United States
Department of
Agriculture

Forest Service
Pacific Southwest
Region

Tahoe National Forest

R5-MB-122c
September 2010

Motorized Travel Management

Final Environmental Impact Statement

Volume 3 of 3: Appendices C, D, E, F and N

(Appendices A, B, G, H, I J, K, L and M are incorporated by reference from the Tahoe National Forest Motorized Travel Management Supplemental Draft Environmental Impact Statement - February 2010)

Volunteers assisting Forest Service with maintenance of the Rubicon Jeep Trail

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Motorized Travel Management
Final Environmental Impact Statement

Nevada, Placer, Plumas, Sierra and Yuba Counties, California
September 2010

Volume 3 of 3: Appendices C, D, E, F and N

Lead Agency:	US Forest Service
Cooperating Agencies:	None
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Abstract: This Final Environmental Impact Statement (FEIS) describes seven alternatives, six of which propose changes to the National Forest Transportation System (NFTS) and would prohibit cross country travel on the Tahoe National Forest (TNF). These actions are needed in order to implement the 2005 Travel Management Rule (36 CFR Part 212, Subpart B) while providing for a diversity of motor vehicle recreation opportunities and providing motorized access to dispersed recreation opportunities on the TNF. The FEIS discloses environmental impacts associated with the Proposed Action, a No Action Alternative and 5 additional alternatives developed to meet the purpose and need and to respond to issues raised by the public.

Appendices not changed or revised between the Supplemental Draft EIS (SDEIS – February 2010) and Final EIS (FEIS) are not reprinted in this FEIS. Refer to the SDEIS for the unchanged Appendices.

Appendices included in the FEIS

Appendix C: Distribution List C-1
Appendix D: References D-1
Appendix E: Acronyms & Abbreviations E-1
Appendix F: Watershed Analysis F-1
Appendix N: Responses to Comments N-1

Appendices included… but not reprinted… in the FEIS

Appendix A: Site Specific Road, Trail and Open Area Information A-1
Appendix B: Glossary of Terms B-1
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Appendix C

Distribution List

Appendix C: Distribution List

The lists that follows shows the tribes, federal, state, and local government agencies, elected officials, libraries and individuals who are on the mailing list to receive the Final Environmental Impact Statement (FEIS). In addition, more than 5,000 individuals are on an electronic mailing list and were notified of the availability of the Final EIS.

California and Nevada Tribes

Rancheria (Tribe)	Local Office Name	Last Name	First Name	Title
United Auburn Indian Community of the Auburn Rancheria	Tribal Office	Tavares	Jessica	Chair
Colfax-Todd Valley Consolidated Tribe		Suehead	Levina	Chair
Todd Valley Miwok-Maidu Cultural Foundation		Zellner	Brigette	President
T'si-Akim Maidu		Ryberg	Donald E.	Chair
Washoe Tribal Council		Walker	Waldo W.	Chair
Washoe Tribe of Nevada and California	Washoe Tribal Council	Cruz	Darrel	Cultural Coordinator and THPO
Washiw Wagayay Manal		Shoshone	Lynda	
Wadatkuht Band of the Northern Paiutes of the Honey Lake Valley		Dixon	Harold	
Greenville Rancheria		Jaimes	Lorie	Chair
Greenville Rancheria		DeSpain	Michael	Environmental Issues Coordinator
California Indian Basketmakers Association		Brawley	Shannon	Executive Director
Washoe Tribal Council	Washoe Environmental Protection Department	Barry	Marie	
UAIC Tribal Preservation Committee				

Federal Government Agencies

Advisory Council on Historic Preservation, Director, Planning and Review
Army Corp of Engineers
BLM Central Ca. Resource
CESPD-CMP, U.S. Army Engineer Division, South Pacific
Environmental Protection Agency, Region 9, EIS Review Coordinator
Federal Aviation Administration, Regional Administrator, Western Pacific Region
Federal Highway Administration, Director, Project Development and Environment
National Marine Fisheries Service, Habitat Conservationists Division, SW Region
National Oceanic and Atmospheric Adfministration, Office of Policy and Strategic Planning
Natural Resources Conservation Service, National Environmental Coordinator
U.S. Coast Guard (USCG), Environmental Management CG-443
U.S. Department of Energy, Director, Office of NEPA Policy and Compliance
USFWS, Reno,NV
USDA APHIS PPD/EAD
USDA National Agricultural Library, Head, Acquisitions & Serials Branch
USDA Office of Civil Rights
USDI Bureau of Land Management
USDI Fish and Wildlife Service

California State Government Agencies

Agency	Department/Board/Office
California Environmental Protection Agency	Air Resources Board
	Northern Sierra Air Quality Management District
	Water Resources Control Board
Resources Agency	Department of Conservation
	Department of Fish and Game
	California Board of Forestry
	Department of Forestry and Fire Protection
	Mining and Geology Board
	Department of Parks and Recreation
	California Tahoe Conservancy
	Department of Water Resources
	Wildlife Conservation Board (Depart. of Fish & Game)
Lahontan Water Quality Control Board	
Tahoe Regional Planning Agency	
Tahoe Resource Conservation District	

Nevada State Government Agencies

Nevada Division of Environmental Protection
Nevada Division of State Parks/ Dist. II HQ
Nevada Department of Conservation & Natural Resources
Nevada Department of Parks & Recreation
Bureau of Recreation-Carson City
Nevada Department of Transportation
Nevada State Clearing House
Nevada Irrigation District

County Board of Supervisors

County	Organization
Nevada County	Board of Supervisors
Placer County	Board of Supervisors
Plumas County	Board of Supervisors
Sierra County	Board of Supervisors
Yuba County	Board of Supervisors

Other California County Government

County	Organization
Nevada County	Engineer / Public Works
Placer County	Planning Department
Sierra County	Planning Department
Yuba County	Planning Department / Community Development

Federal Elected Officials

Last Name	First Name	Last Name	First Name
U.S. Senators		**U.S. House of Representatives**	
Boxer	Barbara	McClintock	Tom
Feinstein	Diane	Herger	Wally

California State Elected Officials

Last Name	First Name	Last Name	First Name
State Assembly		**State Senate**	
Gaines	Ted	Aanestad	Sam
Logue	Dan	vacant	vacant

Libraries

Name	City	State
El Dorado County Library	Placerville	CA
Nevada County Library	Nevada City	CA
Nevada County Library	Truckee	CA
Placer County Library	Auburn	CA
Placer County Library	Foresthill	CA
Placer County Library	Rocklin	CA
Plumas County Library	Quincy	CA
Sacramento County Library, Central	Sacramento	CA
Sierra College Library	Grass Valley	CA
Sierra County Library	Loyalton	CA
Washoe County Library	Reno	NV
Washoe County Library	Incline Village	NV

Organizations

4X4 in Motion
Back Country Horsemen of Ca. - Mother Lode Unit
Back Country Hunters and Anglers
Blue Ribbon Coalition
Bullhead 4 Wheelers, Inc.
Ca. Association of 4 wheel drive Clubs
Ca. Enduro Rider Association
Ca. School of Fly-fishing
Ca. Wilderness Coalition and others
Cal Cycling Race Team
Cal-4WD/ Sequoia Sidewinders
California Off Road Vehicle Association
Capital City Mountain Goat 4WD Club
Center for Sierra Nevada Conservation
Colfax Area Chamber of Commerce
Community Action Partners
Condor Exploration Company
CRAWL Magazine
Diablo 4 Wheelers
Ecology Center of Southern Ca.
EDAW Design, Planning and Environments Corporation
El Dorado Equestrian Trails Foundation
Ellsworth Bikes
Forest Issues Group
Foresthill Four Wheelers
Four Dice 4WD Club
Friends of Fordyce
Friends of Foresthill OHV Trails
Friends of Greenhorn
Friends of Tahoe Forest Access
Gold Country Trails Council
Grass Valley 4 Wheelers
Great Basin Group Sierra Club
High Country Cruisers
High Sierra Motorcycle Club
International Mountain Bicycling Association - California
Lake Tahoe Hi-Lo's 4WD Club
League to Save Lake Tahoe
Merced Dirt Riders Inc.
Moore Smith Buxton & Turke
Nevada County Woods Riders
NID - Nevada Irrigation District
North American XJ Association - Sierra Chapter
North Creek Property Owners
North Fork American River Alliance
Northern California Council Federation of Fly Fishers
Northern Ca. Pacific Crest Trail Association
Northern Office of Public Lands for the People
Off Road Business Association
Opposing the One Vehicle Length on Our Forest
P.T. Schram Rover Repair
Pacific Crest Trail Association
PG & E Corporation
Pirate 4X4 Club
Placer County Visitors Bureau
Polka Dots Motorcycle Club
Protect American River Canyons
Protecting Earth and Animals w/ Compassion and Education
Public Lands for the People

Quincy Wheelers
Rabeneau Construction
Recreation Outdoors Coalition
Reno Fly Shop
River Rest Resort
Rolling Thunder Off Road
Rubicon Trail Foundation
Ruby Development Company
Sacramento Valley Top Gun Jeep Club
Sierra Access Coalition
Sierra College
Sierra Foothills Audubon Society
Sierra Motor Sports
Sierra Nevada Group/ Sierra Club
Sierra Nevada Mining & Industry
Sierra Pacific Industries
Silly Fab Service
South Lake Tahoe Hi Lo's
Snow Lands Network
South Yuba River citizens League
Specialized 4WD Drive Club
Stewards of the Sierra NF
Stewards of the SNF
SummerHill Homes
Swamp Stompers 4X4 Club
Tahoe Fly Fishing Outfitters
Tahoe Truckee Fly Fishers
The Mountain Messenger
The Ritz-Carlton Club, Lake Tahoe
The Sierra Fund
The Wilderness Institute
The Yuba River Land and Water Conservancy
Timekeepers Motorcycle Club
Town of Washington
Trout Unlimited
Truckee Donner Land Trust
Tuesday Friday Hiking Group
University of California - Davis
Vice Principle John Barrett M.S.
Welbilt 4WD Club
Western States Endurance Run Foundation
Western States Trail Foundation
Wilderness Society
Winter Wildlands Alliance

Individuals

Ackerman, Gregory
Acton, Aero
Adams, Andrew
Adams, Carl
Adams, Lance
Alafouzos, John
Albright, Del
Albright, Stacie
Alderson, George & Frances
Allen, Jon
Alling, Thomas E.
Alvarado, Kim
Amador, Don
Andrews, Robert W.
Angell, Andy
Aniello, Pete
Apple, Ryan
Araujo, Rick
Armstrong, Mike
Arnett, Kenneth R.
Arter, Don
Ashton, Zach
Athorp, Jesse
Atkins, Paul
Atkinson, Steve and Geri
Auth, William J. Jr.
Autrey-Schell, Yovonne
Averett, AJ
Baack, Jim
Backhaus, Curt
Baez, Ken
Baker, Shawn
Barbor, Jamie
Barker, Rick
Barnes, Gary & Elaine
Baron, Heather
Barr, Doug
Barriger, Dave
Bastnagel, Marc
Batastini, Troy
Batchelder, Adam
Bauer, Richard
Beasley, Geoffrey
Beasley, Thomas R.
Bechta, Sean
Beck, Joan
Beckstead, Todd
Behr, Doug
Beine, Dave
Bell and Pearson, Ryan and Shaylen
Bellino, Joan
Bender, Daryl
Benjamin, Gross
Benner, Stephen
Bennett, Max
Bennett, Bryan
Benson, Brett
Bentley, Christopher
Berkner, Mark
Bianchini, David Sr.
Bibelheimer, Erik
Bloom, Jerry
Boell, Ken
Bolinger, Charlotte
Bolstad, Eric
Borovicka, Cory
Bosso, Anthony J.
Bosso, Tony
Boswell, Harold
Bottoms, Alicia
Boudier, Eric
Boutin, Dolores
Bower, Ben
Boyd, Tom
Boyle, Michael
Braden, Bill
Brazieal, Lisa
Brazil, Bruce
Brightenstine, John
Briley, Brian
Brinkman, Tyler
Britto, Ray
Britts, Michael
Brock, Elmar
Brock, Richard K.
Brock, Eric

Brodie, Andrew
Brooks, Todd
Brown, Bruce
Brown, Frank
Brown, Mark
Brown, Phillip
Brown, Steven
Brown , Kevin
Bruechle, Donald
Brumit, Robert
Brundige, Carol & Bruce
Bruno, Nick
Brusin, Willie
Buck, Donald
Buland , James
Bunting, Bryan, Hillarie, Drew, Cole
Burgard, Faith
Burgard, Rob and Matt
Burleson, Randy
Burnes, Rodney
Burns, Mary
Burrill, Todd
Burriss, Mark
Burroughs, Jeanne
Burroughs, Steve
Bush, Christopher
Butler, Michael
Butler, Ray
Byers, Rick
Cacy, Tim
Calkins, Lawrence
Calvert, Charlotte and Steven
Cannon, Chad
Cappello, Brad
Cardenas, Andy
Cardin, Lisa
Carey, Kevin
Carlson, David
Carlson, Michael
Carney, Diane
Carpenter, Travis
Carr, Robert
Carreon, Ben
Carter, Kenneth
Carter, Marian
Case, Steve
Cassidy, Pete
Castro, Peter
Ceeko, Chance
Ceeko, Shawn
Chaplin, Daniel
Chaplin, Mike
Chaulberg , Gary
Cheek, Lawrence and Bernadette
Chesney, Robert
Chilcote, John
Childs, Brad
Christensen, Todd
Christiansen, David
Christiansen, Klaus
Ciappa, Hank
Clark, Justin
Clark, Alejandro
Clark, Gary
Clark, James
Clark, Jennifer
Clark, Jim
Clark, Justin
Clark, Paloma
Clark, Robert
Clarke, Ken
Cochran, Joseph
Cohen, Janet
Coiner, Charlie
Collin, Nick
Collins, Troy
Conner, Ben
Conner, Narvell
Connolly, Justin
Conover, Celia
Cooley, Shari
Cooper, Richard
Coplen, Sean
Coppedge, Brandon
Coppedge, Michael
Corbett, Wade
Cordingley, Paul and Florence
Cottel, Mitch
Countryman, Gordon
Courter, Paul
Cox, Karen
Crabb, David Eric
Crean, Dennis Jr.
Cree, Ian
Crim, Matthew
Cross, Diane
Croxton, Valinda
Curry, Richard and Sherri
Cushman, Douglas
Cutler, Carina
Cutter, Ralph and Lisa
Dal Pino, Ida Jane
Damaso, Michael
Danfield, Thomas
Dangberg, John
Daniel, Arlan
Daniels, Gregg
Dart, Bill
Davis, Joshua
Davis, Steve
Davis, Dion
Davis, Heather
Davis, Kent
Davison, Pat
Day, Kenneth L.
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De La Briandais, Larry
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Dear, Elizabeth
DeBisschop, George E.
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DeLoney, Anthony
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Deutscher, Wayne
Dever, Douglas L.
Diaz, Olivia
DiCarlantonio, Gayle
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Dickson, Andrew
Diddy, Mark
Dierksen, Brian
Dietz, Matthew S.
DiMattia, Robert
Doherty, Pat
Donley, Rob
Douglas, Peter
Doyon, Aurora
Dragon, George
Drake, William
DuBray, Jason
Dunbar, Sean
Duncan, Andrew
Dunivant, Terre
Dunn , Jason
Dunn , Ken
Dunster, Kevan
DuPrey, Brandon
Dupuis, Curtis
Duran, Ed
Dworaczyk, Debra
Dye, Ken
Eagan, Kathleen
Ebright, Bret
Eckenburg, Dick
Eickerman, Scott

Eisele, John H. Jr.
Ellinger, Scott
Elliot, Cynthia
Elliot, Mark
Ellis, Bret
Ellison, Jason
Ellsworth, Tony
Encarnacion, Maila
Erickson, Eleanor
Ervin, Craig
Eshleman, Caroline D.
Estes, Sean
Esteve, Gregory
Evans, Paul
Ewing, Mike
Fairman, Robert
Falkner, Mike
Falxa, Gary
Fanselau, Erik
Fanselau, Jason
Farley, Damion
Farrell, Jeremy
Farrell, Vinny
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Feller, Timothy
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Fernandez, Anna and Miek
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Feusi, Jim
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Finstad, Jason
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Flowers, Eric
Folena, Rusty
Foli, John
Foote, Donna and Jerry
Foottit, John
Forberg, Erik
Forgey, Chavaleh
Fowlkes, John
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Freas, Robert
Frederking, Rick
French Sterling, Carolyn
Frolli, Tom
Fronce and Hall , Linnea and Thomas
Frounfelter, Earl
Fuller, Randy
Fulling, Jim
Furrer, David
Gachesa, Ellen
Gage , Kyle
Gallen, Tim
Galvan, Corrie
Garcia, Dan
Gardiner, Steven
Gardner, Elyse
Gariano, Anthony
Garrshan, Patrick
Gerber, Donald
Gibbs, Patricia
Gillmore, John and Sara
Giraffe, Frank
Gish, Robert
Glad, Carol
Glaser, Nick
Gleim, Ray and Julie
Goforth, Kathleen
Goodell, Paul
Gorman, Richard
Gotham, Rorie
Graf, Susan
Graham, Jonathan
Granat, Amy
Grass, Chad
Greene, Kevin
Gregg, Benjamin
Grimm, Wayne
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Guidice, Rick
Guinn, Timothy
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Gustafson, Curtis
Gusto, Emerson
Habenicht, Fred
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Hacker, Nick
Hale, Steven
Hallas, Melissa
Halliburton, Roy
Hallmark, Candace
Hammes, Douglas E.
Handly, Jack
Hansen, Robert
Hansen, Scot, Leticia, Nathan, Nickolas
Happee, Bryan
Happs, Kenneth
Harbaugh, Dianna, Bill, Kevin, Leighan
Harlowe, Anna
Harmon, Joshua
Harney, Ken
Harper, Stanley
Harris, Justin
Harris, Ron
Harris, Mark
Hart, Ronald W.
Hartinger, Marcus
Hartmann, Chris
Hathaway, Chad
Havlik, Frank
Hawes, Jason
Hay, Gannt
Hazard , Eric
Heck, Lisa Rene
Hedden, Donald
Heimlich, Mildred
Heinemann, Bill
Helm, Chris
Hendrick, Kevin
Hendrick, Steve
Hendricks, Gary
Hendricks, Monte
Hendrickson, Bruce
Hendrix, Rick
Hendry, Mike
Hennig, Jeannine
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Hensley, Chris
Herr, Joseph R.
Hess, Donald and Susan
Hewston , Mike
Hewston , Sandra
Higgins, Jabin
Hildebrandt, Timo
Hill, Jason
Hill, Jeffrey
Hill, Kevin
Hipkiss, Ron
Hirst, Charles
Hobbs, Gerald
Hochendoner, Bernie
Hoffmann, Marie
Holiday, Judd
Holiday, Wade
Hooser, Dirk ahnd Vickie
Hoover, Micah
Hopkins, Susan
Hopp, David
Horgan, Chris
Horn, Daniel

Horton, Kathryn Ann
Houle , Jeff
Houston, John
Hower, Ken
Huber, Rory
Huckins, Robert
Huebner, Kurt
Hughes, Adam
Hughes, Judy
Humber, Erik A.
Humphrey, John
Hunt, Richard
Hunter, Steven
Hutson, Daryl
Ingram, Robert
Inskeep, James
Iturriaga, Claudio
Jasper, Marilyn
Jayne, Michael
Jennings, Rita
Jensen, Walter
Jerry, Sacramento Resident
Jespersen, Soren B.
Jiannalone, Chase
Johnson, Sue
Johnson, Bill
Johnson, Jim
Johnson, Joanne
Johnson, John and Timothy
Johnson, Martin
Johnson, Mary
Johnson, Megan
Johnson, Scott
Johnson, Susan
Johnson, Wayne and Sue
Johnston, Scott
Johnston, Trevor
Jones, Mark
Jonson, Mary
Jordan, Larry
Jorstad, Jared
June, Eric
Kartozian, Matt
Karuzas, Jeremiah
Kassar, Chris
Kaye, Steven
Keables, Steve and Kristine
Kee, Tony
Keil, Brennan
Kell, Judy and Steve
Kellogg, Jason
Kelly, Bob
Kelly, Bill
Kempenaar, Cornell
Kerrigan, Michael
Kewman, Don
King, Ed
Klein, Kevin
Klein, Rich (1)
Klein, Rich (2)
Kleinasser, Arlen
Klusman, Don
Knerr, Wiliam
Knipe, Kelly
Knull, Ken
Koerber, Randal
Koons, Howard
Kooyman, Justin
Kordasiewicz, Joshua
Koretoff, Steve
Korock, Donald
Kostelny, Dave
Kost-Herbert, Kandace
Kotalik, Richard
Kovacs, Miklos
Kovar, Timothy
Kranz, Bruce
Krause, Rick
Krejsa, Richard
Krumbuegel, Perrin
Krusko, Claire
Kump, Ron
Kupfersberger, E.
Kyra
Lackey, Lisa
Laffoon, Lary
Lai, Jason
Lander, Margaret
Lane, Jana
Langford, Mark
Lapham, Ellen
Larrieu, Wendy
Larsen, Erick
LaRusso, Sandra
Lasko, Tim
Lass, David
Lasyone, Leonard
Laurrance, Robin
Laurrance , Robert J.
Lazzarino, Mike
Leal, David
Lee, Dan
Leidner and Davy, Irene and Bill
Leitzell, William
Lewis, James
Lewis, Jim
Lewis, Tim
Lewis, Robert
Liberty, Ross
Libkind, Marcus
Licciardi, Philip
Lightfoot, Robert
Likins, Jim
Liles, John Kevin
Liles, Kevin
Lillund, Jen
Limov, Miriam
Lindeman, Wayne
Linden, Scott
Lindsey, Robert
Lipson, Peter
Little, Megan and Sean
Livai, Jason
Loft, Eric
Longmire, Samuel F.
Lopez, Irene
Lopez, Kevin
Lopez and Durbin, Tom and Donna; Kevin and Brandon
Lowe, Trace
Luce, John
Lunsford, Dewitt
Lyerly, Linda
Lynch, Ron
MacArdican, William
Macdonald, Janet
MacRaith , Bonnie
Maddalena, Rick
Maddox , Van
Mahaffey, Michele
Manji, Neil
Maia, Maia
Maier, George
Maier, Jim
Malamud, Ernest
Maloney, Dennis
Marshall, Carol
Martin, Daniel F.
Martin, Elizabeth
Martin, Jim
Martinez, Jorge
Martinson, Duane
Masters, Alan
Mathews, Robin
Matthews, Mary Ann
May, Brent
Mayer, Dennis
McAlister, Melinda
McCaskey, Ray
McClinton, Ben and Karen
McCready, Carrie
McDermott, Brent and Helen

McDonald, John
McDougall, Robert
McDowell, Curt
McGavren, Steve
McGuire, William
McKenzie, Chris
McKenzie, Justin
McKinzie, John
McLane, Dave and Bonnie
McLaughlin, Michael
McManus, Dan
McMurray, Nick
McNamara, Terry
McNew, Brad
McNicol, Randy
McRoberts, Mike
Mead, Rick
Meals, Hank
Mears , Shannon and Robbie
Mellenthin, Joel
Mellison, Chad
Mello, Marty
Mellor, Leslie
Mesarchik, Dana
Meyner, Gus
Michaelis, James
Micsan, Bill
Middleton, Fred
Milazzo, David
Miller, Cassie
Miller, Erik D.
Miller, Jerome
Miller, Murray
Milligan, Sylvia
Mills, Jack
Mills, Scott
Minor, Sean
Mitchell, Dave
Mittelstadt, John
Moebos, Chris
Moffit, Jason
Moles, Dale
Monnin, Jonathan and Douglas
Montgomery, Richard
Moore, John K.
Moore, Dave
Moore, Iris
Moore, John
Morgan, Lori
Morgan, Ryan
Morris, Alexis
Moser, David
Mourgos, Reanna
Mross, James
Mudd, Brian
Muhlenberg, Todd
Mullins, Heath
Murphy, Edward
Musto, Daryl
Myer, William
Myers, Joel
Myrah, Don
N., Mike
Nag , Nitish
Nagano, Chris
Nelson, Jess
Nelson, Ron
Nelson, Sally
Nesheim, Mike
Nevins, Brad
Newell, Pete
Newman, Gregory
Newton, Carol
Nichols, Jason
Nichols, Melanie
Nickell, Jesse, Christine, Oliver and Jesse
Norrington, Linda
Norton, Doug
Norton, Elizabeth
Nosala, Wayne
Obrien, Michael
Ockert, Todd
Odelberg, Bruce
Odell, Glenn
Ogren, Brody
O'Growney, Jas
Oliva, Tim
Olson, Steve
O'Neill, Merryan
O'Riley, Catherine
O'Rourke, Jesse
Ostwald, Brent
Paik, Wesley
Palmer, Robert
Parker, Mark
Parriott, Brian
Parsons, Chris
Paton, Chris
Patterson, John
Pautsch, Doug
Pave, Lars
Peach, Eric
Peachay, Ernie
Pearce , Brian
Pearson, Clark
Pearson, Clark
Pederson, Terry
Pellizzer, John D.
Penniman, Arthur B.
Penniman, Dick
Penniman, Starr
Perrella, Marco
Peters, Todd
Peterson, Michael
Peterson, Kirk
Petzak, Jamaka
Petzak, Jamaka N.
Pfile, Ryan
Pickering, Joe
Pickett, Dave
Pickett, Dave
Pieper, William
Plante, Marie
Plasse, Eduard
Platt, Nancy
Playle, Kevin
Plunkett, Wesley
Podraza, Steve
Port, Patricia Sanderson
Porter, David
Porter, Stuart
Powers, Bridgette
Powers, Pamy
Pradetto, Joni
Pratt, Geoff
Pratt, Richard
Preble, Bret
Preble, Traci
Prichard, Peter N.
Pritchard, Ryan
Proctor, Kim
Pumphrey, Matt
Purcell, Nina
Quitevis, Ron
Rabeneau, Scott and Tony
Raco, Claudia
Ramsay, Drew
Ransom, Michael
Ranta, Jeff
Ranz, Gary
Rassuchine, Jeff
Ratcliff, Philip
Ratzburg, Keith
Ratzburg , Alan
Ray-Leal, Melba J.
Raymond, Robert
Reams, Chris
Redmond, Gary
Reed, Catherine
Reed, Colleen, Marshall and Katherine

Rehm-Lorber, Jora
Reneau, Landon
Renstrom, John
Rewinkle, Andrew
Rewinkle, Gerry
Reynolds, Glenn
Rhodes, Robert
Ricci, Debra
Ricker, Jim
Riley, Brent
Riley, Joe
Ritchie, Matt
Rivenes, Don
Rives, David
Rix, Maxine
Rixen, Allan
Roberts, John
Robinson, Jim and Liz
Robinson, Terry Ellen
Rodgers, Mark
Rodrigues, Louis
Rogers, Scott
Rognlin, David
Ronning, Dustin
Root, Brian
Roper, Harvey
Rosenbach, Jordan
Rosenberg, Kurt
Rossman, Antonio
Rouse, Brian G.
Rovane, Sandy
Royston, Heather
Rubick, Karyn
Rubio, Gail
Ruble, Lucy
Ruggiero, Sandra
Rumburger, Mrs.
Russell, Jake
Russell and Timmer, Gayle
Ryder, Steve
Sackman, Tom and Kathy
Salsbury, Lynn
Salveson, Sean
Sanchez, Tom
Sand, Joe
Sanderson Port, Patricia
Saretsky, Richard
Sassoon , Joy
Sawhill, Bob
Scammon, Chris
Schade, Dennis
Schambach, Karen
Scharffenberg, Ryan, Kim, Jacob and Katelyn
Scheitlin, Lloyd
Schilling, David and Roxanne
Schmidt, Jane
Schneider, Kurt
Schoradt, Brent
Schram, P.T.
Schuit, Nathan
Schultz, William
Schwarz, Hank
Scott, Tyler
Scribner, Jerry
Shade, Betsy
Shafer, Danielle
Shannon, Dick
Shannon, Nancy
Sharp, Timothy
Sheets, Eric
Sheffield, Alastair
Sheffield, Rex
Shelton, Lois
Shelton, Theodore R.
Sherry, Stortroen
Shilling, Fraser
Shipley, Donald and Deborah
Shores, Radley
Shuck, Michael
Shupe, Peter
Silvernail, Lois Jane
Simmons, Mike
Smith, Eric T.
Smith, Chelsea
Smith, Lawrence
Smith, Paul
Sober, Steve
Socha, Jim
Soldano, Donna
Soles, Kevin C.
Solomon, Claudia and Al
Sonsteng, Richard
Sorum, Donald
Sparkman, Jerry
Sparks, Emily
Spechler, Donald
Spencer, Robert
Standley, Jordan
Stanton, Stan
Starbuck, John A.
Stark, John A.
Stark, Lisa
Stark, John
Steigmeyer, Robert
Sterling, Todd
Stewart, Joel
Stewart, John
Steyding, James
Stickelmaier, Mark
Stokes, John
Stortroen, Sherry
Straub, Caroyln
Stuckey, Joel
Sullivan, David
Sundberg, Erik
Suter, Robert T.
Sutton, Philip
Svoboda, Laurence
Swaim, Steven M.
Swartz, Corey
Syndergaard, Todd
Taddo, Sara
Tamerius, Terry
Tamney, David
Taylor, Mark
Terhune, Jonathan
Terwilliger, Bob
Thayer, Diana
Theberge, Michele
Theisen, Jacquelyne
Thomas, Robert
Thomas, J.
Thomas, Paul
Thomas, Richard
Thomas, Robert E.
Thomason, Ryan and Kim
Thompson, Jerry
Thompson, Jim
Thompson, James
Thorndyke, Jim
Tierney, Marilyn
Tietje, R.
Timmer, John
Titmus, Keni
Tomlinson, Bob
Toms, Steve
Toner, Sheila
Toomsen, Justin
Tower, Hugh
Trager, Steve and Annamarie
Tralongo, Joseph
Trolan, Patrick
Troth, Rockwell
Trumbly, Terry
Tucker, Tim
Tudesko, Mark
Tuggey, Terry
Turcke, Paul A.
Tussing, Wes
Twiddy, Anthony
Ungeheuer, Judy

Van Valzah, Matthew
Van Velsor, Stan
Van Zant, Peter
Vance, Melony
Vandell, Joy
VanderMeeden, Richard
VanOmmen, Paul and Cheryl
Vargas, Mike
Varnum, Jon
Vega, Pete
Verdier, Joshua
Vieira, Joey
Vierra, Wayne
Vogh, Barbara
Volkman, Greg
Volle, Ron
Von Seggern, David
Wade, Jim
Waldrop, Duncan
Walker, Ken
Waller, David
Wallis, Alec
Wangsgard, Neil E.
Ward, Jenny
Ward, Martin J.
Ward, Tom
Wasden, David
Wash, Phil
Wayne, Mike
Waynick, Samantha
Wear, Larry
Wears, Jacob
Weaver, Mark
Webber, David
Webster, Dustin
Wedge, Gene
Wellman Stelle, Dawn
Wenger, Holly
Wesley, Jo
West, Dick
West, Roy
Westbrook, Kirk
Westerbeck, Brad
Whalley, Chris
Whitcher, Bruce
White, Rick
Whitford, Brian
Whitley, Patricia
Wigley, Warren and D'Nette
Wilbourn, Jack B.
Wilburn, Diana and Ves
Wilcox, Bobbi
Wilder, Robert, Pat
Williams, Alice
Williams, Greg
Williams, Robert
Williams, Stephanie and Keith
Williams, Michael
Williams, Stephanie
Willoughby, Ellie and Don
Wilson, Greg
Wilson, Rich
Wilson, Richard
Winberry, Andrew
Winston, Kenny
Witherow, Michael
Witt, Rose Ann
Wood, David
Wray, David
Wren, Carrie
Wright, Andrew
Wubbels, Mike
Wyeth, Karen and Harry
Yamane, Stan
Yanni, Larry
Young, Howard
Zeber, Jeff
Zukowski, John and Sandy
Zurit, Jon
Maxine
Mike
Richard
Scott
Taxpayer

Appendix D

References

Appendix D: References

Airola, D.A. 1988. *A guide for the Calif. Wildlife Habitat Relationships (CWHR) System*. Calif. Dept. Fish and Game. Wildlife Investigations Lab. Rancho Cordova, CA.

Akay, A.E, Erdan, O., Reis, M., and Yuksel, A., 2008, Estimating sediment yield form a forest road network by using a sediment prediction model and GIS techniques: Building and Environment 43(2008): 687-695.

Allen, A. W. 1982. Habitat suitability index models: marten. U.S. Fish and Wildlife Service, FWS/OBS-82/10.11. 9 pp.

Allen, A.W. 1987. The relationship between habitat and furbearers. Pages 164-179 In Wild furbearer management and conservation in North America. Novak, M., J.A. Baker, M.E. Obbard and B. Malloch, eds. Ontario Ministry of Natural Resources, Canada. 1150 pp.

Alt, K.L. 1980. Ecology of the nesting bald eagle and osprey in the Grand Teton-Yellowstone National Parks Complex. M.S. Thesis, Montana State Univ., Bozeman. 95 pp.

American Association of State Highway and Transportation Officials (AASHTO) green book. 2001. A Policy on Geometric Design of Highways and Streets. 4th ed.

Andren, H. 1994. Effects of habitat fragmentation on birds and mammals in landscapes with different proportions of suitable habitat: a review. Oikos 71:355-366.

Andrew J.M. and J. A. Mosher. 1982. Bald eagle nest site selection and nesting habitat in Maryland. J. Wildl. Manage. 46:383-390.

Anthony, R.G. and F.B. Isaacs. 1989. Characteristics of bald eagle nest sites in Oregon. J. of Wildl. Manage. 53:148-159.

Anthony, R.G., R.L. Knight, G.T. Allen, B.R. McClelland and J.I. Hodges. 1982. Habitat use by nesting and roosting bald eagles in the Pacific Northwest. Trans. A. Am. Wildl. Natural Res Conf. 47:332-342.

Apodaca, Marjorie. 2006. Road Definitions – email to Melissa Hallas.

Arora, D. 1986. *Mushrooms Demystified: A Comprehensive Guide to the Fleshy Fungi*. Second Edition. Ten Speed Press. Berkeley, CA. 959 pages.

Aubrey, K.B. 2008. Wolverine den sites. Personal Communication. March 21.

Aubry K. B., McKelvey K. S., Copeland J. P. 2007. Distribution and broadscale habitat relations of the wolverine in the contiguous United States. Journal of Wildlife Management. 71: 2147–2158

Aubry, K.B. and J.C Lewis. 2003 (In press). Extirpation and reintroduction of fishers (*Martes pennanti*) in Oregon: implications for their conservation in the Pacific states. Biological Conservation 114 (2003) 79-90.

Austin, K.A. 1991. Habitat use of northern goshawk in Southern Cascades. M.S. Thesis. Oregon State University, Corvallis, Oregon. In prep.

Avise, J.C., and F.J. Ayala. 1976. Genetic differentiation in species versus *depauperate phylads*: Evidence from the California minnows. Evolution 30: 46-58.

Ayres, W.O. 1854. Remarks on some fish of the cyprinoid family. Daily Placer Times and Transcripts, 30 May 1854:1.

Bald and Golden Eagle Protection Act. 1940. P.L. 76-567, Ch. 278, 54 Stat. 250, as amended; 16 U.S.C. 668 (note), 668, 668a-d). June 8.

Baltz, D.M. and P.B. Moyle. 1993. Invasion resistance by an assemblage of native California stream fishes. Ecol. Applic. 3:246-255.

Banci, V. A. 1994. Wolverine. Pages 99-127 in L. F. Ruggiero, K. B. Aubry, S. W. Buskirk, L. J. Lyon, and W. J. Zielinski, eds. The scientific basis for conserving forest carnivores, American marten, fisher, lynx and wolverine in the western United States. USDA For. Serv. Rocky Mt. For. and Range Exp. Stn., Gen. Tech. Rep. RM-254, Fort Collins, Colo.

Bancroft, D.C. 1990. Use of wildlife enforcement decoys for wildlife enforcement in northern Arizona: preliminary results. In Krausman, P.R. and N.S. Smith, eds. Proceedings of Managing Wildlife in the Southwest. Tucson, AZ. Oct. 1990. Univ. of Arizona, Tucson. 262 pp. IN Habitat Fragmentation and the Effects of Roads on Wildlife and Habitats. Background and literature review, Conservation Services Division of the New Mexico Department of Game and Fish. 18 pages. Watson, Mark L. compiler 2005.

Barbour, R.W. and W.H. Davis. 1969. Bats of America. University Press of Kentucky. 283 pp.

Bard, Erin C., Roger L. Sheley, Jeff S. Jacobsen, and John J. Borkowski. Using ecological theory to guide the implementation of augmentative restoration. Weed Technology, 18 (5), pages 1246-1249.

Barneby, R. C. 1964. Atlas of North American *Astragalus*. Memoirs of the New York Botanical Garden. 13:1-1188.

Bart, J. 1995. Amount of suitable habitat and viability of northern spotted owls. Conservation Biology 9:945-946.

Bartoleme, J. W. and R. B. Standiford. 1992. Ecology and Management of Californian Oak Woodlands. *In:* Ecology and management of oak and associated woodlands; perspectives in the southwestern United States and northern Mexico. Gen. Tech. Rep. RM-218, 224 pages.

Bateman, M.C. 1986. Winter habitat use, food habits and home range size of the marten, *Martes americana*, in western Newfoundland. Canadian Field Naturalist 100: 58-62.

Beck, T.W. 1985. Interim direction for management of great gray owl. USDA Forest Service, Stanislaus National Forest. Sonora, CA. 24pp.

Beedy, E. C. and Peter Brussard. 2002. Nevada County Natural Resources Report. A Scientific Assessment of Watersheds and Ecosystems. An unpublished report prepared for Nevada County Planning Department.

Beesley, D. 1996. Reconstructing the Landscape: An Environmental History, 1820-1960. Pages 3-24 In *Sierra Nevada Ecosystem Project: Final Report to Congress*, Vol. II. Centers for Water and Wildland Resources. Univ. Calif., Davis. 95616.

Behnke, R.J. 1979. Monograph of the native trouts of the genus *Salmo* of western North America. U.S. Department of Agriculture, Forest Service, Lakewood, Colorado. 2155 pp.

Behnke, R.J. 1992. Native trout of western North America. American Fisheries Society, Bethesda, Maryland. 275 p.

Beier, P. and J.E. Drennan. 1997. Forest structure and prey abundance in foraging areas of northern goshawks. Ecological Applications 7:564-571.

Bell, R.R. and J.B. Kimsey. 1955. Some considerations of the chemical treatment of the Monticello Reservoir basin, Napa County. Calif. Dept. of Fish and Game, Inland Fish. Admin. Rep. No. 55. 7pp.

Bennett, L.A. and F.B. Samson. 1984. Marten ecology and habitat management in the central Rocky Mountains: problem analysis. USDA Forest Service and Colorado Cooperative Wildlife Research Unit, Colorado State University. Fort Collins, CO. 60 pp.

Bergstrom, J.C., H.K. Cordell, G.A. Ashley, and A.E. Watson. 1990. Economic Impacts of Recreational Spending on Rural Areas: A Case Study. *Economic Development Quarterly* 4(1): 29-39.

Best, D.W., Kelsey, H.M., Hagans, D.K., and Alpert, M., 1995, Role of fluvial hillslope erosion and road construction in the sediment budget of Garret Creek, Humboldt County, California, in: Geomorphic processes and aquatic habitat in the Redwood Creek Basin, Northwestern California, Nolan, K.M., Kelsey, H.M., and Marron, D.C. (eds.), U.S. Geological Survey Professional Paper 1454, p. M1-M9.

Bias, M.A. 1989. Habitat use by California spotted owls in the central Sierra Nevada. Humboldt State University, Arcata. Master's thesis. 55pp.

Biotic Invasions: Causes, Epidermiology, Global Consequences and Control. IN: Issues in Ecology #5, Ecological Society of America. Pps. 1-20.

Bissonette, J.A., D.J. Harrison, C.D. Hargis, T.G. Chapin. 1997. The influence of spatial scale and scale-sensitive properties on habitat selection by American marten. Pages 368-385 in J.A. Bissonette, editor. Wildlife and landscape ecology: effects of pattern and scale. Springer-Verlag, New York, N.Y.

Bissonette, J.A., R.J. Fredrickson, and B.J. Tucker. 1988. The effects of forest harvesting on marten and small mammals in western Newfoundland. Final Report, for the Newfoundland and Labrador Wildlife Division and Corner Brook Pulp and Paper, Ltd. (Kruger). Logan, UT: Utah Cooperative Fish and Wildlife Research Unit, Department of Fisheries and Wildlife, College of Natural Resources, Utah State University. 109pp.

Blakesley, J.A. and B.R. Noon. 1999. Demographic parameters of the California spotted owl on the Lassen National Forest; preliminary results (1990-1998). Summary Report, February 1999. USDA Forest Service, Pacific Southwest Research Station, Arcata, CA. 44pp.

Blakesley, J.A., 2003. Ecology of the California spotted owl: breeding dispersal and associations with forest stand characteristics in northeastern California. Ph.D. dissertation, Colorado State University, Ft. Collins, p. 60.

Bleich, Vernon C., John G. Kie, Eric R. Loft, Thomas R. Stephenson, Michael W. Oehler, Sr., and Alvin L. Medina. 2005. Managing Rangelands for Wildlife. In: Clait E. Braun, Editor. 2005. Techniques for Wildlife Investigations and Management. The Wildlife Society, Bethesda, Maryland, USA, pages 873

Bloom, P.H., G.R. Stewart and B.J. Walton. 1986. The status of northern goshawk in California, 1981-1983. Adm. Rept. 85-1. State of California, Department of Fish and Game, Sacramento, CA.

Bolster, B.C. 1998. Calif. Dept. of Fish and Game, Presentation to the Western Bat Working Group Workshop. Feb. 9-13, 1998. Reno, Nevada.

Bombay, H.L. 1999. Scale perspectives in habitat selection and reproductive success for willow flycatchers (*Empidonax traillii*) in the central Sierra Nevada, California. Masters thesis, California State University, Sacramento. 223 pp.

Bombay, H.L. 2003. Annual report and preliminary demographic analysis for willow flycatcher monitoring in the Central Sierra Nevada in partial fulfillment of contract 53-91S8-01-NRM09 between Dr. Michael L. Morrison under subcontract to Tetra Tech FW, Inc. and USDA Forest Service, Pacific Southwest Region, Vallejo, CA. 50 pp.

Bombay, H.L., M.L. Morrison, and L.S. Hall. 2003. Scale perspectives in habitat selection and animal performance for willow flycatchers (*Empidonax traillii*) in the central Sierra Nevada, CA. Studies in Avian biology No. 26:60-72, 2003.

Bombay, H.L., M.L. Morrison, D.E. Taylor, and J. W. Cain. 2001. Annual report and preliminary demographic analysis for willow flycatcher monitoring in the Central Sierra Nevada in partial fulfillment of contract RFQ-IBET-17-01-053 between University of California, San Diego - White Mountain Research Station and USDA Forest Service, Tahoe National Forest. 46 pp.

Borisenko, A. N., and M. P. Hayes. 1999. Status of the foothill yellow-legged frog (*Rana boylii*) in Oregon. Final Report under contract ORFO080197-1 to the The Nature Conservancy under contract 1448-13420-7-M262 to the US Fish and Wildlife Service. 39 pp.

Bossard, Carla C., John M. Randall, and Marc C. Hoshovsky. 2000. Invasive Plants of California's Wildlands. University of California Press. 360 pages.

Boyce, D.A. and C.M. White. 1979. A peregrine falcon nesting habitat survey in the Mendocino National Forest - 1979, Wilderness Research Institute.

Bradford, D.F. 1991. Mass mortality and extinction in a high elevation population of *Rana muscosa*. Journal of Herpetology 25(2):174-177.

Bradford, D.F., F. Tabatabai, and D.M. Graber. 1993. Isolation of remaining populations of the native frog, *Rana muscosa*, by introduced fishes in Sequoia and Kings Canyon National Parks, California. Conservation Biology 7: 882-888.

Breeding Bird Survey. Sauer, J. R., J. E. Hines, and J. Fallon. 2008. The North American Breeding Bird Survey, Results and Analysis 1966 - 2007. Version 5.15.2008. USGS Patuxent Wildlife Research Center, Laurel, MD

Brocke, R.H., J.P. O'Pezio, and K.A. Gustafson. 1988. A forest management scheme mitigating impact of road networks on sensitive wildlife species.

Brody, A.J. and M.R. Pelton. 1989. Effects of roads on Black Bear movements in western North Carolina. Wild. Soc. Bull. 17, 5-10.

Brooks, R. R. 1987. Serpentine and its vegetation - A multidisciplinary approach. Ecology, Phytogeography and Physiology series volume 1. Dioscorides Press, Portland, Oregon. 454 pages.

Brown, L.R. and P.B. Moyle. 1987. Survey of fishes of mid-elevation streams of the San Joaquin Valley. Unpubl. Rep. Calif. Dept. of Fish and Game. 220pp.

Brown, P. 1996. Presentation at the Natural History and Management of Bats in California and Nevada Conference. The Wildlife Society Western Section, Nov. 13-15, 1996. Sacramento, CA.

Brunton, D.F. 1971. Observations of the great gray owl on winter range. Can. Field Nat. 86: 315-322.

Buck, S., C. Mullis and A. Mossman. 1983. Final report: Coral Bottom - Hayfork Bally fisher study. USDA Forest Service. Unpublished report. 133 pp.

Buehler, D.A., T.J. Mersmann, J.D. Fraser, J.K.D. Seegar. 1991. Effects of human activity on bald eagle distribution on the northern Chesapeake Bay. J. of Wildl. Manage. 55:282-290.

Bull, E.L. and M.G. Henjum. 1990. Ecology of the great gray owl. General Technical Report PNW-GTR 265. Pacific Northwest Research Station, USDA Forest Service, Portland OR. 39pp.

Bull, E.L., R.S. Holthausen, D.B. Marx. 1990. How to determine snag density. Western Journal of Applied Forestry 5:56-58.

Bull, Evelyn L.; Parks, Catherine G.; Torgersen, Torolf R. 1997. Trees and logs important to wildlife in the interior Columbia River basin. Gen. Tech. Rep. PNW-GTR-391. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Burkett, E.E. and J.C. Lewis. 1992. The spread of the red fox. Outdoor Calif. 53(2):1-4.

Bury, R.B. 1980. Conservation of the amphibians of the United States: review. U.S.A. Dept. of the Interior, Fish and Wildlife Service. Resource publication 134, Washington, D. C., 34 pp.

Buskirk, S.W. 1994. Introduction to the genus *Martes*. Pages 1-10 In S.W. Buskirk, A.S. Harestad, M.G. Raphael, and R.A. Powell, editors. Martens, sables and fishers: biology and conservation. Cornell University Press, Ithaca, New York. 484 pp.

Buskirk, S.W. and L.F. Ruggiero. 1994. American marten. Pages 7-37 in L.F. Ruggiero, K.B. Aubry, S.W. Buskirk, L.J. Lyon, and W.J. Zielinski, eds. The scientific basis for conserving forest carnivores: American marten, fisher, lynx, and wolverine in the western United States. U. S. Forest Service Gen. Tech. Rep. RM-254.

Buskirk, S.W. and R.A. Powell. 1994. Habitat ecology of fishers and American martens. Pages 283-296 in Buskirk, S.W., A.S. Harestad, M.G. Raphael, and R.A. Powell eds. Martens, sables, and fishers: biology and conservation. Cornell University Press, Ithaca, N.Y.

Buskirk, S.W.; Zielinski, W.J. 2003. Small and mid-sized carnivores. In: Zabel, C.J.; Anthony, R.G., editors. Mammalian community dynamics: Management and conservation in the coniferous forests of western North America. Cambridge, UK: Cambridge University Press; 207-249.

Busnel, R. G. and J. L. Fletcher (eds.). 1978. Effects of noise on wildlife. New York: Academic Press.

Butts, T.W. 1992. Wolverine (*Gulo gulo*) biology and management: A literature review and annotated bibliography. Unpublished paper for the U.S. Forest Service. Northern Region.

Bytherowicz, A., and M.E. Fenn. 1996. Nitrogen Deposition in Calif. Forests: A Review. *Environmental Pollution* 92(2). Published by Elsevier Science Ltd.

Bytherowicz, A., J. Carroll, M. Fenn, P. Miller, R. Musselman, and B. Takemoto. 1998. *Distribution and Transport of Air Pollutants to Vulnerable Calif. Ecosystems.* USDA Forest Service, Pacific Southwest Region. Riverside CA. 92507.

Cahill, T., R. Eldred, and P. Feeney. 1986. *Particulate Monitoring and Data Analysis for the National Park Service 1982-1985*. Univ. Calif., Davis. 95616

Cahill, T.A., J.J. Carroll, D. Campbell and T.E. Gill. 1996. Air Quality. Pages 1227-1260 In *Sierra Nevada Ecosystem Project: Final Report to Congress, Assessments and scientific basis for management options*. Vol. II, Ch. 48. Univ. Calif. Centers for Water and Wildland Resources, Davis, CA 95616-8750.

Caicco Steven L. 1998. Current status, structure, and plant species composition of the riparian vegetation of the Truckee River, California and Nevada. Madrono, volume 45, number 1, 17 pages.

Cain III, J.W., M.L. Morrison, and H.L. Bombay. 2003. Predator activity and nest success of willow flycatchers and yellow warblers. Journal of Wildlife Management 67(3):600-610.

Cain, J. W. 2001. Nest success of yellow warblers (*Dendroica petechia*) and willow flycatchers (*Empidonax traillii*) in relation to predator activity in montane meadows of the central Sierra Nevada, California. Thesis, California State University, Sacramento, California, USA. In: Predator Activity and Nest Success of Willow Flycatchers and Yellow Warblers, James W. Cain III, Michael L. Morrison and Helen L. Bombay, The Journal of Wildlife Management, Vol. 67, No. 3 (Jul., 2003), pp. 600-610.

Calef, G.W. 1973. Natural mortality of tadpoles in a population of *Rana aurora*. Ecology 54: 741-758.

Calhoun, A.J. 1942. The biology of the black-spotted trout (*Salmo clarki henshawi*) (Gill and Jordan) in two Sierra Nevada lakes. Ph.D. dissertation. Stanford University, Palo Alto, California. 218 pp.

California Academy of Sciences. 1992. Copy of locality records from the data base of California Academy of Sciences.

California Air Resources Board. 1998. A program update for off-road motorcycles and ATVs. Accessed 9/18/2007. Available on-line: http://www.arb.ca.gov/msprog/offroad/mcfactst.htm.

California Air Resources Board. 1998. *Particle Pollution: Charting a Course for Clean Air.* Calif. Environmental Protection Agency.

California Department of Fish and Game. 1988 Revised 2005, 2006. A Guide to the California Wildlife Habitat Relationships System (CWHR). Edited by Kenneth E. Mayer and William F. Laudenslayer, Jr. State of California, Resources Agency, Department of Fish and Game Sacramento, CA. 166 pp.

California Department of Fish and Game. 1990. 1989 annual report on the status of California's state listed threatened and endangered plants and animals. California Department of Fish and Game, Sacramento.

California Department of Fish and Game. 1994. Five-year status review: greater sandhill crane (*Grus canadensis tabida*). Reported to: California Fish and Game Commission. 12 pp.

California Department of Fish and Game. 1996. Managing non-native species in California: the red fox. California Department of Fish and Game, Sacramento, California

California Department of Fish and Game. 1998. An Assessment of Mule and Black-tailed Deer Habitats and Populations in California. Report to the Fish and Game Commission. February 1998. 57pp.

California Department of Fish and Game. 2003. Deer Hunting Draft Environmental Document, February 3, 2003. State of California, The Resources Agency, Department of Fish and Game. 269pp + appendices

California Department of Fish and Game. 2004. Final Environmental Document regarding the hunting of doves, band-tailed pigeons, common snipe, and American crows. State of California, The Resources Agency. Sacramento, CA. 146 pp.

California Department of Fish and Game. 2004. Final Environmental Document: Bear Hunting. California Department of Fish and Game, Sacramento, California.

California Department of Fish and Game. 2004. Special animals. California Department of Fish and Game, Sacramento, California.

California Department of Fish and Game. 2008. Special animals. California Department of Fish and Game, Sacramento, California.

California Environmental Protection Agency News Release. 1997. ARB Approves Emission Limits for Off-Road Vehicles. Accessed 9/18/2007. Available on line: http://www.arb.ca.gov/newsrel/nr012194.htm

California Interagency Noxious and Invasive Plant Committee. 2007. Noxious Times - 2007 California Noxious weed ratings list. Volume 8, No. 4, pages 8 and 9.

California Native Plant Society (CNPS). 2001. Inventory of rare and endangered plants of California (6th edition). Rare plant scientific advisory committee, David P. Tibor, convening editor. CNPS, Sacramento, CA 388 pages.

California Native Plant Society (CNPS). 2006. Inventory of rare and endangered plants (online edition, v7-06a). California Native Plant Society. Sacramento, CA. Accessed routinely. Available online at: http://www.cnps.org/inventory.

California State Parks. 2003, December. California Outdoor Recreation Plan 2002. Sacramento, CA. 78 pages.

California State Parks. 2005, May. Park and Recreation Trends in California. Sacramento, CA. 23 pages.

Call, D.R. 1990. Home range and habitat use by California spotted owls in the central Sierra Nevada. Unpublished Thesis. Humboldt State University, Arcata CA. 83 pp.

Campbell, L.A. 2004. Distribution and habitat association of mammalian carnivores in the central and southern Sierra Nevada [PhD dissertation]. Davis (CA): University of California, Davis. 167 p.

Carr, L.W., Fahrig, L. 2001. Effect of road traffic on two amphibian species of different vagility. Conservation Biology 15(4), 1071–1078.

Carroll, C., W.J. Zielinski, and R.F. Noss. 1999. Using presence-absence data to build and test spatial habitat models for the fisher in the Klamath Region, U.S.A. Conservation Biology 6:1344-1359.

Cech, J.J., S.J. Mitchell, D.T. Castleberry, and M. McEnroe. 1990. Distribution of California stream fishes: influence of environmental temperature and hypoxia. Env. Biol. Fish. 29:95-105.

Cedarholm, C.J., Reid, L.M., and Salo, E.O., 1981, Cumulative effects of logging road sediment on salmonid populations of the Clearwater River, Jefferson County, Washington: p. 38-74 in Proceedings of the Conference on Salmon Spawning Gravel: A Renewable Resource in the Pacific Northwest? Report 19, Washington State University, Water Research Center, Pullman, Washington.

Chandler, Sheri K., James D. Fraser, David A. Buehler, Janis K. D. Seegar. 1995. Perch Trees and Shoreline Development as Predictors of Bald Eagle Distribution on Chesapeake Bay. Journal of Wildlife Management, Vol. 59, No. 2, pp. 325-332.

Chapel, M., A. Carlson, D. Craig, T. Flaherty, C. Marshall, M. Reynolds, D. Pratt, L. Pyshora, S. Tanguay and W. Thompson. 1992. Recommendations for managing late-seral-stage forest and riparian habitats on the Tahoe National Forest. Located at: USDA Forest Service, Tahoe National Forest, Nevada City, CA. 31pp.

Chapin, T.G., D.J. Harrison, D.M. Phillips. 1997. Seasonal habitat selection by marten in an untrapped forest preserve. J. Wildl. Manage. 61:707-717.

Chapin, T.G., D.J. Harrison. 1998. Conservation Biology 12:1327-1338.

Chatfield, Andrea H. 2005. Habitat Selection by a California Spotted Owl Population: A Landscape Scale Analysis Using Resource Selection Functions. A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science – University of Minnesota, St. Paul Minnesota. Unpublished.

Chen, T.H., J.A.Gross, W.H. Karasov. 2006. Sublethal effects of lead on northern leopard frog (Rana pipiens) tadpoles. Environ Toxicol Chem 25(5):1383-9.

Chin, A., D.M. Rohrer, D.A. Marion, and J.A. Clingenpeel. 2004. Effects of all-terrain vehicles on stream dynamics. Pgs. 292-296 In: Guldin, James M., tech. comp. 2004. Ouachita and Ozark Mountains symposium: ecosystem management research. Gen. Tech. Rep. SRS–74. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 321 p.

Christy, J. A. and D. H. Wagner. 1996. Guide for the identification of rare, threatened, or sensitive bryophytes in the range of the northern spotted owl, western Washington, western Oregon, and northwestern California. USDI, Bureau of Land Management, Portland, Oregon.

Claar, J. J.; Anderson, N.; Boyd, D. [et al]. 1999. Carnivores. In: Joslin, G.;Youmans, H., cords. Effects of recreation on Rocky Mountain wildlife: a review for Montana. Committee on Effects of Recreation on Wildlife, Montana Chapter of The Wildlife Society. 307pp.

Clark, W.R. and E.K. Fritzell. 1992. A review of population dynamics of furbearers. *In:* Wildlife 2001: populations. D.R. McCullough and R.H. Barrett, eds. Elsevier Applied Science, London. 1163 pp.

Clevenger, A.P. 1994. Habitat characteristics of Eurasian pine Martens, *Martes martes*, in an insular Mediterranean environment. Ecography 17:257-263.

Clinton, B.D. and J.M. Vose. 2003. Differences in surface water quality draining four road surface types in the southern Appalachians, S. J. Appl. Forestry 27(2), pp. 100–106.

Coe, D. B.R., 2006, Sediment production and delivery from forest roads in the Sierra Nevada, California: MS thesis, Colorado State University, Fort Collins, Colorado.

Coffin, P.D. 1981. Distribution and life history of the Lahontan/Humboldt cutthroat trout, Humboldt River drainage basin. Nevada Department of Wildlife, Reno, Nevada. 69 pp.

Coffin, P.D. 1983. Lahontan cutthroat trout fishery management plan for the Humboldt River Basin. Federal Aid to Fish Restoration Project Report F-20-17, Study 1X, Job No. 1-P-1. Nevada Department of Wildlife, Reno, Nevada. 33 pp.

Coffin, P.D. 1988. Nevada's native salmonid program status, distribution and management. Nevada Department of Wildlife, Reno, Nevada. 400 pp.

Cole, David N. 1995. Experimental trampling of vegetation. I. Relationship between trampling intensity and vegetation response. Journal of Applied Ecology, Volume 32, pages 203-214.

Cole, David N. 1995. Experimental trampling of vegetation. II. Predictors of resistance and resilience. Journal of Applied Ecology, Volume 32, pages 215-224.

Coleman, M.E., and V.K. Johnson. 1988. Summary of trout management at Pyramid Lake, Nevada, with emphasis on Lahontan cutthroat trout, 1954-1987. American Fisheries Society Symposium 4:107-115.

Cooper, D. J. and Evan C Wolf. 2004. Fens of the Sierra Nevada, California. Department of Forest, Rangeland and watershed Stewardship, Colorado State University, Fort Collins, CO. An unpublished progress report of work in classifying Sierra Nevada Fens sent to Anne Bradley, R-5 botanist.

Cooper, J.J. 1983. Distributional ecology of native and introduced fishes in the Pit River system, northeastern California, with note on the Modoc sucker. Calif. Fish and Game 69:39-53.

Copeland J. P., Peek J. M., Groves C. R., Melquist W. E., McKelvey K. S., McDaniel G. W., Long C. D., Harris C. E. 2007. Seasonal habitat associations of the wolverine in central Idaho. Journal of Wildlife Management. 71: 2201–2212.

Cordell, H.K. 1999. *Outdoor Recreation in American Life: A National Assessment of Demand and Supply Trends.* USDA Forest Service, Southern Research Station. Athens, Georgia. 449 pages.

Corn, P.S., and L.J. Livo. 1989. Leopard frog and wood frog reproduction in Colorado and Wyoming. The Northwestern Naturalist 70(1):1-9.

Costanza, R., and H.E. Daly. 1992. Natural capitol and sustainable development. *Conservation Biology* 6(1):37-46.

Cowan, W. 1983. Annual fisheries management report FY-83' Summit Lake Indian Reservation, Humboldt Country, Nevada. Unpublished report. Summit Lake Paiute Tribe, Winnemucca, Nevada. 37 pp.

Craig, D. 1991. A habitat management program for the bald eagle on the Tahoe National Forest - draft; unpublished report. Available at the Tahoe National Forest Supervisor's Office, 631 Coyote Street, Nevada City, CA. 10p.

D'Antonio, Carla M., Eric L. Berlow, and Karen L. Haubensak. 2004. Invasive Exotic Plant Species in Sierra Nevada Ecosystems. USDA Forest Service General Technical Report PSW-GTR-193.pages 175-183.

Daehler, Curtis C. 2003. Performance comparisons of co-occurring native and alien invasive plants: Implications for conservation and restoration. Annual Review of Ecology, Evolution, and Systematics. Available online at: http://ecolsys.annualreviews.org

Damiani, C., D.C. Lee, S.L. Jacobson. 2007. Effects of noise disturbance on northern spotted owl reproductive success. Unpublished report. USDA Forest Service. Pacific Southwest Research Station, Redwood Sciences Laboratory, Arcata, CA.

Dark, S.J. 1997. A landscape-scale analysis of mammalian carnivore distribution and habitat use by fisher. M.S. Thesis, Humboldt State Univ. 67 pp

Davidson, C. 1994. Westward Frog. Multimedia Tour of Calif. (images, sounds, and species notes). http://ice.ucdavis.edu/Toads/oldpage/wwfrog.html

Davis: University of California, Centers for Water and Wildland Resources. 1996. Sierra Nevada Ecosystem Project, Final Report to Congress.

Daw, S. K., and S. DeStefano. 2001. Forest structure of Northern Goshawk nest stands and post-fledging areas. Journal of Wildlife Management 65:59–65.

Dean Runyan Associates. 1994. "Campers in Calif. - Travel Patterns and Economic Impacts." Portland, OR. July 1994. 31 pages.

Dean Runyan Associates. 1996. "Calif. Travel Impacts by County, 1991-1994." Portland, OR. March 1996. 105 pages.

Dean Runyan Associates. 1999. "Calif. Travel Impacts by County, 1992-1997." Portland, OR. February 1999. 104 pages.

Delaney, D.K., T.G. Grubb, P. Beier, L.L. Pater, and M.H. Reiser. 1999. Effects of helicopter noise on Mexican spotted owls. Journal of Wildlife Management 63:60-76.

Delaney, David K. and Teryl G. Grubb. 2001. Effects of Off-Highway Vehicle Noise on Northern Spotted Owls: Sound Data Results. A report to the Mendocino National Forest. Contract Number 43-91Z9-0055.

Delaney, David K. and Teryl G. Grubb. 2003. Effects of Off-Highway Vehicle Noise on Northern Spotted Owls: 2002 Results. A Report to the State of California Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division Contract Number 4391Z9-0-0055.

Delaney, David K., Teryl G. Grubb, Paul Beier, Larry L. Pater, and M. Hildegard Reiser. 1999. Effects of Helicopter Noise on Mexican Spotted Owls. Journal of Wildlife Management Vol. 63 (1), Pages 60-76.

Detrich, P. 1982. Results of California winter bald eagle survey--1982. U. S. Dept. Int. Fish Wildl. Serv., Sacramento, CA. 16 pp.

Detrich, P. 1990. The California bald eagle management plan - draft; unpublished report. Available at the Tahoe National Forest Supervisor's Office, 631 Coyote Street, Nevada City, CA. 71p.

deVos, A. 1951. Recent findings in fisher and marten ecology and management. Transactions North American Wildl. Conf. 16:498-505.

deVos, J.C., M.R. Conover, and N.E. Headrick. 2003. Mule deer conservation: Issues and management strategies. Jack H. Berryman Institute Press. Logan, UT.

Dietrich, P.J. 1981. Historic range of breeding bald eagles in California. Unpublished manuscript. Redding, CA. 17 pp.

Dillingham, C. P. 2005. Conservation Assessment for *Meesia triquetra* (three-ranked hump-moss) and *Meesia uliginosa* (broad-nerved hump-moss) in California with a focus on the Sierra Nevada Bioregion. Unpublished report prepared for R5 Forest Service, Vallejo, California. 28 pages.

DiTomaso, J. M. and Evelyn A. Healy. 2007. Weeds of California and other western states. University of California Agriculture and Natural Resources, Publications 3488, Volumes I and II, 1805 pages.

Dole, J.W. 1998. Professor at California State University, Northridge. Personal communication

Dougherty, C.K., G.R. Smith. 2006. Acute effects of road de-icers on the tadpoles of three anurans. Applied Herpetology, Vol. 3(2), pp. 87-93.

Douglass, Kriss S, John Hamann, and Gayle Joslin. 1999. Vegetation, Soils and Water. Pages 9.1-9.11 *In* G. Joslin and H. Youmans, coordinators. Effects of recreation on Rocky Mountain wildlife: A review for Montana. Committee on effects of recreation on wildlife, Montana Chapter of the Wildlife Society. 307 pages.

Dovers, S.R., T.W. Norton, and J.W. Handmer. 1996. Uncertainty, ecology, sustainability, and policy. *Biodiversity and Conservation* 5:1143-1167.

Drost, C.A., and G.M. Fellers. 1996. Collapse of a regional frog fauna in the Yosemite area of the Calif. Sierra Nevada, USA. *Conservation Biology* 10:414-425.

Duane, Timothy. 1999. Shaping the Sierra: Nature, Culture, and Conflict in the Changing West. University of California Press. Berkeley and Los Angeles, CA. Lewis, Henry. 1973. Patterns of Indian Burning in California: Ecology and Ethnohistory. Pp. 55-116 *In: Before the Wilderness: Environmental Management by Native Californians*. Edited by T. C. Blackburn and K. Anderson. Ballena Press. Menlo Park, CA.

Duellman, W.E. and L. Trueb. 1986. Biology of the amphibians. McGraw-Hill Publishing Company. New York, NY. 670 pp.

Duncan Furbearer Interagency Workgroup. 1989. Workgroup assembled to review the proposed Duncan Timber Sale, Tahoe National Forest and formulate proposed Management Guidelines. Members present: Slader Buck, Reginald Barrett, Terri Simon-Jackson, Gordon Gould, Ron Schlorff, Jeff Finn, Joelle Buffa, Maeton Freel, Jeff Mattison, Mike Chapel, Mariana Armijo, Julie Lydick and Phil Turner.

Duron, Wendy. 1990. Survey of historic locations of *Ivesia webberi* on the Plumas and Tahoe National Forests. A cost-share effort between the Nature Conservancy, the Tahoe National Forest and the Plumas National Forest - unpublished report.

Ecology. 1-17. University of Oregon, Eugene Oregon.

Elmore, Wayne and Robert L. Beschta. 1987. Riparian areas: Perceptions in Management. Rangelands 9 (6), pages 260-265.

Endangered Species Act. 1973 as amended. 50 CFR Chapter IV part 402. 12pp.

Erman, N. A. 1996. Status of aquatic invertebrates. Pages 987-1008 In: Sierra Nevada Ecosystem Project: Final Report to Congress, Vol. II, Assessments and scientific basis for management options, Chapter 35. University of California, centers for water and wildland resources, Davis, CA. 95616-8750.

Erman, N. A. 2002. Lessons from a long-term study of springs and spring invertebrates (Sierra Nevada, California, U.S.A.) and implications for conservation and management. Conference Proceedings, Spring-fed Wetlands: Important Scientific and Cultural Resources of the Intermountain Region, 2002. Available online at: http://www.wetlands.dri.edu. 13 pages.

Erman, N.A. and D.C. Erman. 1990. Biography of caddisfly Tricoptera assemblages in cold springs of the Sierra Nevada. University of California Water Resources Center, Davis.

Evermann, B.W. 1905. The golden trout of the southern High Sierras. Bull. U.S. Bur. Fish. 25:1-51.

Fahrig, L., J.H. Pedlar, S.E. Pope, P.D. Taylor, and J.F. Wegner. 1995. Effect of road traffic on amphibian density. Biological Conservation 73:177-182.

Federal Register 1970. Volume 35, page 13520. Listing of Lahontan Cutthroat Trout as endangered species.

Federal Register 1975. Volume 40, page 29864. Listing of Lahontan Cutthroat Trout as threatened species.

Federal Register 2001. Volume 66 (49): 14626-14758. Final determinations of critical habitat for the California Red-legged Frog; Final Rule.

Ferguson, Leslie; Celestine Lacey Duncan, and Kathleen Snodgrass. 2003. Backcountry road maintenance and weed management. Tech. Rep. 0371-2811-MTDC. Missoula, MT: U.S. Department of Agriculture, Forest Service, Missoula Technology and Development Center. 22 pages.

Fitch, H.S. 1938. *Rana boylii* in Oregon. Copeia, Vol 1938(3):pg. 148.

Flanagan, S.A., Furniss, M.J., Ledwith, T.S., etal. 1998. *Methods for Inventory and Environmental Risk Assessment of Road and Drainage Crossings*. USDA Forest Service, San Dimas Technology and Development Center, San Dimas CA. 56pp. Available online at: http://stream.fs.fed.us/water-road/w-r-pdf/handbook.pdf

Flowers, Seville. 1973. Mosses: Utah and the west. Brigham Young University Press. 567 pages.

Foltz, Randy B. and Dexter L. Meadows. 2007. Impacts of ATV traffic on undesignated trails. Streams systems technology center. 3 pages.

Foltz, Randy, B. 2006. Erosion from all terrain vehicle (ATV) trails on national forest lands. American Society of Agricultural and Biological Engineers. ASABE meeting presentation. Paper number: 068012.

Forman, R.T.T. and L.E. Alexander. 1998. Roads and their major ecological effects. Annual Review of Ecology and Systematics 29:207-31.

Forsyth, A.R., Bubb, K.A., and Cox, M.E., 2005, Runoff, sediment loss, and water quality from forest roads in a southeast Queensland coastal plain Pinus plantation: Forest Ecology and Management, vol. 221, issues 1-3, p. 194-206.

Fowler, C., B. Valentine, S. Sanders and M. Stafford. 1991. Habitat Suitability Index Model: willow flycatcher (*Empidonax traillii*). Unpublished document, USDA Forest Service, Tahoe National Forest. 15 pp.

Fowler, Catherine. 1988. Habitat capability model for the northern goshawk. USFS, Tahoe National Forest, Nevada City, CA. 21 pp.

Franklin, Jerry F. 2003. Challenges to temperate forest stewardship – focusing on the future. CSIRO Publishing. 10 pages.

Fraser, J.D. 1985. The impact of human activities on bald eagle populations - a review. Pages 68-84 in J.M. Gerrard and T.M. Ingram, eds. The bald eagle in Canada. Headingley, Manitoba: White Horse Plains Pub.

Fraser, J.D., L.D. Frenzel, J.E. Mathisen. 1985. The impact of human activities on breeding bald eagles in north-central Minnesota. J. Wildl. Manage. 59:585-592.

Freddy, D. J., W. M. Bronaugh, and M. C. Fowler. 1986. Responses of mule deer to disturbance by persons afoot and snowmobiles. Wildl. Soc. Bull. 14:63-68.

Freel, M. 1991. A literature review for management of fisher and marten in California. Unpubl. Document, USDA Forest Service, Pacific Southwest Region.

Freel. K. 1997. Herpetologist with USGS, Point Reyes, CA [personal communication with Tahoe National Forest Fisheries Biologist].

French, J., and J. Curran. 1991. DRAFT Lahontan cutthroat trout fishery management plan for the Quinn River drainage basin. Nevada Department of Wildlife, Reno, Nevada. 46 pp.

Frest, T.J. and E.J. Johannes. 1993. Mollusk Species of Special Concern within the Range of the Northern Spotted Owl. Final Report to the Forest Ecosystem Management Working Group, USDA, Forest Service. Deixis Consultants, Seattle WA. 98 pages.

Frest, T.J.; Johannes, E.J. 1995. Interior Columbia basin mollusk species of special concern. Seattle, WA: Deixis Consultants; Final report to the Interior Columbia Basin Ecosystem Management Project, a contract report prepared for the U.S. Department of Agriculture, Forest Service; U.S. Department of the Interior, Bureau of Land Management, Upper Columbia River Basin Ecosystem Management Project. Walla Walla, WA.Contract #43-0E00-4-9112. 274 p. (plus appendices).

Frest, T.J.; Johannes, E.J. 1998 (1995). Freshwater mollusks of the Upper Klamath Drainage, Oregon. Seattle, WA: Deixis Consultants; 1998 yearly report to Oregon National Heritage Program and Klamath Project, U.S. Department of the Interior, Bureau of Reclamation. Contract #ORFO 092094, 200 p. (plus appendices).

Froehlich, H.A. 1979. Soil compaction from logging equipment: effects on growth of young ponderosa pine. *J. Soil and Water Conservation* 34:276-278.

Froehlich, H.A. and D.H. McNabb. 1984. Minimizing soil compaction in Pacific Northwest forests. Pages 159-192 In *Forest soils and treatment impacts: Proceedings of the 6th North American Forest Soils Conference, June 1983* edited by E.L. Stone. Knoxville, TN. Department of Forestry, Wildlife and Fisheries, Univ. Tennessee, Knoxville, TN 37920.

Furniss, M.J., Love, Michael, and Flanagan, S.A., 1997, Diversion potential at road-stream crossings: USDA Forest Service Technology and Development Program, 9777 1814-SDTDC, 12 p.

Furniss, M.J., T.D. Roelofs and C.S. Yee. 1991. Road construction and maintenance. In *Influences of forest and rangeland management on salmonid fishes and their habitats* edited by W.R. Meehan. Pages 297-323. Special Publication No. 19. American Fisheries Society, Bethesda, MD.

Gaines, William L.; Singleton, Peter H.; Ross, Roger C. 2003. Assessing the Cumulative Effects of Linear Recreation Routes on Wildlife Habitats on the Okanogan and Wenatchee National Forests. Gen. Tech. Rep. PNW-GTR-586. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 79 pages.

Garber, S.D. and J. Burger. 1995. A 20 year study documenting the relationship between turtle decline and human recreation. *Ecological Applications* 5:1151-1162.

Gelbard, J. L. and Jayne Belnap. 2003. Roads as Conduits for Exotic Plant Invasions in a Semiarid Landscape. Conservation Biology, Volume 17, No. 2, Pages 420-432.

Gelbard, J. L. and Jayne Belnap. 2005. Invasibility of Roadless Grasslands: An Experimental Study of Yellow Starthistle. Ecological Applications, Volume 15 (5), Pages 1570-1580.

Gerlach, J.D. 1998. How the West was lost: reconstructing the invasion dynamics of yellow star thistle and other plant invaders of western rangelands and natural areas. In: M. Kelly, E. Wagner, and P. Warner (eds). Proceedings of the California Pest Plant Council Symposium. 3:1997. Pages 67-72.

Gerstung, E.R. 1986. Fishery management plan for Lahontan cutthroat trout (*Salmo clarki henshawi*) in California and western Nevada water. Inland Fisheries Administrative Report No. 86-, Federal Aid Project F33-R-11, The Resources Agency, California Department of Fish and Game. 54 pp.

Gerstung, E.R. 1988. Status, life history, and management of the Lahontan cutthroat trout. American Fisheries Society Symposium 4:93-106.

Gibson, David J., Eric D. Adams, Joseph S. Ely, Danny J. Gustafson, Douglas McEwen, and Tracy R. Evans. 2000. Eighteen years of herbaceous layer recovery of a recreation area in amesic forest. Journal of the Torrey Botanical Society, 127 (3), pages 230-239.

Gillespie, G. R. 2002. Impacts of sediment loads, tadpole density, and food type on the growth and development of tadpoles of the spotted tree frog *Litoria spenceri*: an in-stream experiment. Biological Conservation, 106:141-150.

Girard, C. 1854. Description of *Sebastues ruber, Sebastes ruber* var. *parvu, Sebastes variabilis*, and *Centrarchus maculosus*. The Pacific 3: 165-209.

Godish, T. 1991. *Air Quality*. Lewish Publishers, Inc.

Goebel, P. Charles, Brian J. Palik, and Kurt S. Pregitzer. 2003. Plant diversity contributions of riparian areas in watersheds of the northern lake states, USA. Ecological Applications, volume 13, number 6, pages 1595-1609.

Golightly, R.T, T.F. Penland, W.J. Zielinski, and J.M. Higley. 2006. Fisher diet in the Klamath/North Coast Bioregion. Unpublished report, Department of Wildlife, Humboldt State University, Arcata, California.

Golightly, R.T. and W.J. Zielinski. 1997. Food habits of fisher in northwestern California. (In prep.)

Graber, D.M. 1996. Status of terrestrial vertebrates. Pgs 709-726 in Vol. II Assessments and Scientific Basis for Management Options. Sierra Nevada Ecosystem Project, Final Report to Congress. Centers for Water and Wildland Resources, University of California, Davis CA.

Grace, J.M. III, and Clinton, B.D., 2007, Protecting soil and water in forest road management: Transactions of the American Society of Agricultural and Biological Engineers 50(5):1579-1584.

Graumlich, L.J. 1993. A 1000 year record of temperature and precipitation in the Sierra Nevada. *Quaternary Research* 39:249-255.

Gray, E.M. 1995. DNA fingerprinting reveals a lack of genetic variation in northern populations of the western pond turtle (*Clemmys marmota*). Conservation Biology 5:1244-1255.

Green, G. A., H. L. Bombay, M. L. Morrison. 2003. Conservation assessment of the willow flycatcher in the Sierra Nevada. Unpublished document. USDA Forest Service, Pacific Southwest Region, CA. 62 pp.

Green, G.A., L.A. Campbell, and D.C. Macfarlane. Submitted. A conservation assessment for fishers (*Martes pennanti*) in the Sierra Nevada of California. USDA Forest Service, Pacific Southwest Region, Vallejo, California. 72 p.

Greene, C. 1995. Habitat requirements of great gray owls in the central Sierra Nevada. M.S. Thesis. University of Michigan. 94pp.

Grinnell, J. and A.H. Miller. 1994. The distribution of the birds of California. Pacific Coast Avifauna, No. 27. 608 pp.

Grinnell, J., and T.I. Storer. 1924. Animal life in the Yosemite; an account of the mammals, birds, reptiles, and amphibians in a cross-section of the Sierra Nevada. Univ. California Press, Berkeley.

Grinnell, J., J.S. Dixon, and J.M. Linsdale. 1937. Fur-bearing mammals of California. Univ. of California Press, Berkeley. Vols. 1 and 2. 777p

Grubb, T.G. 1976. A survey and analysis of bald eagle nesting in Western Washington. M.S. Thesis, Univ. Washington, Seattle. 87 pp.

Grubb, T.G. 1995. Food habits of bald eagles breeding in the Arizona desert. Wilson Bulletin 107(2), pp. 258-274.

Grubb, T.G. 1995a. Constructing bald eagle nests with natural materials. USDA Forest Service research note RM-RN-535, 8p. Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.

Grubb, T.G. 1995b. Food habits of bald eagles breeding in the Arizona Desert. Wilson Bulletin 107:258-274.

Grubb, T.G. and C.E. Kennedy. 1982. Bald eagle winter habitat on southwestern National Forests. USDA Forest Service Research paper RM-237, 13p. Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.

Grubb, T.G. and R.M. King. 1991. Assessing human disturbance of breeding bald eagles with classification tree models. J. Wildl. Manage. 55:500-511.

Grubb, T.G., L.L. Pater and K. K. Delaney. 1998. Logging truck noise near nesting northern goshawk. USDA Forest Research Note RMRS-RN-3.

Grubb, T.G., W.W. Bowerman, J.P. Giesy and G.A. Dawson. 1992. Responses of breeding bald eagles, *Haliaeetus leucocephalus*, to human activities in north central Michigan. Canadian Field-Naturalist 106(4):443-453.

Guariguata, Manuel R. and Juan M. Dupuy. 1997. Forest regeneration in abandoned logging roads in lowland Costa Rica. Biotropica 29 (1) pages 15-28.

Gucinski, Hermann; Furniss, Michael J.; Ziemer, Robert R.; Brookes, Martha H. 2001. Forest roads: a synthesis of scientific information. Gen. Tech. Rep. PNW-GTR-509. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 103 p.

Guldin, James M., tech. comp. 2004. Ouachita and Ozark Mountains symposium: ecosystem management research. Gen. Tech. Rep. SRS–74. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 321 p.

Gutiérrez, R. J., and S. Harrison. 1996. Applying metapopulation theory to Spotted Owl management: a history and critique. Pages 167–185 in D. R. McCullough, editor. Metapopulations and wildlife conservation. Island Press, Washington, D.C.

Gutierrez, R.J., M.E. Seamans and M.Z. Peery. 1999. Population ecology of the California spotted owl in the central Sierra Nevada: annual results 1998. Annual progress Report March 1999. Region 5, USDA Forest Service. 20pp.

Gutzwiller, K.J. and W.C. Barrow. 2003. Influences of roads and development on bird communities in protected Chihuanhuan desert landscapes. Biological Conservation 1113:225-237.

Hagans, D. K., W. E. Weaver, and M. A. Madej. 1986. Long-term on-site and off-site effects of logging and erosion in the Redwood Creek Basin, northern California. Pages 38–65 In: Papers presented at the American Geophysical Union meeting on cumulative effects. National Council for Air and Stream Improvement, New York, Technical Bulletin 490.

Halford, Anne. 1992. Interim management guide for *Lewisia longipetala* – a cost-share agreement between the California Native Plant Society and the Tahoe, Eldorado and Lake Tahoe Basin Management Unit – an administrative report - Unpublished USDA PSW region, 34 pages.

Hamann, B., H. Johnston, P. McClelland, S. Johnson, L. Kelly and J. Gobielle. 1999. Birds. Pages 3.1-3.34. In: G. Joslin and H. Youmans, cords. Effects of recreation on Rocky Mountain wildlife: a review for Montana. Committee on the effects of Recreation on Wildlife, Montana Chapter of the Wildlife Society.

Hargis C.D., J.A. Bissonette, and D.L. Turner. 1999. The influence of forest fragmentation and landscape pattern on American martens. J. of Appl. Ecol. 36:157-172.

Hargis, C.D. and D.R. McCullough. 1984. Winter diet and habitat selection of marten in Yosemite National Park. Journal of Wildlife Management 48:140-146.

Hargis, C.D. and J.A. Bissonette. 1995. The effect of forest fragmentation on American marten populations and prey availability. Final report for the Utah Division of Wildlife Resources, Wasatch-Cache National Forest, Ashley National Forest, Utah Wilderness Association (Contract No. 91-9166). December 31, 1995. 96pp.

Hargis, C.D. and J.A. Bissonette. 1997. The influence of forest fragmentation and prey availability on American marten populations: a landscape level analysis. Pages 437-451 in Proulx, Gilbert, H.N. Bryant and P.M. Woodard, eds. *Martes*: taxonomy, ecology, techniques, and management. Proceedings of the Second International Martes symposium. The Provincial Museum of Alberta. Edmonton, Alberta, Canada. 474 p.

Hargis, C.D., J.A. Bissonette and D.L Turner. 1999. The influence of forest fragmentation and landscape pattern on American martens. Journal of Applied Ecology 36:157-172.

Hargis, C.D., Perloff, R.D. and C. McCarthy. 1991. Home ranges and habitats of northern goshawks in eastern California. Draft Rep. C.D. Hargis, Dept. Fish and Wildl., Utah State Univ. Logan, UT. 17 pp.

Harmata, A.R. and Oakleaf, B. 1992. Bald eagles in the greater Yellowstone ecosystem: an ecological study with emphasis on the Snake River, Wyoming. Cheyenne, WY: Wyoming Game and Fish Department. [Pages unknown] In: Gaines, William L.; Singleton, Peter H.; Ross, Roger C. 2003. Assessing the Cumulative Effects of Linear Recreation Routes on Wildlife Habitats on the Okanogan and Wenatchee National Forests. Gen. Tech. Rep. PNW-GTR-586. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Harr, R.D. and R.A. Nichols. 1993. Stabilizing forest roads to help restore fish habitats: a northwest Washington example. *Fisheries* 18(4):18-22.

Harris, J.H., S.D. Sanders, and M. A. Flett. 1987. Willow flycatcher surveys in the Sierra Nevada. Western Birds 18:27-36.

Harris, J.H., S.D. Sanders, and M.A. Flett. 1988. The status and distribution of the willow flycatcher in the Sierra Nevada: results of the 1986 Survey. California Department of Fish and Game. Wildlife Management Division Administrative Report. 88-1. 32 pp.

Harrison, C. 1978. A field guide to the nests, eggs and nestlings of North American birds. W. Collins Sons and Co., Cleveland OH. 416 pp.

Harrison, R.T. 1975. Impact of off-road vehicle noise on a national forest. San Dimas, CA: U.S. Department of Agriculture, Forest Service, Equipment Development Center. 23 p.

Harrison, S., Hugh Safford, James B. Grace, Joshua H. Viers, Kendi F. Davies. 2006. Regional and local species richness in an insular environment: Serpentine plants in California. Ecological Monographs 76 (1), pages 41-56.

Havlick, David G. 2002. No Place Distance: Roads and Motorized Recreation on America's Public Lands. Island Press. Washington D.C. 297 pp.

Hayes, M.P. and M.R. Jennings. 1986. Decline of ranid frog species in western North America: are bullfrogs (*Rana catesbeiana*) responsible? Journal of Herpetology 20(4):490-509.

Hayes, M.P. and M.R. Jennings. 1988. Habitat correlates of distribution of the California red-legged frog (*Rana aurora draytonii*) and the foothill yellow-legged frog (*Rana boylii*): implications for management. Proceedings of the Symposium on Management of Amphibians, Reptiles and Small Mammals in North America. Gen. Tech. Rpt. RM-166, Rocky Mountain Research Station, USDA Forest Service. Fort Collins, CO. pp 144-158.

Heinemeyer, K.S. 1993. Temporal dynamics in the movements, habitat use, activity, and spacing of reintroduced fishers in Northwestern Montana. [M.S.]. Missoula: University of Montana. 158 p.

Hejl, Sallie J. 1997. A landscape perspective on the effects of clearcutting on birds in cedar/hemlock forests. Intermountain Journal of Science 3(4): 149.

Hickman, J.C. 1993. *The Jepson Manual - Higher Plants of Calif.* Berkeley and Los Angeles: Univ. Calif. Press.

Hickman, T., and R.F. Raleigh. 1982. Habitat suitability index models: cutthroat trout. Report number USFWS/OBS-82/10.5. USDI, Fish and Wildlife Service, Western Energy and Land Use Team, Office of Biological Services, Washington, D.C.

Hilborn, R. 1987. Living with uncertainty in resource management. *North American J. of Fisheries Mgt* 7:1-5.

Hill, M. 1975. Geology of the Sierra Nevada. Univ. Calif. Press, Berkeley, CA.

Hinds, Thomas E. and Wayne D. Shepperd. 1987. Aspen sucker damage and defect in Colorado clearcut areas. USDA Forest Service Research Paper RM-278.

Hine, R.L., B.L. Les, and B. F. Hellmich. 1981. Leopard frog populations and mortality in Wisconsin, 1974-76. Wis. Dep. Natur. Resour. Tech Bull. 122. 39pp.

Holland, D.C. 1991. A synopsis of the ecology and status of the western pond turtle (*Clemmys marmorata*) in 1991. Report to USFWS National Ecology Research Center, San Simeon Field

Holland, D.C. 1994. The Western Pond Turtle: Habitat and History. Final Report, U.S. Department of Energy, Bonneville Power Administration, Division of Fish and Wildlife, Wildlife diversity Program, Oregon Department of Fish and Wildlife. August.

Holling, C.S. 1978. *Adaptive environmental assessment and management.* John Wiley and Sons. New York, NY.

Holtrop, 1988. *Recent Adverse District Court Decision Concerning 2001 Roadless Area Conservation Rule in Wyoming v. USDA, No. 2:07-cv-00017-CAB (D. Wyoming, August 8, 2008).* Joel D. Holtrop, Deputy Chief National Forest System.

Hornocker, M.G. and H.S. Hash. 1981. Ecology of the wolverine in northwestern Montana. Can. J. Zool. 59:1286-1301.

Howard, J. K. & K. M. Cuffey, 2003. Freshwater mussels in a California North Coast Range river: occurrence, distribution, and controls. Journal of the North American Benthological Society 22: 63–77.

Huggett, R. J. 1993. *Modeling the human impact on nature: systems analysis of environmental problems.* Oxford Univ. Press, New York.

Hupf, T. H. 1977. Natural histories of two species of leopard frogs, *Rana blairi* and *Rana pipiens*, in a zone of sympatry in northeastern Nebraska. MS Thesis, University of Nebraska, Lincoln, Lincoln, Nebraska.

Hynes, H.B.N. 1970. *The Ecology of Running Waters*. Liverpool Univ. Press, Liverpool, England. 555 pages.

Ikeda, D. H. and J. A. Witzman. 1989. Ecological survey and status report for *Astragalus webberi* on the Plumas National Forest. A cost-share agreement between the Nature Conservancy and the Plumas National Forest – an administrative report - Unpublished, USDA, PSW region.

Irwin, J.T., J.P. Costanzo and R.E. Lee. 1999. Terrestrial overwintering in the northern cricket frog, *Acris crepitans*. Canadian Journal of Zoology 77:1240–1246

Ivey, G. 1995. Draft paper given at the Sandhill Crane Workshop, August 8-9, 1995. Preliminary unpublished data. Alturas, CA.

Jalkotzy, M. G., P. I. Ross, and M. D. Nasserden. 1997. The Effects of Linear Developments on Wildlife: A Review of Selected Scientific Literature. Prepared for Canadian Association of Petroleum Producers. Arc Wildlife Services Ltd., Calgary. 115pp.

James, A.H. 1997. Sandhill cranes breeding in Sierra Valley, Ca. West Birds 8:159-160.

Jassby, A.D., J.E. Reuter, R.P. Axler, C.R. Goldman, and T.J. Hackley. 1994. Atmospheric deposition of nitrogen and phosphorous in the annual nutrient load of Lake Tahoe (Calif. Nevada). *Water Resources Research*, 30:2207-2216.

Jennings, M. 1993. Current Status of 25 species of California Herps. Presented at the 1993 Wildlife Society Western Section Meeting.

Jennings, M. R. 1996. Volume II. Chapter 31. Status of amphibians. Pp 921-944 in Sierra Nevada Ecosystem Project: Final report to Congress. Centers for Water and Wildland Resources, University of California, Davis.

Jennings, M. R. 1997. Research Associate with California Academy of Sciences, San Francisco, CA [personal communication with Tahoe National Forest Biologist].

Jennings, M. R. 1998. USGS Herpetologist, Davis, CA. Personal communication.

Jennings, M. R., and M. P. Hayes. 1985. Pre-1900 overharvest of California red-legged frogs (*Rana aurora draytonii*): The inducement for bullfrog (*Rana catesbeiana*) introduction. Herpetologica, 41:94-103.

Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. A Report to the California CDFG, Rancho Cordova, California. 255 pp.

Jennings, M.R. 1988. Natural history and decline of native ranids in California. Pgs. 61-72 in Proceedings of the Conference on California Herptology. Eds. H.P. DeLisle, P. R. Brown, B. Kaufman and B. M. McGurty.

Jennings, M.R. and M.P. Hayes. 1985. Pre-1900 over harvest of California red-legged frogs (*Rana aurora draytonii*) : the inducement for bullfrog (*Rana catesbeiana*) introduction. Herpetologica 41 (1): 94-103.

Jennings, M.R. and M.P. Hayes. 1992. Copy of locality records from the data base of Mark R. Jennings and Marc P. Hayes for use in support of the petition to list *Rana aurora draytonii* under the endangered Species Act. 30pp.

Jennings, Mark R., and Michael M. Fuller. 2004. Origin and distribution of leopard frogs, *Rana pipiens* complex, in California. California Fish and Game 90(3):119-139.

Jimerson, Thomas M. and Sydney K. Carothers. 2002. Northwest California Oak Woodlands: Environment, species composition, and ecological status. USDA Forest Service Gen. Tech. Rep. 705-717.

Johnsgard, P.A. 1975. North American game birds of upland and shoreline. Univ. Nebraska Press, Lincoln. 183 pp.

Johnson, G., D. Bennett, and T. Bjornn. 1983. Juvenile emigration of Lahontan cutthroat trout in the Truckee River/Pyramid Lake system. Pages 90-175. In: Restoration of a Reproductive Population of Lahontan Cutthroat Trout (*Salmo clarki henshawi*) to the Truckee River/Pyramid Lake System. Special Report U.S. Department of the Interior, Fish and Wildlife Service, Great Basin Complex Office, Reno, Nevada.

Jones & Stokes Associates, Inc. 1987. Survey of habitat and populations of the Valley elderberry longhorn beetle along the Sacramento River. Final report prepared for U. S. Department of Interior, Fish and Wildlife Service, Region 1. Sacramento, California.

Jones and Stokes. 1997. Eldorado National Forest survey.

Jones, J. A., F. A. Swanson, B. C. Wemple, and K. U. Snyder. 2000. Effects of roads on hydrology, geomorphology, and disturbance patches in stream networks. Conservation Biology, 14:76-85.

Jordan, D.S. and B.W. Evermann. 1896. Fishes of North and Middle America. Bull. U.S. Nat. Mus. 47:1-3705.

Joslin, G., and H. Youmans, Coordinators. 1999. Effect of Recreation on Rocky Mountain Wildlife: A Review for Montana. Committee on Effects of Recreation on Wildlife, Montana Chapter of the Wildlife Society. 307 pages.

Jurek, R.M. 1988. Five-year status report - bald eagle. State of California, The Resources Agency, Department of Fish and Game; unpublished report. 15p.

Kamler JF, Ballard WB. 2002. A review of native and nonnative red foxes in North America. Wildl Soc Bull 30:370–379

Kan, T., 1993. Interim Management Guide for *Eriogonum umbellatum* var. *torreyanum.* A cost-share agreement between the Nature Conservancy and the Tahoe National Forest – an administrative report - Unpublished, USDA, PSW region.

Kassar, Chris. 2005. Motorized Recreation at a Crossroads: Lessons from the Past Converge with Management Practices of the Future – Off-Road Vehicle Use on Public Lands. A report completed for the Friends of the Inyo. 66 pages.

Kasworm, W .F. and T.L. Manley. 1990. Road and Trail Influences on Grizzly Bears and Black Bears in Northwest Montana from Bears: Their Biology and Management, Vol. 8, A Selection of Papers from the Eighth International Conference on Bear Research and Management, Victoria, British Columbia, Canada, February 1989, (1990), pp. 79-84

Kattelmann, R. and M. Embury. 1996. Riparian areas and wetlands. Pages 201-273 In *Sierra Nevada Ecosystem Project: Final Report to Congress, Assessments, Commissioned Reports and Background Information*, Vol III Ch. 5. Univ. Calif. Centers for Water and Wildland Resources, Davis, CA 95616-8750.

Kaye, Thomas N. and Jennie R. Cramer. 2005. Conservation assessment for *Cypripedium fasciculatum* and *Cypripedium montanum*. Developed by the Institute for Applied Ecology for the R-5 USDA Forest Service, unpublished. 50 pages.

Keane, John. 1995. Unpublished report. Draft report to the California Tahoe Conservancy RE: Northern Goshawks final report.

Keister, G.P. and R.G. Anthony. 1983. Characteristics of bald eagle communal roosts in the Klamath Basin, Oregon and California. J. Wildl. Manage. 47:1072-1079.

Keller, E.A. and F.J. Swanson. 1979. Effects of large organic material on channel form and fluvial processes. *Earth Surface Processes* 4:361-80.

Kimbell, Abigail R. USDA Forest Service, February 15, 2001, letter to Forest Service National Leadership Team.

Knapp, R. 1994. Wilderness Record. Volume 19, Number 2. Davis, California.

Knapp, R. A., and K. Matthews. 2000. Non-native fish introductions and the decline of the mountain yellow-legged frog (*Rana muscosa*) from within protected areas. Conservation Biology, 14:428-438.

Knapp, R.A. 1993. Non-native trout in natural lakes of the Sierra Nevada: An analysis of their distribution and impacts on native aquatic biota. Sierra Nevada Ecosystem Project: Final Report to Congress, Volume III, Chapter 8, pp 363-407. Davis: University of California, Centers for Water and Wildland Resources.

Knapp, R.A. 1996. Non-native trout in natural lakes of the Sierra Nevada: An analysis of their distribution and impacts on native aquatic biota. Sierra Nevada Ecosystem Project: Final Report to Congress, Volume III, Chapter 8, pp 363-407. Davis: University of California, Centers for Water and Wildland Resources.

Knight, N.J. 1985. Microhabitats and temperature requirements of hardhead (*Mylopharadon conocephalus*) and Sacramento squawfish (*Ptychocheilus grandis*), with notes for some other native California stream fishes. Unpubl. Ph.D Dissertation., University of California, Davis. 161pp.

Knight, R.L. and K. J. Gutzwiller. 1995. Wildlife and recreationists: Coexistence through management and research. 372pp. Island Press: Washington, D.C.

Knight, R.L. and S. K. Skagen. 1987. Effects of recreational disturbance on birds of prey: a review. Southwest Raptor Management Symposium and Workshop.

Knight, R.L.; Cole, D.N. 1991. Effects of recreational activity on wildlife in wildlands. Transactions of the North American Wildlife and Natural Resources Conference. 56: 239-247.

Koch, D.L., and J.J. Cooper, E.L. Lider, R.L. Jacobson and R.J. Spencer. 1979. Investigations of Walker Lake, Nevada: Dynamic ecological relationships. Desert Research Center, University of Nevada, Reno. 191 pp.

Koehler, G.M., W.R. Moore and A.R. Taylor. 1975. Preserving the pine marten: management guidelines for western forests. Western Wildlands 2:31-36.

Koide, Roger T. and Harold A. Mooney. 1987. Revegetation of serpentine substrates: Response to Phosphate Application. Environmental Management volume 11, number 4, pages 563-567.

Kondolf, G.M., R. Kattelmann, M. Embury, and D.C. Erman. 1996. Status of riparian habitat. Pages 1009-1030 In *Sierra Nevada Ecosystem Project: Final Report to Congress, Assessments and scientific basis for management options*, Vol II Ch. 30. Univ. Calif. Centers for Water and Wildland Resources. Davis, CA 95616-8750.

Krohn, W.B., Arthur, S.M., Paragi, T.F. 1994. Mortality and vulnerability of a heavily trapped fisher population. In: Buskirk, S.W., Harestad, A.S., Raphael, M.G., comps., eds. Martens, sables and fishers: biology and conservation. Ithaca, NY: Cornell University Press: 137-148.

Kruckeberg, Arthur R. 1984. California serpentines: flora, vegetation, geology, soils and management problems. University of California Press, Berkeley. 180 pages.

Kucera, T.E. (1995) Recent photograph of a Sierra Nevada red fox. California Fish and Game, 81, 43–44.

Kucera, T.E., W.J. Zielinski, and R.H. Barrett. 1995. Current distribution of the American marten, *Martes americana*, in California. Calif. Fish and Game 81:96-103

Kunz, T.H. and R.A. Martin. 1990. *Plecotus townsendii*. Mammalian Species. The American Society of Mammalogists. No. 175:1-6.

Kupferberg, S. J. 1996a. Hydrologic and geomorphic factors affecting conservation of a river-breeding frog (*Rana boylii*). Ecological Applications, 6:1332-1344.

Lacey, C.A., J.R. Lacey, P.K. Fay, J.M. Storey, and D.L. Zamora. 1997. Controlling knapweed on Montana rangeland. Circular 311. Montana State University Extension Service, Bozeman, MT.

Laeger, Eve. 2002. *Botrychium* surveys in California-2002. Prepared for the Sierra Nevada Framework. Unpublished.

Lamberson, R.H., R.L. Truex, W.J. Zielinski, D.C. Macfarlane. 2000. Preliminary analysis of fisher population viability in the southern Sierra Nevada. Unpublished document, February 15. Available at USDA Forest Service, Tahoe National Forest Supervisor's Office, Nevada City, CA. 20pp.

Langley, P. 1996. Quality Assessment of Late Seral Old-Growth Forest Mapping. Pages 663-670 In *Sierra Nevada Ecosystem Project: Final Report to Congress, Assessments and scientific basis for management options*, Vol. II Ch. 30. Univ. Calif. Centers for Water and Wildland Resources. Davis, CA 95616-8750.

Lannoo, M. editor. 2005. Amphibian declines: The conservation status of the United States species. University of California Press. 1094 pgs.

Larson, D.J. 1996. Historic water-use priorities and public policies. Pages 163-180 In *Sierra Nevada Ecosystem Project: Final Report to Congress, Assessments and scientific management options.* Vol II Ch. 8. Univ. Calif. Centers for Wildland Resources. Davis, CA 95616-8750.

Laymon, S.A. 1988. The ecology of the spotted owl in the central Sierra Nevada, California. University of California, Berkeley. PhD Dissertation. 285pp.

Lea, T.N. 1968. Ecology of the Lahontan cutthroat trout, *Salmo clarki henshawi*, in Independence Lake, California. Master's thesis. University of California, Berkeley. 95 pp.

Lefcort, H. 1996. Adaptive, chemically mediated fright response in tadpoles of the southern leopard frog, *Rana utricularia*. Copeia 1996:455–459

Lefcort, H. 1998. Chemically mediated fright response in southern toad (*Bufo terrestris*) tadpoles. Copeia 1998:445–450.

Lefcort, H., K.A. Hancock, K.M. Maur and D.C. Rostal. 1997. The effects of used motor oil, silt, and the water mold *Saprolegnia parasitica* on the growth and survival of mole salamanders (genus *Ambystoma*). Archives of Environmental Contamination and Toxicology 32:383–388

Lehman, R.N. 1979. A survey of selected habitat features of 95 bald eagle nest in California. Calif. Dept. Fish and Game. Wildl. Manage. Branch Admin. Rep. 79-1, Sacramento. 23 pp.

Lehman, R.N., D.E. Craigie, P.L. Colins and R.S. Griffen. 1980. An analysis of habitat requirements and site selection criteria for nesting bald eagle in California. Report by Wilderness Research Institute, Arcata, CA. for U.S. Forest Service. Region 5, San Francisco, CA. 106 pp.

Leiberg, J.B. 1902. *Forest conditions in the northern Sierra Nevada, Calif.* Professional Paper No. 8, Series H, Forestry 5. USDI Geological Survey Washington, D.C.

Leung, Yu-Fai and Jeffrey L. Marion. 1996. Trail degradation as influenced by environmental factors: a state-of-the-knowledge review. Journal of Soil and Water Conservation, 51 (2), 9 pages.

Lewis J.C., Sallee K.L., Golightly R.T. 1999. Introduction and range expansion of nonnative red foxes (*Vulpes vulpes*) in California. Am Midl Nat 142:372–381

Lewis, J.C., K.L. Sallee, and R.T. Golightly Jr. 1993. Introduced red fox in California. Calif. Dep. of Fish and Game, Nongame Bird and Mammal Sec. Rep. 93-10. 56pp. + appends.

Licht, L.E. 1971. Breeding habits and embryonic thermal requirements of the frog, *Rana aurora aurora* and *Rana pretiosa pretiosa*, in the Pacific Northwest. Ecology 52(1):116-124.

Lidberg, J. personal communication. 2006. California and Nevada Interstate Mule Deer Population Numbers. CA Dept. of Fish and Game.

Liddle, M. 1997. Recreation ecology: the ecological impact of outdoor recreation and ecotourism. New York: Chapman and Hall. 639 pgs.

Lind, A. 1996. Research Herpetologist, Pacific Southwest Region, USDA Forest Service, Arcata, CA, personal observation.

Lind, A.J. 2005. Reintroduction of a declining amphibian: determining an ecologically feasible approach for the foothill yellow-legged frog (*Rana boylii*) through analysis of decline factors, genetic structure, and habitat associations. Ph.D. Dissertation, University of California, Davis. (March) 169 pp.

Lindh, Brianna C. and Patricia S. Muir. 2004. Understory vegetation in young Douglas-fir forests: does thinning help restore old-growth composition? Forest Ecology and Management 192, pages 285-296.

Littlefield, C.D. 1982. The status and distribution of greater sandhill cranes in California, 1981. The California Resources Agency, Department of Fish and Game.

Littlefield, C.D. 1989. Status of greater sandhill crane breeding populations in California, 1988. State of Calif. the Resources Agency, Dept. of Fish and Game, Wildlife Management Division, Nongame Bird and Mammal Section. 40 pp.

Litton, R. Burton Jr. 1984. Visual Vulnerability of the Landscape: Control of Visual Quality. USDA Forest Service Research Paper WO

Lloyd, Alan C. and Thomas A. Cackette. 2001. Diesel Engines: Environmental Impact and Control. Journal of the Air and Waste Management Association, Vol. 51. Pages 809-847.

Longhurst, W.M., A.S. Leopold, and R.F. Dasmann. 1952. A survey of Calif. deer herds: their ranges and management problems. *Calif. Department of Fish and Game Bulletin* No. 6.

Loomis, John B. and Robert Richardson. 2000. Economic values of protecting roadless areas in the United States. An analysis prepared for the Wilderness Society and Heritage Forests Campaign.

Loos G., and P. Kerlinger. 1993. Road mortality of saw-whet and screech-owls on the Cape May peninsula. J. Raptor Res. 27:210–213

Luce, C.H., and Black, T.A., 2001, Effects of traffic and ditch maintenance on forest road sediment production: Proceedings, Federal Interagency Sedimentation Conference, Reno, Nevada, p. V67-V74.

Luce, C.H., and Wemple, B.C., 2001, Introduction to the special issue on hydrologic and geomorphic effects of forest roads: Earth Surface Processes and Landforms 26: 111-113.

Luce, Charles H., Bruce E. Rieman, Jason B. Dunham, James L. Clayton, John G. King, and Thomas A. Black. 2001. Incorporating Aquatic Ecology into Decisions on Prioritization of Road Decommissioning. Water Resources IMPACT, Vol. 3, (3), pg. 8-14.

MacDonald, L., A. Smart, and R. Wissmar. 1991. “Monitoring Guidelines to Evaluate Effects of Forestry Activities on Streams in the Pacific Northwest and Alaska.” US Environmental Protection Agency, Region 10, NPS Section, WD-139, 1200 Sixth Avenue, Seattle WA 98101.

Mace, R.D. and J.S. Waller, 1996 Grizzly Bear Distribution and Human Conflicts in Jewel Basin Hiking Area, Swan Mountains, Montana Wildlife Society Bulletin, Vol. 24, No. 3, Predators, (Autumn, 1996), pp. 461-467

Mack, R. Daniel Simberloff, W. M. Lonsdale, Harry Evans, M. Clout, and E. Bazzaz. 2000.

Madej, Mary Ann, 2001, Erosion and sediment delivery following removal of forest roads: Earth Surface Processes and Landforms, vol. 26, p. 1-16.

Magill, Arthur. 1990. Assessing Public Concern for Landscape Quality: A Potential Model to Identify Visual Thresholds. USDA Forest Service Pacific Southwest Research Station Research Paper PSW

Maharaj, V. and J. Carpenter. 1999. *The Economic Impacts of Fishing, Hunting and Wildlife Viewing on National Forest Lands.* American Sportfishing Association. April 1999. 41 pages.

Manci, K.M. D.N. Gladwin, R. Villella, and M. G. Cavendish. 1988. Effects of aircraft noise and sonic booms on domestic animals and wildlife: a literature synthesis. U.S. Fish and Wildlife Service, National Ecology Research Center, Fort Collins, CO. 88p.

Marra P.P. and R.L. Holberton. 1998. Corticosterone levels as indicators of habitat quality: effects of habitat segregation in a migratory bird during the non-breeding season. Oecologia 116, pp. 284–292.

Marrin, D.L., and Erman, D.C. 1982. Evidence against Competition between Trout and Nongame Fishes in Stampede Reservoir, California. North American Journal of Fisheries Management: Vol. 2, No. 3 pp. 262–269

Martin, D.L. 1992. Sierra Nevada Anuran Guide. Canorus Ltd. Ecological Research Team. Canorus Ltd. Press. San Jose. 28 pp.

Martin, D.L. 1992. Sierra Nevada Anuran Guide. Canorus, Ltd. Ecological Research Team. San Jose, CA.

Martin, D.L. 1994. Personal communication regarding mountain yellow-legged frog habitat needs.

Martin, S.K. 1987. The ecology of the pine marten (*Martes americana*) at Sagehen Creek, California. PhD Dissertation, University of California, Berkeley. 223pp

Martin, Stephen A., Anthony Leung, Patrick Pallini. 2005. California Off-Highway Vehicle Noise Study: A Report to the California Legislature as Required by Public Resources Code Section 5090.32 (0) Prepared for: State of California Department of Parks and Recreation Off-Highway Motor Vehicle Recreation Division. Wyle Laboratories.

Maser, C., J.M. Trappe and D.C. Ure. 1978. Implications of small mammal mycophagy to the management of western coniferous forests. Trans. North Am. Wildl. and Nat. Resour. Conf. 43:78-88.

Mathisen, John E. 1968. Effects of Human Disturbance on Nesting of Bald Eagles. Journal of Wildlife Management, Vol. 32(1), pp. 1-6.

Matthews, K. 1999. Personal communication regarding movement of mountain yellow-legged frogs in the Sierra Nevada.

Maxell, B. A., and D. G. Hokit. 1999. Amphibians and reptiles. Pp. 2.1-2.30 In: J. Joslin and H. Youmans, committee chairs. Effects of recreation on Rocky Mountain wildlife: a compendium of the current state of understanding in Montana. Committee on Effects of Recreation on Wildlife, Montana Chapter of the Wildlife Society.

Mayer, K.E. and W.F. Laudenslayer, Jr., eds. 1988. "A Guide to the Wildlife Habitats of Calif." Calif. Dept of Forestry and Fire Protection. Sacramento, CA. 166 pages.

Mazerolle M. J. 2003. Night driving surveys as an amphibian monitoring technique in Kouchibouguac National Park, 1995–2002. Parks Canada - Ecosystem Monitoring and Data Reports 9, Parks Canada, Halifax, Nova Scotia, Canada.

Mazerolle M. J. 2004. Amphibian road mortality in response to nightly variations in traffic intensity. Herpetologica. 60:45–53.

McAfee, W.R. 1966. Lahontan cutthroat trout. Pages 225-231 in A. Calhoun, editor. Inland Fisheries management. California Department of Fish and Game, Sacramento, California.

McCammon B., J. Rector and K. Gebhardt. 1998. *A Framework for Analyzing the Hydrologic Condition of Watersheds*. USDA Forest Service and USDI Bureau of Land Management, BLM Technical Note 405. 48 pages

McCashion, J.D. and R. M. Rice. 1983. Erosion on logging roads in northwestern California: How much is avoidable? Journal of Forestry 81 (1): 23-26.

McCreary, Doug. 2004. Managing and restoring California's oak woodlands. Natural Areas Journal, Volume 24 (3), 269-275.

McCune, B. and L. Geiser. 1997. Macrolichens of the Pacific Northwest. Oregon State University and USDA Forest Service, Corvallis, OR, USA, 386 pages.

McCune, B., Jill Grenon, and Erin Martin. 2006. Lichens in relation to management issues in Sierra Nevada National Parks. Unpublished report developed cooperatively between Oregon State University and the National Park system. 45 pages.

McDonald, D.W. 1983. The ecology of carnivore social behavior. Nature 301:279-384.

McGarigal, K. 1988. Human-eagle interactions on the Lower Columbia River. M.S. Thesis, Oregon State Univ., Corvallis. 115pp.

McLellan, B.W. and D.M. Shackleton. 1988. Grizzly bears and resource extraction industries: effects of roads on behavior, habitat use, and demography. Journal of Applied Ecology. 25:451-460.

Megahan, W.F. and W.J. Kidd. 1972. Effects of logging and logging roads on erosion and sediment deposition from steep terrain. *J. Forestry.* 7:136-141.

Menke, J., C. Davis, P Beesley. 1996. Rangeland Assessment. Pp. 901-972 In: Sierra Nevada Ecosystem Project, Final Report to Congress, Vol. III, Assessments, commissioned reports and background information. Centers for Water and Wildland Resources, University of California, Davis CA

Merriam, Kyle E., Jon E. Keeley, and Jan L. Beyers. 2006. Ecological Applications 16(2), pages 515-527.

Meyer, Judy L., Louis A. Kaplin, Denis Newbold, David L. Strayer, Christopher J. Woltemade, Joy B. Zedler, Richard Beilfuss, Quentin Carpenter, Ray Semlitsch, Mary C. Watzin and Paul H. Zedler. 2003. Where Rivers are born: The Scientific Imperative for Defending Small Streams and Wetlands. American Rivers and Sierra Club, pps. 24.

Michael, D. N. 1995. Barriers and bridges to learning in a turbulent human ecology. Pages 461-485 In *Barriers and bridges to the renewal of ecosystems and institutions* edited by L.H. Gunderson, C.S. Holling, and S.S. Light. Columbia Univ. Press, New York, NY.

Migratory Bird Treaty Act of 1918. P.L. 65-186, Ch. 128, 40 Stat. 755; 16 U.S.C. 703-712. July 3.

Miller, R.G. 1951. The natural history of Lake Tahoe fishes. Unpubl. Ph.D. Dissertation. Stanford University. 160 pp.

Miller, R.S., G.S. Hochbaum and D.B. Botkin. 1972. A simulation model for the management of sandhill cranes. Yale University School of Forestry and Environmental Studies Bulletin 80.

Moll, J.E. 1998. Environmentally Sensitive Roads. Road Technology Series, San Dimas Technology and Development Center. San Dimas, CA.

Monk, J., B.J. Walton, R. Olendorff and D. Carrier. 1988. California peregrine falcon implementation plan. Santa Cruz Predatory Bird Research Group. 44 pp.

Montopoli, G.J. and D.A. Anderson. 1991. A logistic model for the cumulative effects of human intervention on bald eagle habitat. J. Wildl. Manage. 55:290-293.

Moore, R.L. and A.R Graefe, R.J. Gitelson, and E. Porter. 1992. *The Impacts of Rail-Trails - A Study of Users and Nearby Property Owners from Three Trails.* USDI National Park Service. Rivers and Trails Conservation Program. February, 1992. 34 pages.

Moore, R.L. and K. Barthlow. 1998. *The Economic Impacts and Uses of Long-Distance Trails - A Case Study of the Overmountain Victory National Historic Trail.* Department of Parks, Recreation and Tourism Management, North Carolina State Univ. Raleigh, NC. March 1998. 63 pages.

Morey, S. 1988. Northern Leopard Frog (*Rana pipiens*). Pages 90-91 in Zeiner, D.C., W. F. Laudenslayer, Jr. and K. E. Mayer (eds). California's Wildlife, Volume 1: Amphibians and Reptiles. California Department of Fish and Game, Sacramento, CA. 272 pp.

Morgan, M., and M. Henrion. 1990. *Uncertainty: A guide to dealing with uncertainty in quantitative risk and policy analysis.* Cambridge Univ. Press, New York. 332 pages.

Morrison, M.L., H.L. Bombay, J.W. Cain, and D.E. Taylor. 2000. Annual Report and Preliminary Demographic analysis for Willow Flycatcher monitoring in the Central Sierra Nevada. Unpublished document, USDA Forest Service, Tahoe National Forest. 34 pp.

Moyle, P. B. 1973. Effects of introduced bullfrogs, *Rana catesbeiana*, on the native frogs of the San Joaquin Valley, California. Copeia 18-22.

Moyle, P.B. 1976. Inland fishes of California. University of California Press, Berkeley, California. 405 pages.

Moyle, P.B. and D.M. Baltz. 1985. Microhabitat use by an assemblage of California stream fishes: developing criteria for instream flow recommendations. Trans. Amer. Fish. Soc. 114:695-704.

Moyle, P.B. and M. Gard. 1993. South Yuba River fisheries survey and habitat assessment. Report to the California State Department of Parks and Recreation. 66pp.

Moyle, P.B. and R.A. Daniels. 1982. Fishes of the Pit River system, and Surprise Valley region. University of Calif. Publ. Zool. 115:1-82.

Moyle, P.B. and R.D. Nichols. 1973. Ecology of some native and introduced fishes of the Sierra Nevada foothills, central California. Copeia. 1973: 478-490.

Moyle, P.B., B. Vondracek and G. D. Grossman. 1983 Response of fish populations in the North Fork of the Feather River, California to treatment with fish toxicants. N. Amer. J. Fish. Mgmt. 3:48-60.

Moyle, P.B., R.M. Yoshiyama, J. E. Williams, and E.D. Wikramanyake. 1995. Fish species of special concern in California. Dept. Fish and Game, Inland Fisheries Division. Rancho Cordova, CA Final Report for contract No. 2128IF. 272 pp.

Mullin, Barbara, Lars Anderson, Joseph DiTomomaso, Robert Eplee, Kurt Getsinger. 2000. Council for Agricultural Science and Technology (CAST) Issue Paper #13.

Munger, James C., Bruce R. Barnett, Stephen J. Novak, and Aaron A. Ames. 2003. Impacts of Off-highway motorized vehicles trails on the reptiles and vegetation of the Owyhee Front. USDI, Idaho Bureau of Land Management, Technical Bulletin number 03-3. Available online at: www.id.blm.gov. 23 pages.

Murphy, Dennis D., Erica Fleishman, and Peter A. Stine. 2004. Biodiversity in the Sierra Nevada. A paper presented at the Sierra Nevada Science Symposium in October of 2202. USDA FS GTR PSW-GTR-193 pages 167-174

Murphy, G.I. 1947. Notes on hardhead control in the East Fork of the Russian River, Mendocino County, California. Calif. Dept. Fish and Game. 34:101-110.

National Environmental Policy Act. 1986. 40 CFR Parts 1500-1508. 45pp.

National Resources Defense Council. http://www.nrdc.org/land/forests/roads/chap6.asp. Accessed 3/27/2007. End of the Road – The Adverse Ecological Impacts of Roads and Logging: A Compilation of Independently Reviewed Research.

NatureServe. 2006. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.7. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer.

Neal, D.L., J. Verner, G.N. Steger and G. Eberlein. 1989. A study of spotted owl home-range and composition in the Sierra National Forest. 1988 Progress Report. Pacific Southwest Forest and Range Experiment Station. Fresno, California.

Newbold, J.D.,Erman, D.C., Roby, K. B. 1980. Effects of logging on macroinvertebrates in streams with and without buffer strips. Can. J. Fish. Aquat. Sci. 37: 1046-1085. In: Gucinski, Hermann; Furniss, Michael J.; Ziemer, Robert R.; Brookes, Martha H. 2001. Forest roads: a synthesis of scientific information. Gen. Tech. Rep. PNW-GTR-509. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 103 p.

Newcombe, C. P., and D. D. MacDonald. 1991. Effects of suspended sediments on aquatic ecosystems. North American Journal of Fisheries Management, 11:72-84.

Newcombe, C. P., and J. O. T. Jensen. 1996. Channel suspended sediment and fisheries: a synthesis for quantitative assessment of risk and impact. North American Journal of Fisheries Management, 16:693-727.

Noon, B.R. and K.S. McKelvey. 1996. Management of the spotted owl: A case history in conservation biology. Annu. Rev. Ecol. Syst. 27:135-162.

Norris, Daniel H. and James R. Shevock. 2004. Contributions toward a bryoflora of California: II. A key to the mosses. California Botanical Society. Madrono American Journal of Botany, Volume 51 (2), 133.

Nussbaum, R. A., E. D. Brodie, Jr., and R.M. (or R.C) Storm. 1983. Amphibians and Reptiles of the Pacific Northwest. University of Idaho. 332 pp.

O'Connell, M. J. 2003. Detecting, measuring and reversing changes to wetlands. Wetlands Ecology and management, volume 11, pages 397-401.

Ouren, D.S., Haas, C., Melcher, C.P., Stewart, S.C., Ponds, P.D., Sexton, N.R., Burris, L., Fancher, T., and Bowen, Z.H., 2007, Environmental effects of off-highway vehicles on Bureau of Land Management lands: A literature synthesis, annotated bibliographies, extensive bibliographies, and internet resources: U.S. Geological Survey Open-File Report 2007-1353, 225 p.

Pacific Flyway Council. 1997. Pacific Flyway management plan for the Central Valley population of greater sandhill cranes. Pacific Flyway Study Comm. [c/o Pacific Flyway Representative USFWS], Portland, OR 97232-4181. Unpubl. Rept. 44pp. and appendices.

Pacific Gas and Electric (PG&E). 1985. Bald Eagle and Fish Study. Pit 3, 4 and 5 Project. Biosystems Analysis, Inc. and University of California, Davis.

Panik, H. R., and S. Barrett. 1994. Distribution of amphibians and reptiles along the Truckee River System. Northwest Science 68: 197–204.

Panik, H.R. 1995. An ecological survey of the mountain yellow-legged frog (*Rana muscosa*) in Nevada. (Unpub. Report) Nevada Division of Wildlife.

Pankik, R. 1998. Science teacher at Western Nevada Community College, Carson City, NV. Personal communication with George Elliott, Forest Service fisheries biologist, Eldorado NF.

Pan-Pacific Entomologist. Scientific Note: New Distribution Records for the Elderberry Longhorn Beetle *Desmocerus californicus* Horn (*Coleoptera: Cerambycidae*). 76(1): 74-76.

Parendes, Laurie A, and Julia A. Jones. 2000. Role of light availability and dispersal in exotic plant invasion along roads and streams in the H. J. Andrews Experimental Forest, Oregon. Conservation Biology, Vol. 14, No. 1, pages 64-75.

Pauchard, Anibal and Paul B. Alaback. 2005. Edge type defines alien plant species invasions along *Pinus contorta* burned, highway and clearcut forest edges. Forest Ecology and Management 223 (2006) pages 327-335.

Pennsylvania Department of Conservation and Natural Resources. Fragmentation – Impact of Roads. Accessed 1/11/2007. Available online at: http://www.dcnr.state.pa.us/wlhabitat/forest/forest_fragment.htm.

Penrod, K., R. Hunter, and M. Merrifield. 2001. Missing linkage: Restoring connectivity in the California Landscape. Conference Proceedings co-sponsored by the California Wilderness Coalition, The Nature Conservancy, U.S. Geological Survey, Center for Reproduction of Endangered Species, and California State Parks.

Perrine, J.D. 2005. Ecology of red fox (*Vulpes vulpes*) in the Lassen Peak region of California, USA. PhD dissertation. University of California, Berkeley

Perrine, J.D., J.P. Pollinger, B.N. Sacks, R.H. Barrett, R.K. Wayne. 2007. Genetic evidence for the persistence of the critically endangered Sierra Nevada red fox in California. Conservation Genetics; 8:1083-1095.

Perrine, J.D., L.C. Campbell, and G.A. Green. 2006. Conservation Assessment for the Sierra Nevada red fox (*Vulpes vulpes necator*), USDA Forest Service.

Perry, C. and R. Overly. 1976. Impact of roads on big game distribution in portions of the Blue Mountains of Washington. Pages 62-68 in: Hieb, S.R., Ed. Proceedings of the Elk-Logging-Roads Symposium. December 16-17, 1976, Moscow, Idaho. Forest, Wildlife and Range Experiment Station, University of Idaho, Moscow, ID.

Perry, C., and R. Overly. 1977. Impact of roads on big game distribution in portions of the Blue Mountains of Washington, 1972-1973. Applied Research Bulletin No. 11. Washington Game Department, Olympia, WA 38 pp.

Phelps, K. 1996. Species account for *Cypripedium fasciculatum*. USDA FS White River NF, Dillion Ranger District. Unpublished.

Philpott, W. 1997. Summaries of the life histories of California bat species. USDA Forest Service, Sierra National Forest, Pine Ridge Ranger Station. 30pp. Unpublished Document.

Pierson, E.D. 1996. Pierson and Rainey Consultants, Berkeley CA. Presentation at the North California Mine Assessment for Bats Seminar. Shasta College, Redding CA. June 4-6, 1996.

Pierson, E.D. 1996. Presentation to the Western Section of the Wildlife Society, Natural History and Management of Bats in California and Nevada Workshop. Nov. 13-15. Sacramento, CA.

Pierson, E.D., W.E. Rainey and D.M. Koontz. 1991. Experimental mitigation for Townsend's big-eared bat at the McLaughlin Mine in California. From Proceedings V: Issues and technology in the management of impacted wildlife, April 8-10, 1991. Snowmass, Co., Thorne Ecological Institute, Boulder, CO.

Pollet I., L.I. Bendell-Young. 2000. Amphibians as indicators of wetland quality in wetlands formed from oil sands effluent. Environmental Toxicology and Chemistry: Vol. 19, No. 10 pp. 2589–2597

Pollution Locator: Smog and Particulates: County Reports. Accessed 9/17/2007. http://www.scorecard.org/env-releases/cap/county.tcl?fips_county_code=06061; and http://www.scorecard.org/env-releases/cap/county.tcl?fips_county_code=06057

Potvin, F., L. Belanger and K. Lowell. 2000. Marten habitat selection in a clearcut boreal landscape. Conservation Biology 14:844-857.

Powell, R.A. 1979. Mustelid spacing patterns: variations on a theme by Mustela Zhurnal Tierpsychologie. 50:153-165.

Power, M. E. 1990. Resource Enhancement by Indirect Effects of Grazers: Armored Catfish, Algae, and Sediment. Ecology, Vol. 71, No. 3, pp. 897-904 Published by: Ecological Society of America.

Powers, Lori. 1993. Summary of monitoring efforts for a population of willow flycatchers in Perazzo Meadows 1992 and 1993. 4pp.

Pringle, C. M., R. J. Naiman, G. Bretschko, J. R. Karr, M. W. Oswood, J. R. Webster, R. L. Welcomme, and M. J. Winterbourn. 1988. Patch dynamics in lotic systems: the stream as a mosaic. Journal of the North American Benthological Society, 7:502-524.

Radle, A. L. 1999. The Effect of Noise on Wildlife. World Forum for Acoustic Ecology. 2000. 17pp.

Rankel, G.L. 1976. Fishery management program, Summit Lake Indian Reservation, Humboldt County, Nevada. Special Report of the U.S. Fish and Wildlife Service, Division of Fishery Services, Reno, Nevada. 35 pp.

Raphael, M.G. and M. White. 1984. Use of snags by cavity-nesting birds in the Sierra Nevada. Wildlife Society Monograph No. 86. 66pp.

Rathbun, G.B., M.R. Jennings, T. G. Murphey and N. R. Siepel. 1993. Status and ecology of sensitive aquatic vertebrates in lower San Simeon and Pico Creeks, San Luis Obispo Co., Calif. USFWS National Ecology Research Center., San Simeon, CA. Prepared for California Department of Parks and Recreation. 103 pp.

Records of Decision for the Eight Eastside Rivers and 22 Westside Rivers Wild and Scenic River Study Reports, 1999

Reeves, J.G. 1964. Age and growth of the hardhead minnow *Mylopharodon conocephalus* in the American River basin of California, with notes on its ecology. M.S. Thesis. University of California, Berkeley. 90 pp.

Reid, L. M., and T. Dunne. 1984. Sediment production from forest road surfaces. Water Resources Research, 20:1753–1761.

Reid, M. 1989. The predator-prey relationships of the Great Gray Owl in Yosemite National Park. National Park Service, Western Region, Tech. Rep. NPS/WRUC/NRTR-89/32. Univ. California, Davis, CAU.S.A.

Reid, M.E. 1989. The predator-prey relationships of the Great Gray Owl in Yosemite National Park. Cooperative National Park Research Studies Unit Technical Report No. 35. 86pp.

RHJV (RIPARIAN HABITAT JOINT VENTURE). 2004. Version 2.0. The riparian bird conservation plan: a strategy for reversing the decline of riparian associated birds in California. California Partners in Flight. http://www.prbo.org/calpif/pdfs/riparian.v-2.pdf.

Richards, R.C., C.R. Goldman, T.C. Frantz, and R. Wickwire. 1975. Where have all the Daphnia gone? The decline of a major cladoceran in Lake Tahoe, California-Nevada. Verh. Internat. Verein. Limnol. 19:835-842.

Richardson, E. V., B. Simons, S. Karaki, M. Mahmood, and M. A. Stevens. 1975. Highways in the river environment: hydraulic and environmental design considerations training and design manual. U.S. Department of Transportation, Federal Highway Administration, Washington, D.C.

Roberts, B.C., and R.G. White. 1992. Effects of angler wading on survival of trout eggs and pre-emergent fry. North American Journal of Fisheries Management 12:450-459.

Robitaille, J.F., K. Aubry . 2000. Occurrence and activity of American martens, *Martes americana*, in relation to roads and other routes Acta Theriologica 45 (1): p 137.

Romin, L.A., and J.A. Bissonette. 1996. Deer-vehicle collisions: status of state monitoring activities and mitigation efforts. Wildlife Society Bulletin 24(2):276-283.

Rooney, Thomas P. 2003. Off-road vehicles as dispersal agents for invasive plant species in a forested landscape. Unpublished, 25 pages.

Roovers, Pieter, Beatrijs Bossuyt, Hubert Gulinck and Martin Hermy. 2004. Vegetation recovery on closed paths in temperate deciduous forests. Journal of Environmental Management, 74, pages 273-281.

Rost, G.R. and J.A. Bailey. 1979. Distribution of mule deer and elk in relation to roads. Journal of Wildlife Management. 43(3):634-641.

Rowley, W. 1955. 1954 creel census, North Fork, Feather River. Calif. Dept. Fish and Game, Inland Fish. Admin. Rep. 55 17pp.

Ruggiero, L.F., K.B. Aubry, S.W. Buskirk, L.J. Lyon and W.J. Zielinski, tech. eds. 1994. The Scientific Basis for Conserving Forest Carnivores: American Marten, Fisher, Lynx, and Wolverine in the United States. Gen. Tech. Rep. RM-254. Ft. Collins, CO: U. S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 184 pp.

Rutter, C. 1908. The fishes of the Sacramento-San Joaquin basin, with a study of their distribution and variation. U.S. Bur. Fish. Bull. 27:143-48.

Sada, Donald W., Jack E. Williams, Anne Halford, Jim Ramakka, Jill C. Silvey, Paul Summers, Lyle Lewis. 2001. Riparian Management – A guide to managing, restoring, and conserving springs in the western United States. USDI, BLM, technical reference BLM/ST/ST-01/001+1737-17, Denver, Colorado. 70 pages.

Safford, H. D. and Susan Harrison. 2005. The effects of fire on serpentine vegetation and implications for management. USDA Forest Service General Technical Report, PSW-GTR-189.

Safford, H. D., J. H. Viers, S. P. Harrison. 2005. Serpentine endemism in the California flora: A database of serpentine affinity. Madrono, Vol. 52, number 4, pages 222-257.

Saiki, M.K. 1984. Environmental conditions and fish faunas in low elevation rivers and the irrigated San Joaquin Valley floor, California. Calif. Fish and Game 70:145-157

Sanders, S.D., and M.A. Flett. 1989. Ecology of a Sierra Nevada population of willow flycatchers (*Empidonax traillii*), 1986-1987. Wildlife Management Division Administrative Report 88-3. 34pp.

Sawyer, J.O. and T. Keeler-Wolf. 1995. A Manual of California Vegetation. California Native Plant Society. 471p.

Schempf, P.F. and M. White. 1977. Status of six furbearer populations in the mountains of northern California. USDA Forest Service. 51 pp.

Schlorff, Ron. 1998. Wildlife Biologist, Sensitive Species Branch, California Dept. of Fish and Game, Sacramento, CA. pers. comm.

Schueck, Linda S., John M. Marzluff, and Karen Steenhof. 2001. Influence of Military Activities on Raptor Abundance and Behavior. The Condor, Vol. 103, Issue 3. Pages 606-615.

Schwartz, M. and Pilgrim. March 30, 2008. Personal communication. Wolverine population DNA.

Scott, Virgil E., and John L. Oldemeyer. 1983. Cavity-nesting bird requirements and response to snag cutting in ponderosa pine. pp. 19-23 in Snag habitat management: proceedings of the symposium, Jerry W. Davis, Gregory A. Goodwin, and Richard A. Ockenfels [technical coordinators], U. S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, General Technical Report, RM-99.

Seamans, M.E. 2005. Population Biology of the California Spotted Owl in the Central Sierra Nevada. Ph.D. Dissertation. University of Minnesota. St. Paul, Minnesota.

Serena, M. 1982. The status and distribution of the willow flycatcher (*Empidonax traillii*) in selected portions of the Sierra Nevada, 1982. Calif. Dept. of Fish and Game, Wildlife Management Division Administrative Report No. 82-5. 28 pp.

Shefferson, Richard P., Michael Wei, Tiiu Kull, and D. Lee Taylor. 2005. High specificity generally characterizes mycorrhizal association in rare lady's slipper orchids, genus *Cypripedium*. Molecular Ecology 14, pages 613-626.

Sheley, R. L. and Janet K. Petroff. 1999. Biology and Management of Noxious Rangeland Weeds. Oregon State University Press, Corvallis. 438 pages.

Shepperd, W.D., Smith, F.W. 1993. The role of near-surface lateral roots in the life cycle of aspen in the central Rocky Mountains. Forest Ecology and Management. 61: (1-2) 157-170.

Shepperd, Wayne D., Paul C. Rogers, David Burton, Dale L. Bartos. 2006. Ecology, Biodiversity, Management, and Restoration of Aspen in the Sierra Nevada. USDA Forest Service.

Sherburne, S.S. and J.A. Bissonette. 1994. Marten subnivean access point use: response to subnivean prey levels. J. Wildl. manage. 58:400-405.

Sheridan, G..J., Noske, P.J., Whipp, R.K., and Nimal, W., 2005, The effect of truck traffic and road water content on sediment delivery from unpaved forest roads: Hydrological Processes 20(8):1683-1699.

Sherwin, R. 1998. Presentation to the Western Bat Working Group Workshop. February 9-13. Reno, Nev., Pers. Comm.

Sidle, R.C., A.J. Pearce, and C.L. O'Loughlin. 1985. Hillslope stability and land use. Water resource Monographs. Series II, Washington, DC: American Geophysical Union.

Siegel, R. B. and D. DeSante. 1999. Version 1.0. The draft avian conservation plan for the Sierra Nevada Bioregion: conservation priorities and strategies for safeguarding Sierra bird populations. Institute for Bird Populations report to California Partners in Flight.

Sierra Business Council. 1999. Sierra Nevada Wealth Index, Understanding and Tracking our Region's Wealth, 1999

Sierra Nevada Ecosystem Project, Final Report to Congress. 1996. Volumes 1-111 and addendum.

Sigler, W.F., and J.W. Sigler. 1987. Fishes of the Great Basin: A Natural History. University of Nevada Press, Reno, Nevada. 425 pp.

Sigler, W.F., W.T. Helm, P. A. Kucera, S. Vigg, and G. W. Workman. 1983. Life history of the Lahontan cutthroat trout, *Salmo clarki henshawi*, in Pyramid Lake, Nevada. Great Basin Naturalist 43:1-29.

Simon, T.L. 1980. An ecological study of the marten in the Tahoe National Forest, California. M.S. Thesis, California State University, Sacramento. 140pp.

Skagen, Susan K., Richard L. Knight, Gordon H. Orians. Human Disturbance of an Avian Scavenging Guild Source: Ecological Applications, Vol. 1, No. 2, (May, 1991), pp. 215-225

Skinner, M.W. and B.M. Pavlik. 1994. California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society, Sacramento, CA.

Slevin, J.R. 1928. The amphibians of western North America; an account of the species known to inhabit California, Alaska, British Columbia, Washington, Oregon, Idaho, Utah, Nevada, Arizona, Sonora, and Lower California. Occasional Papers of the California Academy of Sciences (16):1-152.

Snyder, J.O. 1917. The fishes of the Lahontan system of Nevada and northeastern California. Bull. U.S. Bur. Fish. 35:33-86.

Soil Science Society of America (SSSA). 1987. *Glossary of soil science terms.* SSSA, Madison, WI 53711.

Somer, W. 1998. Lahontan Cutthroat Trout, A Threatened Resource. Department of Fish and Game Wild Trout Project winter 1998. Vol. 3, No. 2.

Soule, M. 1951. Power development of the Kings River drainage, Fresno County, California. Rep. No 3., Junction development of the Kings River and its Middle and South Forks. Calif. Dept. Fish and Game, Inland Fish. Admin. Rep. 51. 17pp.

Spellerberg, Ian. F. 1998. Ecological Effects of Roads and Traffic: A Literature Review. Global Ecology and Biogeography Letter. 7. Pages 317-333.

Spencer, W. D. 1981. Pine marten habitat preferences at Sagehen Creek, California. UnpubL MLS. thesis, Univ. California, Berkeley, 121 pp.

Spencer, W.D. and W.J. Zielinski. 1983. Predatory Behavior of Pine Martens. Journal of Mammalogy. 64(4) pp. 715-717.

Spencer, W.D., R.H. Barrett, and W.J. Zielinski. 1983. Marten habitat preferences in the northern Sierra Nevada. Journal of Wildlife Management 47:1181-1186.

Stalmaster, M. V. 1987. The bald eagle. Universe Books, New York, N. Y. 227pp., In: Joslin, G., and H. Youmans, coordinators. 1999. Effects of recreation on Rocky Mountain wildlife: a review for Montana. Committee on Effects of Recreation on Wildlife, Montana Chapter of The Wildlife Society. 307pp.

Stalmaster, M.V. 1976. Winter ecology and effects of human activity on bald eagles in the Nooksack River Valley, Washington. M.S. Thesis. West. Washington State Coll. Bellingham, WA. 100 pp.

Stalmaster, M.V. and J.R. Newman. 1978. Behavioral responses of bald eagles to human activity. Journal of Wildlife Management. 42 (or 52):506-513.

Stebbins, R. C. 1985. A Field Guide to Western Reptiles and Amphibians. Second edition, revised. Houghton Mifflin Company, Boston, Mass. USA.

Stebbins, R.C. 1972. California amphibians and reptiles. Univ. Calif. Press, Berkeley. 152 pp.

Steele, Jim. 1993. Preliminary report of neotropical migratory bird monitoring at San Francisco State University's Sierra Nevada Field Campus for the Summers of 1992 and 1993. 8 pp.

Steger, G.N., T.E. Munton, G.P. Eberlein and K.D. Johnson. 1998. A study of spotted owl demographics in the Sierra National Forest and Sequoia and Kings Canyon National Parks. USDA Forest Service, Pacific Southwest Research Station, Fresno, CA. Annual Progress Report, November 1998. 5pp.

Steger, G.N., T.E. Munton, G.P. Eberlein and K.D. Johnson. 1999. A study of spotted owl demographics in the Sierra National Forest and Sequoia and Kings Canyon National Parks. USDA Forest Service, Pacific Southwest Research Station, Fresno, CA. Annual Progress Report, December 1999. 16pp.

Steidl, Robert J. and Brian F. Powell. 2006. Assessing the Effects of Human Activities on Wildlife. Visitor Impact Monitoring. Vol. 23, number 2. Pages 50-58

Steinhart, P. 1990. California's Wild Heritage: Threatened and Endangered Animals in the Golden State. Calif. Dept. of Fish and Game. 108 pp.

Stewart, W.C. 1996. Economic Assessment of the Ecosystem. Pages 973-1063. In *Sierra Nevada Ecosystem Project: Final Report to Congress, Assessments, Commissioned Reports and Background Information,* Vol. III Ch. 23. Univ. Calif. Centers for Water and Wildland Resources, Davis, CA 95616.

Stewart, W.C., 1997. *Bioregional demographic trends and implications for biodiversity*. Report to the California Biodiversity Council.

Storer, T. I. 1925. A synopsis of the Amphibia of California. Univ. Calif. Publ. Zool. 27: 1-342.

Storer, T.I. 1930. Notes on the range and life-history of the Pacific fresh-water turtle, *Clemmys marmorata*. Univ. Calif. Publ. Zool. 32:429-441.

Sumner, F.H. 1940. The decline of the Pyramid Lake fishery. Transactions of the American Fisheries Society 69:216-224.

Sumner, L. and J.S. Dixon. 1953. Birds and mammals of the Sierra Nevada. University of California Press, Berkeley, CA. 484pp.

Swarthout, E.C.H. and Steidl, R.J., 2001. Flush responses of Mexican spotted owls to recreationists. Journal of Wildlife Management 65, pp. 312–317.

Swarthout, Elliot C. H. and Robert J. Steidl. 2003. Experimental Effects of Hiking on Breeding Mexican Spotted Owls. Conservation Biology. Vol. 17 (1), 12 pages.

Switalski, Adam T. Date Unknown. How Many is Too Many: A Review of Road Density for Wildlife. Accessed 1/12/2007. Available online at: http://www.wildlandscpr.org/databases/biblionotes/biblio11.4.html.

Switalski, T.A., Bissonette, J.A., DeLuca, T.H., Luce, C.H., and Madej, M.A., 2004, Benefits and impacts of road removal: Frontiers in Ecology and the Environment 2(1): 21-28.

Szewczak, Joseph M. 2002. White Mountain Research Station, Bishop, CA. Personal communication and information provided on website (http://www.wmrs.edu/joe/CarmanBats/CarmanBats.html)

Szewczak, Joseph M.; S.M. Szewczak, M.L. Morrison and L.S. Hall. 1998. Bats of the White and Inyo Mountains of California-Nevada. Great Basin Naturalist 58:66-75.

Takken, I., Croke, J., and Lane, P., 2008, A methodology to assess the delivery of road runoff in forestry environments: Hydrological Processes 22:254-264.

Tatum L. 1998. Wildlife Biologist. USFS, Mendocino National Forest, Supervisor's Office.

Tausch, Robin J. 2008. Invasive Plants and Climate Change. Climate Change Resource Center.

Taylor, D.W. 1981. Freshwater Mollusks of California: A Distributional Checklist. California Department of Fish and Game 67(3):140-163.

Taylor, Richard B. Unknown date. The Effects of Off-Road Vehicles on Ecosystems. An unpublished report, Texas Parks and Wildlife, P.O. Box 5207, Uvalde, Texas. 12 pages.

Thomas, J. W., H. Black, Jr., R. J. Scherzinger, and R. J. Pedersen. 1979. Deer and elk. In Wildlife habitats in managed forests: the Blue Mountains of Oregon and Washington, ed. J. W. Thomas, 104-127. U.S. Department of Agriculture, Forest Service, Agricultural Handbook No. 553. Portland, Oregon.

Thompson, W. H., Robert C. Ehrhart, Paul L. Hansen, Thomas G. Parker, and William C. Haglan. 1998. Assessing Health of a riparian site. *In:* Proceedings - Specialty Conference on Rangeland Management and Water Resources, 10 pages.

Tierney, M. 1997. Tahoe National Forest, Downieville District Wildlife Biologist, Camptonville, CA, personal observation.

Travel Industry Association of America. 1997. "Profile of Travelers Who Participate in Historical and Cultural Activities." Washington, D.C. 43+ pages.

Trombulak S. C. and C.A. Frissell. 2000. Review of Ecological Effects of Roads on Terrestrial and Aquatic Communities. Conservation Biology, 14:18-30.

True, Gordon H. 2003. The Four Seasons. Volume 12, No. 1, pages 3-12.

Truex, Richard L.; Zielinski, William J.; Golightly, Richard T.; Barrett, Reginald H.; Wisely, Samantha M. 1998. A meta-analysis of regional variation in fisher morphology, demography, and habitat ecology in California Draft report submitted to: California Department of Fish and Game, Wildlife Management Division, Nongame Bird and Mammal Section. 118 p.

Tsukamoto, George. 2001. Impact of Roads on Elk and Other Wildlife. Washington Department of Fish and Wildlife Game Trails. Accessed 1/11/2007. Available online at http://wdfw.wa.gov/wlm/game/hunter/gametrails/2001/impact_roads.htm

Tuan, Yi-Fu. 1974. Topophilia: A Study of Environmental Perception, Attitudes, and Values. New York: Columbia University Press.

Turina, Frank, Ericka Pilcher. 2006. Protecting Natural Sounds in National Parks: Soundscape Workshop Visitor Experience and Soundscapes Annotated Bibliography March 1-2. National Park Service and Colorado State University.

Turkiewicz, K. 1998. "$PM_{2.5}$ Monitoring Network Design. Air Report." Calif. Air Resources Board. Sacramento, CA 95814.

Twitty, V.C., D. Grant and O. Anderson. 1967. Amphibian orientation: An unexpected observation. Science 155(3760):352-353.

U.S. Department of Transportation Federal Highway Administration. 2004. Synthesis of Noise Effects on Wildlife Populations. Publication Number FHWA-HEP-06-016

U.S. Environmental Protection Agency. 2003. Reducing Air Pollution from Nonroad Engines. Office of Transportation and Air Quality. EPA420-F-03-011.12 pages.

United States Congress. 2007.Congressional Budget Office. The Budget and Economic Outlook: Fiscal Years 2008-2017. Available online at: http://www.cbo.gov/

USDA Departmental Regulation 5600-2, Environmental Justice, December 15, 1997.

USDA Forest Service - Handbook 7709.56. 1987. Road Preconstruction Handbook. Available online at: http://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsh?7709.56.

USDA Forest Service Engineering Manual 7700-30 Mixed Use Guidebook. 2005. Guidelines for Engineering Analysis of Motorized Mixed Use on National Forest System Roads. Government Printing Office.

USDA Forest Service Manual and Handbooks 2670 and 2080.

USDA Forest Service Pacific Southwest Region. 2001a. Sierra Nevada Forest Plan Amendment Final Environmental Impact Statement. Sacramento, CA.

USDA Forest Service Pacific Southwest Region. 2001b. Sierra Nevada Forest Plan Amendment Record of Decision. January 12, 2001. Volumes 1-6 and Appendices.

USDA Forest Service Pacific Southwest Region. 2004a. Sierra Nevada Forest Plan Amendment Final Supplemental Environmental Impact Statement. Vallejo, CA. Volumes 1-2.

USDA Forest Service Pacific Southwest Region. 2004b. Sierra Nevada Forest Plan Amendment Final Environmental Impact Statement Record of Decision. Region 5, Vallejo, CA.

USDA Forest Service, Forest Service, Pacific Northwest Region. 2001. Forest Roads: A Synthesis of Scientific Information. Gen. Tech. Report PNW-GTR-509. 103 pages.

USDA Forest Service, Tahoe National Forest, Land and Resource Management Plan (LRMP), 1990

USDA Forest Service. 1974, April. Agriculture Handbook Number 462. National Forest Landscape Management Volume 2. Chapter 1 – The visual management system. 47 pages.

USDA Forest Service. 1977. Bald eagle habitat management guidelines, unpublished report, U. S. Forest Service, California Region. 60p.

USDA Forest Service. 1982. 1982 ROS Users Guide.

USDA Forest Service. 1984. Land Management Planning Direction. Pacific Southwest Region. San Francisco.

USDA Forest Service. 1985. National Forest Landscape Management, Volume 2, Chapter 6: Fire. USDA Forest Service Agricultural Handbook No. 608.

USDA Forest Service. 1990. Tahoe National Forest Land and Resources Management Plan.

USDA Forest Service. 1991. Management recommendations for the northern goshawk in the southwestern United States. Northern Goshawk Scientific Committee. Southwestern Region. 184 pp.

USDA Forest Service. 1991. Protocol for surveying for spotted owls in proposed management activity areas and habitat conservation areas. 19 pp.

USDA Forest Service. 1992. “Investigating Water Quality in the Pacific Southwest Region: Best Management Practices Evaluation Program.” Forest Service. Pacific Southwest Region.

USDA Forest Service. 1992. Biological Evaluation for Drought-Related Timber Salvage on National Forests of the Sierra Nevada Province, Pacific Southwest Region (R5). 94pp.

USDA Forest Service. 1993. California Spotted Owl Sierran Province Interim Guidelines Environmental Assessment. 87pp.

USDA Forest Service. 1993. Ecological Guide to Mixed Conifer Plant Associations. 71 pp.

USDA Forest Service. 1993b. *Principal Laws Relating to Forest Service Activities.* US Government Printing Office, Superintendent of Documents, Mail Stop: SSOP, Washington, D.C. 20402-9328. (ISBN 0-16-041927-1). 1184 pages.

USDA Forest Service. 1994. Biological Evaluation for Managing willow flycatcher (*Empidonax traillii*) Habitat on Plumas National Forest Range Allotments. DRAFT. 26 pp.

USDA Forest Service. 1994. Guide to Forested Communities of the Upper Montane in the Central and Southern Sierra Nevada. 164 pp.

USDA Forest Service. 1994. Management guidelines for the greater sandhill crane on National Forest Systems Lands in California. Pacific Southwest Region, San Francisco, Ca. 40 pp.

USDA Forest Service. 1994. The scientific basis for conserving forest carnivores. American marten, fisher, lynx and wolverine in the western United States. General Technical Report RM-254. 184pgs.

USDA Forest Service. 1995. Landscape Aesthetics: A Handbook for Scenery Management. USDA Forest Service Agriculture Handbook Number 701.

USDA Forest Service. 1995a. Revised Forest Service Manual for Noxious Weed Management. Forest Service Manual 2080, WO Amendment No 2000-95-5. USDA Forest Service. Washington, D.C. 20090-6090. 10 pages.

USDA Forest Service. 1997. *Ecological subregions of Calif.: Section and subsection descriptions* compiled by S.R. Miles and C.B. Goudy. Publication R5-EM-TP-005. USDA Forest Service Pacific Southwest Region, San Francisco, CA 94111 (http://www.fs.fed.us/r5/projects/ecoregions/).

USDA Forest Service. 1998. Region 5 letter, July 31. Use of information in the Sierra Nevada Science Review in planning and decision making.

USDA Forest Service. 1998. Sensitive Species List 1998. Pacific Southwest Region. San Francisco.

USDA Forest Service. 1998. Sierra Nevada Science Review-report of the Science Review Team charged to synthesize new information of range wide urgency to the national forests of the Sierra Nevada. Pacific Southwest Research Station. July 25, 1998. 115pp.

USDA Forest Service. 1998. *Stemming the Invasive Tide: Forest Service Strategy for Noxious and Nonnative Plant Management.* USDA Forest Service. Washington, D.C. 20090-6090. 29 pages

USDA Forest Service. 1999. New information and management considerations for the northern goshawk (*Accipter gentilis*). Tahoe National Forest, Nevada City, CA. 16 pp.

USDA Forest Service. 2000. A Willow Flycatcher Survey Protocol for California. 48 pp.

USDA Forest Service. 2000. Forest Service Roadless Area Conservation Final Environmental Impact Statement Biological Evaluation for Threatened, Endangered and Proposed Species and Sensitive Species. Written by Seona Brown and Ron Archuleta and signed on 11/13/2000. Unpublished. 90 pages.

USDA Forest Service. 2000. Pacific Southwest Region. Non-point source pollution on national forests is managed through the Regional Water Quality Management Plan.

USDA Forest Service. 2000. Survey Protocol for the Great Gray Owl in the Sierra Nevada of California. 32pp.

USDA Forest Service. 2000. Survey Protocol for the Northern Goshawk in the Pacific Southwest Region.

USDA Forest Service. 2000. Washington Office letter, March 13. Direction on Forest Service timber sale environmental analysis requirements.

USDA Forest Service. 2001. Pacific Southwest Region. Sierra Nevada Forest Plan Amendment, Final Environmental Impact Statement. Vallejo, CA.

USDA Forest Service. 2002. Pacific Southwest Region. National Visitor Use Monitoring Results for Tahoe National Forest. 24 pages.

USDA Forest Service. 2004. Pacific Southwest Region. Sierra Nevada Forest Plan Amendment, Final Supplemental Environmental Impact Statement. Vallejo, CA.

USDA Forest Service. 2004. Tahoe National Forest. Roads and Travel Analysis Project.

USDA Forest Service. 2005. Guidelines for Road Maintenance Levels. Available online at: http://www.fs.fed.us/eng/php/library_card.php?p_num=0577%201205P.

USDA Forest Service. 2005. National Visitor Use Monitoring Data. Tahoe National Forest, Nevada City California.

USDA Forest Service. 2005. Policy for Section 106 of the NHPA Compliance in Travel Management: Designated Routes for Motor Vehicle Use. On file, USDA Forest Service Pacific Southwest Region, Vallejo.

USDA Forest Service. 2006. Programmatic Agreement among the USDA. Forest Service, Pacific Southwest Region, USDA. Forest Service, Intermountain Region's Humboldt-Toiyabe National Forest, California State Historic Preservation Officer, and Advisory Council on Historic Preservation Regarding the Process for Compliance with Section 106 of the National Historic Preservation Act for Designating Motor Vehicle Routes and Managing Motorized Recreation on the National Forests in California. On file, USDA Forest Service, Pacific Southwest Region, Vallejo.

USDA Forest Service. 2006. *RS-FMP focus.* 48 pages.

USDA Forest Service. 2006. Tahoe National Forest Management Indicator Species report.

USDA Forest Service. 2007. Pacific Southwest Region. Business Plan for the Tahoe National Forest – A Window of Opportunity. R5-MB-131. 48 pages.

USDA Forest Service. 2008. Sierra Nevada Forests Bioregional Management Indicator Species (MIS) Report: Life history and analysis of Management Indicator Species of the 10 Sierra Nevada National Forests: Eldorado, Inyo, Lassen, Modoc, Plumas, Sequoia, Sierra, Stanislaus, and Tahoe National Forests and the Lake Tahoe Basin Management Unit. Pacific Southwest Region, Vallejo, CA. January 2008. 128pp

USDA Forest Service. Photo Series for Quantifying Natural Forest Residues: Southern Cascades, Northern Sierra Nevada. 1981. 145 pp.

USDA Forest Service. Tahoe National Forest. Maps for Endangered, Threatened and Sensitive species sightings and their habitats.

USDA Forest Service. Tahoe National Forest. Occurrence records for sensitive and watchlist plants.

USDA, USEPA, Tennessee Valley Authority, FEMA, USDC, NOAA, USDD, USDHUD, USDI. 1998. Stream Corridor Restoration: Principles, Processes, and Practices. Final manuscript - unpublished.

USDI Fish and Wildlife Service 2000. Endangered and Threatened Wildlife and Plants: 90-day Finding on a Petition to List Mountain Yellow-legged Frog as Endangered. Federal Register 65 (198): 60603-60605.

USDI Fish and Wildlife Service, 2004, April 8. 50 CFR Part 17 Endangered and Threatened Wildlife and Plants; 12-month Finding for a Petition To List the West Coast Distinct Population Segment of the Fisher (*Martes pennanti*); Proposed Rule

USDI Fish and Wildlife Service. 1982. Pacific coast American peregrine falcon recovery plan. 87pp.

USDI Fish and Wildlife Service. 1986. Pacific Bald Eagle Recovery Plan. U. S. Fish and Wildlife Service, Portland, Oregon. 160 pp.

USDI Fish and Wildlife Service. 1986. Recovery plan for the Pacific bald eagle. Portland, Oregon. 163 pages.

USDI Fish and Wildlife Service. 1995. Recovery plan for the Lahontan cutthroat trout. Portland, Oregon. 108 pp.

USDI Fish and Wildlife Service. 1996, June 24. The California red-legged frog, *Rana aurora draytonii*, was listed as federally threatened.

USDI Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the California Red-Legged Frog. Federal Register 61 (101): 25813-25833.

USDI Fish and Wildlife Service. 1999. Endangered and Threatened Wildlife and Plants; final rule to remove the American peregrine falcon from the federal list of endangered and threatened wildlife, and to remove the similarity of appearance provision for free-flying peregrines in the conterminous United States; final rule. August 25. Federal Register 64 (164): 46542-46558.

USDI Fish and Wildlife Service. 2000. Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the California Red-Legged Frog (*Rana aurora draytonii*). Federal Register 65 (176): 54892-54932.Vindum, J. 1994. Research Associate with California Academy of Sciences, San Francisco, CA [personal communication with Tahoe National Forest District Biologist].

USDI Fish and Wildlife Service. 2000. Endangered and Threatened Wildlife and Plants: 90-day finding on a Petition to List the California Spotted owl as Threatened or Endangered. Federal Register 65 (198): 60605-60607.

USDI Fish and Wildlife Service. 2001. (Letter from Wayne S. White to Bradley Powell and Jack Blackwell, January 11; Biological Opinion on Formal Endangered Species Consultation and Conference on the Biological Assessment for the Sierra Nevada Forest Plan Amendment Final Environmental Impact Statement.) Copy located at: Tahoe National Forest, Supervisor's Office, Nevada City, CA.

USDI Fish and Wildlife Service. 2002, September 12. *California Red-legged Frog Recovery Plan* was released (Federal Register, Vol. 67, No. 177, pgs. 57830-57831).

USDI Fish and Wildlife Service. 2002. Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*). U. S. Fish and Wildlife Service, Portland, OR. 173 pp.

USDI Fish and Wildlife Service. 2003. Endangered and Threatened Wildlife and Plants; 12-Month Finding for a Petition to List the Sierra Nevada Distinct Population Segment of the Mountain Yellow-legged Frog (*Rana muscosa*). Federal Register 68 (11): 2283-2303.

USDI Fish and Wildlife Service. 2004. Federal Register / Vol. 69, No. 86 / Tuesday, May 4, 2004 Endangered and Threatened Wildlife and Plants; Review of Species that are Candidates or proposed for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions; Notice of Review; Proposed Rule / Summary of petitioned candidates. Mountain yellow-legged frog Pg. 24889

USDI Fish and Wildlife Service. 2006. Protection of Bald Eagles; Definition. 50 CFR Part 22. RIN 1018-AT94. Federal Register, Vol. 71, Number 32.

USDI Fish and Wildlife Service. 2006. Service finds that most owl populations are stable or increasing in the Sierra Nevada. Press release. May 23.

USDI Fish and Wildlife Service. 2007. Final rule: bald eagle delisting in the lower 48 states. Federal Register. Vol. 72, No. 130, July 9, 2007, pgs. 37346-37372.

USDI Fish and Wildlife Service. Letter to Tahoe National Forest with species list. Available at: Tahoe National Forest Supervisor's Office, Nevada City, CA.

USDI Fish and Wildlife Service. 2010. Endangered and Threatened Wildlife and Plants: Revised Designation of Critical Habitat for California Red-legged frog; Final Rule. Federal Register 75 (51):12816-12959.

USDI Fish and Wildlife Service. June 2010. Jeremiah Karuzas of Sacramento Fish and Wildlife Office provided definition of California red-legged frog suitable habitat and clarification on project Design Criteria for Travel Management [personal communication with Tahoe NF Forest Biologist].

Verner, J. 1999. Review of "A Preliminary Report on the Status of the California Spotted Owl in the Sierra Nevada." Unpublished report. USDA Forest Service, Pacific Southwest Research Station, Fresno, CA. July 7, 1999. 9p.

Verner, J. and A.S. Boss, technical coordinators. 1980. California wildlife and their habitats: Western Sierra Nevada. USDA Forest Service, PSW-37., Berkeley, CA. 439 pp.

Verner, J., K.S. McKelvey, B.R. Noon, R.J. Gutierrez, G.I. Gould, Jr. and T.W. Beck, Technical Coordinators. 1992. The California spotted owl: a technical assessment of its current status. Gen. Tech. Rep. PSW-GTR-133. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; 285pp.

von Der Lippe, Moritz and Ingo Kowarik. 2007. Long-distance dispersal of plants by vehicles as a driver of plant invasions. Conservation Biology, Volume 21, number 4, pages 986-996.

Vos, C.C. and J.P. Chardon. 1998. Effects of habitat fragmentation and road density on the distribution pattern of the moor frog, *Rana arvalis*. Journal of Applied Ecology 35(1): 44-56.

Vredenburg, V.T. 2004. Proc Natl Acad Sci USA 101:7646–7650.

Vredenburg, V.T., R. Bingham, R. Knapp, J. A. T. Morgan, C. Moritz, and D. Wake. 2007. Concordant molecular and phenotypic data delineate new taxonomy and conservation priorities for the endangered mountain yellow-legged frog. Journal of Zoology 271:361-374.

Wales, J.H. 1946. The hardhead problem in the Sacramento River above Shasta Lake, California. Calif. Dept. Fish and Game, Inland fish. Admin. Rep. 46. 4pp.

Wang, J.C.S. 1986. Fishes of the Sacramento-San Joaquin estuary and adjacent waters, California: A guide to the early life histories. Interagency Ecological Study Program for the Sacramento - San Joaquin Estuary, Tech. Rep. 9.

Waples R. S., P. B. Adams, J. Bohnsack, and B. L. Taylor. 2007. A biological framework for evaluating whether a species is threatened or endangered in a "significant portion of its range." Conservation Biology 21:964–974.

Washington Department of Transportation. Noise Impact Assessment. Available online at: http://www.wsdot.wa.gov/TA/Operations/Environmental/Noisechapter011906.pdf.

Wasser, Samuel K., Kenneth Bevis, Gina King, and Eric Hanson. 1997. Noninvasive Physiological Measures of Disturbance in the Northern Spotted Owl. Conservation Biology, Vol. 11, Number 4. Pages 1019-1022.

Waters, T. F. 1995. Sediment in streams: sources, biological effects and control. American Fisheries Society, Bethesda, Maryland, Monograph 7.

Watson, J.W., M.G. Garrett, and R.G. Anthony. 1991. Foraging ecology of bald eagles in the Columbia River estuary. J. Wildl. Manage. 55:492-499.

Watson, Mark L. - compiler. 2005. Habitat Fragmentation and the Effects of Roads on Wildlife and Habitats. Background and literature review, Conservation Services Division of the New Mexico Department of Game and Fish. 18 pages.

Weaver, W., and Hagans, D.K., 1994, Handbook for forest and ranch roads: Mendocino County Resource Conservation District, 161 p.

Welsh, H. H., Jr., and L. M. Ollivier. 1998. Stream amphibians as indicators of ecosystem stress: a case study from California's redwoods. Ecological Applications, 8:1118-1132.

White, C.M. 1974. Hunting range of a breeding peregrine falcon on the Sagavanirktok River. Unpublished report. Brigham Young Univ., Provo, UT and Dept. of Interior, U.S. Fish and Wildlife Service, Anchorage, AK.

White, M. and R.H. Barrett. 1979. A review of the wolverine in California with recommendations for management. Unpublished paper. Prepared for the USDA Forest Service, Region 5. By the Dept. of Forestry and Resource Management. College of Natural Resources. University of Calif. Berkley. 71 pp.

Whitson, Tom; Larry Burrill, Steven Dewey, David Cudney, B. E. Nelson, Richard Lee, and Robert Parker. 1996. Weeds of the West. The Western Society of Weed Science. 630 pages.

Wilderness Society. 2006. Addressing the Ecological Effects of Off-Road Vehicles (ORVs). Science and Policy Brief, August 2006, No. 3.

Wildlands CPR. How Many is Too Many: A Review of Road Density Thresholds for Wildlife. Accessed 8/13/2007. Available online at: http://www.wildlandscpr.org/node/124/print.

Wildlands CPR. The Impact of Roads on Aquatic Benthic Macroinvertebrates and Using Bioassessments as Indicators of Stream Health. Accessed 8/13/2007. Available online at: http://www.wildlandscpr.org/node/127/print

Willard, Beatrice E., David J. Cooper, and Bruce C. Forbes. 2007. Natural regeneration of alpine tundra vegetation after human trampling: a 42-year data set from Rocky Mountain National Park, Colorado, U.S.A. Artic, Antarctic and Alpine Research, Vol. 39 (1) pages 177-183.

Wilshire, H.G. 1983. The impact of vehicles on desert soil stabilizers. Pages 31-50 in: Webb, R.H., and H.G. Wilshire, editors. Environmental Effects of Off-Road Vehicles: Impacts and Management in Arid Regions. Springer-Verlag, New York, NY.

Wilson, B. L., Valerie D. Hipkins, Edna Rey-Vizgirdas, and Thomas N. Kaye. 2004. Variation in *Lewisia kelloggii* (Portulacaceae) with description of a new species endemic to Idaho. Unpublished paper – USDA 13 pages.

Wilson, J. 1981. Some aspects of the ecology of the great gray owl in the Central Sierra Nevada. USDA Forest Service. 30pp.

Wilson, J. 1985. Great gray owl survey, 1984. California Department of Fish and Game. Project W-65-R-2. Progress Report.

Winter, J. 1981. Some aspects of the ecology of the great gray owl in the Central Sierra Nevada. USDA, Forest Service. Stanislaus National Forest Contract # 43-2276. Final report. Sonora, CA. 30pp.

Winter, J. 1982. Further investigations on the ecology of the great gray owl in the central Sierra Nevada. Final Report to the Forest Service under contract #43-2348. Stanislaus National Forest, Sonora CA. 35pp.

Winter, J. 1982b. Great Gray Owl habitat survey, Stanislaus National Forest. U.S. For. Serv., Stanislaus Natl. For. Final Rep., Contract 53-2-37.

Winter, J. 1984. Great Gray Owl survey, 1984. State of California, Dept. of Fish and Game. Project W-65-R-2, Job 11-3. Progress Report (January 1985).

Winter, J. 1986. Status, distribution and ecology of the great gray owl (*Strix nebulosa*) in California. San Francisco, CA: San Francisco State University. 121pp. M.S. thesis.

Wisdom, M. J., H. K. Preisler, N. J. Cimon, B. K. Johnson. 2004. Effects of Off-Road Recreation on Mule Deer and Elk. Transactions of the North American Wildlife and Natural Resources Conference 69: in press.

Wisdom, Michael J., Norman J. Cimon, Bruce K. Johnson, Edward O. Garton and Jack Ward Thomas. Unknown date. Spatial Partitioning by Mule Deer and Elk in Relation to Traffic. In: Transactions of the 69th North American Wildlife and Natural Resources Conference. Pages 509-530.

Wisdom, Michael J., Richard S. Holthausen, Barbara C. Wales, Christina D. Hargis, Victoria A. Saab, Danny C. Lee, Wendel J. Hann, Terrell D. Rich, Mary M. Rowland, Wally J. Murphy, and Michelle R. Eames. 2000. Source Habitats for Terrestrial Vertebrates of Focus in the Interior Columbia Basin: Broad-scale Trends and Management Implications. Volume 1 – Overview. Gen. Tech. Rep. PNW-GTR-485. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 3 vol. (Quigley, Thomas M., tech. ed.; Interior Columbia Basin Ecosystem Management Project: Scientific Assessment).

Witham, Carol W. 2000. Current knowledge and conservation status of Ivesia webberi gray (rosaceae), the Webber ivesia, in Nevada. Nevada Natural Heritage Program, Department of Conservation and Natural Resources, and U.S. Fish and Wildlife Service.

Witmer, G.W., and D.S. DeCalesta. 1985. Effect of forest roads on habitat use by Roosevelt elk. Northwest Science 59:122-125.

Wright, G. A., and D. W. Speake. 1975. Compatibility of the eastern wild turkey with recreational activities at Land Between the Lakes, Kentucky. Pages 578-584 in Proceedings of the Annual conference of the Southeastern Association of Fish and Wildlife Agencies.

Wright, G.A. 1975. A study of the compatibility of the eastern wild turkey with recreational activities at Land Between the Lakes, Kentucky. M.S. Dissertation, Auburn University, Auburn, Alabama.

Yarmaloy, C.M. Bayer, and V. Geist. 1988. Behavior responses and reproduction of mule deer, *Odocoileus hemionus*, does following experimental harassment with an all-terrain vehicle. Canadian Field Naturalist 102:425-429.

York E. 1996. Fisher population dynamics in north-central Massachusetts [MSc thesis]. Amherst (MA): Univ. Massachusetts. 122 p

Yorks, T. P., N. E. West, R. J. Mueller, and S. D. Warren. 1997. Toleration of traffic by vegetation: life form conclusions and summary extracts from a compressive database. Environmental Management 21(1), pages 121-131.

Young, D. D., and J. J. Beecham. 1986. Black bear habitat use at Priest Lake, Idaho. Int. Conf. Bear Res. And Manage. 6:7-80

Youngblood, Quentin. 1998. Sierraville Ranger District Biologist. Personal communication regarding sandhill cranes breeding in Carmen Valley, Tahoe National Forest.

Zeedyk, William D. 1996. Managing roads for wet meadow ecosystem recovery. US Department of Transportation, Federal Highway Administration, Federal Lands Highway Programs, Washington DC, FHWA-FLP-96-016, 80 pages.

Zeiner, D.C., W.F. Laudenslayer, Jr., K. E. Mayer, and M. White. 1988. California's Wildlife. Volume I. Amphibians and Reptiles. California Statewide Wildlife Habitat Relationships System. Department of Fish and Game, The Resources Agency, Sacramento, CA. 272 pages.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer and M. White, (Eds.). 1990. California wildlife: Volume II: Birds. State of California, The Resources Agency, Dept. of Fish and Game, Sacramento, CA pp. 184-185.

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer and M. White. 1990. California Wildlife: Volume III: Mammals. California Dept. of Fish and Game, Sacramento CA. 407 pp.

Ziegler, A.D., Sutherland, R.A., and Giambelluca, T.W., 2001, Interstorm surface preparation and sediment detachment by vehicle traffic on unpaved mountain roads: Earth Surface Processes and Landforms 26(3): 235-250.

Zielinski, W.J. 1981. Food habits, activity patterns and ectoparasites of the pine marten at Sagehen Creek, California. Unpublished thesis. Univ. of California, Berkeley. 121 pp.

Zielinski, W.J., F.V. Schlexer, R.L. Truex and L.A. Campbell. 1999. A preliminary assessment of live-trapping as a technique to estimate the proportion of reproductive female fishers. USDA Forest Service, Pacific Southwest Research Station, Arcata CA. 18 pp.

Zielinski, W.J., K.M. Slauson, C.R. Carroll, C.J. Kent, and D.G. Kudrna. 2001. Status of American martens in coastal forests of the Pacific states. Journal of Mammalogy 82, 478-490.

Zielinski, W.J., R.L. Truex, F.V. Schlexer, L.A. Campbell, and C. Carroll. 2005. Historical and contemporary distributions of carnivores in forests of the Sierra Nevada, California, USA. Journal of Biogeography 32:1385-1407.

Zielinski, W.J., T.E. Kucera, and R.H. Barrett. 1995. Current distribution of fishers, *Martes pennanti*, in California. California Fish and Game 81, 104-112.

Zielinski, W.J., W.D. Spencer and R.H. Barrett. 1983. Relationship between food habits and activity patterns of pine martens. J. Mammalogy 64:387-396.

Zielinski, William J., Keith M. Slauson, and Ann E. Bowles. 2007. The Effect of Off-Highway Vehicle Use on the American Marten in California, USA. U.S. Dept. of Agric., Forest Service, Pacific Southwest Region, and California Department of Parks and Recreation, Off-Highway Vehicle Recreation Division. 28 pp.

Zweifel, R. G. 1955. Ecology, distribution, and systematics of frogs of the Rana boylei group. University of California Publications in Zoology, 54, 207-292.

Appendix E

Acronyms & Abbreviations

Appendix E: Acronyms & Abbreviations

AASHTO	American Association of State Highway and Transportation Officials
ACS	Aquatic Conservation Strategy
AD	Anno Domini (Latin- in the year of the Lord)
ADA	Americans With Disabilities Act
ADA	Aquatic Diversity Area
ALT	Alternative
AML	Abandoned Mine Land
AML	Arc Macro Language (GIS term)
AMP	Allotment Management Plan
AMS	Aquatic Management Strategy
ANC	Acid Neutralizing Capacity
APCD	Air Pollution Control District
AQMD	Air Quality Management District
AQRV	Air Quality Related Value
ATV	All Terrain Vehicle
AUM	Animal Unit Month
BACM	Best Available Control Measure
BAER	Burned Area Emergency Response
BC	Before Christ
BD	Brush Disposal
BHCO	Brown-headed cowbird
BLM	Bureau of Land Management
BMP	Best Management Practice
BMPEP	Best Management Practices Evaluation Program
BOE	California State Board of Equalization
BVFSYU	Big Valley Sustained Yield Unit
CADMP	California Acid Deposition Monitoring Program
CAR	Critical Aquatic Refuge
CARB	California Air Quality Board
CDF	California Department of Forestry and Fire Protection
CDFA	California Department of Food and Agriculture
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
CIBA	California Indian Basketweavers Association

CIPC	California Invasive Plant Council
CNPS	California Native Plant Society
CO	Carbon monoxide
CRLF	California Red-Legged Frog
CRMP	Coordinated Resource Management Plan
CS	Conservation Strategy for Mountain Yellow-Legged Frog
CTL	Cut to Length
CURES	Coalition United for Recreation in the Eastern Sierra
CWAP	Clean Water Action Plan
CWE	Cumulative Watershed Effect
CWHR	California Wildlife Habitat Relationship
CWMA	Cooperative Weed Management Area
DAU	Deer Assessment Unit
DBH	Diameter Breast Height
DEIS	Draft Environmental Impact Statement
DEM	Digital Elevation Model
DFC	Desired Future Condition
DFPZ	Defensible Fuel Profile Zone
DTM	Digital Terrain Model
DWR	Department of Water Resources
ECM	Ectomycorrhizal
EHR	Erosion Hazard Rating
EIS	Environmental Impact Statement
EM	Forest Service Engineering Manual
EMAP	Environmental Monitoring and Assessment Program
EMDS	Ecosystem Management Decision Support
EO	Executive Order
EP	Eastside Pine
EPA	Environmental Protection Agency
EPC	Ecosystem Process Conceptual
ERA	Equivalent Roaded Area
ESA	Ecologically Significant Area
ESA	Endangered Species Act
EW	Emphasis Watershed
F	Fahrenheit
FA	Foraging Area
FDR	Forest Development Road
FEIS	Final Environmental Impact Statement
FEMAT	Forest Ecosystem Management Assessment Team

FERC	Federal Energy Regulatory Commission
FIA	Forest Inventory and Analysis
FICMNEW	Federal Interagency Committee for the Management of Noxious and Exotic Weeds
FLAG	Federal Land Managements' Air Quality Related Values Work Group
FLAM MAP	Flammability Map
FNWA	Federal Noxious Weed Act
FO	Forest Order
FOFEM	First Order Fire Effects Model
FOM	Fine organic matter
4WD, 4X4	Four Wheel Drive
FR	Federal Regulations
FS	Forest Service
FSH	Forest Service Handbook
FSM	Forest Service Manual
FVS	Forest Vegetation Simulation
FY	Fiscal Year
FYLF	Foothill Yellow-Legged Frog
GIS	Geographic Information System
GP	Georgia Pacific
GPRA	Government Performance and Results Act
HFQLG	Herger-Feinstein Quincy Library Group
HSA	Hydrologic Sub-area (CalWater Level 4, 100,000 – 500,000 acres)
HUC	Hydrologic Unit Code
IASC	Interagency Air and Smoke Council
IBA	Important Bird Area
IBI	Index of Biotic Integrity
IC	Ion Chromatography
ID	Interdisciplinary
IDT	Interdisciplinary Team
IMPROVE	Interagency Monitoring of Protected Visual Environmental
INFRA	A Forest Service database that houses information on all Forest Service improvements and facilities
IPM	Integrated Pest Management
KMDA	Known Mineral Deposit Area
KV	Knutson-Vandenberg
LAC	Limit of Acceptable Change
LEP	Limited English proficiency
LF	Leopard Frog
LIPM	Laser Integrating Plate Method

LNF	Lassen National Forest
LOP	Limited Operating Period
LRMP	Land and Resource Management Plan.
LSOG	Late Successional/Old Growth
LTBMU	Lake Tahoe Basin Management Unit
LWA	Landscape-Watershed Analysis
LWM	Large Woody Material
MA	Management Area
MBF	Thousands of Board Feet
MC	Mixed Conifer
MEA	Management Emphasis Area
MILS	Mineral Industry Location System
MIS	Management Indicator Species
ML	Road Maintenance Level 1-5
MMBF	Millions of Board Feet
MOU	Memorandum (or Memo) of Understanding
MU	Modern Urban
MYLF	Mountain Yellow-Legged Frog
NAAQS	National Ambient Air Quality Standards
NADP	National Atmospheric Deposition Program
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NF	National Forest
NFMA	National Forest Management Act
NFS	National Forest System
NFSPUFF	A Dispersion Model for Smoke Management in Complex Terrain
NIFC	National Interagency Fire Coordination Center
NO_2	Nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NO_2	Nitrogen Oxides
NPS	National Park System
NRHP	National Register of Historic Places
NRV	Natural Range of Variability
NSRE	National Survey on Recreation and the Environment
NVUM	National Visitor Use Monitoring
OGC	Office of General Counsel
OHV	Off Highway Vehicle
OMB	Office of Management and Budget

ORV	Off Road Vehicle
OSHA	Occupational Safety and Health Administration
OSV	Over Snow Vehicle
PAC	Protected Activity Center
PAOT	Persons-at-One-Time
PCT	Pacific Crest Trail
PFA	Post-Fledging Area
PFC	Proper Functioning Condition
PFIRS	Prescribed Fire Incident Reporting System
PIT	Passport in Time
PIXE	Proton Induced X-ray Emission
PM_{10}, $PM_{2.5}$	Particulates ranging from 10 to 2.5 microns in size
PNC	Potential Natural Community
PNF	Plumas National Forest
PSD	Prevention of Significant Deterioration Program
PSW	Pacific Southwest Forest and Range Experiment Station
QLG	Quincy Library Group
R	Rural
R5	Region 5: Pacific Southwest Region
RA	Riparian Area
RACM	Reasonably Available Control Measure
RARE	Roadless area review and evaluation
RARE II	Second Roadless Area Review and Evaluation (1979)
RCA	Riparian Conservation Area
RCO	Riparian Conservation Objective
RD	Ranger District
RDEIS	Revised Draft Environmental Impact Statement
RHCA	Riparian Habitat Conservation Areas
RIM	Recreation Information Management
RMO	Riparian Management Objectives
RN	Roaded Natural
RNA	Research Natural Area
ROD	Record of Decision
ROG	Reactive Organic Gases
ROS	Recreation Opportunity Spectrum
ROW	Right-of-way
RSL	Remote Sensing Lab
RVD	Recreation Visitor Day
S&G	Standard and Guideline

SAFE	Simulation and Analysis of Fire Effects on Forests
SDEIS	Supplemental Draft Environmental Impact Statement
SHPO	State Historical Preservation Officer
SIA	Special Interest Area
SIO	Scenic Integrity Objectives
SIP	State Implementation Plan
SLAMS	State and Local Air Monitoring Network
SMARA	Surface Mining and Reclamation Act
SMP	Smoke Management Program
SMS	Scenery Management System
SNEP	Sierra Nevada Ecosystem Project
SNFP	Sierra Nevada Framework Project
SNFPA	Sierra Nevada Forest Plan Amendment
SNRF	Sierra Nevada Red Fox
SO_2	Sulfur Dioxide
SPAM	Sierra Provinces Assessment and Monitoring
SPI	Sierra Pacific Industries
SPLAT	Strategically placed area treatments
SQ	Square
SQS	Soil Quality Standards
SSFCA	Southern Sierra Fisher Conservation Area
TAMM	Timber Assessment Market Model
TCP	Traditional Cultural Property
TEP	Threatened, Endangered and Proposed
TEPS	Threatened, Endangered, Proposed, and Sensitive
TES	Threatened, Endangered and Sensitive Species
TIA	Travel Industry Association of America
TMDL	Total Maximum Daily Load
TNF	Tahoe National Forest
TOC	Threshold of Concern
TOG	Total organic gases
TOR	Thermal Optical Reflectance
TPZ	Timber Production Zone
TRP	Tribal Relations Programs
TRPA	Tahoe Regional Planning Agency
TV	Truth Value
USC	United States Code
USDA	United States Department of Agriculture
USDI	United States Department of Interior

USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOC	Volatile Organic Compound
VQO	Visual Quality Objectives
WA	Watershed Analysis
WCA	Watershed Condition Assessment
WFNH	Willow Flycatcher Nesting Habitat
WFSA	Wildland Fire Situation Analysis
WIFL	Willow Flycatcher
WMO	Watershed Management Objectives
YRRD	Yuba River Ranger District
YT	Yosemite Toad

Appendix F

Watershed Analysis

Appendix F: Watershed Analysis

Introduction

The purpose of Appendix F is to provide a technical overview of the analysis process and models used. Due to the complexity and magnitude of this project, a number of analytical models and techniques were utilized requiring development of a decision support system to integrate these processes.

Within the Tahoe National Forest (TNF) boundary, watersheds have been designated into hydrologic unit code 6 (HUC6) watersheds with area (acres) designated as TNF or other. Total HUC6 area and the percent area on TNF are defined. Table F-2 shows the existing and proposed route miles, crossings, and Riparian Conservation Area miles by HUC 6 watershed and by Alternative. Per classified route, route distance (miles) on National Forest System lands and private lands is defined and route density defined (miles route/square mile) as a sum of density on forest service lands and density on private lands. Stream crossings are quantified as perennial and intermittent and designated as crossing through private or TNF land. Table F-1 shows the Codes used to indicate the class of vehicle and season use for the routes. For each HUC6 watershed the total acres, route distance, route density (miles per square mile), number of stream crossings, and density of stream crossings (number of crossings per square mile) are displayed. Route distances within Riparian Conservation Areas are also compiled by HUC6. This data is then presented to include only native surface roads and motorized trails classified as “Higher Risk Routes.”

The riparian conservation area (H6 aquatic area or RCA) is defined as an area (acres) 300 feet on either side of perennial streams and 150 feet on either side of intermittent streams. The RCA is designated by route distance and density on FS and private lands. Total density is calculated per classified route and total distance of all routes in the H6 aquatic area is calculated on FS and private lands. This data is then presented to include only routes classified as “Higher Risk Routes” (native surface roads and motorized trails).

Stream crossings (on TNF) proposed for alternatives for each HUC6 are quantified (total TNF stream crossings (TNF perennial crossings, TNF intermittent crossings)) by alternative. Figure F-1 shows the location of each HUC6 Watersheds on the TNF. Table F-5 displays the HUC6 watershed name and number.

Table F-1. Codes used to indicate Class of Vehicle and Season of User

Code	Class of Vehicle and Season of Use
AS	Roads seasonally open to highway legal vehicles only
AY	Roads open year round to highway legal vehicles only
BS	Roads seasonally open to all vehicles
BY	Roads open year round to all vehicles
CS	Trails seasonally open to high clearance vehicles
CY	Trails open year round to high clearance vehicles
DS	Trails seasonally open to ATV's and motorcycles (<48")
DY	Trails open year round to ATV's and motorcycles (<48")
ES	Trails seasonally open to motorcycles
EY	Trails open year round to motorcycles
FY	National Forest Transportation System roads and trails closed to wheeled motor vehicles
GY	Other jurisdiction roads (ie: county and State)
HY	Other non-system roads (private)
IY	Non-motorized trails
JY	Trails closed to wheeled vehicles (including mountain bikes)
KY	Decommissioned roads
LY	Un-authorized roads and trails remaining open to wheeled motorized vehicles

Table F-2. Routes by HUC6 Watershed: Total Miles in Watershed, Perennial and Intermittent Stream Crossings, and Miles in Riparian Conservation Areas

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
160501020101	AS	Upper Middle Truckee	31,362	17.4	3.9	17.4	17.4	3.9	11.5	17.4	1	1	0	0	1	1	1	1	0	0	0	0	1	1	4505.3	1.0	0.5	1.0	1.0	0.5	0.5	1.0
160501020101	AY	Upper Middle Truckee	31,362	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4505.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020101	BS*	Upper Middle Truckee	31,362	37.2	50.7	37.2	37.2	50.7	43.5	37.2	7	3	8	4	7	3	7	3	8	4	8	4	7	3	4505.3	2.8	3.4	2.8	2.8	3.4	3.4	2.8
160501020101	BY*	Upper Middle Truckee	31,362	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4505.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020101	CS*	Upper Middle Truckee	31,362	2.9	2.9	2.9	2.9	2.9	2.9	2.9	1	0	1	0	1	0	1	0	1	0	1	0	1	0	4505.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
160501020101	CY*	Upper Middle Truckee	31,362	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4505.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020101	DS*	Upper Middle Truckee	31,362	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4505.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020101	DY*	Upper Middle Truckee	31,362	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4505.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020101	ES*	Upper Middle Truckee	31,362	0.0	1.6	0.0	1.6	1.6	1.6	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4505.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020101	EY*	Upper Middle Truckee	31,362	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4505.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020101	FY	Upper Middle Truckee	31,362	3.6	42.7	44.3	42.7	42.7	42.4	42.7	0	0	7	2	7	2	7	2	7	2	7	2	7	2	4505.3	0.0	3.1	3.1	3.1	3.1	3.1	3.1
160501020101	GY	Upper Middle Truckee	31,362	63.9	63.9	63.9	63.9	63.9	63.9	63.9	20	4	20	4	20	4	20	4	20	4	20	4	20	4	4505.3	7.7	7.7	7.7	7.7	7.7	7.7	7.7
160501020101	HY*	Upper Middle Truckee	31,362	100.7	100.7	100.7	100.7	100.7	100.7	100.6	37	0	37	0	37	0	37	0	37	0	37	0	37	0	4505.3	10.5	10.5	10.5	10.5	10.5	10.5	10.5
160501020101	IY	Upper Middle Truckee	31,362	15.2	15.2	15.2	15.2	15.2	15.2	15.2	3	1	3	1	3	1	3	1	3	1	3	1	3	1	4505.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4
160501020101	JY	Upper Middle Truckee	31,362	13.2	13.2	13.2	13.2	13.2	13.2	13.2	3	0	3	0	3	0	3	0	3	0	3	0	3	0	4505.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
160501020101	KY	Upper Middle Truckee	31,362	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1	0	1	0	1	0	1	0	1	0	1	0	1	0	4505.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
160501020101	LY*	Upper Middle Truckee	31,362	40.7	0.0	0.0	0.0	0.0	0.0	0.0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	4505.3	3.1	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	31,362	295.6	295.6	295.6	295.6	295.6	295.6	295.5	80	11	80	11	80	11	80	11	80	11	80	11	80	11	4505.3	27.1	27.1	27.1	27.1	27.1	27.1	27.1
		Total Mi./Sq.Mi.	49.00	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.4	1.6	11.4	1.6	11.4	1.6	11.4	1.6	11.4	1.6	11.4	1.6	11.4	1.6	7.0	3.9	3.9	3.9	3.9	3.9	3.9	3.9
		Total Native Surface Motorized		181.4	155.8	140.8	142.4	155.8	148.6	142.3	52	5	46	4	45	3	45	3	46	4	46	4	45	3		16.6	14.0	13.4	13.4	14.0	14.0	13.4
		Motorized Native Surface Mi./Sq.Mi.		3.7	3.2	2.9	2.9	3.2	3.0	2.9	7.4	0.7	6.5	0.6	6.4	0.4	6.4	0.4	6.5	0.6	6.5	0.6	6.4	0.4		2.4	2.0	1.9	1.9	2.0	2.0	1.9

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
160501020102	AS	Donner Lake	18,801	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020102	AY	Donner Lake	18,801	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020102	BS*	Donner Lake	18,801	5.0	5.0	5.0	5.0	5.0	5.0	5.0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	3184.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
160501020102	BY*	Donner Lake	18,801	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020102	CS*	Donner Lake	18,801	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020102	CY*	Donner Lake	18,801	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020102	DS*	Donner Lake	18,801	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020102	DY*	Donner Lake	18,801	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020102	ES*	Donner Lake	18,801	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	3184.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
160501020102	EY*	Donner Lake	18,801	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020102	FY	Donner Lake	18,801	0.4	6.9	6.9	6.9	6.9	6.9	6.9	0	0	1	0	1	0	1	0	1	0	1	0	1	0	3184.4	0.0	0.1	0.1	0.1	0.1	0.1	0.1
160501020102	GY	Donner Lake	18,801	37.8	37.8	37.8	37.8	37.8	37.8	37.8	11	0	11	0	11	0	11	0	11	0	11	0	11	0	3184.4	4.0	4.0	4.0	4.0	4.0	4.0	4.0
160501020102	HY*	Donner Lake	18,801	99.0	99.0	99.0	99.0	99.0	99.0	99.0	25	5	25	5	25	5	25	5	25	5	25	5	25	5	3184.4	7.9	7.9	7.9	7.9	7.9	7.9	7.9
160501020102	IY	Donner Lake	18,801	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1
160501020102	JY	Donner Lake	18,801	5.4	5.4	5.4	5.4	5.4	5.4	5.4	1	0	1	0	1	0	1	0	1	0	1	0	1	0	3184.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
160501020102	KY	Donner Lake	18,801	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020102	LY*	Donner Lake	18,801	6.5	0.0	0.0	0.0	0.0	0.0	0.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3184.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	18,801	161.4	161.4	161.4	161.4	161.4	161.4	161.4	40	5	40	5	40	5	40	5	40	5	40	5	40	5	3184.4	12.6	12.6	12.6	12.6	12.6	12.6	12.6
		Total Mi./Sq.Mi.	29.38	5.5	5.5	5.5	5.5	5.5	5.5	5.5	8.0	1.0	8.0	1.0	8.0	1.0	8.0	1.0	8.0	1.0	8.0	1.0	8.0	1.0	5.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5
		Total Native Surface Motorized		114.0	107.6	107.6	107.6	107.6	107.6	107.6	28	5	27	5	27	5	27	5	27	5	27	5	27	5		8.3	8.3	8.3	8.3	8.3	8.3	8.3
		Motorized Native Surface Mi./Sq.Mi.		3.9	3.7	3.7	3.7	3.7	3.7	3.7	5.6	1.0	5.4	1.0	5.4	1.0	5.4	1.0	5.4	1.0	5.4	1.0	5.4	1.0		1.7	1.7	1.7	1.7	1.7	1.7	1.7

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
160501020103	AS	Middle Truckee River-Prosser Creek	40,813	5.4	3.1	5.4	5.4	3.1	5.1	5.4	1	0	0	0	1	0	1	0	1	0	1	0	1	0	8606.6	0.7	0.3	0.7	0.7	0.3	0.7	0.7
160501020103	AY	Middle Truckee River-Prosser Creek	40,813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8606.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020103	BS*	Middle Truckee River-Prosser Creek	40,813	46.8	49.1	46.8	46.9	49.1	47.4	46.8	6	4	7	4	6	4	6	4	6	4	6	4	6	4	8606.6	3.9	4.3	3.9	3.9	4.3	3.9	3.9
160501020103	BY*	Middle Truckee River-Prosser Creek	40,813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8606.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020103	CS*	Middle Truckee River-Prosser Creek	40,813	4.6	4.7	4.6	4.6	5.4	6.4	4.7	1	2	1	2	1	2	1	2	2	5	2	5	1	2	8606.6	0.6	0.6	0.6	0.6	0.6	1.1	0.6
160501020103	CY*	Middle Truckee River-Prosser Creek	40,813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8606.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020103	DS*	Middle Truckee River-Prosser Creek	40,813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8606.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020103	DY*	Middle Truckee River-Prosser Creek	40,813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8606.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020103	ES*	Middle Truckee River-Prosser Creek	40,813	9.0	11.0	9.0	11.0	11.0	11.0	11.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8606.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020103	EY*	Middle Truckee River-Prosser Creek	40,813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8606.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020103	FY	Middle Truckee River-Prosser Creek	40,813	1.0	61.2	63.3	61.3	60.5	59.3	61.3	0	0	11	9	11	9	11	9	10	6	10	6	11	9	8606.6	0.0	8.0	8.0	8.0	7.9	7.5	8.0
160501020103	GY	Middle Truckee River-Prosser Creek	40,813	89.8	89.8	89.8	89.8	89.8	89.8	89.8	12	6	12	6	12	6	12	6	12	6	12	6	12	6	8606.6	5.8	5.8	5.8	5.8	5.8	5.8	5.8
160501020103	HY*	Middle Truckee River-Prosser Creek	40,813	167.5	167.5	167.5	167.5	167.5	167.5	167.5	15	12	15	12	15	12	15	12	15	12	15	12	15	12	8606.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
160501020103	IY	Middle Truckee River-Prosser Creek	40,813	15.3	15.3	15.3	15.3	15.3	15.3	15.3	11	3	11	3	11	3	11	3	11	3	11	3	11	3	8606.6	3.2	3.2	3.2	3.2	3.2	3.2	3.2
160501020103	JY	Middle Truckee River-Prosser Creek	40,813	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8606.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020103	KY	Middle Truckee River-Prosser Creek	40,813	10.3	10.3	10.3	10.3	10.3	10.3	10.3	2	0	2	0	2	0	2	0	2	0	2	0	2	0	8606.6	0.9	0.9	0.9	0.9	0.9	0.9	0.9
160501020103	LY*	Middle Truckee River-Prosser Creek	40,813	62.3	0.0	0.0	0.0	0.0	0.0	0.0	11	9	0	0	0	0	0	0	0	0	0	0	0	0	8606.6	7.9	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	40,813	412.0	412.0	412.0	412.0	412.0	412.0	412.0	59	36	59	36	59	36	59	36	59	36	59	36	59	36	8606.6	35.6	35.6	35.6	35.6	35.6	35.6	35.6
		Total Mi./Sq.Mi.	63.77	6.5	6.5	6.5	6.5	6.5	6.5	6.5	4.4	2.7	4.4	2.7	4.4	2.7	4.4	2.7	4.4	2.7	4.4	2.7	4.4	2.7	13.4	2.6	2.6	2.6	2.6	2.6	2.6	2.6
		Total Native Surface Motorized		290.3	232.3	227.9	230.0	233.0	232.3	230.0	33	27	23	18	22	18	22	18	23	21	23	21	22	18		25.0	17.5	17.1	17.1	17.5	17.6	17.1
		Motorized Native Surface Mi./Sq.Mi.		4.6	3.6	3.6	3.6	3.7	3.6	3.6	2.5	2.0	1.7	1.3	1.6	1.3	1.6	1.3	1.7	1.6	1.7	1.6	1.6	1.3		1.9	1.3	1.3	1.3	1.3	1.3	1.3

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
160501020104	AS	Martis Creek	27,262	2.7	0.0	2.7	2.7	0.0	2.7	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.3	0.0	0.3	0.3	0.0	0.3	0.3
160501020104	AY	Martis Creek	27,262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	BS*	Martis Creek	27,262	4.0	6.8	4.0	4.0	6.8	4.0	4.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.4	0.7	0.4	0.4	0.7	0.4	0.4
160501020104	BY*	Martis Creek	27,262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	CS*	Martis Creek	27,262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	CY*	Martis Creek	27,262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	DS*	Martis Creek	27,262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	DY*	Martis Creek	27,262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	ES*	Martis Creek	27,262	0.0	1.4	0.0	1.4	1.4	1.4	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	EY*	Martis Creek	27,262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	FY	Martis Creek	27,262	0.2	5.7	7.1	5.7	5.7	5.7	5.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.4	0.4	0.4	0.4	0.4	0.4
160501020104	GY	Martis Creek	27,262	8.4	8.4	8.4	8.4	8.4	8.4	8.4	4	0	4	0	4	0	4	0	4	0	4	0	4	0	5216.9	2.1	2.1	2.1	2.1	2.1	2.1	2.1
160501020104	HY*	Martis Creek	27,262	221.3	221.3	221.3	221.3	221.3	221.3	221.2	42	24	42	24	42	24	42	24	42	24	42	24	42	24	5216.9	17.0	17.0	17.0	17.0	17.0	17.0	17.0
160501020104	IY	Martis Creek	27,262	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1
160501020104	JY	Martis Creek	27,262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	KY	Martis Creek	27,262	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020104	LY*	Martis Creek	27,262	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5216.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	27,262	245.8	245.8	245.8	245.8	245.8	245.8	245.7	46	24	46	24	46	24	46	24	46	24	46	24	46	24	5216.9	20.2	20.2	20.2	20.2	20.2	20.2	20.2
		Total Mi./Sq.Mi.	42.60	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.6	2.9	5.6	2.9	5.6	2.9	5.6	2.9	5.6	2.9	5.6	2.9	5.6	2.9	8.2	2.5	2.5	2.5	2.5	2.5	2.5	2.5
		Total Native Surface Motorized		232.2	229.5	225.3	226.7	229.5	226.7	226.6	42	24	42	24	42	24	42	24	42	24	42	24	42	24		17.8	17.7	17.4	17.4	17.7	17.4	17.4
		Motorized Native Surface Mi./Sq.Mi.		5.5	5.4	5.3	5.3	5.4	5.3	5.3	5.2	2.9	5.2	2.9	5.2	2.9	5.2	2.9	5.2	2.9	5.2	2.9	5.2	2.9		2.2	2.2	2.1	2.1	2.2	2.1	2.1

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
160501020201	AS	Little Truckee River-Webber Lake	22,043	16.1	7.9	16.1	16.1	7.9	16.1	16.1	6	9	3	1	6	9	6	9	6	9	6	9	6	9	7273.1	2.6	1.5	2.6	2.6	1.5	2.6	2.6
160501020201	AY	Little Truckee River-Webber Lake	22,043	4.2	0.0	4.2	4.2	0.0	2.1	4.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1
160501020201	BS*	Little Truckee River-Webber Lake	22,043	0.0	8.2	0.0	19.4	31.8	22.1	0.0	0	0	3	8	0	0	2	5	2	5	2	5	0	0	7273.1	0.0	1.1	0.0	2.3	3.5	2.6	0.0
160501020201	BY*	Little Truckee River-Webber Lake	22,043	19.4	23.6	19.4	0.0	0.0	0.0	19.4	2	5	2	5	2	5	0	0	0	0	0	0	2	5	7273.1	2.3	2.4	2.3	0.0	0.0	0.0	2.3
160501020201	CS*	Little Truckee River-Webber Lake	22,043	0.0	0.0	0.0	0.2	0.8	0.9	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0
160501020201	CY*	Little Truckee River-Webber Lake	22,043	0.0	0.8	0.0	0.0	0.0	0.0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1
160501020201	DS*	Little Truckee River-Webber Lake	22,043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020201	DY*	Little Truckee River-Webber Lake	22,043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020201	ES*	Little Truckee River-Webber Lake	22,043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020201	EY*	Little Truckee River-Webber Lake	22,043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020201	FY	Little Truckee River-Webber Lake	22,043	0.2	18.0	18.9	18.7	18.0	17.4	18.6	0	0	4	7	4	7	4	7	4	7	4	7	4	7	7273.1	0.0	2.6	2.7	2.6	2.6	2.3	2.6
160501020201	GY	Little Truckee River-Webber Lake	22,043	8.1	8.1	8.1	8.1	8.1	8.1	8.1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	7273.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9
160501020201	HY*	Little Truckee River-Webber Lake	22,043	21.9	21.9	21.9	21.9	21.9	21.9	21.9	6	8	6	8	6	8	6	8	6	8	6	8	6	8	7273.1	3.6	3.6	3.6	3.6	3.6	3.6	3.6
160501020201	IY	Little Truckee River-Webber Lake	22,043	2.9	2.9	2.9	2.9	2.9	2.9	2.9	1	0	1	0	1	0	1	0	1	0	1	0	1	0	7273.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
160501020201	JY	Little Truckee River-Webber Lake	22,043	2.8	2.8	2.8	2.8	2.8	2.8	2.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3
160501020201	KY	Little Truckee River-Webber Lake	22,043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020201	LY*	Little Truckee River-Webber Lake	22,043	18.7	0.0	0.0	0.0	0.0	0.0	0.0	4	7	0	0	0	0	0	0	0	0	0	0	0	0	7273.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	22,043	94.3	94.3	94.3	94.3	94.3	94.3	94.3	23	33	23	33	23	33	23	33	23	33	23	33	23	33	7273.1	14.4	14.4	14.4	14.4	14.4	14.4	14.4
		Total Mi./Sq.Mi.	34.44	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.0	2.9	2.0	2.9	2.0	2.9	2.0	2.9	2.0	2.9	2.0	2.9	2.0	2.9	11.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		Total Native Surface Motorized		60.0	54.5	41.3	41.5	54.5	44.9	41.6	12	20	11	21	8	13	8	13	8	13	8	13	8	13		8.6	7.2	5.9	6.0	7.2	6.3	6.0
		Motorized Native Surface Mi./Sq.Mi.		1.7	1.6	1.2	1.2	1.6	1.3	1.2	1.1	1.8	1.0	1.8	0.7	1.1	0.7	1.1	0.7	1.1	0.7	1.1	0.7	1.1		0.8	0.6	0.5	0.5	0.6	0.6	0.5

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
160501020202	AS	Little Truckee River-Independence Lake	21,807	0.5	0.0	0.5	0.5	0.0	0.0	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020202	AY	Little Truckee River-Independence Lake	21,807	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1	0	1	0	1	0	1	0	1	0	1	0	1	0	6528.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
160501020202	BS*	Little Truckee River-Independence Lake	21,807	12.5	13.1	12.5	33.6	34.1	34.8	12.5	2	6	2	6	2	6	2	18	2	18	2	18	2	6	6528.1	0.9	0.9	0.9	2.1	2.1	2.2	0.9
160501020202	BY*	Little Truckee River-Independence Lake	21,807	21.0	21.0	21.0	0.0	0.0	0.0	21.0	0	12	0	12	0	12	0	0	0	0	0	0	0	12	6528.1	1.2	1.2	1.2	0.0	0.0	0.0	1.2
160501020202	CS*	Little Truckee River-Independence Lake	21,807	0.0	0.0	0.0	0.8	2.0	2.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.0	0.0	0.0	0.2	0.2	0.0
160501020202	CY*	Little Truckee River-Independence Lake	21,807	0.8	2.0	0.8	0.0	0.0	0.0	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.2	0.0	0.0	0.0	0.0	0.1
160501020202	DS*	Little Truckee River-Independence Lake	21,807	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020202	DY*	Little Truckee River-Independence Lake	21,807	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020202	ES*	Little Truckee River-Independence Lake	21,807	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020202	EY*	Little Truckee River-Independence Lake	21,807	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020202	FY	Little Truckee River-Independence Lake	21,807	0.0	21.3	22.6	22.6	21.3	20.7	22.4	0	0	4	7	4	7	4	7	4	7	4	7	4	7	6528.1	0.0	2.5	2.7	2.7	2.5	2.4	2.6
160501020202	GY	Little Truckee River-Independence Lake	21,807	23.9	23.9	23.9	23.9	23.9	23.9	23.9	8	14	8	14	8	14	8	14	8	14	8	14	8	14	6528.1	5.5	5.5	5.5	5.5	5.5	5.5	5.5
160501020202	HY*	Little Truckee River-Independence Lake	21,807	21.2	21.2	21.2	21.2	21.2	21.2	21.2	2	7	2	7	2	7	2	7	2	7	2	7	2	7	6528.1	3.7	3.7	3.7	3.7	3.7	3.7	3.7
160501020202	IY	Little Truckee River-Independence Lake	21,807	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020202	JY	Little Truckee River-Independence Lake	21,807	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020202	KY	Little Truckee River-Independence Lake	21,807	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020202	LY*	Little Truckee River-Independence Lake	21,807	22.6	0.0	0.0	0.0	0.0	0.0	0.0	4	7	0	0	0	0	0	0	0	0	0	0	0	0	6528.1	2.7	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	21,807	104.3	104.3	104.3	104.3	104.3	104.3	104.3	17	46	17	46	17	46	17	46	17	46	17	46	17	46	6528.1	14.3	14.3	14.3	14.3	14.3	14.3	14.3
		Total Mi./Sq.Mi.	34.07	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.7	4.5	1.7	4.5	1.7	4.5	1.7	4.5	1.7	4.5	1.7	4.5	1.7	4.5	10.2	1.4	1.4	1.4	1.4	1.4	1.4	1.4
		Total Native Surface Motorized		78.1	57.3	55.5	55.5	57.3	58.0	55.7	8	32	4	25	4	25	4	25	4	25	4	25	4	25		8.5	6.0	5.8	5.8	6.0	6.1	5.9
		Motorized Native Surface Mi./Sq.Mi.		2.3	1.7	1.6	1.6	1.7	1.7	1.6	0.8	3.1	0.4	2.5	0.4	2.5	0.4	2.5	0.4	2.5	0.4	2.5	0.4	2.5		0.8	0.6	0.6	0.6	0.6	0.6	0.6

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
160501020203	AS	Sagehen Creek	10,374	5.2	0.0	5.2	5.2	0.0	0.0	5.2	1	2	0	0	1	2	1	2	0	0	0	0	1	2	1380.0	0.4	0.0	0.4	0.4	0.0	0.0	0.4
160501020203	AY	Sagehen Creek	10,374	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	BS*	Sagehen Creek	10,374	23.1	28.3	23.1	23.2	28.5	28.5	23.1	1	7	2	9	1	7	1	7	2	9	2	9	1	7	1380.0	1.0	1.4	1.0	1.0	1.4	1.4	1.0
160501020203	BY*	Sagehen Creek	10,374	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	CS*	Sagehen Creek	10,374	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	CY*	Sagehen Creek	10,374	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	DS*	Sagehen Creek	10,374	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	DY*	Sagehen Creek	10,374	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	ES*	Sagehen Creek	10,374	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	EY*	Sagehen Creek	10,374	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	FY	Sagehen Creek	10,374	4.0	18.6	18.7	18.7	18.6	18.6	18.7	0	1	1	5	1	5	1	5	1	5	1	5	1	5	1380.0	0.6	1.6	1.6	1.6	1.6	1.6	1.6
160501020203	GY	Sagehen Creek	10,374	3.5	3.5	3.5	3.5	3.5	3.5	3.5	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1380.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
160501020203	HY*	Sagehen Creek	10,374	6.7	6.7	6.7	6.7	6.7	6.7	6.7	0	2	0	2	0	2	0	2	0	2	0	2	0	2	1380.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
160501020203	IY	Sagehen Creek	10,374	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	JY	Sagehen Creek	10,374	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020203	KY	Sagehen Creek	10,374	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
160501020203	LY*	Sagehen Creek	10,374	14.7	0.0	0.0	0.0	0.0	0.0	0.0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	1380.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	10,374	59.5	59.5	59.5	59.5	59.5	59.5	59.5	4	17	4	17	4	17	4	17	4	17	4	17	4	17	1380.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
		Total Mi./Sq.Mi.	16.21	3.7	3.7	3.7	3.7	3.7	3.7	3.7	1.9	7.9	1.9	7.9	1.9	7.9	1.9	7.9	1.9	7.9	1.9	7.9	1.9	7.9	2.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6
		Total Native Surface Motorized		46.4	37.0	31.7	31.7	37.0	37.0	31.7	2	14	2	12	1	10	1	10	2	12	2	12	1	10		2.1	1.6	1.2	1.2	1.6	1.6	1.2
		Motorized Native Surface Mi./Sq.Mi.		2.9	2.3	2.0	2.0	2.3	2.3	2.0	0.9	6.5	0.9	5.6	0.5	4.6	0.5	4.6	0.9	5.6	0.9	5.6	0.5	4.6		1.0	0.7	0.5	0.5	0.7	0.7	0.5

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
160501020204	AS	Little Truckee River-Stampede Reservoir	31,892	9.9	2.1	9.9	9.9	2.1	4.9	9.9	2	0	0	0	2	0	2	0	0	0	0	0	2	0	9222.8	1.0	0.2	1.0	1.0	0.2	0.4	1.0
160501020204	AY	Little Truckee River-Stampede Reservoir	31,892	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9222.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020204	BS*	Little Truckee River-Stampede Reservoir	31,892	30.9	39.0	30.9	80.7	88.6	87.3	30.9	10	6	12	6	10	6	17	30	20	34	20	34	10	6	9222.8	4.0	4.8	4.0	9.7	10.5	10.7	4.0
160501020204	BY*	Little Truckee River-Stampede Reservoir	31,892	50.2	50.2	50.2	0.6	0.6	0.6	49.6	7	24	7	24	7	24	0	0	0	0	0	0	7	24	9222.8	5.7	5.7	5.7	0.0	0.0	0.0	5.7
160501020204	CS*	Little Truckee River-Stampede Reservoir	31,892	1.3	4.8	1.3	4.0	7.2	4.1	3.9	0	1	4	2	0	1	2	2	1	3	1	3	4	2	9222.8	0.0	0.9	0.0	0.8	1.0	0.5	0.7
160501020204	CY*	Little Truckee River-Stampede Reservoir	31,892	0.4	0.8	0.4	0.0	0.0	0.0	0.8	0	0	0	1	0	0	0	0	0	0	0	0	0	1	9222.8	0.0	0.2	0.0	0.0	0.0	0.0	0.2
160501020204	DS*	Little Truckee River-Stampede Reservoir	31,892	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9222.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020204	DY*	Little Truckee River-Stampede Reservoir	31,892	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9222.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020204	ES*	Little Truckee River-Stampede Reservoir	31,892	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	9222.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020204	EY*	Little Truckee River-Stampede Reservoir	31,892	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9222.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020204	FY	Little Truckee River-Stampede Reservoir	31,892	0.0	47.5	51.8	49.1	45.9	47.5	47.8	0	0	23	11	27	13	24	12	25	7	25	7	23	11	9222.8	0.0	6.4	7.5	6.7	6.4	6.5	6.6
160501020204	GY	Little Truckee River-Stampede Reservoir	31,892	19.5	19.5	19.5	19.5	19.5	19.5	19.2	7	11	7	11	7	11	7	11	7	11	7	11	7	11	9222.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2
160501020204	HY*	Little Truckee River-Stampede Reservoir	31,892	4.6	4.6	4.6	4.6	4.6	4.6	4.6	1	2	1	2	1	2	1	2	1	2	1	2	1	2	9222.8	1.1	1.1	1.1	1.1	1.1	1.1	1.1
160501020204	IY	Little Truckee River-Stampede Reservoir	31,892	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9222.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
160501020204	JY	Little Truckee River-Stampede Reservoir	31,892	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9222.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020204	KY	Little Truckee River-Stampede Reservoir	31,892	3.8	3.8	3.8	3.8	3.8	3.8	3.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9222.8	0.3	0.3	0.3	0.3	0.3	0.3	0.3
160501020204	LY*	Little Truckee River-Stampede Reservoir	31,892	51.7	0.0	0.0	0.0	0.0	0.0	0.0	27	13	0	0	0	0	0	0	0	0	0	0	0	0	9222.8	7.5	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	31,892	174.1	174.1	174.1	174.1	174.1	174.1	172.3	54	57	54	57	54	57	54	57	54	57	54	57	54	57	9222.8	24.2	24.2	24.2	24.2	24.2	24.2	24.2
		Total Mi./Sq.Mi.	49.83	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.7	4.0	3.7	4.0	3.7	4.0	3.7	4.0	3.7	4.0	3.7	4.0	3.7	4.0	14.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7
		Total Native Surface Motorized		139.1	99.4	87.3	90.0	101.0	96.7	89.8	45	46	24	35	18	33	21	34	22	39	22	39	22	35		18.2	12.6	10.8	11.6	12.6	12.3	11.6
		Motorized Native Surface Mi./Sq.Mi.		2.8	2.0	1.8	1.8	2.0	1.9	1.8	3.1	3.2	1.7	2.4	1.2	2.3	1.5	2.4	1.5	2.7	1.5	2.7	1.5	2.4		1.3	0.9	0.7	0.8	0.9	0.9	0.8

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
160501020205	AS	Little Truckee River-Boca Reservoir	23,039	13.5	5.8	13.5	13.5	5.8	3.3	13.3	2	9	1	2	2	9	2	9	1	2	1	2	2	9	6014.3	1.4	0.6	1.4	1.4	0.6	0.6	1.4
160501020205	AY	Little Truckee River-Boca Reservoir	23,039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6014.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020205	BS*	Little Truckee River-Boca Reservoir	23,039	78.4	86.1	78.4	78.4	86.1	88.6	78.4	9	35	10	42	9	35	9	35	10	42	10	42	9	35	6014.3	6.4	7.2	6.4	6.4	7.2	7.2	6.4
160501020205	BY*	Little Truckee River-Boca Reservoir	23,039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6014.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020205	CS*	Little Truckee River-Boca Reservoir	23,039	8.1	9.2	8.1	9.2	14.5	9.2	9.2	2	5	2	5	2	5	2	5	2	5	2	5	2	5	6014.3	0.7	0.7	0.7	0.7	1.5	0.7	0.7
160501020205	CY*	Little Truckee River-Boca Reservoir	23,039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6014.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020205	DS*	Little Truckee River-Boca Reservoir	23,039	3.6	4.6	3.6	3.6	4.6	4.6	3.6	1	5	1	5	1	5	1	5	1	5	1	5	1	5	6014.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
160501020205	DY*	Little Truckee River-Boca Reservoir	23,039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6014.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020205	ES*	Little Truckee River-Boca Reservoir	23,039	0.0	4.9	0.0	1.6	4.9	4.9	1.6	0	0	0	1	0	0	0	0	0	1	0	1	0	0	6014.3	0.0	0.2	0.0	0.0	0.2	0.2	0.0
160501020205	EY*	Little Truckee River-Boca Reservoir	23,039	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6014.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020205	FY	Little Truckee River-Boca Reservoir	23,039	0.2	60.6	67.6	64.9	55.3	60.6	64.3	0	0	6	25	6	26	6	26	6	25	6	25	6	26	6014.3	0.0	6.8	7.1	7.0	6.0	6.8	7.0
160501020205	GY	Little Truckee River-Boca Reservoir	23,039	19.6	19.6	19.6	19.6	19.6	19.6	19.6	4	18	4	18	4	18	4	18	4	18	4	18	4	18	6014.3	3.6	3.6	3.6	3.6	3.6	3.6	3.6
160501020205	HY*	Little Truckee River-Boca Reservoir	23,039	13.3	13.3	13.3	13.3	13.3	13.3	13.3	0	13	0	13	0	13	0	13	0	13	0	13	0	13	6014.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9
160501020205	IY	Little Truckee River-Boca Reservoir	23,039	5.5	5.5	5.5	5.5	5.5	5.5	5.5	0	5	0	5	0	5	0	5	0	5	0	5	0	5	6014.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
160501020205	JY	Little Truckee River-Boca Reservoir	23,039	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6014.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160501020205	KY	Little Truckee River-Boca Reservoir	23,039	26.8	26.8	26.8	26.8	26.8	26.8	26.8	3	15	3	15	3	15	3	15	3	15	3	15	3	15	6014.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0
160501020205	LY*	Little Truckee River-Boca Reservoir	23,039	67.4	0.0	0.0	0.0	0.0	0.0	0.0	6	26	0	0	0	0	0	0	0	0	0	0	0	0	6014.3	7.0	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	23,039	236.4	236.4	236.4	236.4	236.4	236.4	235.7	27	131	27	131	27	131	27	131	27	131	27	131	27	131	6014.3	24.8	24.8	24.8	24.8	24.8	24.8	24.8
		Total Mi./Sq.Mi.	36.00	6.6	6.6	6.6	6.6	6.6	6.6	6.5	2.9	13.9	2.9	13.9	2.9	13.9	2.9	13.9	2.9	13.9	2.9	13.9	2.9	13.9	9.4	2.6	2.6	2.6	2.6	2.6	2.6	2.6
		Total Native Surface Motorized		170.7	118.0	103.3	106.0	123.3	120.5	106.0	18	84	13	66	12	58	12	58	13	66	13	66	12	58		16.5	10.4	9.4	9.5	11.2	10.4	9.5
		Motorized Native Surface Mi./Sq.Mi.		4.7	3.3	2.9	2.9	3.4	3.3	2.9	1.9	8.9	1.4	7.0	1.3	6.2	1.3	6.2	1.4	7.0	1.4	7.0	1.3	6.2		1.8	1.1	1.0	1.0	1.2	1.1	1.0

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201230201	AS	Smithneck Creek	36,685	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6099.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230201	AY	Smithneck Creek	36,685	6.5	0.0	6.5	6.5	0.0	5.3	6.5	1	7	0	0	1	7	1	7	1	7	1	7	1	7	6099.3	1.8	0.0	1.8	1.8	0.0	1.7	1.8
180201230201	BS*	Smithneck Creek	36,685	3.1	3.1	3.1	56.2	56.2	56.9	3.1	0	3	0	3	0	3	9	25	9	27	9	27	0	3	6099.3	1.0	1.0	1.0	6.4	6.4	6.6	1.0
180201230201	BY*	Smithneck Creek	36,685	53.1	59.6	53.1	0.0	6.5	1.2	53.1	9	22	10	29	9	22	0	0	0	0	0	0	9	22	6099.3	5.4	7.2	5.4	0.0	1.8	0.1	5.4
180201230201	CS*	Smithneck Creek	36,685	0.0	0.0	0.0	2.3	2.3	2.3	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6099.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230201	CY*	Smithneck Creek	36,685	2.1	2.3	2.1	0.0	0.0	0.0	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6099.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230201	DS*	Smithneck Creek	36,685	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6099.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230201	DY*	Smithneck Creek	36,685	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6099.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230201	ES*	Smithneck Creek	36,685	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6099.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230201	EY*	Smithneck Creek	36,685	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6099.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230201	FY	Smithneck Creek	36,685	1.6	59.1	59.3	59.1	59.1	58.4	59.3	1	0	8	34	8	34	8	34	8	32	8	32	8	34	6099.3	0.1	7.2	7.2	7.2	7.2	7.0	7.2
180201230201	GY	Smithneck Creek	36,685	22.0	22.0	22.0	22.0	22.0	22.0	22.0	9	17	9	17	9	17	9	17	9	17	9	17	9	17	6099.3	6.4	6.4	6.4	6.4	6.4	6.4	6.4
180201230201	HY*	Smithneck Creek	36,685	15.5	15.5	15.5	15.5	15.5	15.5	14.2	2	11	2	11	2	11	2	11	2	11	2	11	2	11	6099.3	2.7	2.7	2.7	2.7	2.7	2.7	2.7
180201230201	IY	Smithneck Creek	36,685	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6099.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
180201230201	JY	Smithneck Creek	36,685	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6099.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230201	KY	Smithneck Creek	36,685	4.5	4.5	4.5	4.5	4.5	4.5	4.5	0	1	0	1	0	1	0	1	0	1	0	1	0	1	6099.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201230201	LY*	Smithneck Creek	36,685	57.7	0.0	0.0	0.0	0.0	0.0	0.0	7	34	0	0	0	0	0	0	0	0	0	0	0	0	6099.3	7.1	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	36,685	168.4	168.4	168.4	168.4	168.4	168.4	167.3	30	96	30	96	30	96	30	96	30	96	30	96	30	96	6099.3	25.4	25.4	25.4	25.4	25.4	25.4	25.4
		Total Mi./Sq.Mi.	57.32	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.1	10.1	3.1	10.1	3.1	10.1	3.1	10.1	3.1	10.1	3.1	10.1	3.1	10.1	9.5	2.7	2.7	2.7	2.7	2.7	2.7	2.7
		Total Native Surface Motorized		131.5	80.4	73.8	74.0	80.4	75.9	72.6	18	70	12	43	11	36	11	36	11	38	11	38	11	36		16.2	10.9	9.1	9.1	10.9	9.4	9.1
		Motorized Native Surface Mi./Sq.Mi.		2.3	1.4	1.3	1.3	1.4	1.3	1.3	1.9	7.3	1.3	4.5	1.2	3.8	1.2	3.8	1.2	4.0	1.2	4.0	1.2	3.8		1.7	1.1	1.0	1.0	1.1	1.0	1.0

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201230202	AS	Sierra Valley-Antelope Creek	20,036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3077.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230202	AY	Sierra Valley-Antelope Creek	20,036	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3077.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230202	BS*	Sierra Valley-Antelope Creek	20,036	3.2	3.2	3.2	21.3	21.3	21.5	3.2	0	7	0	7	0	7	0	19	0	19	0	19	0	7	3077.1	0.6	0.6	0.6	2.4	2.4	2.4	0.6
180201230202	BY*	Sierra Valley-Antelope Creek	20,036	18.2	18.2	18.2	0.0	0.1	0.0	18.2	0	12	0	12	0	12	0	0	0	0	0	0	0	12	3077.1	1.8	1.8	1.8	0.0	0.0	0.0	1.8
180201230202	CS*	Sierra Valley-Antelope Creek	20,036	0.0	0.0	0.0	5.9	5.9	5.9	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3077.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230202	CY*	Sierra Valley-Antelope Creek	20,036	5.9	5.9	5.9	0.0	0.0	0.0	5.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3077.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230202	DS*	Sierra Valley-Antelope Creek	20,036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3077.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230202	DY*	Sierra Valley-Antelope Creek	20,036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3077.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230202	ES*	Sierra Valley-Antelope Creek	20,036	0.0	0.0	0.0	0.8	0.8	0.8	0.0	0	0	0	0	0	0	0	2	0	2	0	2	0	0	3077.1	0.0	0.0	0.0	0.3	0.3	0.3	0.0
180201230202	EY*	Sierra Valley-Antelope Creek	20,036	0.8	0.8	0.8	0.0	0.0	0.0	0.8	0	2	0	2	0	2	0	0	0	0	0	0	0	2	3077.1	0.3	0.3	0.3	0.0	0.0	0.0	0.3
180201230202	FY	Sierra Valley-Antelope Creek	20,036	2.8	26.0	26.0	26.0	26.0	25.8	26.0	0	4	0	37	0	37	0	37	0	37	0	37	0	37	3077.1	0.3	3.4	3.4	3.4	3.4	3.4	3.4
180201230202	GY	Sierra Valley-Antelope Creek	20,036	10.1	10.1	10.1	10.1	10.1	10.1	10.1	1	12	1	12	1	12	1	12	1	12	1	12	1	12	3077.1	2.6	2.6	2.6	2.6	2.6	2.6	2.6
180201230202	HY*	Sierra Valley-Antelope Creek	20,036	12.4	12.4	12.4	12.4	12.4	12.4	12.4	3	20	3	20	3	20	3	20	3	20	3	20	3	20	3077.1	2.4	2.4	2.4	2.4	2.4	2.4	2.4
180201230202	IY	Sierra Valley-Antelope Creek	20,036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3077.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230202	JY	Sierra Valley-Antelope Creek	20,036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3077.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230202	KY	Sierra Valley-Antelope Creek	20,036	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0	1	0	1	0	1	0	1	0	1	0	1	0	1	3077.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201230202	LY*	Sierra Valley-Antelope Creek	20,036	23.2	0.0	0.0	0.0	0.0	0.0	0.0	0	33	0	0	0	0	0	0	0	0	0	0	0	0	3077.1	3.1	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	20,036	78.3	78.3	78.3	78.3	78.3	78.3	78.3	4	91	4	91	4	91	4	91	4	91	4	91	4	91	3077.1	11.2	11.2	11.2	11.2	11.2	11.2	11.2
		Total Mi./Sq.Mi.	31.31	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.8	18.9	0.8	18.9	0.8	18.9	0.8	18.9	0.8	18.9	0.8	18.9	0.8	18.9	4.8	2.3	2.3	2.3	2.3	2.3	2.3	2.3
		Total Native Surface Motorized		63.6	40.4	40.4	40.4	40.4	40.6	40.4	3	74	3	41	3	41	3	41	3	41	3	41	3	41		8.2	5.1	5.1	5.1	5.1	5.1	5.1
		Motorized Native Surface Mi./Sq.Mi.		2.0	1.3	1.3	1.3	1.3	1.3	1.3	0.6	15.4	0.6	8.5	0.6	8.5	0.6	8.5	0.6	8.5	0.6	8.5	0.6	8.5		1.7	1.1	1.1	1.1	1.1	1.1	1.1

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201230203	AS	Sierra Valley-Cold Stream	23,858	17.8	1.6	17.8	17.8	1.6	7.3	17.8	7	6	0	0	7	6	7	6	3	1	3	1	7	6	4223.0	1.9	0.6	1.9	1.9	0.6	1.4	1.9
180201230203	AY	Sierra Valley-Cold Stream	23,858	6.3	1.1	6.3	6.3	1.1	3.5	6.3	3	5	0	1	3	5	3	5	3	4	3	4	3	5	4223.0	1.0	0.3	1.0	1.0	0.3	0.5	1.0
180201230203	BS*	Sierra Valley-Cold Stream	23,858	1.7	17.8	1.7	52.1	71.2	66.3	1.7	0	0	7	6	0	0	5	23	9	29	9	29	0	0	4223.0	0.0	1.3	0.0	3.2	4.9	4.4	0.0
180201230203	BY*	Sierra Valley-Cold Stream	23,858	50.5	55.7	50.5	0.0	2.4	0.0	50.5	5	23	8	27	5	23	0	0	3	3	0	0	5	23	4223.0	3.1	3.8	3.1	0.0	0.2	0.0	3.1
180201230203	CS*	Sierra Valley-Cold Stream	23,858	0.0	0.0	0.0	12.7	13.2	12.7	0.0	0	0	0	0	0	0	0	7	0	7	0	7	0	0	4223.0	0.0	0.0	0.0	0.7	0.7	0.7	0.0
180201230203	CY*	Sierra Valley-Cold Stream	23,858	12.7	12.7	12.7	0.0	0.0	0.0	12.7	0	7	0	7	0	7	0	0	0	0	0	0	0	7	4223.0	0.7	0.7	0.7	0.0	0.0	0.0	0.7
180201230203	DS*	Sierra Valley-Cold Stream	23,858	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4223.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230203	DY*	Sierra Valley-Cold Stream	23,858	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4223.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230203	ES*	Sierra Valley-Cold Stream	23,858	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4223.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230203	EY*	Sierra Valley-Cold Stream	23,858	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4223.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230203	FY	Sierra Valley-Cold Stream	23,858	0.5	67.8	67.8	67.8	67.3	67.0	67.8	0	0	11	32	11	32	11	32	11	32	11	32	11	32	4223.0	0.0	5.9	5.9	5.9	5.9	5.7	5.9
180201230203	GY	Sierra Valley-Cold Stream	23,858	12.7	12.7	12.7	12.7	12.7	12.7	12.7	2	7	2	7	2	7	2	7	2	7	2	7	2	7	4223.0	2.2	2.2	2.2	2.2	2.2	2.2	2.2
180201230203	HY*	Sierra Valley-Cold Stream	23,858	10.8	10.8	10.8	10.8	10.8	10.8	10.8	3	6	3	6	3	6	3	6	3	6	3	6	3	6	4223.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
180201230203	IY	Sierra Valley-Cold Stream	23,858	4.9	4.9	4.9	4.9	4.9	4.9	4.9	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4223.0	1.7	1.7	1.7	1.7	1.7	1.7	1.7
180201230203	JY	Sierra Valley-Cold Stream	23,858	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4223.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230203	KY	Sierra Valley-Cold Stream	23,858	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4223.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201230203	LY*	Sierra Valley-Cold Stream	23,858	67.3	0.0	0.0	0.0	0.0	0.0	0.0	11	32	0	0	0	0	0	0	0	0	0	0	0	0	4223.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	23,858	185.8	185.8	185.8	185.8	185.8	185.8	185.8	34	89	34	89	34	89	34	89	37	92	34	89	34	89	4223.0	17.8	17.8	17.8	17.8	17.8	17.8	17.8
		Total Mi./Sq.Mi.	37.28	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.2	13.5	5.2	13.5	5.2	13.5	5.2	13.5	5.6	13.9	5.2	13.5	5.2	13.5	6.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7
		Total Native Surface Motorized		142.9	97.0	75.6	75.6	97.5	89.8	75.6	19	68	18	46	8	36	8	36	15	45	12	42	8	36		10.8	6.9	4.9	4.9	6.9	6.1	4.9
		Motorized Native Surface Mi./Sq.Mi.		3.8	2.6	2.0	2.0	2.6	2.4	2.0	2.9	10.3	2.7	7.0	1.2	5.5	1.2	5.5	2.3	6.8	1.8	6.4	1.2	5.5		1.6	1.0	0.7	0.7	1.0	0.9	0.7

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201230204	AS	Sierra Valley-Berry Creek	15,556	5.1	0.0	5.1	5.1	0.0	4.5	5.1	0	3	0	0	0	3	0	3	0	2	0	2	0	3	2984.8	0.4	0.0	0.4	0.4	0.0	0.2	0.4
180201230204	AY	Sierra Valley-Berry Creek	15,556	6.8	0.0	6.8	6.8	0.0	0.6	6.8	3	4	0	0	3	4	3	4	0	0	0	0	3	4	2984.8	0.8	0.0	0.8	0.8	0.0	0.0	0.8
180201230204	BS*	Sierra Valley-Berry Creek	15,556	2.8	8.0	2.8	33.2	44.9	40.0	2.8	2	0	2	3	2	0	6	20	10	25	10	25	2	0	2984.8	0.4	0.7	0.4	1.9	3.1	2.8	0.4
180201230204	BY*	Sierra Valley-Berry Creek	15,556	30.3	37.2	30.3	0.0	0.2	0.2	30.3	4	20	7	24	4	20	0	0	0	0	0	0	4	20	2984.8	1.5	2.4	1.5	0.0	0.1	0.1	1.5
180201230204	CS*	Sierra Valley-Berry Creek	15,556	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230204	CY*	Sierra Valley-Berry Creek	15,556	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230204	DS*	Sierra Valley-Berry Creek	15,556	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230204	DY*	Sierra Valley-Berry Creek	15,556	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230204	ES*	Sierra Valley-Berry Creek	15,556	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230204	EY*	Sierra Valley-Berry Creek	15,556	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230204	FY	Sierra Valley-Berry Creek	15,556	5.4	39.1	39.6	39.6	37.9	39.4	39.5	1	3	11	25	11	25	11	25	10	25	10	25	11	25	2984.8	0.5	3.5	3.6	3.6	3.5	3.5	3.6
180201230204	GY	Sierra Valley-Berry Creek	15,556	5.6	5.6	5.6	5.6	5.6	5.6	5.6	1	5	1	5	1	5	1	5	1	5	1	5	1	5	2984.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
180201230204	HY*	Sierra Valley-Berry Creek	15,556	23.6	23.6	23.6	23.6	23.6	23.6	23.6	4	8	4	8	4	8	4	8	4	8	4	8	4	8	2984.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5
180201230204	IY	Sierra Valley-Berry Creek	15,556	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230204	JY	Sierra Valley-Berry Creek	15,556	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230204	KY	Sierra Valley-Berry Creek	15,556	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230204	LY*	Sierra Valley-Berry Creek	15,556	34.2	0.0	0.0	0.0	0.0	0.0	0.0	10	22	0	0	0	0	0	0	0	0	0	0	0	0	2984.8	3.1	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	15,556	114.3	114.3	114.3	114.3	114.3	114.3	114.2	25	65	25	65	25	65	25	65	25	65	25	65	25	65	2984.8	8.9	8.9	8.9	8.9	8.9	8.9	8.9
		Total Mi./Sq.Mi.	24.31	4.7	4.7	4.7	4.7	4.7	4.7	4.7	5.4	13.9	5.4	13.9	5.4	13.9	5.4	13.9	5.4	13.9	5.4	13.9	5.4	13.9	4.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
		Total Native Surface Motorized		91.0	69.3	56.8	56.8	70.5	63.8	56.8	20	50	13	35	10	28	10	28	14	33	14	33	10	28		6.5	4.7	3.4	3.4	4.7	4.4	3.4
		Motorized Native Surface Mi./Sq.Mi.		3.7	2.8	2.3	2.3	2.9	2.6	2.3	4.3	10.7	2.8	7.5	2.1	6.0	2.1	6.0	3.0	7.1	3.0	7.1	2.1	6.0		1.4	1.0	0.7	0.7	1.0	1.0	0.7

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201230205	AS	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	AY	Sierra Valley-Carman Creek	11,539	8.3	0.8	8.3	8.3	0.8	5.9	8.3	0	9	0	2	0	9	0	9	0	8	0	8	0	9	1995.0	1.8	0.3	1.8	1.8	0.3	1.1	1.8
180201230205	BS*	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	7.8	15.3	10.2	0.0	0	0	0	0	0	0	0	9	0	10	0	10	0	0	1995.0	0.0	0.0	0.0	0.7	2.2	1.5	0.0
180201230205	BY*	Sierra Valley-Carman Creek	11,539	7.8	15.3	7.8	0.0	0.0	0.0	7.8	0	9	0	16	0	9	0	0	0	0	0	0	0	9	1995.0	0.7	2.2	0.7	0.0	0.0	0.0	0.7
180201230205	CS*	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	CY*	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	DS*	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	DY*	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	ES*	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	EY*	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	FY	Sierra Valley-Carman Creek	11,539	4.9	18.3	18.3	18.3	18.3	18.3	18.3	1	1	6	9	6	9	6	9	6	9	6	9	6	9	1995.0	0.6	2.2	2.2	2.2	2.2	2.2	2.2
180201230205	GY	Sierra Valley-Carman Creek	11,539	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	HY*	Sierra Valley-Carman Creek	11,539	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	IY	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	JY	Sierra Valley-Carman Creek	11,539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230205	KY	Sierra Valley-Carman Creek	11,539	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0	3	0	3	0	3	0	3	0	3	0	3	0	3	1995.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201230205	LY*	Sierra Valley-Carman Creek	11,539	13.4	0.0	0.0	0.0	0.0	0.0	0.0	5	8	0	0	0	0	0	0	0	0	0	0	0	0	1995.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	11,539	39.2	39.2	39.2	39.2	39.2	39.2	39.2	6	32	6	32	6	32	6	32	6	32	6	32	6	32	1995.0	5.2	5.2	5.2	5.2	5.2	5.2	5.2
		Total Mi./Sq.Mi.	18.03	2.2	2.2	2.2	2.2	2.2	2.2	2.2	1.9	10.3	1.9	10.3	1.9	10.3	1.9	10.3	1.9	10.3	1.9	10.3	1.9	10.3	3.1	1.7	1.7	1.7	1.7	1.7	1.7	1.7
		Total Native Surface Motorized		21.8	15.9	8.4	8.4	15.9	10.8	8.4	5	18	0	17	0	10	0	10	0	11	0	11	0	10		2.3	2.3	0.8	0.8	2.3	1.5	0.8
		Motorized Native Surface Mi./Sq.Mi.		1.2	0.9	0.5	0.5	0.9	0.6	0.5	1.6	5.8	0.0	5.5	0.0	3.2	0.0	3.2	0.0	3.5	0.0	3.5	0.0	3.2		0.8	0.7	0.2	0.2	0.7	0.5	0.2

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201230206	AS	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	AY	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	BS*	Sierra Valley	7,523	0.0	0.0	0.0	5.1	5.1	5.1	0.0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	775.3	0.0	0.0	0.0	0.7	0.7	0.7	0.0
180201230206	BY*	Sierra Valley	7,523	5.1	5.1	5.1	0.0	0.0	0.0	5.1	0	1	0	1	0	1	0	0	0	0	0	0	0	1	775.3	0.7	0.7	0.7	0.0	0.0	0.0	0.7
180201230206	CS*	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	CY*	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	DS*	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	DY*	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	ES*	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	EY*	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	FY	Sierra Valley	7,523	0.1	5.1	5.1	5.1	5.1	5.1	5.1	0	0	1	3	1	3	1	3	1	3	1	3	1	3	775.3	0.0	0.4	0.4	0.4	0.4	0.4	0.4
180201230206	GY	Sierra Valley	7,523	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	HY*	Sierra Valley	7,523	4.2	4.2	4.2	4.2	4.2	4.2	4.1	0	2	0	2	0	2	0	2	0	2	0	2	0	2	775.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9
180201230206	IY	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	JY	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	KY	Sierra Valley	7,523	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201230206	LY*	Sierra Valley	7,523	5.1	0.0	0.0	0.0	0.0	0.0	0.0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	775.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	7,523	15.1	15.1	15.1	15.1	15.1	15.1	15.0	1	6	1	6	1	6	1	6	1	6	1	6	1	6	775.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		Total Mi./Sq.Mi.	11.75	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.8	5.0	0.8	5.0	0.8	5.0	0.8	5.0	0.8	5.0	0.8	5.0	0.8	5.0	1.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6
		Total Native Surface Motorized		14.3	9.3	9.3	9.3	9.3	9.3	9.2	1	6	0	3	0	3	0	3	0	3	0	3	0	3		1.9	1.6	1.6	1.6	1.6	1.6	1.6
		Motorized Native Surface Mi./Sq.Mi.		1.2	0.8	0.8	0.8	0.8	0.8	0.8	0.8	5.0	0.0	2.5	0.0	2.5	0.0	2.5	0.0	2.5	0.0	2.5	0.0	2.5		1.6	1.3	1.3	1.3	1.3	1.3	1.3

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250101	AS	Haypress Creek	20,638	24.8	0.0	24.8	24.8	0.0	14.1	24.8	6	9	0	0	6	9	6	9	4	0	4	0	6	9	4457.3	2.5	0.0	2.5	2.5	0.0	0.9	2.5
180201250101	AY	Haypress Creek	20,638	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1	0	1	0	1	0	1	0	1	0	1	0	1	0	4457.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
180201250101	BS*	Haypress Creek	20,638	3.9	28.7	3.9	41.7	66.6	52.5	3.9	0	0	6	9	0	0	8	4	10	13	10	13	0	0	4457.3	0.0	2.5	0.0	3.5	6.0	5.1	0.0
180201250101	BY*	Haypress Creek	20,638	37.9	37.9	37.9	0.0	0.0	0.0	37.9	8	4	8	4	8	4	0	0	0	0	0	0	8	4	4457.3	3.5	3.5	3.5	0.0	0.0	0.0	3.5
180201250101	CS*	Haypress Creek	20,638	0.0	0.0	0.0	0.0	1.4	0.5	0.0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	4457.3	0.0	0.0	0.0	0.0	0.2	0.2	0.0
180201250101	CY*	Haypress Creek	20,638	0.0	0.4	0.0	0.0	0.0	0.0	0.4	0	0	1	0	0	0	0	0	0	0	0	0	1	0	4457.3	0.0	0.2	0.0	0.0	0.0	0.0	0.2
180201250101	DS*	Haypress Creek	20,638	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4457.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250101	DY*	Haypress Creek	20,638	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4457.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250101	ES*	Haypress Creek	20,638	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4457.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250101	EY*	Haypress Creek	20,638	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4457.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250101	FY	Haypress Creek	20,638	2.0	23.5	23.9	23.9	22.5	23.4	23.5	1	1	3	5	4	5	4	5	3	5	3	5	3	5	4457.3	0.3	1.7	1.9	1.9	1.7	1.7	1.7
180201250101	GY	Haypress Creek	20,638	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4457.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250101	HY*	Haypress Creek	20,638	25.2	25.2	25.2	25.2	25.2	25.2	25.2	3	8	3	8	3	8	3	8	3	8	3	8	3	8	4457.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
180201250101	IY	Haypress Creek	20,638	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6	0	6	0	6	0	6	0	6	0	6	0	6	0	4457.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4
180201250101	JY	Haypress Creek	20,638	6.3	6.3	6.3	6.3	6.3	6.3	6.3	4	2	4	2	4	2	4	2	4	2	4	2	4	2	4457.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2
180201250101	KY	Haypress Creek	20,638	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4457.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250101	LY*	Haypress Creek	20,638	21.9	0.0	0.0	0.0	0.0	0.0	0.0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	4457.3	1.6	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	20,638	130.5	130.5	130.5	130.5	130.5	130.5	130.5	32	28	32	28	32	28	32	28	32	28	32	28	32	28	4457.3	13.3	13.3	13.3	13.3	13.3	13.3	13.3
		Total Mi./Sq.Mi.	32.25	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.6	4.0	4.6	4.0	4.6	4.0	4.6	4.0	4.6	4.0	4.6	4.0	4.6	4.0	7.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9
		Total Native Surface Motorized		88.8	92.1	66.9	66.9	93.1	78.2	67.3	14	16	18	21	11	12	11	12	14	21	14	21	12	12		7.4	8.5	5.8	5.8	8.5	7.6	6.0
		Motorized Native Surface Mi./Sq.Mi.		2.8	2.9	2.1	2.1	2.9	2.4	2.1	2.0	2.3	2.6	3.0	1.6	1.7	1.6	1.7	2.0	3.0	2.0	3.0	1.7	1.7		1.1	1.2	0.8	0.8	1.2	1.1	0.9

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250102	AS	Headwaters North Yuba River	35,403	26.2	1.5	26.2	26.2	1.5	23.6	26.2	10	5	1	0	10	5	10	5	10	5	10	5	10	5	9066.7	1.7	0.1	1.7	1.7	0.1	1.6	1.7
180201250102	AY	Headwaters North Yuba River	35,403	4.6	2.9	4.6	4.6	2.9	4.6	4.6	4	0	2	0	4	0	4	0	4	0	4	0	4	0	9066.7	1.1	0.7	1.1	1.1	0.7	1.1	1.1
180201250102	BS*	Headwaters North Yuba River	35,403	2.8	27.5	2.8	45.5	70.1	48.1	2.8	1	1	10	6	1	1	14	6	14	6	14	6	1	1	9066.7	0.2	1.8	0.2	4.5	6.2	4.6	0.2
180201250102	BY*	Headwaters North Yuba River	35,403	42.3	44.4	42.3	0.0	1.7	0.1	42.3	13	5	15	5	13	5	0	0	0	0	0	0	13	5	9066.7	4.3	4.8	4.3	0.0	0.4	0.0	4.3
180201250102	CS*	Headwaters North Yuba River	35,403	0.0	0.0	0.0	1.3	3.5	1.3	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9066.7	0.0	0.0	0.0	0.1	0.4	0.1	0.0
180201250102	CY*	Headwaters North Yuba River	35,403	1.3	1.5	1.3	0.0	0.0	0.0	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9066.7	0.1	0.1	0.1	0.0	0.0	0.0	0.1
180201250102	DS*	Headwaters North Yuba River	35,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9066.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250102	DY*	Headwaters North Yuba River	35,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9066.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250102	ES*	Headwaters North Yuba River	35,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9066.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250102	EY*	Headwaters North Yuba River	35,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9066.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250102	FY	Headwaters North Yuba River	35,403	0.0	50.9	51.4	51.1	48.9	51.1	51.4	0	0	23	13	23	13	23	13	23	13	23	13	23	13	9066.7	0.0	5.5	5.5	5.5	5.2	5.5	5.5
180201250102	GY	Headwaters North Yuba River	35,403	23.7	23.7	23.7	23.7	23.7	23.7	23.7	18	7	18	7	18	7	18	7	18	7	18	7	18	7	9066.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8
180201250102	HY*	Headwaters North Yuba River	35,403	28.4	28.4	28.4	28.4	28.4	28.4	28.4	7	4	7	4	7	4	7	4	7	4	7	4	7	4	9066.7	3.4	3.4	3.4	3.4	3.4	3.4	3.4
180201250102	IY	Headwaters North Yuba River	35,403	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12	3	12	3	12	3	12	3	12	3	12	3	12	3	9066.7	2.2	2.2	2.2	2.2	2.2	2.2	2.2
180201250102	JY	Headwaters North Yuba River	35,403	7.8	7.8	7.8	7.8	7.8	7.8	7.8	3	2	3	2	3	2	3	2	3	2	3	2	3	2	9066.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3
180201250102	KY	Headwaters North Yuba River	35,403	2.6	2.6	2.6	2.6	2.6	2.6	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9066.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3
180201250102	LY*	Headwaters North Yuba River	35,403	51.4	0.0	0.0	0.0	0.0	0.0	0.0	23	13	0	0	0	0	0	0	0	0	0	0	0	0	9066.7	5.5	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	35,403	203.7	203.7	203.7	203.7	203.7	203.7	203.6	91	40	91	40	91	40	91	40	91	40	91	40	91	40	9066.7	24.9	24.9	24.9	24.9	24.9	24.9	24.9
		Total Mi./Sq.Mi.	55.32	3.7	3.7	3.7	3.7	3.7	3.7	3.7	6.4	2.8	6.4	2.8	6.4	2.8	6.4	2.8	6.4	2.8	6.4	2.8	6.4	2.8	14.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8
		Total Native Surface Motorized		126.2	101.8	74.8	75.1	103.7	77.8	74.8	44.00	23	32	15	21	10	21	10	21	10	21	10	21	10		13.4	10.1	7.9	8.0	10.3	8.0	7.9
		Motorized Native Surface Mi./Sq.Mi.		2.3	1.8	1.4	1.4	1.9	1.4	1.4	3.1	1.6	2.3	1.1	1.5	0.7	1.5	0.7	1.5	0.7	1.5	0.7	1.5	0.7		0.9	0.7	0.6	0.6	0.7	0.6	0.6

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250103	AS	North Yuba River-Jim Crow Creek	34,430	0.4	0.0	0.4	0.4	0.0	7.4	0.4	0	0	0	0	0	0	0	0	2	0	2	0	0	0	7001.2	0.0	0.0	0.0	0.0	0.0	0.3	0.0
180201250103	AY	North Yuba River-Jim Crow Creek	34,430	17.3	0.4	17.3	17.3	0.4	7.9	17.3	5	2	0	1	5	2	5	2	3	2	3	2	5	2	7001.2	0.7	0.1	0.7	0.7	0.1	0.4	0.7
180201250103	BS*	North Yuba River-Jim Crow Creek	34,430	0.0	0.4	0.0	32.6	33.0	33.0	0.0	0	0	0	0	0	0	6	7	6	7	6	7	0	0	7001.2	0.0	0.0	0.0	1.3	1.3	1.3	0.0
180201250103	BY*	North Yuba River-Jim Crow Creek	34,430	32.5	49.4	32.5	0.0	16.9	2.0	32.5	6	7	11	8	6	7	0	0	0	0	0	0	6	7	7001.2	1.3	2.0	1.3	0.0	0.7	0.1	1.3
180201250103	CS*	North Yuba River-Jim Crow Creek	34,430	0.0	0.0	0.0	0.0	4.2	3.2	0.0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	7001.2	0.0	0.0	0.0	0.0	0.1	0.1	0.0
180201250103	CY*	North Yuba River-Jim Crow Creek	34,430	0.0	3.2	0.0	0.0	0.0	0.0	3.2	0	0	0	1	0	0	0	0	0	0	0	0	0	1	7001.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1
180201250103	DS*	North Yuba River-Jim Crow Creek	34,430	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7001.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250103	DY*	North Yuba River-Jim Crow Creek	34,430	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7001.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250103	ES*	North Yuba River-Jim Crow Creek	34,430	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7001.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250103	EY*	North Yuba River-Jim Crow Creek	34,430	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7001.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250103	FY	North Yuba River-Jim Crow Creek	34,430	0.0	42.8	46.0	46.0	41.8	42.8	42.8	0	0	17	9	17	10	17	10	17	9	17	9	17	9	7001.2	0.0	3.8	4.0	4.0	3.8	3.8	3.9
180201250103	GY	North Yuba River-Jim Crow Creek	34,430	26.8	26.8	26.8	26.8	26.8	26.8	26.8	7	12	7	12	7	12	7	12	7	12	7	12	7	12	7001.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
180201250103	HY*	North Yuba River-Jim Crow Creek	34,430	40.0	40.0	40.0	40.0	40.0	40.0	40.0	9	6	9	6	9	6	9	6	9	6	9	6	9	6	7001.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5
180201250103	IY	North Yuba River-Jim Crow Creek	34,430	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7001.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250103	JY	North Yuba River-Jim Crow Creek	34,430	5.1	5.1	5.1	5.1	5.1	5.1	5.1	0	3	0	3	0	3	0	3	0	3	0	3	0	3	7001.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250103	KY	North Yuba River-Jim Crow Creek	34,430	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7001.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250103	LY*	North Yuba River-Jim Crow Creek	34,430	46.0	0.0	0.0	0.0	0.0	0.0	0.0	17	10	0	0	0	0	0	0	0	0	0	0	0	0	7001.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	34,430	168.5	168.5	168.5	168.5	168.5	168.5	168.5	44	40	44	40	44	40	44	40	44	40	44	40	44	40	7001.2	13.9	13.9	13.9	13.9	13.9	13.9	13.9
		Total Mi./Sq.Mi.	53.80	3.1	3.1	3.1	3.1	3.1	3.1	3.1	4.0	3.7	4.0	3.7	4.0	3.7	4.0	3.7	4.0	3.7	4.0	3.7	4.0	3.7	10.9	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		Total Native Surface Motorized		118.6	93.1	72.6	72.6	94.1	78.3	75.8	32	23	20	15	15	13	15	13	15	14	15	14	15	14		8.8	5.7	4.8	4.9	5.7	5.1	5.0
		Motorized Native Surface Mi./Sq.Mi.		2.2	1.7	1.3	1.3	1.7	1.5	1.4	2.9	2.1	1.8	1.4	1.4	1.2	1.4	1.2	1.4	1.3	1.4	1.3	1.4	1.3		0.8	0.5	0.4	0.4	0.5	0.5	0.5

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250104	AS	Downie River	46,405	4.6	0.0	4.6	4.6	0.0	6.4	4.6	4	1	0	0	4	1	4	1	2	1	2	1	4	1	10933.0	0.6	0.0	0.6	0.6	0.0	0.5	0.6
180201250104	AY	Downie River	46,405	7.4	0.0	7.4	7.4	0.0	3.2	7.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10933.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250104	BS*	Downie River	46,405	0.0	4.6	0.0	27.9	32.5	30.3	0.0	0	0	4	1	0	0	7	3	9	3	9	3	0	0	10933.0	0.0	0.6	0.0	2.2	2.8	2.3	0.0
180201250104	BY*	Downie River	46,405	27.9	35.4	27.9	0.0	7.4	0.0	27.9	7	3	7	3	7	3	0	0	0	0	0	0	7	3	10933.0	2.2	2.2	2.2	0.0	0.0	0.0	2.2
180201250104	CS*	Downie River	46,405	4.8	4.8	4.8	41.1	46.2	43.1	4.8	5	0	5	0	5	0	21	6	22	6	22	6	5	0	10933.0	1.1	1.1	1.1	6.6	7.0	6.9	1.1
180201250104	CY*	Downie River	46,405	36.2	39.9	36.2	0.0	0.0	0.0	37.3	16	6	18	6	16	6	0	0	0	0	0	0	16	6	10933.0	5.5	5.9	5.5	0.0	0.0	0.0	5.5
180201250104	DS*	Downie River	46,405	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10933.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250104	DY*	Downie River	46,405	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10933.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250104	ES*	Downie River	46,405	0.0	0.0	0.0	27.8	30.8	27.9	0.0	0	0	0	0	0	0	14	4	14	4	14	4	0	0	10933.0	0.0	0.0	0.0	7.0	7.2	7.0	0.0
180201250104	EY*	Downie River	46,405	27.8	30.8	27.8	0.0	0.0	0.0	30.2	14	4	16	4	14	4	0	0	0	0	0	0	15	4	10933.0	7.0	7.2	7.0	0.0	0.0	0.0	7.1
180201250104	FY	Downie River	46,405	0.0	28.6	35.4	35.3	27.1	33.1	31.9	0	0	15	4	19	4	19	4	18	4	18	4	18	4	10933.0	0.0	3.3	3.8	3.8	3.3	3.5	3.7
180201250104	GY	Downie River	46,405	8.5	8.5	8.5	8.5	8.5	8.5	8.5	13	0	13	0	13	0	13	0	13	0	13	0	13	0	10933.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5
180201250104	HY*	Downie River	46,405	13.2	13.2	13.2	13.2	13.2	13.2	13.2	8	2	8	2	8	2	8	2	8	2	8	2	8	2	10933.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
180201250104	IY	Downie River	46,405	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10933.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250104	JY	Downie River	46,405	7.4	7.4	7.4	7.4	7.4	7.4	7.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10933.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250104	KY	Downie River	46,405	2.7	2.7	2.7	2.7	2.7	2.7	2.7	1	0	1	0	1	0	1	0	1	0	1	0	1	0	10933.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250104	LY*	Downie River	46,405	35.4	0.0	0.0	0.0	0.0	0.0	0.0	19	4	0	0	0	0	0	0	0	0	0	0	0	0	10933.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	46,405	176.7	176.7	176.7	176.7	176.7	176.7	176.7	87	20	87	20	87	20	87	20	87	20	87	20	87	20	10933.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
		Total Mi./Sq.Mi.	72.51	2.4	2.4	2.4	2.4	2.4	2.4	2.4	5.1	1.2	5.1	1.2	5.1	1.2	5.1	1.2	5.1	1.2	5.1	1.2	5.1	1.2	17.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		Total Native Surface Motorized		145.2	128.6	109.9	110.0	130.1	114.5	113.4	69	19	58	16	50	15	50	15	53	15	53	15	51	15		21.7	19.0	17.8	17.9	19.0	18.2	17.9
		Motorized Native Surface Mi./Sq.Mi.		2.0	1.8	1.5	1.5	1.8	1.6	1.6	4.0	1.1	3.4	0.9	2.9	0.9	2.9	0.9	3.1	0.9	3.1	0.9	3.0	0.9		1.3	1.1	1.0	1.0	1.1	1.1	1.1

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250105	AS	North Yuba River-Goodyears Bar	46,488	0.0	0.0	0.0	0.0	0.0	10.4	0.0	0	0	0	0	0	0	0	0	7	3	7	3	0	0	10763.8	0.0	0.0	0.0	0.0	0.0	1.2	0.0
180201250105	AY	North Yuba River-Goodyears Bar	46,488	36.8	17.0	36.8	36.8	17.0	26.4	36.8	17	17	6	7	17	17	17	17	10	14	10	14	17	17	10763.8	3.4	1.1	3.4	3.4	1.1	2.2	3.4
180201250105	BS*	North Yuba River-Goodyears Bar	46,488	0.0	0.0	0.0	64.1	64.1	64.2	0.0	0	0	0	0	0	0	16	17	16	17	16	17	0	0	10763.8	0.0	0.0	0.0	4.3	4.3	4.3	0.0
180201250105	BY*	North Yuba River-Goodyears Bar	46,488	63.8	83.9	63.8	0.0	19.8	0.0	63.8	16	16	27	27	16	16	0	0	11	10	0	0	16	16	10763.8	4.2	6.6	4.2	0.0	2.2	0.0	4.2
180201250105	CS*	North Yuba River-Goodyears Bar	46,488	0.0	0.0	0.0	2.1	43.8	2.5	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10763.8	0.0	0.0	0.0	0.0	3.4	0.0	0.0
180201250105	CY*	North Yuba River-Goodyears Bar	46,488	2.1	2.9	2.1	0.0	0.0	0.0	2.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10763.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250105	DS*	North Yuba River-Goodyears Bar	46,488	0.0	0.0	0.0	0.0	12.6	8.7	0.0	0	0	0	0	0	0	0	0	1	3	1	3	0	0	10763.8	0.0	0.0	0.0	0.0	1.1	0.9	0.0
180201250105	DY*	North Yuba River-Goodyears Bar	46,488	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10763.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250105	ES*	North Yuba River-Goodyears Bar	46,488	0.0	0.0	0.0	14.5	14.5	14.5	0.0	0	0	0	0	0	0	3	4	3	4	3	4	0	0	10763.8	0.0	0.0	0.0	1.6	1.6	1.6	0.0
180201250105	EY*	North Yuba River-Goodyears Bar	46,488	14.5	14.5	14.5	0.0	0.0	0.0	14.5	3	4	3	4	3	4	0	0	0	0	0	0	3	4	10763.8	1.6	1.6	1.6	0.0	0.0	0.0	1.6
180201250105	FY	North Yuba River-Goodyears Bar	46,488	3.4	125.7	126.8	126.5	72.1	117.2	126.8	3	1	31	40	31	41	31	40	30	37	30	37	31	41	10763.8	0.5	9.9	10.0	9.9	5.5	9.0	10.0
180201250105	GY	North Yuba River-Goodyears Bar	46,488	47.2	47.2	47.2	47.2	47.2	47.2	47.2	34	30	34	30	34	30	34	30	34	30	34	30	34	30	10763.8	9.6	9.6	9.6	9.6	9.6	9.6	9.6
180201250105	HY*	North Yuba River-Goodyears Bar	46,488	20.2	20.2	20.2	20.2	20.2	20.2	20.2	6	4	6	4	6	4	6	4	6	4	6	4	6	4	10763.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2
180201250105	IY	North Yuba River-Goodyears Bar	46,488	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6	6	6	6	6	6	6	6	6	6	6	6	6	6	10763.8	3.1	3.1	3.1	3.1	3.1	3.1	3.1
180201250105	JY	North Yuba River-Goodyears Bar	46,488	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10763.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250105	KY	North Yuba River-Goodyears Bar	46,488	15.0	15.0	15.0	15.0	15.0	15.0	15.0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	10763.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
180201250105	LY*	North Yuba River-Goodyears Bar	46,488	123.5	0.0	0.0	0.0	0.0	0.0	0.0	28	40	0	0	0	0	0	0	0	0	0	0	0	0	10763.8	9.5	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	46,488	334.7	334.7	334.7	334.7	334.7	334.7	334.7	115	120	115	120	115	120	115	120	126	130	115	120	115	120	10763.8	34.1	34.1	34.1	34.1	34.1	34.1	34.1
		Total Mi./Sq.Mi.	72.64	4.6	4.6	4.6	4.6	4.6	4.6	4.6	6.8	7.1	6.8	7.1	6.8	7.1	6.8	7.1	7.5	7.7	6.8	7.1	6.8	7.1	16.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		Total Native Surface Motorized		224.0	121.5	100.5	100.8	175.0	110.1	100.5	53	64	36	35	25	24	25	25	37	38	26	28	25	24		16.6	9.4	7.0	7.1	13.8	8.1	7.0
		Motorized Native Surface Mi./Sq.Mi.		3.1	1.7	1.4	1.4	2.4	1.5	1.4	3.2	3.8	2.1	2.1	1.5	1.4	1.5	1.5	2.2	2.3	1.5	1.7	1.5	1.4		1.0	0.6	0.4	0.4	0.8	0.5	0.4

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250201	AS	Canyon Creek	22,369	0.0	0.0	0.0	0.0	0.0	19.7	0.0	0	0	0	0	0	0	0	0	11	7	11	7	0	0	5604.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0
180201250201	AY	Canyon Creek	22,369	27.6	7.9	27.6	27.6	7.9	7.9	27.6	18	11	7	4	18	11	18	11	7	4	7	4	18	11	5604.0	2.9	0.9	2.9	2.9	0.9	0.9	2.9
180201250201	BS*	Canyon Creek	22,369	0.0	0.0	0.0	31.9	31.9	32.0	0.0	0	0	0	0	0	0	7	9	7	9	7	9	0	0	5604.0	0.0	0.0	0.0	1.9	1.9	1.9	0.0
180201250201	BY*	Canyon Creek	22,369	31.3	51.6	31.3	0.0	19.7	0.0	31.3	7	9	18	16	7	9	0	0	11	7	0	0	7	9	5604.0	1.9	3.8	1.9	0.0	1.9	0.0	1.9
180201250201	CS*	Canyon Creek	22,369	0.0	0.0	0.0	5.1	20.7	5.2	0.0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	5604.0	0.0	0.0	0.0	0.5	1.4	0.5	0.0
180201250201	CY*	Canyon Creek	22,369	5.1	5.7	5.1	0.0	0.0	0.0	5.7	1	0	1	0	1	0	0	0	0	0	0	0	1	0	5604.0	0.5	0.5	0.5	0.0	0.0	0.0	0.5
180201250201	DS*	Canyon Creek	22,369	0.0	0.0	0.0	0.0	1.7	0.2	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5604.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250201	DY*	Canyon Creek	22,369	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5604.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250201	ES*	Canyon Creek	22,369	0.0	0.0	0.0	3.2	3.2	3.2	0.0	0	0	0	0	0	0	3	1	3	1	3	1	0	0	5604.0	0.0	0.0	0.0	0.7	0.7	0.7	0.0
180201250201	EY*	Canyon Creek	22,369	3.2	3.2	3.2	0.0	0.0	0.0	3.2	3	1	3	1	3	1	0	0	0	0	0	0	3	1	5604.0	0.7	0.7	0.7	0.0	0.0	0.0	0.7
180201250201	FY	Canyon Creek	22,369	0.0	58.9	60.0	59.5	42.2	59.2	59.5	0	0	29	14	29	14	29	14	29	14	29	14	29	14	5604.0	0.0	5.5	5.5	5.5	4.6	5.5	5.5
180201250201	GY	Canyon Creek	22,369	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5604.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250201	HY*	Canyon Creek	22,369	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5604.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250201	IY	Canyon Creek	22,369	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5604.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250201	JY	Canyon Creek	22,369	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5604.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250201	KY	Canyon Creek	22,369	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5604.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250201	LY*	Canyon Creek	22,369	60.0	0.0	0.0	0.0	0.0	0.0	0.0	29	14	0	0	0	0	0	0	0	0	0	0	0	0	5604.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	22,369	129.5	129.5	129.5	129.5	129.5	129.5	129.5	58	35	58	35	58	35	58	35	69	42	58	35	58	35	5604.0	11.5	11.5	11.5	11.5	11.5	11.5	11.5
		Total Mi./Sq.Mi.	34.95	3.7	3.7	3.7	3.7	3.7	3.7	3.7	6.6	4.0	6.6	4.0	6.6	4.0	6.6	4.0	7.9	4.8	6.6	4.0	6.6	4.0	8.8	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		Total Native Surface Motorized		99.8	60.5	39.7	40.3	77.2	40.5	40.3	40	24	22	17	11	10	11	10	22	17	11	10	11	10		8.6	5.0	3.1	3.1	5.9	3.1	3.1
		Motorized Native Surface Mi./Sq.Mi.		2.9	1.7	1.1	1.2	2.2	1.2	1.2	4.6	2.7	2.5	1.9	1.3	1.1	1.3	1.1	2.5	1.9	1.3	1.1	1.3	1.1		1.0	0.6	0.4	0.4	0.7	0.4	0.4

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250203	AS	Bullards Bar Reservoir	24,263	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7861.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250203	AY	Bullards Bar Reservoir	24,263	12.8	10.2	12.8	12.8	10.2	12.8	12.8	4	1	1	1	4	1	4	1	4	1	4	1	4	1	7861.8	0.5	0.2	0.5	0.5	0.2	0.5	0.5
180201250203	BS*	Bullards Bar Reservoir	24,263	9.8	10.0	9.8	20.7	20.8	20.8	9.8	1	7	3	8	1	7	5	9	6	9	6	9	1	7	7861.8	0.4	0.5	0.4	0.9	0.9	0.9	0.4
180201250203	BY*	Bullards Bar Reservoir	24,263	10.8	13.4	10.8	0.0	2.6	0.0	10.8	3	1	6	1	3	1	0	0	3	0	0	0	3	1	7861.8	0.4	0.8	0.4	0.0	0.3	0.0	0.4
180201250203	CS*	Bullards Bar Reservoir	24,263	1.1	1.1	1.1	1.1	1.8	1.1	1.1	0	1	0	1	0	1	0	1	0	1	0	1	0	1	7861.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250203	CY*	Bullards Bar Reservoir	24,263	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7861.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250203	DS*	Bullards Bar Reservoir	24,263	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7861.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250203	DY*	Bullards Bar Reservoir	24,263	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7861.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250203	ES*	Bullards Bar Reservoir	24,263	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7861.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250203	EY*	Bullards Bar Reservoir	24,263	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7861.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250203	FY	Bullards Bar Reservoir	24,263	3.6	44.0	44.2	44.0	43.3	44.0	44.2	0	0	10	14	12	15	11	14	10	14	10	14	12	15	7861.8	0.3	2.6	2.7	2.6	2.6	2.6	2.7
180201250203	GY	Bullards Bar Reservoir	24,263	33.4	33.4	33.4	33.4	33.4	33.4	33.4	15	12	15	12	15	12	15	12	15	12	15	12	15	12	7861.8	4.1	4.1	4.1	4.1	4.1	4.1	4.1
180201250203	HY*	Bullards Bar Reservoir	24,263	33.5	33.5	33.5	33.5	33.5	33.5	33.5	8	6	8	6	8	6	8	6	8	6	8	6	8	6	7861.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7
180201250203	IY	Bullards Bar Reservoir	24,263	16.5	16.5	16.5	16.5	16.5	16.5	16.5	2	8	2	8	2	8	2	8	2	8	2	8	2	8	7861.8	3.5	3.5	3.5	3.5	3.5	3.5	3.5
180201250203	JY	Bullards Bar Reservoir	24,263	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7861.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250203	KY	Bullards Bar Reservoir	24,263	10.8	10.8	10.8	10.8	10.8	10.8	10.8	4	4	4	4	4	4	4	4	4	4	4	4	4	4	7861.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
180201250203	LY*	Bullards Bar Reservoir	24,263	40.6	0.0	0.0	0.0	0.0	0.0	0.0	12	15	0	0	0	0	0	0	0	0	0	0	0	0	7861.8	2.4	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	24,263	175.1	175.1	175.1	175.1	175.1	175.1	175.1	49	55	49	55	49	55	49	55	52	55	49	55	49	55	7861.8	15.4	15.4	15.4	15.4	15.4	15.4	15.4
		Total Mi./Sq.Mi.	37.91	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.0	4.5	4.0	4.5	4.0	4.5	4.0	4.5	4.2	4.5	4.0	4.5	4.0	4.5	12.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		Total Native Surface Motorized		96.4	58.6	55.8	55.9	59.4	56.0	55.8	24	30	17	16	12	15	13	16	17	16	14	16	12	15		6.2	4.2	3.8	3.8	4.2	3.9	3.8
		Motorized Native Surface Mi./Sq.Mi.		2.5	1.5	1.5	1.5	1.6	1.5	1.5	2.0	2.4	1.4	1.3	1.0	1.2	1.1	1.3	1.4	1.3	1.1	1.3	1.0	1.2		0.5	0.3	0.3	0.3	0.3	0.3	0.3

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250301	AS	M. Yuba River-Jackson Meadows Res.	23,866	16.9	5.3	16.9	16.9	5.3	8.7	16.9	9	9	3	4	9	9	9	9	4	5	4	5	9	9	6163.5	1.6	0.6	1.6	1.6	0.6	0.9	1.6
180201250301	AY	M. Yuba River-Jackson Meadows Res.	23,866	4.7	2.7	4.7	4.7	2.7	3.4	4.7	1	0	1	0	1	0	1	0	1	0	1	0	1	0	6163.5	0.4	0.3	0.4	0.4	0.3	0.4	0.4
180201250301	BS*	M. Yuba River-Jackson Meadows Res.	23,866	0.0	11.7	0.0	39.8	51.5	49.9	0.0	0	0	6	5	0	0	13	29	18	33	18	33	0	0	6163.5	0.0	0.9	0.0	2.8	3.7	3.6	0.0
180201250301	BY*	M. Yuba River-Jackson Meadows Res.	23,866	39.8	41.8	39.8	0.0	2.0	0.0	39.8	13	29	13	29	13	29	0	0	0	0	0	0	13	29	6163.5	2.8	2.9	2.8	0.0	0.2	0.0	2.8
180201250301	CS*	M. Yuba River-Jackson Meadows Res.	23,866	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6163.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250301	CY*	M. Yuba River-Jackson Meadows Res.	23,866	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6163.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250301	DS*	M. Yuba River-Jackson Meadows Res.	23,866	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6163.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250301	DY*	M. Yuba River-Jackson Meadows Res.	23,866	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6163.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250301	ES*	M. Yuba River-Jackson Meadows Res.	23,866	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6163.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250301	EY*	M. Yuba River-Jackson Meadows Res.	23,866	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6163.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250301	FY	M. Yuba River-Jackson Meadows Res.	23,866	0.8	10.8	10.8	10.8	10.8	10.2	10.8	0	0	3	4	3	4	3	4	3	4	3	4	3	4	6163.5	0.1	0.8	0.8	0.8	0.8	0.7	0.8
180201250301	GY	M. Yuba River-Jackson Meadows Res.	23,866	11.7	11.7	11.7	11.7	11.7	11.7	11.7	13	4	13	4	13	4	13	4	13	4	13	4	13	4	6163.5	2.2	2.2	2.2	2.2	2.2	2.2	2.2
180201250301	HY*	M. Yuba River-Jackson Meadows Res.	23,866	28.8	28.8	28.8	28.8	28.8	28.8	28.8	6	13	6	13	6	13	6	13	6	13	6	13	6	13	6163.5	2.8	2.8	2.8	2.8	2.8	2.8	2.8
180201250301	IY	M. Yuba River-Jackson Meadows Res.	23,866	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2	0	2	0	2	0	2	0	2	0	2	0	2	0	6163.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250301	JY	M. Yuba River-Jackson Meadows Res.	23,866	10.2	10.2	10.2	10.2	10.2	10.2	10.2	1	0	1	0	1	0	1	0	1	0	1	0	1	0	6163.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250301	KY	M. Yuba River-Jackson Meadows Res.	23,866	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6163.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250301	LY*	M. Yuba River-Jackson Meadows Res.	23,866	9.9	0.0	0.0	0.0	0.0	0.0	0.0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	6163.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	23,866	123.9	123.9	123.9	123.9	123.9	123.9	123.9	48	59	48	59	48	59	48	59	48	59	48	59	48	59	6163.5	10.8	10.8	10.8	10.8	10.8	10.8	10.8
		Total Mi./Sq.Mi.	37.29	3.3	3.3	3.3	3.3	3.3	3.3	3.3	5.0	6.1	5.0	6.1	5.0	6.1	5.0	6.1	5.0	6.1	5.0	6.1	5.0	6.13	9.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1
		Total Native Surface Motorized		78.6	82.3	68.6	68.6	82.3	78.8	68.6	22	46	25	47	19	42	19	42	24	46	24	46	19	42		6.4	6.7	5.6	5.6	6.7	6.4	5.6
		Motorized Native Surface Mi./Sq.Mi.		2.1	2.2	1.8	1.8	2.2	2.1	1.8	2.3	4.8	2.6	4.9	2.0	4.4	2.0	4.4	2.5	4.8	2.5	4.8	2.0	4.4		0.7	0.7	0.6	0.6	0.7	0.7	0.6

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250302	AS	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	0.0	0.0	14.3	0.0	0	0	0	0	0	0	0	0	2	2	2	2	0	0	4482.1	0.0	0.0	0.0	0.0	0.0	0.7	0.0
180201250302	AY	Middle Yuba River-East Fork Creek	24,674	15.5	0.0	15.5	15.5	0.0	0.0	15.5	2	3	0	0	2	3	2	3	0	0	0	0	2	3	4482.1	0.9	0.0	0.9	0.9	0.0	0.0	0.9
180201250302	BS*	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	24.0	32.6	25.7	0.0	0	0	0	0	0	0	7	4	8	6	8	6	0	0	4482.1	0.0	0.0	0.0	1.8	2.2	2.1	0.0
180201250302	BY*	Middle Yuba River-East Fork Creek	24,674	24.0	39.6	24.0	0.0	7.0	0.0	24.0	7	4	9	7	7	4	0	0	1	2	0	0	7	4	4482.1	1.8	2.7	1.8	0.0	0.4	0.0	1.8
180201250302	CS*	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4482.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250302	CY*	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4482.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250302	DS*	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4482.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250302	DY*	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4482.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250302	ES*	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4482.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250302	EY*	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4482.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250302	FY	Middle Yuba River-East Fork Creek	24,674	0.2	15.6	15.7	15.7	15.6	15.1	15.7	0	0	4	3	4	3	4	3	3	2	3	2	4	3	4482.1	0.0	1.8	1.8	1.8	1.8	1.7	1.8
180201250302	GY	Middle Yuba River-East Fork Creek	24,674	11.3	11.3	11.3	11.3	11.3	11.3	11.3	3	2	3	2	3	2	3	2	3	2	3	2	3	2	4482.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9
180201250302	HY*	Middle Yuba River-East Fork Creek	24,674	60.9	60.9	60.9	60.9	60.9	60.9	60.9	9	4	9	4	9	4	9	4	9	4	9	4	9	4	4482.1	3.6	3.6	3.6	3.6	3.6	3.6	3.6
180201250302	IY	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4482.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250302	JY	Middle Yuba River-East Fork Creek	24,674	2.9	2.9	2.9	2.9	2.9	2.9	2.9	0	1	0	1	0	1	0	1	0	1	0	1	0	1	4482.1	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201250302	KY	Middle Yuba River-East Fork Creek	24,674	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4482.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250302	LY*	Middle Yuba River-East Fork Creek	24,674	15.5	0.0	0.0	0.0	0.0	0.0	0.0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	4482.1	1.8	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	24,674	130.3	130.3	130.3	130.3	130.3	130.3	130.3	25	17	25	17	25	17	25	17	26	19	25	17	25	17	4482.1	9.4	9.4	9.4	9.4	9.4	9.4	9.4
		Total Mi./Sq.Mi.	38.55	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.6	2.4	3.6	2.4	3.6	2.4	3.6	2.4	3.7	2.7	3.6	2.4	3.6	2.4	7.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		Total Native Surface Motorized		100.4	100.4	84.9	84.9	100.4	86.6	84.9	20	11	18	11	16	8	16	8	18	12	17	10	16	8		7.3	6.3	5.4	5.4	6.3	5.8	5.4
		Motorized Native Surface Mi./Sq.Mi.		2.6	2.6	2.2	2.2	2.6	2.2	2.2	2.9	1.6	2.6	1.6	2.3	1.1	2.3	1.1	2.6	1.7	2.4	1.4	2.3	1.1		1.0	0.9	0.8	0.8	0.9	0.8	0.8

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250303	AS	Middle Yuba River-Wolf Creek	24,658	4.2	4.2	4.2	4.2	4.2	4.2	4.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4618.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250303	AY	Middle Yuba River-Wolf Creek	24,658	0.5	0.4	0.5	0.5	0.4	0.4	0.5	0	1	0	1	0	1	0	1	0	1	0	1	0	1	4618.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250303	BS*	Middle Yuba River-Wolf Creek	24,658	2.5	2.5	2.5	26.1	26.2	26.2	2.5	0	1	0	1	0	1	3	7	3	7	3	7	0	1	4618.4	0.0	0.0	0.0	1.2	1.2	1.2	0.0
180201250303	BY*	Middle Yuba River-Wolf Creek	24,658	23.6	23.7	23.6	0.0	0.0	0.0	23.6	3	6	3	6	3	6	0	0	0	0	0	0	3	6	4618.4	1.2	1.2	1.2	0.0	0.0	0.0	1.2
180201250303	CS*	Middle Yuba River-Wolf Creek	24,658	0.0	0.0	0.0	5.3	6.7	5.8	0.0	0	0	0	0	0	0	0	2	0	2	0	2	0	0	4618.4	0.0	0.0	0.0	0.4	0.4	0.4	0.0
180201250303	CY*	Middle Yuba River-Wolf Creek	24,658	5.3	5.8	5.3	0.0	0.0	0.0	5.8	0	2	0	2	0	2	0	0	0	0	0	0	0	2	4618.4	0.4	0.4	0.4	0.0	0.0	0.0	0.4
180201250303	DS*	Middle Yuba River-Wolf Creek	24,658	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4618.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250303	DY*	Middle Yuba River-Wolf Creek	24,658	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4618.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250303	ES*	Middle Yuba River-Wolf Creek	24,658	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4618.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250303	EY*	Middle Yuba River-Wolf Creek	24,658	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4618.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250303	FY	Middle Yuba River-Wolf Creek	24,658	0.2	37.4	37.8	37.8	36.4	37.4	37.4	0	0	5	12	5	12	5	12	5	12	5	12	5	12	4618.4	0.0	2.2	2.2	2.2	2.2	2.2	2.2
180201250303	GY	Middle Yuba River-Wolf Creek	24,658	24.9	24.9	24.9	24.9	24.9	24.9	24.9	3	4	3	4	3	4	3	4	3	4	3	4	3	4	4618.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5
180201250303	HY*	Middle Yuba River-Wolf Creek	24,658	66.1	66.1	66.1	66.1	66.1	66.1	66.1	3	34	3	34	3	34	3	34	3	34	3	34	3	34	4618.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5
180201250303	IY	Middle Yuba River-Wolf Creek	24,658	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4618.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250303	JY	Middle Yuba River-Wolf Creek	24,658	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4618.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250303	KY	Middle Yuba River-Wolf Creek	24,658	5.5	5.5	5.5	5.5	5.5	5.5	5.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4618.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250303	LY*	Middle Yuba River-Wolf Creek	24,658	37.7	0.0	0.0	0.0	0.0	0.0	0.0	5	12	0	0	0	0	0	0	0	0	0	0	0	0	4618.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	24,658	170.4	170.4	170.4	170.4	170.4	170.4	170.4	15	61	15	61	15	61	15	61	15	61	15	61	15	61	4618.4	9.2	9.2	9.2	9.2	9.2	9.2	9.2
		Total Mi./Sq.Mi.	38.53	4.4	4.4	4.4	4.4	4.4	4.4	4.4	2.1	8.5	2.1	8.5	2.1	8.5	2.1	8.5	2.1	8.5	2.1	8.5	2.1	8.5	7.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		Total Native Surface Motorized		135.1	98.1	97.5	97.5	99.0	98.1	97.9	11	55	6	43	6	43	6	43	6	43	6	43	6	43		7.3	5.0	5.0	5.0	5.1	5.0	5.0
		Motorized Native Surface Mi./Sq.Mi.		3.5	2.5	2.5	2.5	2.6	2.5	2.5	1.5	7.6	0.8	6.0	0.8	6.0	0.8	6.0	0.8	6.0	0.8	6.0	0.8	6.0		1.0	0.7	0.7	0.7	0.7	0.7	0.7

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250304	AS	Oregon Creek	22,477	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250304	AY	Oregon Creek	22,477	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1	2	1	2	1	2	1	2	1	2	1	2	1	2	4143.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
180201250304	BS*	Oregon Creek	22,477	3.5	3.5	3.5	26.7	26.7	26.7	3.5	0	1	0	1	0	1	2	8	2	8	2	8	0	1	4143.4	0.0	0.0	0.0	0.7	0.7	0.7	0.0
180201250304	BY*	Oregon Creek	22,477	22.7	23.1	22.7	0.0	0.0	0.0	22.7	1	7	2	7	1	7	0	0	0	0	0	0	1	7	4143.4	0.5	0.6	0.5	0.0	0.0	0.0	0.5
180201250304	CS*	Oregon Creek	22,477	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250304	CY*	Oregon Creek	22,477	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250304	DS*	Oregon Creek	22,477	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250304	DY*	Oregon Creek	22,477	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250304	ES*	Oregon Creek	22,477	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250304	EY*	Oregon Creek	22,477	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250304	FY	Oregon Creek	22,477	1.3	36.6	37.0	36.6	36.4	36.6	37.0	0	1	4	18	5	18	4	18	4	18	4	18	5	18	4143.4	0.1	2.1	2.3	2.1	2.1	2.1	2.3
180201250304	GY	Oregon Creek	22,477	55.4	55.4	55.4	55.4	55.4	55.4	55.4	14	23	14	23	14	23	14	23	14	23	14	23	14	23	4143.4	5.7	5.7	5.7	5.7	5.7	5.7	5.7
180201250304	HY*	Oregon Creek	22,477	44.6	44.6	44.6	44.6	44.6	44.6	44.6	7	15	7	15	7	15	7	15	7	15	7	15	7	15	4143.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
180201250304	IY	Oregon Creek	22,477	14.0	14.0	14.0	14.0	14.0	14.0	14.0	2	11	2	11	2	11	2	11	2	11	2	11	2	11	4143.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2
180201250304	JY	Oregon Creek	22,477	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250304	KY	Oregon Creek	22,477	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250304	LY*	Oregon Creek	22,477	35.7	0.0	0.0	0.0	0.0	0.0	0.0	5	17	0	0	0	0	0	0	0	0	0	0	0	0	4143.4	2.2	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	22,477	178.8	178.8	178.8	178.8	178.8	178.8	178.8	30	77	30	77	30	77	30	77	30	77	30	77	30	77	4143.4	12.7	12.7	12.7	12.7	12.7	12.7	12.7
		Total Mi./Sq.Mi.	35.12	5.1	5.1	5.1	5.1	5.1	5.1	5.1	4.6	11.9	4.6	11.9	4.6	11.9	4.6	11.9	4.6	11.9	4.6	11.9	4.6	11.9	6.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		Total Native Surface Motorized		106.6	71.3	70.9	71.3	71.5	71.3	70.9	13	40	9	23	8	23	9	23	9	23	9	23	8	23		5.1	3.1	3.0	3.1	3.1	3.1	3.0
		Motorized Native Surface Mi./Sq.Mi.		3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	6.2	1.4	3.6	1.2	3.6	1.4	3.6	1.4	3.6	1.4	3.6	1.2	3.6		0.8	0.5	0.5	0.5	0.5	0.5	0.5

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250305	AS	Lower Middle Yuba River	30,695	7.2	7.2	7.2	7.2	7.2	7.2	7.2	1	0	1	0	1	0	1	0	1	0	1	0	1	0	6042.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250305	AY	Lower Middle Yuba River	30,695	9.6	9.6	9.6	9.6	9.6	9.6	9.6	2	6	2	6	2	6	2	6	2	6	2	6	2	6	6042.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
180201250305	BS*	Lower Middle Yuba River	30,695	4.6	4.6	4.6	18.5	18.5	18.5	4.6	0	0	0	0	0	0	2	3	2	3	2	3	0	0	6042.7	0.0	0.0	0.0	0.4	0.4	0.4	0.0
180201250305	BY*	Lower Middle Yuba River	30,695	13.8	13.9	13.8	0.0	0.0	0.0	13.8	2	3	2	3	2	3	0	0	0	0	0	0	2	3	6042.7	0.3	0.4	0.3	0.0	0.0	0.0	0.3
180201250305	CS*	Lower Middle Yuba River	30,695	0.0	0.0	0.0	1.5	3.4	1.5	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6042.7	0.0	0.0	0.0	0.0	0.1	0.0	0.0
180201250305	CY*	Lower Middle Yuba River	30,695	1.5	1.5	1.5	0.0	0.0	0.0	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6042.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250305	DS*	Lower Middle Yuba River	30,695	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6042.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250305	DY*	Lower Middle Yuba River	30,695	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6042.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250305	ES*	Lower Middle Yuba River	30,695	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6042.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250305	EY*	Lower Middle Yuba River	30,695	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6042.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250305	FY	Lower Middle Yuba River	30,695	0.0	55.7	55.8	55.7	53.7	55.7	55.8	0	0	15	12	15	12	15	12	15	12	15	12	15	12	6042.7	0.0	3.5	3.6	3.5	3.5	3.5	3.6
180201250305	GY	Lower Middle Yuba River	30,695	56.9	56.9	56.9	56.9	56.9	56.9	56.9	8	24	8	24	8	24	8	24	8	24	8	24	8	24	6042.7	3.3	3.3	3.3	3.3	3.3	3.3	3.3
180201250305	HY*	Lower Middle Yuba River	30,695	65.8	65.8	65.8	65.8	65.8	65.8	65.8	9	27	9	27	9	27	9	27	9	27	9	27	9	27	6042.7	4.2	4.2	4.2	4.2	4.2	4.2	4.2
180201250305	IY	Lower Middle Yuba River	30,695	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6042.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250305	JY	Lower Middle Yuba River	30,695	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6042.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250305	KY	Lower Middle Yuba River	30,695	2.4	2.4	2.4	2.4	2.4	2.4	2.4	1	0	1	0	1	0	1	0	1	0	1	0	1	0	6042.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201250305	LY*	Lower Middle Yuba River	30,695	55.8	0.0	0.0	0.0	0.0	0.0	0.0	15	12	0	0	0	0	0	0	0	0	0	0	0	0	6042.7	3.6	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	30,695	217.8	217.8	217.8	217.8	217.8	217.8	217.8	38	72	38	72	38	72	38	72	38	72	38	72	38	72	6042.7	12.9	12.9	12.9	12.9	12.9	12.9	12.9
		Total Mi./Sq.Mi.	47.96	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.0	7.6	4.0	7.6	4.0	7.6	4.0	7.6	4.0	7.6	4.0	7.6	4.0	7.6	9.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
		Total Native Surface Motorized		141.5	85.8	85.7	85.8	87.7	85.8	85.7	26	42	11	30	11	30	11	30	11	30	11	30	11	30		8.1	4.6	4.6	4.6	4.7	4.6	4.6
		Motorized Native Surface Mi./Sq.Mi.		3.0	1.8	1.8	1.8	1.8	1.8	1.8	2.8	4.4	1.2	3.2	1.2	3.2	1.2	3.2	1.2	3.2	1.2	3.2	1.2	3.2		0.9	0.5	0.5	0.5	0.5	0.5	0.5

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250401	AS	Headwaters South Yuba River	37,673	6.6	0.0	6.6	6.6	0.0	2.2	6.6	2	1	0	0	2	1	2	1	0	1	0	1	2	1	7008.9	0.9	0.0	0.9	0.9	0.0	0.2	0.9
180201250401	AY	Headwaters South Yuba River	37,673	0.7	0.4	0.7	0.7	0.4	0.4	0.7	1	0	1	0	1	0	1	0	1	0	1	0	1	0	7008.9	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250401	BS*	Headwaters South Yuba River	37,673	5.9	12.5	5.9	21.1	27.7	25.5	5.9	0	0	2	1	0	0	1	4	3	4	3	4	0	0	7008.9	0.7	1.7	0.7	2.1	3.0	2.8	0.7
180201250401	BY*	Headwaters South Yuba River	37,673	14.8	15.5	14.8	0.0	0.3	0.3	14.8	1	4	1	4	1	4	0	0	0	0	0	0	1	4	7008.9	1.3	1.4	1.3	0.0	0.0	0.0	1.3
180201250401	CS*	Headwaters South Yuba River	37,673	0.3	2.7	0.3	8.0	10.7	10.7	2.7	1	0	2	0	1	0	3	0	4	0	4	0	2	0	7008.9	0.1	0.1	0.1	0.7	0.9	0.9	0.1
180201250401	CY*	Headwaters South Yuba River	37,673	7.6	7.9	7.6	0.0	0.0	0.0	7.9	2	0	2	0	2	0	0	0	0	0	0	0	2	0	7008.9	0.7	0.8	0.7	0.0	0.0	0.0	0.8
180201250401	DS*	Headwaters South Yuba River	37,673	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7008.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250401	DY*	Headwaters South Yuba River	37,673	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7008.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250401	ES*	Headwaters South Yuba River	37,673	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7008.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250401	EY*	Headwaters South Yuba River	37,673	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7008.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250401	FY	Headwaters South Yuba River	37,673	3.2	36.2	39.4	38.9	36.2	36.2	36.7	0	1	5	11	6	11	6	11	5	11	5	11	5	11	7008.9	0.2	3.3	3.6	3.5	3.3	3.3	3.5
180201250401	GY	Headwaters South Yuba River	37,673	55.7	55.7	55.7	55.7	55.7	55.7	55.7	35	10	35	10	35	10	35	10	35	10	35	10	35	10	7008.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3
180201250401	HY*	Headwaters South Yuba River	37,673	118.9	118.9	118.9	118.9	118.9	118.9	118.9	37	5	37	5	37	5	37	5	37	5	37	5	37	5	7008.9	11.3	11.3	11.3	11.3	11.3	11.3	11.3
180201250401	IY	Headwaters South Yuba River	37,673	14.2	14.2	14.2	14.2	14.2	14.2	14.2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	7008.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
180201250401	JY	Headwaters South Yuba River	37,673	7.1	7.1	7.1	7.1	7.1	7.1	7.1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7008.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5
180201250401	KY	Headwaters South Yuba River	37,673	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4	0	4	0	4	0	4	0	4	0	4	0	4	0	7008.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5
180201250401	LY*	Headwaters South Yuba River	37,673	36.1	0.0	0.0	0.0	0.0	0.0	0.0	6	10	0	0	0	0	0	0	0	0	0	0	0	0	7008.9	3.4	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	37,673	275.1	275.1	275.1	275.1	275.1	275.1	275.1	93	35	93	35	93	35	93	35	93	35	93	35	93	35	7008.9	30.0	30.0	30.0	30.0	30.0	30.0	30.0
		Total Mi./Sq.Mi.	58.86	4.7	4.7	4.7	4.7	4.7	4.7	4.7	8.5	3.2	8.5	3.2	8.5	3.2	8.5	3.2	8.5	3.2	8.5	3.2	8.5	3.2	11.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7
		Total Native Surface Motorized		183.6	157.5	147.5	147.9	157.5	155.3	150.1	47	19	44	10	41	9	41	9	44	9	44	9	42	9		17.4	15.2	14.0	14.1	15.2	15.0	14.2
		Motorized Native Surface Mi./Sq.Mi.		3.1	2.7	2.5	2.5	2.7	2.6	2.6	4.3	1.7	4.0	0.9	3.7	0.8	3.7	0.8	4.0	0.8	4.0	0.8	3.8	0.8		1.6	1.4	1.3	1.3	1.4	1.4	1.3

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250402	AS	Fordyce Creek	34,137	0.6	0.0	0.6	0.6	0.0	0.6	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10005.6	0.1	0.0	0.1	0.1	0.0	0.1	0.1
180201250402	AY	Fordyce Creek	34,137	1.4	0.0	1.4	1.4	0.0	1.4	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10005.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250402	BS*	Fordyce Creek	34,137	8.1	8.8	8.1	38.2	38.8	38.3	8.1	0	1	0	1	0	1	5	12	5	12	5	12	0	1	10005.6	0.3	0.4	0.3	3.0	3.1	3.0	0.3
180201250402	BY*	Fordyce Creek	34,137	30.0	31.4	30.0	0.0	1.4	0.0	30.0	5	11	5	11	5	11	0	0	0	0	0	0	5	11	10005.6	2.8	2.8	2.8	0.0	0.0	0.0	2.8
180201250402	CS*	Fordyce Creek	34,137	0.0	0.0	0.0	13.2	14.6	14.3	0.0	0	0	0	0	0	0	11	5	11	5	11	5	0	0	10005.6	0.0	0.0	0.0	2.9	3.1	3.1	0.0
180201250402	CY*	Fordyce Creek	34,137	12.8	14.6	12.8	0.0	0.0	0.0	14.3	11	5	12	5	11	5	0	0	0	0	0	0	11	5	10005.6	2.8	3.1	2.8	0.0	0.0	0.0	3.1
180201250402	DS*	Fordyce Creek	34,137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10005.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250402	DY*	Fordyce Creek	34,137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10005.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250402	ES*	Fordyce Creek	34,137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10005.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250402	EY*	Fordyce Creek	34,137	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10005.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250402	FY	Fordyce Creek	34,137	1.9	10.1	12.0	11.5	10.1	10.3	10.5	0	0	5	1	6	1	6	1	6	1	6	1	6	1	10005.6	0.1	0.9	1.2	1.2	0.9	0.9	1.0
180201250402	GY	Fordyce Creek	34,137	4.7	4.7	4.7	4.7	4.7	4.7	4.7	1	0	1	0	1	0	1	0	1	0	1	0	1	0	10005.6	1.0	1.0	1.0	1.0	1.0	1.0	1.0
180201250402	HY*	Fordyce Creek	34,137	22.5	22.5	22.5	22.5	22.5	22.5	22.5	11	6	11	6	11	6	11	6	11	6	11	6	11	6	10005.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7
180201250402	IY	Fordyce Creek	34,137	27.8	27.8	27.8	27.8	27.8	27.8	27.8	13	6	13	6	13	6	13	6	13	6	13	6	13	6	10005.6	5.2	5.2	5.2	5.2	5.2	5.2	5.2
180201250402	JY	Fordyce Creek	34,137	10.7	10.7	10.7	10.7	10.7	10.7	10.7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	10005.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1
180201250402	KY	Fordyce Creek	34,137	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10005.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250402	LY*	Fordyce Creek	34,137	10.1	0.0	0.0	0.0	0.0	0.0	0.0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	10005.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	34,137	131.1	131.1	131.1	131.1	131.1	131.1	131.1	49	32	49	32	49	32	49	32	49	32	49	32	49	32	10005.6	17.2	17.2	17.2	17.2	17.2	17.2	17.2
		Total Mi./Sq.Mi.	53.34	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.1	2.0	3.1	2.0	3.1	2.0	3.1	2.0	3.1	2.0	3.1	2.0	3.1	2.0	15.6	1.1	1.1	1.1	1.1	1.1	1.1	1.1
		Total Native Surface Motorized		83.4	77.3	73.4	73.8	77.3	75.0	74.8	33	24	28	23	27	23	27	23	27	23	27	23	27	23		9.7	9.0	8.6	8.6	9.0	8.9	8.8
		Motorized Native Surface Mi./Sq.Mi.		1.6	1.4	1.4	1.4	1.4	1.4	1.4	2.1	1.5	1.8	1.5	1.7	1.5	1.7	1.5	1.7	1.5	1.7	1.5	1.7	1.5		0.6	0.6	0.5	0.6	0.6	0.6	0.6

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250403	AS	South Yuba River-Lake Spaulding	22,668	10.9	0.0	10.9	10.9	0.0	9.6	10.9	7	1	0	0	7	1	7	1	6	1	6	1	7	1	5338.8	1.5	0.0	1.5	1.5	0.0	1.4	1.5
180201250403	AY	South Yuba River-Lake Spaulding	22,668	13.8	1.1	13.8	13.8	1.1	13.8	13.8	2	5	0	1	2	5	2	5	2	5	2	5	2	5	5338.8	0.8	0.3	0.8	0.8	0.3	0.8	0.8
180201250403	BS*	South Yuba River-Lake Spaulding	22,668	0.9	11.9	0.9	21.0	37.2	23.1	0.9	0	0	7	1	0	0	3	3	4	4	4	4	0	0	5338.8	0.0	1.5	0.0	1.4	3.2	1.7	0.0
180201250403	BY*	South Yuba River-Lake Spaulding	22,668	19.8	33.3	19.8	0.0	8.0	0.0	19.8	3	3	5	8	3	3	0	0	1	4	0	0	3	3	5338.8	1.3	2.0	1.3	0.0	0.4	0.0	1.3
180201250403	CS*	South Yuba River-Lake Spaulding	22,668	0.0	0.0	0.0	0.0	1.5	1.1	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5338.8	0.0	0.0	0.0	0.0	0.1	0.1	0.0
180201250403	CY*	South Yuba River-Lake Spaulding	22,668	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5338.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0
180201250403	DS*	South Yuba River-Lake Spaulding	22,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5338.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250403	DY*	South Yuba River-Lake Spaulding	22,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5338.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250403	ES*	South Yuba River-Lake Spaulding	22,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5338.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250403	EY*	South Yuba River-Lake Spaulding	22,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5338.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250403	FY	South Yuba River-Lake Spaulding	22,668	2.4	19.3	21.2	20.9	19.0	19.0	21.2	0	0	3	2	3	3	3	3	3	2	3	2	3	3	5338.8	0.2	1.8	2.1	2.0	1.8	1.8	2.1
180201250403	GY	South Yuba River-Lake Spaulding	22,668	12.2	12.2	12.2	12.2	12.2	12.2	12.2	0	4	0	4	0	4	0	4	0	4	0	4	0	4	5338.8	1.1	1.1	1.1	1.1	1.1	1.1	1.1
180201250403	HY*	South Yuba River-Lake Spaulding	22,668	44.4	44.4	44.4	44.4	44.4	44.4	44.4	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5338.8	3.2	3.2	3.2	3.2	3.2	3.2	3.2
180201250403	IY	South Yuba River-Lake Spaulding	22,668	13.6	13.6	13.6	13.6	13.6	13.6	13.6	5	3	5	3	5	3	5	3	5	3	5	3	5	3	5338.8	1.6	1.6	1.6	1.6	1.6	1.6	1.6
180201250403	JY	South Yuba River-Lake Spaulding	22,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5338.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250403	KY	South Yuba River-Lake Spaulding	22,668	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2	1	2	1	2	1	2	1	2	1	2	1	2	1	5338.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201250403	LY*	South Yuba River-Lake Spaulding	22,668	18.8	0.0	0.0	0.0	0.0	0.0	0.0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	5338.8	1.9	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	22,668	139.5	139.5	139.5	139.5	139.5	139.5	139.5	28	26	28	26	28	26	28	26	29	30	28	26	28	26	5338.8	12.1	12.1	12.1	12.1	12.1	12.1	12.1
		Total Mi./Sq.Mi.	35.42	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.4	3.1	3.4	3.1	3.4	3.1	3.4	3.1	3.5	3.6	3.4	3.1	3.4	3.1	8.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		Total Native Surface Motorized		83.9	90.6	65.1	65.4	91.0	68.6	65.1	12	12	18	15	9	9	9	9	11	14	10	10	9	9		6.4	6.8	4.5	4.6	6.8	4.9	4.5
		Motorized Native Surface Mi./Sq.Mi.		2.4	2.6	1.8	1.8	2.6	1.9	1.8	1.4	1.4	2.2	1.8	1.1	1.1	1.1	1.1	1.3	1.7	1.2	1.2	1.1	1.1		0.8	0.8	0.5	0.5	0.8	0.6	0.5

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250404	AS	Canyon Creek	32,208	1.8	0.0	1.8	1.8	0.0	1.8	1.8	1	0	0	0	1	0	1	0	1	0	1	0	1	0	8977.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250404	AY	Canyon Creek	32,208	10.1	4.5	10.1	6.7	4.5	5.1	6.7	7	1	3	0	7	1	5	0	3	1	3	1	5	0	8977.7	1.6	0.5	1.6	0.8	0.5	1.1	0.8
180201250404	BS*	Canyon Creek	32,208	1.3	3.1	1.3	27.7	31.7	29.4	1.3	0	0	1	0	0	0	12	6	14	5	14	5	0	0	8977.7	0.1	0.2	0.1	2.8	3.1	2.5	0.1
180201250404	BY*	Canyon Creek	32,208	22.9	28.7	22.9	0.0	0.1	0.0	26.2	8	5	14	6	8	5	0	0	0	0	0	0	10	6	8977.7	1.8	2.9	1.8	0.0	0.0	0.0	2.6
180201250404	CS*	Canyon Creek	32,208	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	8977.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250404	CY*	Canyon Creek	32,208	0.0	0.4	0.0	0.0	0.0	0.0	0.1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	8977.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250404	DS*	Canyon Creek	32,208	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8977.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250404	DY*	Canyon Creek	32,208	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8977.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250404	ES*	Canyon Creek	32,208	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8977.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250404	EY*	Canyon Creek	32,208	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8977.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250404	FY	Canyon Creek	32,208	9.8	44.1	44.7	44.5	44.1	44.0	44.6	3	5	13	18	15	19	13	19	13	18	13	18	15	19	8977.7	2.1	4.3	4.4	4.3	4.3	4.3	4.4
180201250404	GY	Canyon Creek	32,208	8.6	8.6	8.6	8.6	8.6	8.6	8.6	4	1	4	1	4	1	4	1	4	1	4	1	4	1	8977.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6
180201250404	HY*	Canyon Creek	32,208	32.5	32.5	32.5	32.5	32.5	32.5	32.5	9	4	9	4	9	4	9	4	9	4	9	4	9	4	8977.7	3.2	3.2	3.2	3.2	3.2	3.2	3.2
180201250404	IY	Canyon Creek	32,208	17.3	17.3	17.3	17.3	17.3	17.3	17.3	8	2	8	2	8	2	8	2	8	2	8	2	8	2	8977.7	3.0	3.0	3.0	3.0	3.0	3.0	3.0
180201250404	JY	Canyon Creek	32,208	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8977.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250404	KY	Canyon Creek	32,208	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1	0	1	0	1	0	1	0	1	0	1	0	1	0	8977.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250404	LY*	Canyon Creek	32,208	34.9	0.0	0.0	0.0	0.0	0.0	0.0	12	14	0	0	0	0	0	0	0	0	0	0	0	0	8977.7	2.2	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	32,208	140.1	140.1	140.1	140.1	140.1	140.1	140.1	53	32	53	32	53	32	53	32	53	32	53	32	53	32	8977.7	15.8	15.8	15.8	15.8	15.8	15.8	15.8
		Total Mi./Sq.Mi.	50.33	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.8	2.3	3.8	2.3	3.8	2.3	3.8	2.3	3.8	2.3	3.8	2.3	3.8	2.3	14.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1
		Total Native Surface Motorized		91.6	64.7	56.7	60.3	64.7	62.4	60.1	29	23	24	11	17	9	21	10	23	10	23	10	19	10		7.4	6.3	5.1	6.0	6.3	5.7	5.9
		Motorized Native Surface Mi./Sq.Mi.		1.8	1.3	1.1	1.2	1.3	1.2	1.2	2.1	1.6	1.7	0.8	1.2	0.6	1.5	0.7	1.6	0.7	1.6	0.7	1.4	0.7		0.5	0.4	0.4	0.4	0.4	0.4	0.4

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250405	AS	South Yuba River-Poorman Creek	22,436	10.8	0.0	10.8	10.8	0.0	10.0	10.8	1	3	0	0	1	3	1	3	1	2	1	2	1	3	4318.8	0.6	0.0	0.6	0.6	0.0	0.6	0.6
180201250405	AY	South Yuba River-Poorman Creek	22,436	6.9	2.4	6.9	6.9	2.4	6.3	6.9	3	1	1	0	3	1	3	1	3	1	3	1	3	1	4318.8	0.5	0.2	0.5	0.5	0.2	0.4	0.5
180201250405	BS*	South Yuba River-Poorman Creek	22,436	12.3	23.1	12.3	30.1	40.9	31.5	12.3	2	6	3	9	2	6	5	6	5	7	5	7	2	6	4318.8	1.1	1.7	1.1	1.7	2.3	1.7	1.1
180201250405	BY*	South Yuba River-Poorman Creek	22,436	17.8	22.3	17.8	0.0	4.5	0.0	17.8	3	0	5	1	3	0	0	0	2	1	0	0	3	0	4318.8	0.6	0.8	0.6	0.0	0.2	0.0	0.6
180201250405	CS*	South Yuba River-Poorman Creek	22,436	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4318.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250405	CY*	South Yuba River-Poorman Creek	22,436	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4318.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250405	DS*	South Yuba River-Poorman Creek	22,436	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4318.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250405	DY*	South Yuba River-Poorman Creek	22,436	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4318.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250405	ES*	South Yuba River-Poorman Creek	22,436	0.0	0.0	0.0	2.0	2.9	1.9	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4318.8	0.0	0.0	0.0	0.1	0.1	0.1	0.0
180201250405	EY*	South Yuba River-Poorman Creek	22,436	0.0	2.9	0.0	0.0	0.0	0.0	2.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4318.8	0.0	0.1	0.0	0.0	0.0	0.0	0.1
180201250405	FY	South Yuba River-Poorman Creek	22,436	5.7	38.8	41.7	39.7	38.8	39.8	39.7	0	2	4	12	4	12	4	12	4	12	4	12	4	12	4318.8	0.2	1.6	1.7	1.6	1.6	1.6	1.6
180201250405	GY	South Yuba River-Poorman Creek	22,436	14.7	14.7	14.7	14.7	14.7	14.7	14.7	5	4	5	4	5	4	5	4	5	4	5	4	5	4	4318.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0
180201250405	HY*	South Yuba River-Poorman Creek	22,436	59.7	59.7	59.7	59.7	59.7	59.7	59.7	18	8	18	8	18	8	18	8	18	8	18	8	18	8	4318.8	4.1	4.1	4.1	4.1	4.1	4.1	4.1
180201250405	IY	South Yuba River-Poorman Creek	22,436	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4318.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250405	JY	South Yuba River-Poorman Creek	22,436	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4318.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250405	KY	South Yuba River-Poorman Creek	22,436	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0	2	0	2	0	2	0	2	0	2	0	2	0	2	4318.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250405	LY*	South Yuba River-Poorman Creek	22,436	36.0	0.0	0.0	0.0	0.0	0.0	0.0	4	10	0	0	0	0	0	0	0	0	0	0	0	0	4318.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	22,436	167.8	167.8	167.8	167.8	167.8	167.8	167.8	36	36	36	36	36	36	36	36	38	37	36	36	36	36	4318.8	11.0	11.0	11.0	11.0	11.0	11.0	11.0
		Total Mi./Sq.Mi.	35.06	4.8	4.8	4.8	4.8	4.8	4.8	4.8	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.6	5.5	5.3	5.3	5.3	5.3	6.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6
		Total Native Surface Motorized		125.7	108.0	89.7	91.8	108.0	93.0	91.8	27	24	26	18	23	14	23	14	25	16	23	15	23	14		7.3	6.8	5.8	5.9	6.8	6.0	5.9
		Motorized Native Surface Mi./Sq.Mi.		3.6	3.1	2.6	2.6	3.1	2.7	2.6	4.0	3.6	3.9	2.7	3.4	2.1	3.4	2.1	3.7	2.4	3.4	2.2	3.4	2.1		1.1	1.0	0.9	0.9	1.0	0.9	0.9

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250406	AS	South Yuba River-Humbug Creek	13,988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250406	AY	South Yuba River-Humbug Creek	13,988	12.6	10.1	12.6	12.6	10.1	10.1	12.6	2	5	2	5	2	5	2	5	2	5	2	5	2	5	2487.4	0.6	0.5	0.6	0.6	0.5	0.5	0.6
180201250406	BS*	South Yuba River-Humbug Creek	13,988	9.5	9.5	9.5	23.8	26.3	26.4	9.5	0	1	0	1	0	1	3	6	3	6	3	6	0	1	2487.4	0.1	0.1	0.1	0.5	0.6	0.6	0.1
180201250406	BY*	South Yuba River-Humbug Creek	13,988	14.3	16.8	14.3	0.0	0.0	0.0	14.3	3	5	3	5	3	5	0	0	0	0	0	0	3	5	2487.4	0.4	0.5	0.4	0.0	0.0	0.0	0.4
180201250406	CS*	South Yuba River-Humbug Creek	13,988	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250406	CY*	South Yuba River-Humbug Creek	13,988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250406	DS*	South Yuba River-Humbug Creek	13,988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250406	DY*	South Yuba River-Humbug Creek	13,988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250406	ES*	South Yuba River-Humbug Creek	13,988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250406	EY*	South Yuba River-Humbug Creek	13,988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250406	FY	South Yuba River-Humbug Creek	13,988	0.0	26.9	26.9	26.9	24.7	26.8	26.9	0	0	2	10	2	10	2	10	2	10	2	10	2	10	2487.4	0.0	0.7	0.7	0.7	0.7	0.7	0.7
180201250406	GY	South Yuba River-Humbug Creek	13,988	9.5	9.5	9.5	9.5	9.5	9.5	9.5	1	4	1	4	1	4	1	4	1	4	1	4	1	4	2487.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
180201250406	HY*	South Yuba River-Humbug Creek	13,988	24.2	24.2	24.2	24.2	24.2	24.2	24.2	5	7	5	7	5	7	5	7	5	7	5	7	5	7	2487.4	1.6	1.6	1.6	1.6	1.6	1.6	1.6
180201250406	IY	South Yuba River-Humbug Creek	13,988	10.0	10.0	10.0	10.0	10.0	10.0	10.0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2487.4	1.1	1.1	1.1	1.1	1.1	1.1	1.1
180201250406	JY	South Yuba River-Humbug Creek	13,988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250406	KY	South Yuba River-Humbug Creek	13,988	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250406	LY*	South Yuba River-Humbug Creek	13,988	26.9	0.0	0.0	0.0	0.0	0.0	0.0	2	10	0	0	0	0	0	0	0	0	0	0	0	0	2487.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	13,988	107.0	107.0	107.0	107.0	107.0	107.0	107.0	17	36	17	36	17	36	17	36	17	36	17	36	17	36	2487.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0
		Total Mi./Sq.Mi.	21.86	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.4	9.3	4.4	9.3	4.4	9.3	4.4	9.3	4.4	9.3	4.4	9.3	4.4	9.3	3.9	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		Total Native Surface Motorized		74.9	50.5	48.0	48.0	52.7	50.6	48.0	10	23	8	13	8	13	8	13	8	13	8	13	8	13		2.9	2.2	2.2	2.2	2.2	2.2	2.2
		Motorized Native Surface Mi./Sq.Mi.		3.4	2.3	2.2	2.2	2.4	2.3	2.2	2.6	5.9	2.1	3.3	2.1	3.3	2.1	3.3	2.1	3.3	2.1	3.3	2.1	3.3		0.8	0.6	0.6	0.6	0.6	0.6	0.6

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250407	AS	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	AY	South Yuba River-Rock Creek	2,618	4.4	4.4	4.4	4.4	4.4	4.4	4.4	1	0	1	0	1	0	1	0	1	0	1	0	1	0	395.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250407	BS*	South Yuba River-Rock Creek	2,618	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	BY*	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	CS*	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	CY*	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	DS*	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	DY*	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	ES*	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	EY*	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	FY	South Yuba River-Rock Creek	2,618	0.0	17.5	17.5	17.5	17.5	17.5	17.5	0	0	2	1	2	1	2	1	2	1	2	1	2	1	395.6	0.0	0.6	0.6	0.6	0.6	0.6	0.6
180201250407	GY	South Yuba River-Rock Creek	2,618	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250407	HY*	South Yuba River-Rock Creek	2,618	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	0	1	0	1	0	1	0	1	0	1	0	1	0	395.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201250407	IY	South Yuba River-Rock Creek	2,618	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3	0	3	0	3	0	3	0	3	0	3	0	3	0	395.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3
180201250407	JY	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	KY	South Yuba River-Rock Creek	2,618	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250407	LY*	South Yuba River-Rock Creek	2,618	17.5	0.0	0.0	0.0	0.0	0.0	0.0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	395.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	2,618	30.4	30.4	30.4	30.4	30.4	30.4	30.4	7	1	7	1	7	1	7	1	7	1	7	1	7	1	395.6	1.4	1.4	1.4	1.4	1.4	1.4	1.4
		Total Mi./Sq.Mi.	4.09	7.4	7.4	7.4	7.4	7.4	7.4	7.4	11.3	1.6	11.3	1.6	11.3	1.6	11.3	1.6	11.3	1.6	11.3	1.6	11.3	1.6	0.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3
		Total Native Surface Motorized		20.1	2.6	2.6	2.6	2.7	2.6	2.6	3	1	1	0	1	0	1	0	1	0	1	0	1	0		0.8	0.2	0.2	0.2	0.2	0.2	0.2
		Motorized Native Surface Mi./Sq.Mi.		4.9	0.6	0.6	0.6	0.7	0.6	0.6	4.9	1.6	1.6	0.0	1.6	0.0	1.6	0.0	1.6	0.0	1.6	0.0	1.6	0.0		1.3	0.3	0.3	0.3	0.3	0.3	0.3

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201250601	AS	Upper Deer Creek	8,836	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1704.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250601	AY	Upper Deer Creek	8,836	9.8	3.4	9.8	9.8	3.4	3.4	9.8	2	1	1	1	2	1	2	1	1	1	1	1	2	1	1704.4	0.3	0.2	0.3	0.3	0.2	0.2	0.3
180201250601	BS*	Upper Deer Creek	8,836	0.0	0.0	0.0	18.9	23.3	25.2	0.0	0	0	0	0	0	0	4	4	4	4	4	4	0	0	1704.4	0.0	0.0	0.0	0.9	1.0	1.0	0.0
180201250601	BY*	Upper Deer Creek	8,836	18.8	25.2	18.8	0.0	2.1	0.1	18.8	4	4	5	4	4	4	0	0	1	0	1	0	4	4	1704.4	0.9	1.1	0.9	0.0	0.1	0.1	0.9
180201250601	CS*	Upper Deer Creek	8,836	0.0	0.0	0.0	0.2	1.9	0.2	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1704.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250601	CY*	Upper Deer Creek	8,836	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1704.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250601	DS*	Upper Deer Creek	8,836	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1704.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250601	DY*	Upper Deer Creek	8,836	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1704.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250601	ES*	Upper Deer Creek	8,836	0.0	0.0	0.0	15.7	20.4	20.2	0.0	0	0	0	0	0	0	4	1	4	1	4	1	0	0	1704.4	0.0	0.0	0.0	1.1	1.1	1.1	0.0
180201250601	EY*	Upper Deer Creek	8,836	15.4	20.4	15.4	0.0	0.0	0.0	15.7	4	1	4	1	4	1	0	0	0	0	0	0	4	1	1704.4	1.1	1.1	1.1	0.0	0.0	0.0	1.1
180201250601	FY	Upper Deer Creek	8,836	0.4	21.2	26.2	25.8	19.4	21.2	25.9	0	0	9	4	9	4	9	4	9	4	9	4	9	4	1704.4	0.0	1.3	1.3	1.3	1.3	1.2	1.3
180201250601	GY	Upper Deer Creek	8,836	4.3	4.3	4.3	4.3	4.3	4.3	4.3	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1704.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
180201250601	HY*	Upper Deer Creek	8,836	15.4	15.4	15.4	15.4	15.4	15.4	15.4	0	3	0	3	0	3	0	3	0	3	0	3	0	3	1704.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201250601	IY	Upper Deer Creek	8,836	9.7	9.7	9.7	9.7	9.7	9.7	9.7	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1704.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8
180201250601	JY	Upper Deer Creek	8,836	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1704.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201250601	KY	Upper Deer Creek	8,836	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1704.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201250601	LY*	Upper Deer Creek	8,836	25.8	0.0	0.0	0.0	0.0	0.0	0.0	9	4	0	0	0	0	0	0	0	0	0	0	0	0	1704.4	1.3	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	8,836	100.9	100.9	100.9	100.9	100.9	100.9	100.9	23	18	23	18	23	18	23	18	23	18	23	18	23	18	1704.4	5.2	5.2	5.2	5.2	5.2	5.2	5.2
		Total Mi./Sq.Mi.	13.81	7.3	7.3	7.3	7.3	7.3	7.3	7.3	8.6	6.8	8.6	6.8	8.6	6.8	8.6	6.8	8.6	6.8	8.6	6.8	8.6	6.8	2.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
		Total Native Surface Motorized		75.6	61.1	49.7	50.1	63.0	61.1	50.1	17	12	9	8	8	8	8	8	9	8	9	8	8	8		3.8	2.6	2.5	2.5	2.7	2.7	2.5
		Motorized Native Surface Mi./Sq.Mi.		5.5	4.4	3.6	3.6	4.6	4.4	3.6	6.4	4.5	3.4	3.0	3.0	3.0	3.0	3.0	3.4	3.0	3.4	3.0	3.0	3.0		1.4	1.0	0.9	0.9	1.0	1.0	0.9

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201260101	AS	Upper Bear River	3,769	0.7	0.0	0.7	0.7	0.0	0.7	0.7	1	0	0	0	1	0	1	0	1	0	1	0	1	0	672.2	0.2	0.0	0.2	0.2	0.0	0.2	0.2
180201260101	AY	Upper Bear River	3,769	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260101	BS*	Upper Bear River	3,769	0.8	1.5	0.8	1.5	2.2	1.5	0.8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.2	0.0	0.0	0.2	0.0	0.0
180201260101	BY*	Upper Bear River	3,769	0.7	0.7	0.7	0.0	0.0	0.0	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260101	CS*	Upper Bear River	3,769	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0
180201260101	CY*	Upper Bear River	3,769	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260101	DS*	Upper Bear River	3,769	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260101	DY*	Upper Bear River	3,769	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260101	ES*	Upper Bear River	3,769	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260101	EY*	Upper Bear River	3,769	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260101	FY	Upper Bear River	3,769	1.5	9.9	10.0	9.9	9.0	9.9	9.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.6	0.6	0.6	0.4	0.6	0.6
180201260101	GY	Upper Bear River	3,769	6.7	6.7	6.7	6.7	6.7	6.7	6.7	1	0	1	0	1	0	1	0	1	0	1	0	1	0	672.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201260101	HY*	Upper Bear River	3,769	5.7	5.7	5.7	5.7	5.7	5.7	5.7	2	0	2	0	2	0	2	0	2	0	2	0	2	0	672.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201260101	IY	Upper Bear River	3,769	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	672.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201260101	JY	Upper Bear River	3,769	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260101	KY	Upper Bear River	3,769	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260101	LY*	Upper Bear River	3,769	8.5	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	672.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	3,769	28.8	28.8	28.8	28.8	28.8	28.8	28.8	5	0	5	0	5	0	5	0	5	0	5	0	5	0	672.2	1.8	1.8	1.8	1.8	1.8	1.8	1.8
		Total Mi./Sq.Mi.	5.89	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.8	0.0	4.8	0.0	4.8	0.0	4.8	0.0	4.8	0.0	4.8	0.0	4.8	0.0	1.1	1.7	1.7	1.7	1.7	1.7	1.7	1.7
		Total Native Surface Motorized		15.7	7.9	7.2	7.2	8.9	7.2	7.2	2	0	3	0	2	0	2	0	2	0	2	0	2	0		1.0	0.6	0.4	0.4	0.7	0.4	0.4
		Motorized Native Surface Mi./Sq.Mi.		2.7	1.3	1.2	1.2	1.5	1.2	1.2	1.9	0.0	2.9	0.0	1.9	0.0	1.9	0.0	1.9	0.0	1.9	0.0	1.9	0.0		0.9	0.6	0.4	0.4	0.7	0.4	0.4

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201260102	AS	Steephollow Creek	10,295	1.5	0.0	1.5	1.5	0.0	0.0	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2077.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260102	AY	Steephollow Creek	10,295	1.4	0.0	1.4	1.4	0.0	0.0	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2077.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260102	BS*	Steephollow Creek	10,295	6.3	7.9	6.3	24.2	27.1	27.3	6.3	0	1	0	1	0	1	0	5	0	5	0	5	0	1	2077.3	0.0	0.0	0.0	0.7	0.7	0.7	0.0
180201260102	BY*	Steephollow Creek	10,295	17.8	19.2	17.8	0.0	0.0	0.0	17.8	0	4	0	4	0	4	0	0	0	0	0	0	0	4	2077.3	0.7	0.7	0.7	0.0	0.0	0.0	0.7
180201260102	CS*	Steephollow Creek	10,295	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2077.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260102	CY*	Steephollow Creek	10,295	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2077.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260102	DS*	Steephollow Creek	10,295	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2077.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260102	DY*	Steephollow Creek	10,295	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2077.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260102	ES*	Steephollow Creek	10,295	0.0	0.0	0.0	16.9	16.9	16.9	0.0	0	0	0	0	0	0	1	2	1	2	1	2	0	0	2077.3	0.0	0.0	0.0	0.6	0.6	0.6	0.0
180201260102	EY*	Steephollow Creek	10,295	12.4	16.9	12.4	0.0	0.0	0.0	16.9	1	0	1	2	1	0	0	0	0	0	0	0	1	2	2077.3	0.2	0.6	0.2	0.0	0.0	0.0	0.6
180201260102	FY	Steephollow Creek	10,295	0.0	12.4	16.9	12.4	12.4	12.2	12.4	0	0	1	1	1	3	1	1	1	1	1	1	1	1	2077.3	0.0	0.4	0.7	0.4	0.4	0.4	0.4
180201260102	GY	Steephollow Creek	10,295	7.7	7.7	7.7	7.7	7.7	7.7	7.7	0	3	0	3	0	3	0	3	0	3	0	3	0	3	2077.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201260102	HY*	Steephollow Creek	10,295	15.1	15.1	15.1	15.1	15.1	15.1	15.1	3	6	3	6	3	6	3	6	3	6	3	6	3	6	2077.3	0.8	0.8	0.8	0.8	0.8	0.8	0.8
180201260102	IY	Steephollow Creek	10,295	5.3	5.3	5.3	5.3	5.3	5.3	5.3	0	2	0	2	0	2	0	2	0	2	0	2	0	2	2077.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
180201260102	JY	Steephollow Creek	10,295	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2077.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260102	KY	Steephollow Creek	10,295	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2077.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260102	LY*	Steephollow Creek	10,295	16.9	0.0	0.0	0.0	0.0	0.0	0.0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	2077.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	10,295	85.7	85.7	85.7	85.7	85.7	85.7	85.7	5	19	5	19	5	19	5	19	5	19	5	19	5	19	2077.3	2.9	2.9	2.9	2.9	2.9	2.9	2.9
		Total Mi./Sq.Mi.	16.09	5.3	5.3	5.3	5.3	5.3	5.3	5.3	1.5	5.9	1.5	5.9	1.5	5.9	1.5	5.9	1.5	5.9	1.5	5.9	1.5	5.9	3.2	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		Total Native Surface Motorized		68.7	59.2	51.8	56.2	59.2	59.4	56.2	5	14	4	13	4	11	4	13	4	13	4	13	4	13		2.5	2.1	1.8	2.1	2.1	2.1	2.1
		Motorized Native Surface Mi./Sq.Mi.		4.3	3.7	3.2	3.5	3.7	3.7	3.5	1.5	4.3	1.2	4.0	1.2	3.4	1.2	4.0	1.2	4.0	1.2	4.0	1.2	4.0		0.8	0.7	0.5	0.6	0.7	0.7	0.6

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201260103	AS	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	AY	Greenhorn Creek	9,246	5.7	0.0	5.7	5.7	0.0	5.7	5.7	3	2	0	0	3	2	3	2	3	2	3	2	3	2	1922.8	0.6	0.0	0.6	0.6	0.0	0.6	0.6
180201260103	BS*	Greenhorn Creek	9,246	3.3	3.3	3.3	11.4	17.1	11.4	3.3	1	0	1	0	1	0	1	2	1	2	1	2	1	0	1922.8	0.3	0.3	0.3	0.4	1.0	0.4	0.3
180201260103	BY*	Greenhorn Creek	9,246	8.2	13.9	8.2	0.0	0.0	0.0	8.2	0	2	3	4	0	2	0	0	0	0	0	0	0	2	1922.8	0.1	0.7	0.1	0.0	0.0	0.0	0.1
180201260103	CS*	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	CY*	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	DS*	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	DY*	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	ES*	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	EY*	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	FY	Greenhorn Creek	9,246	0.0	10.8	10.8	10.8	10.1	10.8	10.8	0	0	13	3	13	3	13	3	13	3	13	3	13	3	1922.8	0.0	1.1	1.1	1.1	1.1	1.1	1.1
180201260103	GY	Greenhorn Creek	9,246	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201260103	HY*	Greenhorn Creek	9,246	28.5	28.5	28.5	28.5	28.5	28.5	28.5	9	5	9	5	9	5	9	5	9	5	9	5	9	5	1922.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7
180201260103	IY	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	JY	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	KY	Greenhorn Creek	9,246	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201260103	LY*	Greenhorn Creek	9,246	10.8	0.0	0.0	0.0	0.0	0.0	0.0	13	3	0	0	0	0	0	0	0	0	0	0	0	0	1922.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	9,246	60.1	60.1	60.1	60.1	60.1	60.1	60.1	26	12	26	12	26	12	26	12	26	12	26	12	26	12	1922.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
		Total Mi./Sq.Mi.	14.45	4.2	4.2	4.2	4.2	4.2	4.2	4.2	8.7	4.0	8.7	4.0	8.7	4.0	8.7	4.0	8.7	4.0	8.7	4.0	8.7	4.0	3.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		Total Native Surface Motorized		50.8	45.7	40.0	40.0	46.4	40.0	40.0	23	10	13	9	10	7	10	7	10	7	10	7	10	7		3.1	2.7	2.1	2.1	2.7	2.1	2.1
		Motorized Native Surface Mi./Sq.Mi.		3.5	3.2	2.8	2.8	3.2	2.8	2.8	7.7	3.3	4.3	3.0	3.3	2.3	3.3	2.3	3.3	2.3	3.3	2.3	3.3	2.3		1.0	0.9	0.7	0.7	0.9	0.7	0.7

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280101	AS	Headwaters Middle Fork American River	32,260	16.6	9.5	16.6	16.6	9.5	9.5	16.6	7	8	3	8	7	8	7	8	5	8	5	8	7	8	7307.7	1.5	0.8	1.5	1.5	0.8	1.2	1.5
180201280101	AY	Headwaters Middle Fork American River	32,260	10.7	7.8	10.7	10.7	7.8	13.4	10.7	3	6	0	6	3	6	3	6	3	6	3	6	3	6	7307.7	0.7	0.3	0.7	0.7	0.3	0.7	0.7
180201280101	BS*	Headwaters Middle Fork American River	32,260	5.1	12.2	5.1	23.0	30.1	27.5	5.1	7	4	11	4	7	4	14	11	16	11	16	11	7	4	7307.7	0.7	1.4	0.7	1.8	2.5	2.0	0.7
180201280101	BY*	Headwaters Middle Fork American River	32,260	17.9	20.8	17.9	0.0	2.9	0.0	17.9	7	7	10	7	7	7	0	0	3	0	0	0	7	7	7307.7	1.1	1.5	1.1	0.0	0.4	0.0	1.1
180201280101	CS*	Headwaters Middle Fork American River	32,260	0.9	0.9	0.9	0.9	1.1	0.9	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7307.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280101	CY*	Headwaters Middle Fork American River	32,260	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7307.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280101	DS*	Headwaters Middle Fork American River	32,260	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7307.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280101	DY*	Headwaters Middle Fork American River	32,260	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7307.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280101	ES*	Headwaters Middle Fork American River	32,260	1.0	1.0	1.0	1.9	1.9	1.9	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7307.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280101	EY*	Headwaters Middle Fork American River	32,260	0.9	0.9	0.9	0.0	0.0	0.0	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7307.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280101	FY	Headwaters Middle Fork American River	32,260	1.8	52.8	52.8	52.8	52.6	52.8	52.8	0	0	14	23	14	23	14	23	14	23	14	23	14	23	7307.7	0.1	2.9	2.9	2.9	2.9	2.9	2.9
180201280101	GY	Headwaters Middle Fork American River	32,260	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7307.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280101	HY*	Headwaters Middle Fork American River	32,260	41.2	41.2	41.2	41.2	41.2	41.2	41.2	16	9	16	9	16	9	16	9	16	9	16	9	16	9	7307.7	4.1	4.1	4.1	4.1	4.1	4.1	4.1
180201280101	IY	Headwaters Middle Fork American River	32,260	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0	3	0	3	0	3	0	3	0	3	0	3	0	3	7307.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9
180201280101	JY	Headwaters Middle Fork American River	32,260	12.7	12.7	12.7	12.7	12.7	12.7	12.7	7	2	7	2	7	2	7	2	7	2	7	2	7	2	7307.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6
180201280101	KY	Headwaters Middle Fork American River	32,260	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7307.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280101	LY*	Headwaters Middle Fork American River	32,260	51.0	0.0	0.0	0.0	0.0	0.0	0.0	14	23	0	0	0	0	0	0	0	0	0	0	0	0	7307.7	2.8	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	32,260	163.4	163.4	163.4	163.4	163.4	163.4	163.4	61	62	61	62	61	62	61	62	64	62	61	62	61	62	7307.7	13.6	13.6	13.6	13.6	13.6	13.6	13.6
		Total Mi./Sq.Mi.	50.41	3.2	3.2	3.2	3.2	3.2	3.2	3.2	5.3	5.4	5.3	5.4	5.3	5.4	5.3	5.4	5.6	5.4	5.3	5.4	5.3	5.4	11.4	1.2	1.2	1.2	1.2	1.2	1.2	1.2
		Total Native Surface Motorized		118.0	77.0	67.0	67.0	77.3	71.5	67.0	44	43	37	20	30	20	30	20	35	20	32	20	30	20		8.8	7.0	6.0	6.0	7.0	6.2	6.0
		Motorized Native Surface Mi./Sq.Mi.		2.3	1.5	1.3	1.3	1.5	1.4	1.3	3.9	3.8	3.2	1.8	2.6	1.8	2.6	1.8	3.1	1.8	2.8	1.8	2.6	1.8		0.8	0.6	0.5	0.5	0.6	0.5	0.5

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280102	AS	M.Fork American River-Duncan Can.	23,269	12.9	11.3	12.9	12.9	11.3	18.3	12.9	4	1	4	1	4	1	4	1	1	10	10	1	4	1	5153.4	0.8	0.8	0.8	0.8	0.8	1.4	0.8
180201280102	AY	M.Fork American River-Duncan Can.	23,269	14.5	7.4	14.5	14.5	7.4	7.4	14.5	12	0	6	0	12	0	12	0	0	6	6	0	12	0	5153.4	1.5	0.8	1.5	1.5	0.8	0.8	1.5
180201280102	BS*	M.Fork American River-Duncan Can.	23,269	10.4	12.0	10.4	43.7	51.9	45.1	10.4	2	0	2	0	2	0	23	3	3	23	23	3	2	0	5153.4	0.2	0.3	0.2	2.7	3.3	0.1	0.2
180201280102	BY*	M.Fork American River-Duncan Can.	23,269	33.2	40.3	33.2	0.0	0.4	0.4	33.2	21	3	27	3	21	3	0	0	0	0	0	0	21	3	5153.4	2.5	3.2	2.5	0.0	0.1	0.1	2.5
180201280102	CS*	M.Fork American River-Duncan Can.	23,269	0.0	0.0	0.0	0.2	0.3	0.2	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5153.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280102	CY*	M.Fork American River-Duncan Can.	23,269	0.2	0.2	0.2	0.0	0.0	0.0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5153.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280102	DS*	M.Fork American River-Duncan Can.	23,269	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5153.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280102	DY*	M.Fork American River-Duncan Can.	23,269	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5153.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280102	ES*	M.Fork American River-Duncan Can.	23,269	0.8	0.8	0.8	11.3	11.3	11.3	0.8	0	0	0	0	0	0	4	0	4	0	4	0	0	0	5153.4	0.1	0.1	0.1	0.4	0.4	0.4	0.1
180201280102	EY*	M.Fork American River-Duncan Can.	23,269	10.5	10.5	10.5	0.0	0.0	0.0	10.5	4	0	4	0	4	0	0	0	0	0	0	0	4	0	5153.4	0.3	0.3	0.3	0.0	0.0	0.0	0.3
180201280102	FY	M.Fork American River-Duncan Can.	23,269	0.0	39.2	39.3	39.2	39.1	39.1	39.3	0	0	16	3	16	3	16	3	16	3	16	3	16	3	5153.4	0.0	2.7	2.7	2.7	2.7	2.7	2.7
180201280102	GY	M.Fork American River-Duncan Can.	23,269	5.5	5.5	5.5	5.5	5.5	5.5	5.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5153.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280102	HY*	M.Fork American River-Duncan Can.	23,269	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1	0	1	0	1	0	1	0	1	0	1	0	1	0	5153.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280102	IY	M.Fork American River-Duncan Can.	23,269	7.0	7.0	7.0	7.0	7.0	7.0	7.0	2	0	2	0	2	0	2	0	2	0	2	0	2	0	5153.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201280102	JY	M.Fork American River-Duncan Can.	23,269	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5153.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280102	KY	M.Fork American River-Duncan Can.	23,269	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5153.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280102	LY*	M.Fork American River-Duncan Can.	23,269	39.3	0.0	0.0	0.0	0.0	0.0	0.0	16	3	0	0	0	0	0	0	0	0	0	0	0	0	5153.4	2.7	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	23,269	135.7	135.7	135.7	135.7	135.7	135.7	135.7	62	7	62	7	62	7	62	7	27	42	62	7	62	7	5153.4	8.7	8.7	8.7	8.7	8.7	6.1	8.7
		Total Mi./Sq.Mi.	36.36	3.7	3.7	3.7	3.7	3.7	3.7	3.7	7.7	0.9	7.7	0.9	7.7	0.9	7.7	0.9	3.4	5.2	7.7	0.9	7.7	0.9	8.1	1.1	1.1	1.1	1.1	1.1	0.8	1.1
		Total Native Surface Motorized		95.2	64.6	55.8	55.9	64.8	57.8	55.8	44	6	34	3	28	3	28	3	8	23	28	3	28	3		5.9	3.9	3.2	3.2	3.9	0.7	3.2
		Motorized Native Surface Mi./Sq.Mi.		2.6	1.8	1.5	1.5	1.8	1.6	1.5	5.5	0.7	4.2	0.4	3.5	0.4	3.5	0.4	1.0	2.9	3.5	0.4	3.5	0.4		0.7	0.5	0.4	0.4	0.5	0.1	0.4

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280201	AS	Upper Rubicon River	2,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	AY	Upper Rubicon River	2,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	BS*	Upper Rubicon River	2,668	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2	0	2	0	2	0	2	0	2	0	2	0	2	0	807.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201280201	BY*	Upper Rubicon River	2,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	CS*	Upper Rubicon River	2,668	3.6	4.5	3.6	3.6	4.5	4.5	4.5	0	0	0	1	0	0	0	0	0	1	0	1	0	1	807.5	0.7	0.9	0.7	0.7	0.9	0.9	0.9
180201280201	CY*	Upper Rubicon River	2,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	DS*	Upper Rubicon River	2,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	DY*	Upper Rubicon River	2,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	ES*	Upper Rubicon River	2,668	1.6	1.6	1.6	1.6	1.6	1.6	1.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	EY*	Upper Rubicon River	2,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	FY	Upper Rubicon River	2,668	0.0	1.3	2.2	2.2	1.3	1.2	1.2	0	0	1	0	1	1	1	1	1	0	1	0	1	0	807.5	0.0	0.2	0.5	0.5	0.2	0.2	0.2
180201280201	GY	Upper Rubicon River	2,668	4.3	4.3	4.3	4.3	4.3	4.3	4.3	2	0	2	0	2	0	2	0	2	0	2	0	2	0	807.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0
180201280201	HY*	Upper Rubicon River	2,668	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280201	IY	Upper Rubicon River	2,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	JY	Upper Rubicon River	2,668	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0	1	0	1	0	1	0	1	0	1	0	1	0	807.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280201	KY	Upper Rubicon River	2,668	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280201	LY*	Upper Rubicon River	2,668	2.2	0.0	0.0	0.0	0.0	0.0	0.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	807.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	2,668	16.9	16.9	16.9	16.9	16.9	16.9	16.8	6	1	6	1	6	1	6	1	6	1	6	1	6	1	807.5	2.7	2.7	2.7	2.7	2.7	2.7	2.7
		Total Mi./Sq.Mi.	4.17	4.1	4.1	4.1	4.1	4.1	4.1	4.0	4.8	0.8	4.8	0.8	4.8	0.8	4.8	0.8	4.8	0.8	4.8	0.8	4.8	0.8	1.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1
		Total Native Surface Motorized		12.1	10.8	9.9	9.9	10.8	10.9	10.8	3	1	2	1	2	0	2	0	2	1	2	1	2	1		1.6	1.4	1.2	1.2	1.4	1.4	1.4
		Motorized Native Surface Mi./Sq.Mi.		2.9	2.6	2.4	2.4	2.6	2.6	2.6	2.4	0.8	1.6	0.8	1.6	0.0	1.6	0.0	1.6	0.8	1.6	0.8	1.6	0.8		1.3	1.1	0.9	0.9	1.1	1.1	1.1

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280202	AS	Middle Rubicon River	31,427	6.5	0.0	6.5	6.5	0.0	1.7	6.5	2	2	0	0	2	2	2	2	1	1	1	1	2	2	5741.5	0.2	0.0	0.2	0.2	0.0	0.1	0.2
180201280202	AY	Middle Rubicon River	31,427	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5741.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280202	BS*	Middle Rubicon River	31,427	11.5	18.1	11.5	15.7	22.2	20.7	11.5	0	1	2	3	0	1	1	1	2	2	2	2	0	1	5741.5	0.3	0.5	0.3	0.5	0.7	0.7	0.3
180201280202	BY*	Middle Rubicon River	31,427	4.1	4.1	4.1	0.0	0.0	0.0	4.1	1	0	1	0	1	0	0	0	0	0	0	0	1	0	5741.5	0.2	0.2	0.2	0.0	0.0	0.0	0.2
180201280202	CS*	Middle Rubicon River	31,427	3.5	3.5	3.5	3.5	4.4	3.9	3.5	4	1	4	1	4	1	4	1	4	1	4	1	4	1	5741.5	0.7	0.7	0.7	0.7	0.8	0.7	0.7
180201280202	CY*	Middle Rubicon River	31,427	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5741.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280202	DS*	Middle Rubicon River	31,427	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5741.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280202	DY*	Middle Rubicon River	31,427	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5741.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280202	ES*	Middle Rubicon River	31,427	1.1	1.1	1.1	1.1	1.1	1.1	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5741.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280202	EY*	Middle Rubicon River	31,427	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5741.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280202	FY	Middle Rubicon River	31,427	0.9	8.7	8.8	8.7	7.8	8.0	8.8	1	0	2	0	2	0	2	0	2	0	2	0	2	0	5741.5	0.1	0.7	0.8	0.7	0.7	0.7	0.8
180201280202	GY	Middle Rubicon River	31,427	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1	0	1	0	1	0	1	0	1	0	1	0	1	0	5741.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201280202	HY*	Middle Rubicon River	31,427	10.5	10.5	10.5	10.5	10.5	10.5	10.5	2	1	2	1	2	1	2	1	2	1	2	1	2	1	5741.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201280202	IY	Middle Rubicon River	31,427	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5741.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280202	JY	Middle Rubicon River	31,427	41.2	41.2	41.2	41.2	41.2	41.2	41.2	20	8	20	8	20	8	20	8	20	8	20	8	20	8	5741.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
180201280202	KY	Middle Rubicon River	31,427	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5741.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280202	LY*	Middle Rubicon River	31,427	7.9	0.0	0.0	0.0	0.0	0.0	0.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5741.5	0.7	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	31,427	87.8	87.8	87.8	87.8	87.8	87.8	87.8	32	13	32	13	32	13	32	13	32	13	32	13	32	13	5741.5	8.2	8.2	8.2	8.2	8.2	8.2	8.2
		Total Mi./Sq.Mi.	49.11	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6	1.4	3.6	1.4	3.6	1.4	3.6	1.4	3.6	1.4	3.6	1.4	3.6	1.4	9.0	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		Total Native Surface Motorized		38.5	37.2	30.6	30.7	38.1	36.1	30.6	8	3	9	5	7	3	7	3	8	4	8	4	7	3		2.2	1.8	1.5	1.5	1.8	1.8	1.5
		Motorized Native Surface Mi./Sq.Mi.		0.8	0.8	0.6	0.6	0.8	0.7	0.6	0.9	0.3	1.0	0.6	0.8	0.3	0.8	0.3	0.9	0.4	0.9	0.4	0.8	0.3		0.2	0.2	0.2	0.2	0.2	0.2	0.2

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280205	AS	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	AY	Long Canyon Creek	711	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1	0	1	0	1	0	1	0	1	0	1	0	1	0	146.6	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201280205	BS*	Long Canyon Creek	711	0.0	0.0	0.0	3.1	3.1	3.1	0.0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	146.6	0.0	0.0	0.0	0.5	0.5	0.5	0.0
180201280205	BY*	Long Canyon Creek	711	3.1	3.1	3.1	0.0	0.0	0.0	3.1	1	0	1	0	1	0	0	0	0	0	0	0	1	0	146.6	0.5	0.5	0.5	0.0	0.0	0.0	0.5
180201280205	CS*	Long Canyon Creek	711	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	CY*	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	DS*	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	DY*	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	ES*	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	EY*	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	FY	Long Canyon Creek	711	0.0	4.0	4.0	4.0	0.9	4.0	4.0	0	0	1	0	1	0	1	0	1	0	1	0	1	0	146.6	0.0	0.1	0.1	0.1	0.1	0.1	0.1
180201280205	GY	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	HY*	Long Canyon Creek	711	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	IY	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	JY	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	KY	Long Canyon Creek	711	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280205	LY*	Long Canyon Creek	711	4.0	0.0	0.0	0.0	0.0	0.0	0.0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	146.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	711	8.4	8.4	8.4	8.4	8.4	8.4	8.4	3	0	3	0	3	0	3	0	3	0	3	0	3	0	146.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8
		Total Mi./Sq.Mi.	1.11	7.5	7.5	7.5	7.5	7.5	7.5	7.5	13.1	0.0	13.1	0.0	13.1	0.0	13.1	0.0	13.1	0.0	13.1	0.0	13.1	0.0	0.2	3.6	3.6	3.6	3.6	3.6	3.6	3.6
		Total Native Surface Motorized		7.2	3.2	3.2	3.2	6.4	3.2	3.2	2	0	1	0	1	0	1	0	1	0	1	0	1	0		0.7	0.5	0.5	0.5	0.6	0.5	0.5
		Motorized Native Surface Mi./Sq.Mi.		6.5	2.9	2.9	2.9	5.7	2.9	2.9	8.7	0.0	4.4	0.0	4.4	0.0	4.4	0.0	4.4	0.0	4.4	0.0	4.4	0.0		2.8	2.4	2.4	2.4	2.6	2.4	2.4

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280301	AS	Upper North Fork Middle Fork American	24,353	10.5	5.7	10.5	10.5	5.7	8.2	10.5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5257.2	0.7	0.4	0.7	0.7	0.4	0.5	0.7
180201280301	AY	Upper North Fork Middle Fork American	24,353	9.4	1.2	9.4	9.4	1.2	9.4	9.4	6	1	0	0	6	1	6	1	6	1	6	1	6	1	5257.2	0.9	0.0	0.9	0.9	0.0	0.9	0.9
180201280301	BS*	Upper North Fork Middle Fork American	24,353	6.1	11.0	6.1	66.4	71.4	69.0	6.1	1	0	1	0	1	0	7	6	7	6	7	6	1	0	5257.2	0.2	0.4	0.2	1.8	2.1	2.0	0.2
180201280301	BY*	Upper North Fork Middle Fork American	24,353	60.3	68.6	60.3	0.0	8.3	0.0	60.3	6	6	12	7	6	6	0	0	0	0	0	0	6	6	5257.2	1.6	2.5	1.6	0.0	0.9	0.0	1.6
180201280301	CS*	Upper North Fork Middle Fork American	24,353	0.0	0.0	0.0	2.6	3.9	2.9	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5257.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0
180201280301	CY*	Upper North Fork Middle Fork American	24,353	2.6	2.6	2.6	0.0	0.0	0.0	2.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5257.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280301	DS*	Upper North Fork Middle Fork American	24,353	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5257.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280301	DY*	Upper North Fork Middle Fork American	24,353	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5257.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280301	ES*	Upper North Fork Middle Fork American	24,353	0.0	0.0	0.0	3.3	3.3	3.3	0.0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	5257.2	0.0	0.0	0.0	0.1	0.1	0.1	0.0
180201280301	EY*	Upper North Fork Middle Fork American	24,353	3.3	3.3	3.3	0.0	0.0	0.0	3.3	1	0	1	0	1	0	0	0	0	0	0	0	1	0	5257.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1
180201280301	FY	Upper North Fork Middle Fork American	24,353	7.1	41.4	41.7	41.6	40.3	41.1	41.7	1	3	6	8	6	8	6	8	6	8	6	8	6	8	5257.2	0.5	2.1	2.1	2.1	2.1	2.1	2.1
180201280301	GY	Upper North Fork Middle Fork American	24,353	9.9	9.9	9.9	9.9	9.9	9.9	9.9	0	2	0	2	0	2	0	2	0	2	0	2	0	2	5257.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
180201280301	HY*	Upper North Fork Middle Fork American	24,353	26.9	26.9	26.9	26.9	26.9	26.9	26.9	2	2	2	2	2	2	2	2	2	2	2	2	2	2	5257.2	0.9	0.9	0.9	0.9	0.9	0.9	0.9
180201280301	IY	Upper North Fork Middle Fork American	24,353	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5257.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280301	JY	Upper North Fork Middle Fork American	24,353	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5257.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280301	KY	Upper North Fork Middle Fork American	24,353	10.8	10.8	10.8	10.8	10.6	10.8	10.8	1	2	1	2	1	2	1	2	1	2	1	2	1	2	5257.2	0.6	0.6	0.6	0.6	0.5	0.6	0.6
180201280301	LY*	Upper North Fork Middle Fork American	24,353	34.7	0.0	0.0	0.0	0.0	0.0	0.0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	5257.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	24,353	182.5	182.5	182.5	182.5	182.5	182.5	182.5	25	23	25	23	25	23	25	23	25	23	25	23	25	23	5257.2	7.4	7.4	7.4	7.4	7.4	7.4	7.4
		Total Mi./Sq.Mi.	38.05	4.8	4.8	4.8	4.8	4.8	4.8	4.8	3.0	2.8	3.0	2.8	3.0	2.8	3.0	2.8	3.0	2.8	3.0	2.8	3.0	2.8	8.2	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		Total Native Surface Motorized		133.7	112.4	99.1	99.2	113.7	102.0	99.1	15	13	16	9	10	8	10	8	10	8	10	8	10	8		4.5	4.1	2.9	2.9	4.1	3.0	2.9
		Motorized Native Surface Mi./Sq.Mi.		3.5	3.0	2.6	2.6	3.0	2.7	2.6	1.8	1.6	1.9	1.1	1.2	1.0	1.2	1.0	1.2	1.0	1.2	1.0	1.2	1.0		0.5	0.5	0.4	0.4	0.5	0.4	0.4

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280302	AS	Lower North Fork Middle Fork American	33,804	1.8	1.8	1.8	1.8	1.8	11.5	1.8	0	0	0	0	0	0	0	0	8	1	8	1	0	0	7960.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
180201280302	AY	Lower North Fork Middle Fork American	33,804	29.0	13.1	29.0	29.0	13.1	19.2	29.0	17	5	4	3	17	5	17	5	9	4	9	4	17	5	7960.0	2.4	0.6	2.4	2.4	0.6	1.5	2.4
180201280302	BS*	Lower North Fork Middle Fork American	33,804	10.9	10.9	10.9	54.0	63.7	54.0	10.9	0	1	0	1	0	1	13	3	13	3	13	3	0	1	7960.0	0.1	0.1	0.1	2.2	3.1	2.2	0.1
180201280302	BY*	Lower North Fork Middle Fork American	33,804	43.0	59.0	43.0	0.0	6.2	0.1	43.0	13	2	26	4	13	2	0	0	0	0	0	0	13	2	7960.0	2.1	3.9	2.1	0.0	0.8	0.0	2.1
180201280302	CS*	Lower North Fork Middle Fork American	33,804	0.0	0.0	0.0	2.7	9.7	3.6	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7960.0	0.0	0.0	0.0	0.4	0.7	0.4	0.0
180201280302	CY*	Lower North Fork Middle Fork American	33,804	2.7	2.7	2.7	0.0	0.0	0.0	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7960.0	0.4	0.4	0.4	0.0	0.0	0.0	0.4
180201280302	DS*	Lower North Fork Middle Fork American	33,804	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7960.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280302	DY*	Lower North Fork Middle Fork American	33,804	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7960.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280302	ES*	Lower North Fork Middle Fork American	33,804	2.4	2.4	2.4	28.9	28.9	28.9	2.4	1	0	1	0	1	0	15	6	15	6	15	6	1	0	7960.0	0.3	0.3	0.3	2.0	2.0	2.0	0.3
180201280302	EY*	Lower North Fork Middle Fork American	33,804	26.5	26.5	26.5	0.0	0.0	0.0	26.5	14	6	14	6	14	6	0	0	0	0	0	0	14	6	7960.0	1.7	1.7	1.7	0.0	0.0	0.0	1.7
180201280302	FY	Lower North Fork Middle Fork American	33,804	0.0	64.8	64.9	64.8	57.8	63.9	64.9	0	0	10	3	10	3	10	3	10	3	10	3	10	3	7960.0	0.0	2.0	2.0	2.0	1.7	2.0	2.0
180201280302	GY	Lower North Fork Middle Fork American	33,804	20.0	20.0	20.0	20.0	20.0	20.0	20.0	6	0	6	0	6	0	6	0	6	0	6	0	6	0	7960.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
180201280302	HY*	Lower North Fork Middle Fork American	33,804	15.8	15.8	15.8	15.8	15.8	15.8	15.8	4	0	4	0	4	0	4	0	4	0	4	0	4	0	7960.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8
180201280302	IY	Lower North Fork Middle Fork American	33,804	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0	1	0	1	0	1	0	1	0	1	0	1	0	1	7960.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201280302	JY	Lower North Fork Middle Fork American	33,804	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7960.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280302	KY	Lower North Fork Middle Fork American	33,804	1.4	1.4	1.4	1.4	1.4	1.4	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7960.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280302	LY*	Lower North Fork Middle Fork American	33,804	64.8	0.0	0.0	0.0	0.0	0.0	0.0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	7960.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	33,804	220.0	220.0	220.0	220.0	220.0	220.0	220.0	65	18	65	18	65	18	65	18	65	18	65	18	65	18	7960.0	10.9	10.9	10.9	10.9	10.9	10.9	10.9
		Total Mi./Sq.Mi.	52.82	4.2	4.2	4.2	4.2	4.2	4.2	4.2	5.2	1.4	5.2	1.4	5.2	1.4	5.2	1.4	5.2	1.4	5.2	1.4	5.2	1.4	12.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9
		Total Native Surface Motorized		166.2	117.3	101.3	101.4	124.3	102.4	101.3	42.00	12	45	11	32	9	32	9	32	9	32	9	32	9		7.4	7.2	5.4	5.4	7.4	5.4	5.4
		Motorized Native Surface Mi./Sq.Mi.		3.1	2.2	1.9	1.9	2.4	1.9	1.9	3.4	1.0	3.6	0.9	2.6	0.7	2.6	0.7	2.6	0.7	2.6	0.7	2.6	0.7		0.6	0.6	0.4	0.4	0.6	0.4	0.4

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280401	AS	Middle Fork American River-Otter Creek	4,875	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	AY	Middle Fork American River-Otter Creek	4,875	7.2	7.2	7.2	7.2	7.2	7.2	7.2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	916.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
180201280401	BS*	Middle Fork American River-Otter Creek	4,875	0.1	0.1	0.1	2.3	2.3	2.3	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	BY*	Middle Fork American River-Otter Creek	4,875	2.2	2.2	2.2	0.0	0.0	0.0	2.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	CS*	Middle Fork American River-Otter Creek	4,875	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	CY*	Middle Fork American River-Otter Creek	4,875	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	DS*	Middle Fork American River-Otter Creek	4,875	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	DY*	Middle Fork American River-Otter Creek	4,875	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	ES*	Middle Fork American River-Otter Creek	4,875	0.0	0.0	0.0	1.4	1.4	1.4	0.0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	916.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0
180201280401	EY*	Middle Fork American River-Otter Creek	4,875	1.4	1.4	1.4	0.0	0.0	0.0	1.4	1	0	1	0	1	0	0	0	0	0	0	0	1	0	916.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1
180201280401	FY	Middle Fork American River-Otter Creek	4,875	2.3	11.1	11.1	11.1	11.1	11.1	11.1	0	0	5	0	5	0	5	0	5	0	5	0	5	0	916.0	0.1	0.2	0.2	0.2	0.2	0.2	0.2
180201280401	GY	Middle Fork American River-Otter Creek	4,875	6.5	6.5	6.5	6.5	6.5	6.5	6.5	1	2	1	2	1	2	1	2	1	2	1	2	1	2	916.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201280401	HY*	Middle Fork American River-Otter Creek	4,875	8.5	8.5	8.5	8.5	8.5	8.5	8.5	1	0	1	0	1	0	1	0	1	0	1	0	1	0	916.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
180201280401	IY	Middle Fork American River-Otter Creek	4,875	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	JY	Middle Fork American River-Otter Creek	4,875	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	KY	Middle Fork American River-Otter Creek	4,875	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280401	LY*	Middle Fork American River-Otter Creek	4,875	8.8	0.0	0.0	0.0	0.0	0.0	0.0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	916.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	4,875	36.9	36.9	36.9	36.9	36.9	36.9	36.9	11	5	11	5	11	5	11	5	11	5	11	5	11	5	916.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8
		Total Mi./Sq.Mi.	7.62	4.8	4.8	4.8	4.8	4.8	4.8	4.8	7.7	3.5	7.7	3.5	7.7	3.5	7.7	3.5	7.7	3.5	7.7	3.5	7.7	3.5	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3
		Total Native Surface Motorized		20.9	12.1	12.1	12.1	12.1	12.1	12.1	7	0	2	0	2	0	2	0	2	0	2	0	2	0		0.5	0.4	0.4	0.4	0.4	0.4	0.4
		Motorized Native Surface Mi./Sq.Mi.		2.7	1.6	1.6	1.6	1.6	1.6	1.6	4.9	0.0	1.4	0.0	1.4	0.0	1.4	0.0	1.4	0.0	1.4	0.0	1.4	0.0		0.4	0.3	0.3	0.3	0.3	0.3	0.3

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280501	AS	Headwaters North Fork American River	34,628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	AY	Headwaters North Fork American River	34,628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	BS*	Headwaters North Fork American River	34,628	8.5	8.8	8.5	8.6	8.8	8.8	8.5	2	1	2	1	2	1	2	1	2	1	2	1	2	1	8026.0	0.7	0.7	0.7	0.7	0.7	0.7	0.7
180201280501	BY*	Headwaters North Fork American River	34,628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	CS*	Headwaters North Fork American River	34,628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	CY*	Headwaters North Fork American River	34,628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	DS*	Headwaters North Fork American River	34,628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	DY*	Headwaters North Fork American River	34,628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	ES*	Headwaters North Fork American River	34,628	3.3	3.3	3.3	3.3	3.3	3.3	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	EY*	Headwaters North Fork American River	34,628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	FY	Headwaters North Fork American River	34,628	3.5	10.5	10.7	10.7	10.5	10.5	10.7	2	1	7	1	7	1	7	1	7	1	7	1	7	1	8026.0	0.7	1.8	1.9	1.9	1.8	1.8	1.9
180201280501	GY	Headwaters North Fork American River	34,628	21.1	21.1	21.1	21.1	21.1	21.1	21.1	12	4	12	4	12	4	12	4	12	4	12	4	12	4	8026.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
180201280501	HY*	Headwaters North Fork American River	34,628	55.9	55.9	55.9	55.9	55.9	55.9	55.9	12	3	12	3	12	3	12	3	12	3	12	3	12	3	8026.0	5.6	5.6	5.6	5.6	5.6	5.6	5.6
180201280501	IY	Headwaters North Fork American River	34,628	10.9	10.9	10.9	10.9	10.9	10.9	10.9	4	0	4	0	4	0	4	0	4	0	4	0	4	0	8026.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4
180201280501	JY	Headwaters North Fork American River	34,628	10.4	10.4	10.4	10.4	10.4	10.4	10.4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	8026.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
180201280501	KY	Headwaters North Fork American River	34,628	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280501	LY*	Headwaters North Fork American River	34,628	7.3	0.0	0.0	0.0	0.0	0.0	0.0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	8026.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	34,628	121.0	121.0	121.0	121.0	121.0	121.0	121.0	42	14	42	14	42	14	42	14	42	14	42	14	42	14	8026.0	14.5	14.5	14.5	14.5	14.5	14.5	14.5
		Total Mi./Sq.Mi.	54.11	2.2	2.2	2.2	2.2	2.2	2.2	2.2	3.3	1.1	3.3	1.1	3.3	1.1	3.3	1.1	3.3	1.1	3.3	1.1	3.3	1.1	12.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2
		Total Native Surface Motorized		75.1	68.1	67.9	67.9	68.1	68.1	67.9	19	4	14	4	14	4	14	4	14	4	14	4	14	4		7.4	6.4	6.3	6.3	6.4	6.4	6.3
		Motorized Native Surface Mi./Sq.Mi.		1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.5	0.3	1.1	0.3	1.1	0.3	1.1	0.3	1.1	0.3	1.1	0.3	1.1	0.3		0.6	0.5	0.5	0.5	0.5	0.5	0.5

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280502	AS	N. Fork American River-Granite Creek	32,607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	AY	N. Fork American River-Granite Creek	32,607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	BS*	N. Fork American River-Granite Creek	32,607	0.2	0.2	0.2	19.3	19.3	19.4	0.2	0	0	0	0	0	0	0	4	0	4	0	4	0	0	6902.8	0.0	0.0	0.0	0.9	0.9	0.9	0.0
180201280502	BY*	N. Fork American River-Granite Creek	32,607	19.0	19.1	19.0	0.0	0.0	0.0	19.0	0	4	0	4	0	4	0	0	0	0	0	0	0	4	6902.8	0.9	0.9	0.9	0.0	0.0	0.0	0.9
180201280502	CS*	N. Fork American River-Granite Creek	32,607	0.0	0.0	0.0	0.0	1.6	0.8	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	CY*	N. Fork American River-Granite Creek	32,607	0.0	0.7	0.0	0.0	0.0	0.0	0.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	DS*	N. Fork American River-Granite Creek	32,607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	DY*	N. Fork American River-Granite Creek	32,607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	ES*	N. Fork American River-Granite Creek	32,607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	EY*	N. Fork American River-Granite Creek	32,607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	FY	N. Fork American River-Granite Creek	32,607	0.1	10.4	11.2	11.1	9.5	10.3	10.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.3	0.3	0.3	0.3	0.3	0.3
180201280502	GY	N. Fork American River-Granite Creek	32,607	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	HY*	N. Fork American River-Granite Creek	32,607	14.7	14.7	14.7	14.7	14.7	14.7	14.7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6902.8	2.1	2.1	2.1	2.1	2.1	2.1	2.1
180201280502	IY	N. Fork American River-Granite Creek	32,607	17.2	17.2	17.2	17.2	17.2	17.2	17.2	6	2	6	2	6	2	6	2	6	2	6	2	6	2	6902.8	4.1	4.1	4.1	4.1	4.1	4.1	4.1
180201280502	JY	N. Fork American River-Granite Creek	32,607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	KY	N. Fork American River-Granite Creek	32,607	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280502	LY*	N. Fork American River-Granite Creek	32,607	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6902.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	32,607	64.7	64.7	64.7	64.7	64.7	64.7	64.7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6902.8	7.3	7.3	7.3	7.3	7.3	7.3	7.3
		Total Mi./Sq.Mi.	50.95	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	10.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
		Total Native Surface Motorized		45.0	34.7	34.0	34.0	35.6	34.9	34.7	1	5	1	5	1	5	1	5	1	5	1	5	1	5		3.3	3.0	3.0	3.0	3.0	3.0	3.0
		Motorized Native Surface Mi./Sq.Mi.		0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.1	0.5	0.1	0.5	0.1	0.5	0.1	0.5	0.1	0.5	0.1	0.5	0.1	0.5		0.3	0.3	0.3	0.3	0.3	0.3	0.3

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280503	AS	N.Fork American River-Humbug Canyon	23,313	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280503	AY	N.Fork American River-Humbug Canyon	23,313	0.3	0.0	0.3	0.3	0.0	0.0	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280503	BS*	N.Fork American River-Humbug Canyon	23,313	6.6	5.8	6.6	19.0	19.3	19.3	6.6	2	0	2	0	2	0	2	0	2	0	2	0	2	0	4302.8	0.3	0.3	0.3	0.4	0.4	0.4	0.3
180201280503	BY*	N.Fork American River-Humbug Canyon	23,313	12.3	13.5	12.3	0.0	0.0	0.0	12.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.1	0.1	0.1	0.0	0.0	0.0	0.1
180201280503	CS*	N.Fork American River-Humbug Canyon	23,313	0.0	0.0	0.0	0.8	1.1	1.4	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280503	CY*	N.Fork American River-Humbug Canyon	23,313	0.0	1.1	0.0	0.0	0.0	0.0	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280503	DS*	N.Fork American River-Humbug Canyon	23,313	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280503	DY*	N.Fork American River-Humbug Canyon	23,313	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280503	ES*	N.Fork American River-Humbug Canyon	23,313	0.0	0.0	0.0	11.4	11.4	11.0	0.0	0	0	0	0	0	0	3	1	3	1	3	1	0	0	4302.8	0.0	0.0	0.0	0.5	0.5	0.5	0.0
180201280503	EY*	N.Fork American River-Humbug Canyon	23,313	11.0	11.4	11.0	0.0	0.0	0.0	11.4	3	1	3	1	3	1	0	0	0	0	0	0	3	1	4302.8	0.5	0.5	0.5	0.0	0.0	0.0	0.5
180201280503	FY	N.Fork American River-Humbug Canyon	23,313	6.2	20.1	21.6	20.3	20.1	20.2	20.1	1	1	1	3	1	3	1	3	1	3	1	3	1	3	4302.8	0.2	1.0	1.0	1.0	1.0	1.0	1.0
180201280503	GY	N.Fork American River-Humbug Canyon	23,313	3.2	3.2	3.2	3.2	3.2	3.2	3.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280503	HY*	N.Fork American River-Humbug Canyon	23,313	6.9	6.9	6.9	6.9	6.9	6.9	6.9	1	0	1	0	1	0	1	0	1	0	1	0	1	0	4302.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280503	IY	N.Fork American River-Humbug Canyon	23,313	16.4	16.4	16.4	16.4	16.4	16.4	16.4	7	3	7	3	7	3	7	3	7	3	7	3	7	3	4302.8	2.6	2.6	2.6	2.6	2.6	2.6	2.6
180201280503	JY	N.Fork American River-Humbug Canyon	23,313	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280503	KY	N.Fork American River-Humbug Canyon	23,313	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280503	LY*	N.Fork American River-Humbug Canyon	23,313	15.4	0.0	0.0	0.0	0.0	0.0	0.0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4302.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	23,313	78.4	78.4	78.4	78.4	78.4	78.4	78.4	14	7	14	7	14	7	14	7	14	7	14	7	14	7	4302.8	4.6	4.6	4.6	4.6	4.6	4.6	4.6
		Total Mi./Sq.Mi.	36.43	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	1.0	2.1	1.0	2.1	1.0	2.1	1.0	2.1	1.0	2.1	1.0	2.1	1.0	6.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
		Total Native Surface Motorized		52.3	38.7	36.9	38.2	38.7	38.6	38.4	6	3	6	1	6	1	6	1	6	1	6	1	6	1		1.8	1.0	1.0	1.0	1.0	1.0	1.0
		Motorized Native Surface Mi./Sq.Mi.		1.4	1.1	1.0	1.0	1.1	1.1	1.1	0.9	0.4	0.9	0.1	0.9	0.1	0.9	0.1	0.9	0.1	0.9	0.1	0.9	0.1		0.3	0.1	0.1	0.1	0.1	0.1	0.1

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280504	AS	N. Fork of North Fork American River	30,273	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6894.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280504	AY	N. Fork of North Fork American River	30,273	25.6	8.3	25.6	25.6	8.3	12.4	25.6	9	7	4	3	9	7	9	7	5	4	5	4	9	7	6894.7	2.9	1.0	2.9	2.9	1.0	2.0	2.9
180201280504	BS*	N. Fork of North Fork American River	30,273	0.4	0.4	0.4	45.5	52.3	58.6	0.4	0	0	0	0	0	0	6	7	10	10	10	10	0	0	6894.7	0.0	0.0	0.0	2.8	3.1	3.7	0.0
180201280504	BY*	N. Fork of North Fork American River	30,273	45.1	62.4	45.1	0.0	10.5	0.0	45.1	6	7	11	11	6	7	0	0	4	4	0	0	6	7	6894.7	2.8	4.7	2.8	0.0	1.6	0.0	2.8
180201280504	CS*	N. Fork of North Fork American River	30,273	0.0	0.0	0.0	0.0	3.1	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6894.7	0.0	0.0	0.0	0.0	0.3	0.0	0.0
180201280504	CY*	N. Fork of North Fork American River	30,273	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6894.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280504	DS*	N. Fork of North Fork American River	30,273	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6894.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280504	DY*	N. Fork of North Fork American River	30,273	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6894.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280504	ES*	N. Fork of North Fork American River	30,273	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6894.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280504	EY*	N. Fork of North Fork American River	30,273	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6894.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280504	FY	N. Fork of North Fork American River	30,273	7.1	39.4	39.4	39.4	36.3	39.4	39.4	1	3	11	7	11	7	11	7	11	7	11	7	11	7	6894.7	0.6	3.1	3.1	3.1	2.7	3.1	3.1
180201280504	GY	N. Fork of North Fork American River	30,273	17.8	17.8	17.8	17.8	17.8	17.8	17.8	2	0	2	0	2	0	2	0	2	0	2	0	2	0	6894.7	1.0	1.0	1.0	1.0	1.0	1.0	1.0
180201280504	HY*	N. Fork of North Fork American River	30,273	52.5	52.5	52.5	52.5	52.5	52.5	52.5	22	7	22	7	22	7	22	7	22	7	22	7	22	7	6894.7	5.3	5.3	5.3	5.3	5.3	5.3	5.3
180201280504	IY	N. Fork of North Fork American River	30,273	4.3	4.3	4.3	4.3	4.3	4.3	4.3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	6894.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
180201280504	JY	N. Fork of North Fork American River	30,273	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6894.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280504	KY	N. Fork of North Fork American River	30,273	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0	1	0	1	0	1	0	1	0	1	0	1	0	1	6894.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280504	LY*	N. Fork of North Fork American River	30,273	32.3	0.0	0.0	0.0	0.0	0.0	0.0	10	4	0	0	0	0	0	0	0	0	0	0	0	0	6894.7	2.4	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	30,273	190.1	190.1	190.1	190.1	190.1	190.1	190.1	52	31	52	31	52	31	52	31	56	35	52	31	52	31	6894.7	15.8	15.8	15.8	15.8	15.8	15.8	15.8
		Total Mi./Sq.Mi.	47.30	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.8	2.9	4.8	2.9	4.8	2.9	4.8	2.9	5.2	3.2	4.8	2.9	4.8	2.9	10.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		Total Native Surface Motorized		130.2	115.2	97.9	97.9	118.2	111.1	97.9	38	18	33	18	28	14	28	14	36	21	32	17	28	14		10.5	10.0	8.0	8.0	10.3	9.0	8.0
		Motorized Native Surface Mi./Sq.Mi.		2.8	2.4	2.1	2.1	2.5	2.3	2.1	3.5	1.7	3.1	1.7	2.6	1.3	2.6	1.3	3.3	1.9	3.0	1.6	2.6	1.3		1.0	0.9	0.7	0.7	1.0	0.8	0.7

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280505	AS	North Fork American River-Indian Creek	4,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	AY	North Fork American River-Indian Creek	4,403	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	BS*	North Fork American River-Indian Creek	4,403	3.4	0.6	3.4	4.0	4.0	4.0	3.4	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1045.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280505	BY*	North Fork American River-Indian Creek	4,403	0.6	3.4	0.6	0.0	0.0	0.0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	CS*	North Fork American River-Indian Creek	4,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	CY*	North Fork American River-Indian Creek	4,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	DS*	North Fork American River-Indian Creek	4,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	DY*	North Fork American River-Indian Creek	4,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	ES*	North Fork American River-Indian Creek	4,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	EY*	North Fork American River-Indian Creek	4,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	FY	North Fork American River-Indian Creek	4,403	0.0	9.6	9.6	9.6	9.6	9.6	9.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.6	0.6	0.6	0.6	0.6	0.6
180201280505	GY	North Fork American River-Indian Creek	4,403	2.2	2.2	2.2	2.2	2.2	2.2	2.2	0	1	0	1	0	1	0	1	0	1	0	1	0	1	1045.8	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280505	HY*	North Fork American River-Indian Creek	4,403	3.2	3.2	3.2	3.2	3.2	3.2	3.2	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1045.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201280505	IY	North Fork American River-Indian Creek	4,403	3.6	3.6	3.6	3.6	3.6	3.6	3.6	2	0	2	0	2	0	2	0	2	0	2	0	2	0	1045.8	0.2	0.2	0.2	0.2	0.2	0.2	0.2
180201280505	JY	North Fork American River-Indian Creek	4,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	KY	North Fork American River-Indian Creek	4,403	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280505	LY*	North Fork American River-Indian Creek	4,403	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1045.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	4,403	22.7	22.7	22.7	22.7	22.7	22.7	22.7	3	2	3	2	3	2	3	2	3	2	3	2	3	2	1045.8	1.2	1.2	1.2	1.2	1.2	1.2	1.2
		Total Mi./Sq.Mi.	6.88	3.3	3.3	3.3	3.3	3.3	3.3	3.3	1.8	1.2	1.8	1.2	1.8	1.2	1.8	1.2	1.8	1.2	1.8	1.2	1.8	1.2	1.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
		Total Native Surface Motorized		16.8	7.2	7.2	7.2	7.2	7.2	7.2	1	1	1	1	1	1	1	1	1	1	1	1	1	1		0.9	0.3	0.3	0.3	0.3	0.3	0.3
		Motorized Native Surface Mi./Sq.Mi.		2.4	1.0	1.0	1.0	1.0	1.0	1.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		0.6	0.2	0.2	0.2	0.2	0.2	0.2

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
180201280601	AS	Shirttail Canyon	15,646	4.5	4.5	4.5	4.5	4.5	4.5	4.5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3555.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
180201280601	AY	Shirttail Canyon	15,646	12.0	10.2	12.0	12.0	10.2	10.2	12.0	2	3	2	3	2	3	2	3	2	3	2	3	2	3	3555.7	1.2	1.2	1.2	1.2	1.2	1.2	1.2
180201280601	BS*	Shirttail Canyon	15,646	11.6	4.7	11.6	23.4	23.4	25.0	11.6	1	2	1	0	1	2	2	5	2	5	2	5	1	2	3555.7	1.0	0.4	1.0	1.8	1.8	1.9	1.0
180201280601	BY*	Shirttail Canyon	15,646	11.7	20.4	11.7	0.0	1.8	0.1	11.7	1	3	1	5	1	3	0	0	0	0	0	0	1	3	3555.7	0.8	1.5	0.8	0.0	0.0	0.0	0.8
180201280601	CS*	Shirttail Canyon	15,646	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3555.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280601	CY*	Shirttail Canyon	15,646	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3555.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280601	DS*	Shirttail Canyon	15,646	2.2	2.2	2.2	24.8	25.3	25.3	2.2	1	1	1	1	1	1	8	5	8	5	8	5	1	1	3555.7	0.1	0.1	0.1	1.3	1.4	1.4	0.1
180201280601	DY*	Shirttail Canyon	15,646	19.6	23.1	19.6	0.0	0.0	0.0	23.1	7	3	7	4	7	3	0	0	0	0	0	0	7	4	3555.7	1.2	1.3	1.2	0.0	0.0	0.0	1.3
180201280601	ES*	Shirttail Canyon	15,646	0.4	0.4	0.4	19.5	19.5	19.2	0.4	0	0	0	0	0	0	7	2	7	2	7	2	0	0	3555.7	0.1	0.1	0.1	1.7	1.7	1.7	0.1
180201280601	EY*	Shirttail Canyon	15,646	18.8	19.1	18.8	0.0	0.0	0.0	19.1	7	2	7	2	7	2	0	0	0	0	0	0	7	2	3555.7	1.5	1.5	1.5	0.0	0.0	0.0	1.5
180201280601	FY	Shirttail Canyon	15,646	11.8	43.6	47.4	44.1	43.6	43.9	43.6	6	4	16	13	16	14	16	13	16	13	16	13	16	13	3555.7	1.9	4.7	4.8	4.7	4.7	4.7	4.7
180201280601	GY	Shirttail Canyon	15,646	13.3	13.3	13.3	13.3	13.3	13.3	13.3	7	2	7	2	7	2	7	2	7	2	7	2	7	2	3555.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
180201280601	HY*	Shirttail Canyon	15,646	17.9	17.9	17.9	17.9	17.9	17.9	17.9	6	8	6	8	6	8	6	8	6	8	6	8	6	8	3555.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9
180201280601	IY	Shirttail Canyon	15,646	4.7	4.7	4.7	4.7	4.7	4.7	4.7	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3555.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
180201280601	JY	Shirttail Canyon	15,646	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3555.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180201280601	KY	Shirttail Canyon	15,646	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1	0	1	0	1	0	1	0	1	0	1	0	1	0	3555.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1
180201280601	LY*	Shirttail Canyon	15,646	35.6	0.0	0.0	0.0	0.0	0.0	0.0	10	10	0	0	0	0	0	0	0	0	0	0	0	0	3555.7	2.9	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	15,646	166.9	165.5	165.5	165.5	165.5	165.5	165.5	55	42	55	42	55	42	55	42	55	42	55	42	55	42	3555.7	16.3	15.9	15.9	15.9	15.9	15.9	15.9
		Total Mi./Sq.Mi.	24.45	6.8	6.8	6.8	6.8	6.8	6.8	6.8	9.8	7.5	9.8	7.5	9.8	7.5	9.8	7.5	9.8	7.5	9.8	7.5	9.8	7.5	5.6	2.9	2.9	2.9	2.9	2.9	2.9	2.9
		Total Native Surface Motorized		117.9	87.9	82.3	85.6	87.9	87.5	86.1	33	29	23	20	23	19	23	20	23	20	23	20	23	20		9.5	6.8	6.6	6.7	6.8	6.8	6.7
		Motorized Native Surface Mi./Sq.Mi.		4.8	3.6	3.4	3.5	3.6	3.6	3.5	5.9	5.2	4.1	3.6	4.1	3.4	4.1	3.6	4.1	3.6	4.1	3.6	4.1	3.6		1.7	1.2	1.2	1.2	1.2	1.2	1.2

HUC6 Watershed Number	Code	HUC6 Watershed Name	Total Acres	Total Miles in Watershed							Perennial (P) and Intermittent (I) Stream Crossings														Riparian Conservation Areas							
				Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 1 (P)	Alt 1 (I)	Alt 2 (P)	Alt 2 (I)	Alt 3 (P)	Alt 3 (I)	Alt 4 (P)	Alt 4 (I)	Alt 5 (P)	Alt 5 (I)	Alt 6 (P)	Alt 6 (I)	Alt 7 (P)	Alt 7 (I)	Acres	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles	Alt 7 Miles
999999999999	AS	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	AY	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	BS*	Miscellanous	0	2.8	2.8	2.8	2.8	2.8	2.8	2.9	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	BY*	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	CS*	Miscellanous	0	0.0	0.4	0.0	0.4	0.4	0.4	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	CY*	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	DS*	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	DY*	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	ES*	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	EY*	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	FY	Miscellanous	0	0.1	3.8	4.2	3.8	3.8	3.8	5.6	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	GY	Miscellanous	0	3.5	3.5	3.5	3.5	3.5	3.5	3.8	1	2	1	2	1	2	1	2	1	2	1	2	1	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	HY*	Miscellanous	0	43.1	43.1	43.1	43.1	43.1	43.1	44.3	0	2	0	2	0	2	0	2	0	2	0	2	0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	IY	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	JY	Miscellanous	0	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	KY	Miscellanous	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
999999999999	LY*	Miscellanous	0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Total All Routes	0	53.9	53.9	53.9	53.9	53.9	53.9	58.2	2	7	2	7	2	7	2	7	2	7	2	7	2	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Total Native Surface Motorized		6.3	6.7	6.3	6.7	6.7	6.7	7.7	1	4	1	4	1	4	1	4	1	4	1	4	1	4		0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table F-3. HUC6 Equivalent Roaded Acres by Alternative (% ERAs)

HUC6	H6 Name	Alt 1 ERAs	Alt 2 ERAs	Alt 3 ERAs	Alt 4 ERAs	Alt 5 ERAs	Alt 6 ERAs	Alt 7 ERAs
160501020101	Upper Middle Truckee	1.953%	1.746%	1.744%	1.746%	1.746%	1.748%	1.745%
160501020102	Donner Lake	1.918%	1.864%	1.864%	1.864%	1.864%	1.864%	1.864%
160501020103	Middle Truckee River-Prosser Creek	2.107%	1.883%	1.881%	1.883%	1.886%	1.892%	1.883%
160501020104	Martis Creek	2.144%	2.108%	2.106%	2.108%	2.108%	2.108%	2.107%
160501020201	Little Truckee River-Webber Lake	0.901%	0.783%	0.776%	0.777%	0.783%	0.790%	0.778%
160501020202	Little Truckee River-Independence Lake	1.045%	0.906%	0.895%	0.895%	0.906%	0.913%	0.897%
160501020203	Sagehen Creek	1.210%	0.935%	0.934%	0.934%	0.935%	0.936%	0.934%
160501020204	Little Truckee River-Stampede Reservoir	1.122%	0.911%	0.886%	0.901%	0.920%	0.914%	0.897%
160501020205	Little Truckee River-Boca Reservoir	1.820%	1.411%	1.393%	1.404%	1.453%	1.412%	1.402%
180201230201	Smithneck Creek	0.912%	0.676%	0.675%	0.676%	0.676%	0.681%	0.667%
180201230202	Sierra Valley-Antelope Creek	0.780%	0.586%	0.586%	0.586%	0.586%	0.589%	0.586%
180201230203	Sierra Valley-Cold Stream	1.531%	1.117%	1.117%	1.117%	1.121%	1.125%	1.117%
180201230204	Sierra Valley-Berry Creek	1.542%	1.165%	1.159%	1.159%	1.179%	1.162%	1.159%
180201230205	Sierra Valley-Carman Creek	0.621%	0.374%	0.374%	0.374%	0.374%	0.374%	0.374%
180201230206	Sierra Valley	0.421%	0.322%	0.322%	0.322%	0.322%	0.322%	0.320%
180201250101	Haypress Creek	1.295%	1.127%	1.124%	1.124%	1.136%	1.128%	1.127%
180201250102	Headwaters North Yuba River	1.116%	0.908%	0.905%	0.907%	0.918%	0.907%	0.905%
180201250103	North Yuba River-Jim Crow Creek	1.025%	0.847%	0.830%	0.830%	0.853%	0.847%	0.847%
180201250104	Downie River	0.621%	0.527%	0.510%	0.511%	0.533%	0.519%	0.516%
180201250105	North Yuba River-Goodyears Bar	1.302%	0.907%	0.902%	0.904%	1.080%	0.915%	0.902%
180201250201	Canyon Creek	1.076%	0.696%	0.686%	0.692%	0.822%	0.693%	0.690%
180201250203	Bullards Bar Reservoir	1.321%	1.053%	1.051%	1.053%	1.059%	1.053%	1.051%
180201250301	Middle Yuba River-Jackson Meadows Res.	1.120%	1.053%	1.053%	1.053%	1.053%	1.058%	1.053%
180201250302	Middle Yuba River-East Fork Creek	1.195%	1.102%	1.102%	1.102%	1.102%	1.107%	1.102%
180201250303	Middle Yuba River-Wolf Creek	1.460%	1.240%	1.237%	1.237%	1.247%	1.240%	1.240%
180201250304	Oregon Creek	1.642%	1.405%	1.400%	1.405%	1.406%	1.405%	1.400%
180201250305	Lower Middle Yuba River	1.521%	1.258%	1.257%	1.258%	1.269%	1.258%	1.257%
180201250401	Headwaters South Yuba River	1.517%	1.378%	1.362%	1.365%	1.378%	1.378%	1.375%
180201250402	Fordyce Creek	0.640%	0.597%	0.587%	0.589%	0.597%	0.596%	0.594%

HUC6	H6 Name	Alt 1 ERAs	Alt 2 ERAs	Alt 3 ERAs	Alt 4 ERAs	Alt 5 ERAs	Alt 6 ERAs	Alt 7 ERAs
180201250403	South Yuba River-Lake Spaulding	1.254%	1.131%	1.113%	1.117%	1.134%	1.134%	1.113%
180201250404	Canyon Creek	0.813%	0.604%	0.600%	0.602%	0.604%	0.605%	0.601%
180201250405	South Yuba River-Poorman Creek	1.602%	1.327%	1.322%	1.325%	1.327%	1.325%	1.325%
180201250406	South Yuba River-Humbug Creek	1.520%	1.240%	1.240%	1.240%	1.269%	1.242%	1.240%
180201250407	South Yuba River-Rock Creek	1.943%	0.969%	0.969%	0.969%	0.974%	0.972%	0.969%
180201250601	Upper Deer Creek	1.864%	1.452%	1.431%	1.433%	1.490%	1.456%	1.432%
180201250602	Middle Deer Creek	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
180201260101	Upper Bear River	1.500%	1.102%	1.102%	1.102%	1.147%	1.102%	1.102%
180201260102	Steephollow Creek	1.478%	1.255%	1.239%	1.255%	1.255%	1.260%	1.255%
180201260103	Greenhorn Creek	1.461%	1.290%	1.290%	1.290%	1.306%	1.290%	1.290%
180201280101	Headwaters Middle Fork American River	0.953%	0.713%	0.713%	0.713%	0.714%	0.713%	0.713%
180201280102	Middle Fork American River-Duncan Canyon	1.080%	0.836%	0.835%	0.836%	0.837%	0.837%	0.835%
180201280201	Upper Rubicon River	1.213%	1.156%	1.093%	1.093%	1.156%	1.159%	1.154%
180201280202	Middle Rubicon River	0.367%	0.326%	0.326%	0.326%	0.332%	0.331%	0.326%
180201280205	Long Canyon Creek	2.298%	1.474%	1.474%	1.474%	2.284%	1.474%	1.474%
180201280301	Upper North Fork Middle Fork American	1.510%	1.254%	1.251%	1.252%	1.263%	1.256%	1.251%
180201280302	Lower North Fork Middle Fork American	1.191%	0.912%	0.912%	0.912%	0.950%	0.918%	0.912%
180201280401	Middle Fork American River-Otter Creek	1.571%	1.222%	1.222%	1.222%	1.222%	1.222%	1.222%
180201280501	Headwaters North Fork American River	0.674%	0.627%	0.625%	0.626%	0.627%	0.627%	0.625%
180201280502	North Fork American River-Granite Creeks	0.339%	0.294%	0.289%	0.290%	0.299%	0.295%	0.293%
180201280503	North Fork American River-Humbug Canyon	0.492%	0.358%	0.348%	0.356%	0.358%	0.359%	0.357%
180201280504	North Fork of North Fork American River	1.335%	1.137%	1.137%	1.137%	1.156%	1.137%	1.137%
180201280505	North Fork American River-Indian Creek	0.869%	0.552%	0.552%	0.552%	0.552%	0.552%	0.552%
180201280601	Shirttail Canyon	1.691%	1.235%	1.224%	1.234%	1.235%	1.234%	1.235%

Table F-4.This table shows how HUC6 Watersheds were consolidated into River Basins/Subbasins and ERAs by alternative
HUC6 Watersheds Aggregated to River Basins/Subbasins

HUC6	Watershed Name	Watershed Acres	Alt 1 ERAs	Alt 2 ERAs	Alt 3 ERAs	Alt 4 ERAs	Alt 5 ERAs	Alt 6 ERAs	Alt 7 ERAs
160501020101	Upper Middle Truckee	31362.32	612.58	547.47	546.89	547.47	547.47	548.23	547.27
160501020102	Donner Lake	18800.66	360.56	350.40	350.39	350.39	350.40	350.40	350.40
160501020103	Middle Truckee River-Prosser Creek	40812.82	860.04	768.49	767.59	768.36	769.89	772.08	768.45
160501020104	Martis Creek	27261.71	584.41	574.59	574.09	574.59	574.59	574.59	574.41
	Middle Truckee River	118237.51	2417.60	2240.95	2238.96	2240.82	2242.35	2245.30	2240.52
			2.04%	1.90%	1.89%	1.90%	1.90%	1.90%	1.89%
160501020201	Little Truckee River-Webber Lake	22043.08	198.52	172.52	171.00	171.35	172.52	174.10	171.51
160501020202	Little Truckee River-Independence Lake	21807.22	227.99	197.52	195.11	195.11	197.52	199.08	195.51
160501020203	Sagehen Creek	10374.33	125.52	96.99	96.85	96.85	96.99	97.15	96.85
160501020204	Little Truckee River-Stampede Reservoir	31891.94	357.87	290.45	282.56	287.47	293.36	291.48	285.95
160501020205	Little Truckee River-Boca Reservoir	23039.19	419.22	325.11	320.82	323.44	334.73	325.28	322.96
	Little Truckee	109155.75	1329.12	1082.59	1066.34	1074.22	1095.11	1087.09	1072.78
			1.22%	0.99%	0.98%	0.98%	1.00%	1.00%	0.98%
180201230201	Smithneck Creek	36685.00	334.39	247.90	247.56	247.90	247.90	249.71	244.66
180201230202	Sierra Valley-Antelope Creek	20035.73	156.29	117.43	117.43	117.43	117.43	118.01	117.43
180201230203	Sierra Valley-Cold Stream	23858.27	365.33	266.50	266.50	266.50	267.43	268.43	266.50
180201230204	Sierra Valley-Berry Creek	15555.52	239.87	181.28	180.37	180.37	183.45	180.69	180.37
180201230205	Sierra Valley-Carman Creek	11539.44	71.62	43.20	43.20	43.20	43.20	43.20	43.19
180201230206	Sierra Valley	7523.19	31.66	24.19	24.19	24.19	24.19	24.19	24.05
180201250101	Haypress Creek	20637.79	267.33	232.63	231.88	231.88	234.41	232.85	232.63
180201250102	Headwaters North Yuba River	35403.09	395.09	321.44	320.28	321.06	325.04	321.10	320.26
180201230202	Sierra Valley-Antelope Creek	20035.73	156.29	117.43	117.43	117.43	117.43	118.01	117.43
180201230203	Sierra Valley-Cold Stream	23858.27	365.33	266.50	266.50	266.50	267.43	268.43	266.50
180201230204	Sierra Valley-Berry Creek	15555.52	239.87	181.28	180.37	180.37	183.45	180.69	180.37
180201230205	Sierra Valley-Carman Creek	11539.44	71.62	43.20	43.20	43.20	43.20	43.20	43.19
180201230206	Sierra Valley	7523.19	31.66	24.19	24.19	24.19	24.19	24.19	24.05
	Feather River	249750.17	2726.37	2067.16	2063.08	2064.20	2078.75	2072.69	2060.62
			1.09%	0.83%	0.83%	0.83%	0.83%	0.83%	0.83%

HUC6	Watershed Name	Watershed Acres	Alt 1 ERAs	Alt 2 ERAs	Alt 3 ERAs	Alt 4 ERAs	Alt 5 ERAs	Alt 6 ERAs	Alt 7 ERAs
180201250101	Haypress Creek	20637.79	267.33	232.63	231.88	231.88	234.41	232.85	232.63
180201250102	Headwaters North Yuba River	35403.09	395.09	321.44	320.28	321.06	325.04	321.10	320.26
180201250103	North Yuba River-Jim Crow Creek	34429.87	352.75	291.76	285.83	285.87	293.52	291.76	291.72
180201250104	Downie River	46404.70	288.23	244.75	236.79	236.95	247.39	240.83	239.63
180201250105	North Yuba River-Goodyears Bar	46488.22	605.05	421.66	419.35	420.14	502.25	425.37	419.35
180201250201	Canyon Creek	22368.76	240.73	155.77	153.39	154.76	183.81	155.01	154.40
180201250203	Bullards Bar Reservoir	24262.97	320.59	255.51	255.00	255.38	256.86	255.51	255.00
	North Yuba River	229995.40	2469.76	1923.52	1902.53	1906.05	2043.28	1922.42	1912.98
			1.07%	0.84%	0.83%	0.83%	0.89%	0.84%	0.83%
180201250301	Middle Yuba River-Jackson Meadows Res.	23866.17	267.19	251.24	251.24	251.24	251.24	252.54	251.24
180201250302	Middle Yuba River-East Fork Creek	24673.69	294.76	271.99	271.90	271.90	271.99	273.21	271.90
180201250303	Middle Yuba River-Wolf Creek	24657.85	360.01	305.77	304.94	304.94	307.51	305.77	305.74
180201250304	Oregon Creek	22477.28	369.06	315.77	314.77	315.77	316.10	315.77	314.77
180201250305	Lower Middle Yuba River	30695.21	466.89	386.02	385.75	386.02	389.53	386.02	385.75
	Middle Yuba River	126370.20	1757.91	1530.79	1528.59	1529.87	1536.37	1533.31	1529.39
			1.39%	1.21%	1.21%	1.21%	1.22%	1.21%	1.21%
180201250401	Headwaters South Yuba River	37673.43	571.54	519.00	513.12	514.14	518.98	519.14	517.90
180201250402	Fordyce Creek	34137.43	218.44	203.74	200.31	201.16	203.74	203.43	202.93
180201250403	South Yuba River-Lake Spaulding	22667.94	284.18	256.35	252.41	253.22	257.05	257.09	252.41
180201250404	Canyon Creek	32208.04	261.96	194.62	193.39	193.90	194.62	194.88	193.49
180201250405	South Yuba River-Poorman Creek	22435.81	359.35	297.71	296.60	297.34	297.71	297.33	297.34
180201250406	South Yuba River-Humbug Creek	13988.38	212.67	173.50	173.50	173.50	177.49	173.71	173.50
180201250407	South Yuba River-Rock Creek	2618.41	50.88	25.37	25.37	25.37	25.49	25.45	25.37
180201250601	Upper Deer Creek	8836.41	164.71	128.30	126.44	126.61	131.70	128.61	126.57
	South Yuba River	174565.85	2123.72	1798.58	1781.13	1785.23	1806.79	1799.66	1789.50
			1.22%	1.03%	1.02%	1.02%	1.04%	1.03%	1.03%
180201260101	Upper Bear River	3769.26	56.54	41.53	41.52	41.53	43.23	41.53	41.53
180201260102	Steephollow Creek	10294.62	152.11	129.21	127.57	129.18	129.21	129.73	129.18
180201260103	Greenhorn Creek	9245.83	135.07	119.31	119.31	119.31	120.71	119.31	119.31
	Bear River	23309.70	343.72	290.04	288.40	290.02	293.15	290.57	290.02

HUC6	Watershed Name	Watershed Acres	Alt 1 ERAs	Alt 2 ERAs	Alt 3 ERAs	Alt 4 ERAs	Alt 5 ERAs	Alt 6 ERAs	Alt 7 ERAs
			1.47%	1.24%	1.24%	1.24%	1.26%	1.25%	1.24%
180201280101	Headwaters Middle Fork American River	32260.10	307.43	229.94	229.94	229.94	230.34	230.01	229.94
180201280102	Middle Fork American River-Duncan Canyon	23269.15	251.41	194.49	194.19	194.43	194.77	194.85	194.19
180201280201	Upper Rubicon River	2668.30	32.36	30.84	29.18	29.18	30.84	30.92	30.79
180201280202	Middle Rubicon River	31427.49	115.49	102.59	102.36	102.59	104.32	103.89	102.34
180201280205	Long Canyon Creek	710.90	16.34	10.48	10.48	10.48	16.24	10.48	10.48
180201280301	Upper North Fork Middle Fork American	24352.70	367.81	305.29	304.57	304.82	307.63	305.94	304.57
180201280302	Lower North Fork Middle Fork American	33804.14	402.71	308.46	308.36	308.46	321.24	310.21	308.36
180201280401	Middle Fork American River-Otter Creek	4875.16	76.60	59.55	59.55	59.55	59.55	59.55	59.55
	Middle Fork American River	153367.94	1570.15	1241.64	1238.63	1239.45	1264.92	1245.86	1240.22
			1.02%	0.81%	0.81%	0.81%	0.82%	0.81%	0.81%
180201280501	Headwaters North Fork American River	34628.27	233.34	217.04	216.45	216.61	217.04	217.04	216.45
180201280502	North Fork American River-Granite Creeks	32606.77	110.68	95.76	94.38	94.50	97.37	96.06	95.64
180201280503	North Fork American River-Humbug Canyon	23312.66	114.79	83.35	81.15	82.91	83.35	83.76	83.24
180201280504	North Fork of North Fork American River	30272.74	404.13	344.28	344.28	344.28	349.83	344.28	344.28
180201280505	North Fork American River-Indian Creek	4402.61	38.26	24.31	24.31	24.31	24.31	24.31	24.31
180201280601	Shirttail Canyon	15646.20	264.65	193.26	191.48	193.02	193.27	193.14	193.26
	North Fork American River	140869.25	1165.84	958.01	952.06	955.63	965.17	958.60	957.19
			0.83%	0.68%	0.68%	0.68%	0.69%	0.68%	0.68%

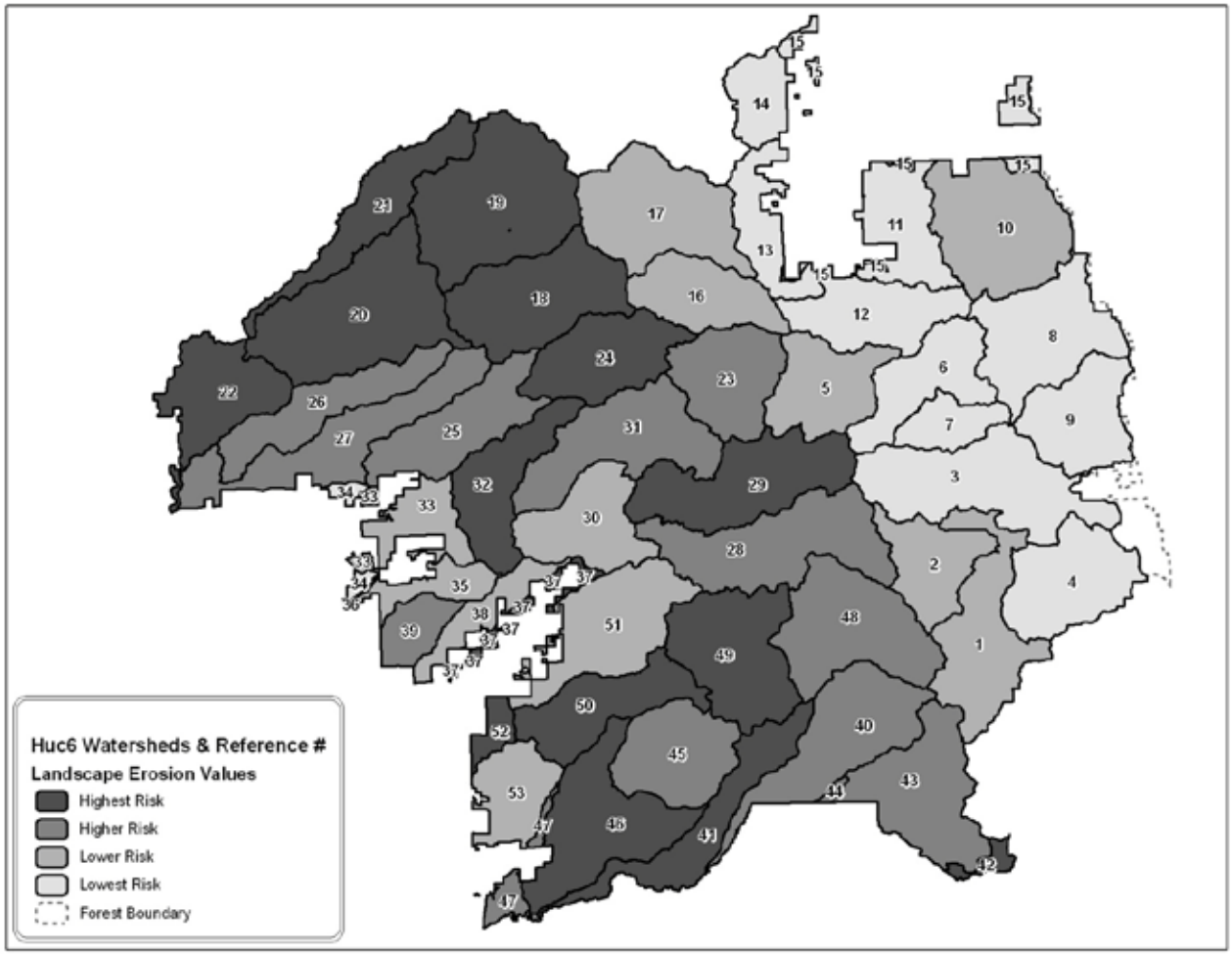

Figure F-1. Shows the location of each HUC6 watershed on the TNF

Table F-5. HUC6 Watershed Number and Name

Watershed Number	HUC6 Watershed Name	Watershed Number	HUC6 Watershed Name
1	Upper Middle Truckee	28	Headwaters South Yuba River
2	Donner Lake	29	Fordyce Creek
3	Middle Truckee River-Prosser Creek	30	South Yuba River-Lake Spaulding
4	Martis Creek	31	Canyon Creek - S.Yuba
5	Little Truckee River-Webber Lake	32	South Yuba River-Poorman Creek
6	Little Truckee River-Independence Lake	33	South Yuba River-Humbug Creek
7	Sagehen Creek	34	South Yuba River-Rock Creek
8	Little Truckee River-Stampede Reservoir	35	Upper Deer Creek
9	Little Truckee River-Boca Reservoir	36	Middle Deer Creek
10	Smithneck Creek	37	Upper Bear River
11	Sierra Valley-Antelope Creek	38	Steephollow Creek
12	Sierra Valley-Cold Stream	39	Greenhorn Creek
13	Sierra Valley-Berry Creek	40	Headwaters Middle Fork American River
14	Sierra Valley-Carman Creek	41	Middle Fork American River-Duncan Canyon
15	Sierra Valley	42	Upper Rubicon River
16	Haypress Creek	43	Middle Rubicon River
17	Headwaters North Yuba River	44	Long Canyon Creek
18	North Yuba River-Jim Crow Creek	45	Upper North Fork Middle Fork American
19	Downie River	46	Lower North Fork Middle Fork American
20	North Yuba River-Goodyears Bar	47	Middle Fork American River-Otter Creek
21	Canyon Creek - N.Yuba	48	Headwaters North Fork American River
22	Bullards Bar Reservoir	49	North Fork American River-Granite Creeks
23	Middle Yuba River-Jackson Meadows Res.	50	North Fork American River-Humbug Creek
24	Middle Yuba River-East Fork Creek	51	North Fork of North Fork American River
25	Middle Yuba River-Wolf Creek	52	North Fork American River-Indian Creek
26	Oregon Creek	53	Shirttail Canyon
27	Lower Middle Yuba River		

BMPs

USFS REGION 5 Best Management Practices for OHV use and road construction and maintenance (from Regional Water Quality Management Plan, 2000)

These BMPs would apply to routes within the National Forest Transportation System.

7. Water Quality Monitoring of Off-Highway Vehicle (OHV) Use According To a Developed Plan (Practice: 4-7)

a. **Objective**: To provide a systematic process to determine when and to what extent OHV use will cause, or is causing adverse effects on water quality.

b. **Explanation**: Each Forest's OHV plan will:

1) Identify areas, or routes where OHV use could cause degradation of water quality.
2) Establish baseline water quality data for normal conditions as a basis from which to measure change.
3) Identify water quality standards and the amount of change acceptable.
4) Establish monitoring methods and frequency.
5) Identify controls and mitigation appropriate in management of OHV's.
6) Restrict OHV use to designated routes.

c. **Implementation**: Monitoring results are evaluated against the OHV plan objectives for water quality and the LRMP objectives for the area. These results are documented, along with the actions necessary to correct identified problems.

If considerable adverse effects are occurring, or are likely to occur, immediate corrective action will be taken. Corrective actions may include, but are not limited to, reduction in the amount of ORV use, signing, or barriers to redistribute use, partial closure of areas, rotation of use on areas, closure to causative vehicle type(s), or total closure, and structural solutions, such as culverts and bridges.

Closure is accomplished through authority of the Forest Supervisor.

12.2 - Synopsis for Road and Building Site Construction

NFS road planning, construction, reconstruction, maintenance and/or removal is a complex process. The process involves roads analysis, Access and Travel Management Planning as well as NEPA procedures. Though complex, it assures roads are located, designed and maintained to meet Forest management objectives. General objectives are set by legislation, policy, directives, and Forest and District plans.

Project-specific resource objectives and alternatives will be formulated by an IDT selected and convened by the line officer responsible for the road or building activity. Team members represent as needed; timber, engineering, geology, archaeology, land right-of-way or easements, hydrology, soil science, botany, landscape architecture, recreation, fisheries, wildlife, range, fire, fuels and minerals.

Most of the NFS roads in California were built under the timber harvest program as a requirement of the TSC. Other roads were constructed under Public Works Contracts for range, recreation, fire, or silvicultural purposes, or under special use purpose they serve.

Transportation planning is normally conducted on a Forest-wide basis with the objective of locating roads both to service the individual timber sale areas and to meet a Forest's other long-range transportation needs. Road reconnaissance personnel flag proposed road corridors on-the-ground using road management objectives, the Forest Transportation Plan, topographic maps, aerial photographs, and any preliminary soils, logging, engineering, or geology data.

These corridors are reviewed by an IDT. Modifications in design and/or alignment, or new alternative corridors are proposed based on multiple resource management objectives, and recommendations are made for road design criteria. Existing roads that are to be improved or removed go through the same interdisciplinary review. Inadequate roads that are retained as part of the transportation system are upgraded to current LRMP standards and guidelines to reduce adverse environmental effects and improve user safety.

Interdisciplinary team roads analysis information and recommendations, along with an economic analysis of alternatives, are used to generate a transportation study report. The report is used to help assess the environmental effects and costs of roads for each alternative in the resource project environmental documentation.

Once an alternative has been chosen through the NEPA process, work begins on the road survey. The transportation study report is used to establish design criteria from which a transportation engineer selects road design standards. The road design standards selected depend on the type and amount of traffic, topography, geology, soils, requirements of the environmental document and the Access Travel Management Plan. Most new roads today, however, are only short segments constructed for local access needs.

Engineers design the road according to the selected design standards, which may include, but are not limited to, road widths, road drainage, maximum road grades, radii, and road surfacing. Members of the IDT are usually involved in the road design phase, to assist in meeting the selected resource objectives. Road planning and implementation includes road design, construction staking and construction inspection. Road design includes selection of construction specifications, which help protect

environmental concerns addressed in the environmental document and preparation of the construction contract. Road design and construction use Forest Service Standard Specifications for Roads and Bridges, Special Project Specifications, Timber Sale B and C provisions, General Provisions and applicable American association of State Highway and Transportation Officials (AASHTO) and American Society for Testing and Materials (ASTM) specifications.

While road construction is in progress, the Engineering Representative (ER), Contracting Officers Representatives (COR), SA, FSR and Construction Inspector (CI), are frequently on the project site. These inspectors, along with a purchaser's or contractor's field representative, assure that the project is carried out according to the specifications in the contract. Various IDT members will be called upon to review proposed design modifications during construction.

As part of the project plan, road management objectives are developed which detail the level of maintenance for each road. There are five levels of maintenance for permanent roads varying from Level 1 (custodial care of the road and assuring functional road drainage) to Level 5 (the maintenance of two lane, paved roads). Maintenance generally consists of, but is not limited to, cleaning, ditches and culverts, road surface grading, pothole patching and surface replacement.

Closed system roads (Level 1) are barricaded to preclude use for a year or longer. Water bars are installed where necessary. All open permanent roads will be inspected periodically and maintained as needed. Temporary roads are built for short-term use, principally under a TSC or for emergency wildfire access. When the temporary road is no longer needed, temporary drainage structures are removed, and the roads are decommissioned as required by the provisions of the applicable contract.

Environmental documents based on the work of IDT are also prepared for proposed building sites. Facilities normally encountered on National Forests are administrative sites, such as fire stations, work centers, ranger stations, campgrounds or VIS centers. Other proposals come from the private sector to build such facilities as: ski areas, marinas, concession building, waste disposal areas or access to private land inholdings.

Facility locations will be evaluated in much the same way as timber sale areas. An IDT is formed to develop resource objectives, formulate alternatives, and analyze the various sites for environmental effects. The IDT prepares environmental analysis, recommends alternatives, design criteria, and mitigation measures to meet Forest resource objectives at each site.

12.21 - Index for Road and Building Site Construction Practices

	Practice	Number	Page
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12.22 - Road and Building Site Construction Best Management Practices

The following are the BMPs for the control of non-point source pollution associated with road and building site construction activities. Each BMP was formulated based on the administrative directives that guide and direct the Forest Services' construction and maintenance of roads, buildings, and administrative facilities on NFS land.

The line officer on each administrative subunit is responsible for fully implementing the directives that require water quality protection and improvement during road and facilities construction and maintenance. The directives referenced in Section 13, provide details on methods to incorporate water quality controls into each phase of the road and facility construction and maintenance program. The BMPs synthesize the direction into a "process" to be followed.

Trained and qualified earth scientists, and other professional employees, are available to provide the engineering work force with technical assistance to identify beneficial uses and the most recent state-of-the-art water quality control methods and techniques; and to evaluate results. Publications and training sessions provide road construction and maintenance engineers with knowledge of the latest proven water quality protection methods.

1. General Guidelines for the Location and Design of Roads (Practice: 2-1)

a. **Objective**: To locate and design roads with minimal resource damage.

b. **Explanation**: The following are some general considerations, which must be incorporated into the planning process of road location and design. These measures are preventive, apply to all transportation activities, and indirectly protect water quality.

1) A basic requirement for transportation facility development and operation is the formulation and evaluation of alternatives that will best meet the resource management objectives with the least adverse effect on environmental values.

2) The location, design, and construction of roads include the use of IDTs. These teams include professional personnel with skills in road, resources and water quality management. The team evaluates the effects of road system development or modification proposals on the environment, and formulates alternative.

3) All resource-coordinating instructions for the protection and prevention of damage to NFS lands, resources, and ecological systems, including wetlands and floodplains will apply to the planning, development, and operation of transportation facilities. The following instructions apply to permanent roads:

a) Locate roads to complete the area transportation system, to fit the terrain, and to minimize damage to improvements and resources. Avoid sensitive areas such as wetlands, inner gorges and unstable ground to the extent practical.

b) Base road design standards on design criteria such as traffic requirements of a timber sale, or the overall transportation plan, road management objectives or resource objectives, and minimize the effects on Forest resources including water quality.

c) Design stream crossing structures to provide the most cost efficient drainage facility consistent with resource protection, facility needs, and legal obligations. The design involves a hydrologic analysis to determine runoff volumes, flood conditions, velocities, scour, and open channel shapes. An economic comparison of various flood frequencies versus structure sizes and types is also done to meet resource and legal requirements and cost/benefit comparisons. All crossings will be designed to provide for unobstructed flows and fish passage, and to minimize diversion potential and alteration of stream channels.

c. **Implementation**: The IDT is selected by the line officer to assist in locating the road to best fit resource objectives, and to develop detailed mitigation measures. For force account projects, Forest engineers will be responsible for developing and meeting design specifications.

For some timber sales awarded to small businesses, the purchaser may request that the Forest Service construct the roads. Under present guidelines, such work is normally done by contracting with a road construction contractor.

The COR, ER or FSR ensures compliance with project plan requirements and the operating plan.

2. Erosion Control Plan (Practice: 2-2)

a. **Objective**: To limit and mitigate erosion and sedimentation through effective planning prior to initiation of construction activities and through effective contract administration during construction.

b. **Explanation**: Land disturbing activities can result in short term erosion. By effectively planning for erosion control, sedimentation can be controlled or prevented. Within a specified period after award of a contract (presently 60 days prior to the first operating season in Timber Sale Contracts, per C6.3) the purchaser will submit a general plan which, among other things, sets forth erosion control measures. Operations cannot begin until the Forest Service has given written approval of the plan. The plan recognizes the mitigation required in the contract. A similar plan is required of miners and special use permittees.

c. **Implementation**: Design engineers develop detailed mitigation using an IDT. The detailed mitigations are reflected in the contract specifications and provisions. The intent of mitigation is to prevent construction-generated erosion, as well as that generated from the completed road, from entering watercourses. Contracted projects are implemented by the contractor or operator. Compliance with contract specifications and operating plans is ensured by the COR, ER, or FSR through inspection.

   This practice is commonly applied to all road construction through contract clauses and specifications and will apply to road construction for timber sales, mining, recreation, special uses and other roadwork on NFS lands.

3. Timing of Construction Activities (Practice: 2-3)

a. **Objective**: To minimize erosion by conducting operations during minimal runoff periods.

b. **Explanation**: The amount of erosion and sedimentation from road construction are affected by the magnitude of water runoff. An essential element of effective erosion control is to schedule operations during the dry season or when rain and runoff are unlikely. Purchasers will be required to schedule and conduct operations during the dry season or when rain and runoff are unlikely. Purchasers will be required to schedule and conduct operations to minimize erosion and sedimentation. Equipment will not be allowed to operate when ground conditions are such that excessive rutting and soil compaction could result. Such conditions will be identified by the COR or ER with the assistance of an earth scientist or other specialists as needed.

   Erosion control work will be kept as current as practicable on active road construction projects. Construction of drainage facilities and performance of other contract work to control erosion and sedimentation will be required in conjunction with earthwork projects. The operator should limit the amount of area being graded at a site at any one time, and should minimize the time that an area is laid bare. Erosion control work must be kept current when road construction occurs outside of the normal operating season.

c. **Implementation**: Detailed mitigations developed by design engineers and an IDT will be included in the environmental analysis and in subsequent project plans and contracts.

   Project crew leaders and supervisors will be responsible for implementing force account projects to construction specifications and as specified in the project plan. Contracted projects are implemented by the contractor, or operator. Compliance with plans, specifications, and the operating plan will be achieved by the COR or ER through inspection.

4. Stabilization of Road Slope Surfaces and Spoil Disposal Areas (Practice: 2-4)

a. **Objective**: To minimize erosion from exposed cut slopes, fill slopes, and spoil disposal areas.

b. **Explanation**: This is a preventive practice using bioengineering and other techniques to prevent or minimize erosion. Depending on site factors such as slope angle, soil type, climate, and proximity to waterways, many fill slopes, some cut slopes, and some spoil disposal areas will require vegetative and/or mechanical measures to provide surface soil stability. The level of stabilization effort needed is determined on a case-by-case basis by trained and qualified employees.

   Revegetation includes the seeding of plant species grass, legumes, or browse species--or the planting of brush, or trees. Revegetation may also include fertilizer, soil amendments, and mulching or even watering to ensure success. A combination of plant types with both woody root systems and fibrous root systems usually produce better results than a single plant type such as grass. Native species are preferred and used wherever feasible. Where local native seed is not available, not economically feasible or native plants would be ineffective in controlling erosion sterilized grass or cereal grain seed is applied.

   Mechanical measures may include, but are not limited to: wattles, erosion nets, terraces, side drains, blankets, mats, riprapping, mulch, tackifiers, pavement, soil seals, and windrowing construction slash at the toe of fill slopes.

c. **Implementation**: Vegetative measures are generally a supplementary device, used to improve the effectiveness of mechanical measures, but can be effective and complete by themselves. They may not take effect for several seasons, depending on the timing of project completion in relation to the growing season.

   Mechanical and vegetative surface stabilization measures will be periodically inspected to determine effectiveness. In some cases, additional work will be needed to ensure that the vegetative and/or mechanical surface stabilization measures continue to function as intended.

   Initial project location, mitigation measures and management requirements are developed during the environmental analysis process. These are translated into project plans, contract provisions and specifications.

   Project road inspectors and their supervisors monitor work accomplishment and effectiveness, to ensure that design standards, project plan management requirements, and mitigation measures are met.

5. Road Slope Stabilization Construction Practices (Practice: 2-5)

a. **Objective**: To reduce sedimentation by minimizing erosion from road slopes and slope failure along roads.

b. **Explanation**: This is an administrative and construction practice. It is prohibitively expensive to immediately and completely prevent erosion from road cut and fill slopes. However, plan all road construction considering adequate stabilization needs. The first planning requirement is an adequate soils and geologic investigation, to provide data necessary for proper cut and fill design such as:

1) The correct cut and fill slope steepness according to the stable angle of repose for the type of material.
2) Methods to handle surface and subsurface runoff.
3) Necessary compaction standards and surfacing needs.

A prerequisite for stabilization is to provide basic mechanical stability of the soils, using data from soils and geologic investigations to develop requirements for proper slope angles, compaction, and adequate drainage.

c. **Implementation**: Include erosion prevention considerations in planning for all road construction contracts. Application is commonly in conjunction with practice 2-4.

Complete most, if not all, of the stabilization measures prior to the first winter rains. At especially critical locations, with a high erosion and/or sedimentation potential, extensive and reliable remedies will be necessary. Determine a project location and detailed mitigation measures during the environmental analysis and included them in the project plan.

Project crew leaders and supervisors will be responsible for ensuring that force account projects meet design standards and project criteria. Contracted projects are implemented by the contractor or operator. Compliance with project plan requirements and the operating plan is ensured by the COR, or ER through inspection.

6. Dispersion of Subsurface Drainage from Cut and Fill slopes (Practice: 2-6)

a. **Objective**: To minimize the possibilities of cut or fill slope failure and the subsequent production of sediment.

b. **Explanation**: This is a preventive practice. Roadways may change the sub-surface drainage characteristics of a slope. Since the angle and height of cut and fill slopes can increase the risk of instability, it is often necessary to provide subsurface drainage to avoid moisture saturation and subsequent slope failure. Where ground water dispersion is necessary because of slopes, soil, aspect, precipitation amounts, inherent instability, or other related characteristics, dispersion methods would include:

1) Underdrains or subdrains (e.g. pipes, geotextiles)
2) Horizontal drains or chimney drains

Dispersal of collected water will be accomplished in an area capable of withstanding increased flows. On erosive soils, energy dissipaters or other slope stabilization treatments or conveyance devices need to be placed below pipes carrying large volumes of water. Road surface may be designed to dissipate the intercepted water in a uniform manner along the road.

c. **Implementation**: Project location and detailed mitigation will be determined by design engineers and the IDT, documented and incorporated into subsequent project plans and contracts.

Project crew leaders and supervisors will be responsible for implementing force account projects to construction specifications as specified in the environmental analysis. Contracted projects are implemented by the contractor or timber sale operator. Compliance with project plan requirements and operating plans is ensured by the COR, FSR, or ER.

7. Control of Road Drainage (Practice: 2-7)

a. **Objective**: Is to minimize the erosive effects of water concentrated by road drainage features; to disperse runoff from disturbances within the road clearing limits; to lessen the sediment yield from roaded areas; to minimize erosion of the road prism by runoff from road surfaces and from uphill areas.

b. **Explanation**: This is a preventive practice. A number of treatments can be used, alone, or in combination, to control unacceptable effects of road drainage. Methods used to reduce erosion include but are not limited to such controls as construction of properly spaced cross drains, water bars or rolling dips; installing energy dissipaters, apron, downspouts, gabions, flumes, overside drains and debris racks; armoring of ditches, drain inlets and outlets and removing or adding berms to control runoff. Accomplish dispersal of runoff on the road surface by such means as rolling the grade, outsloping or crowning. Installing water spreading ditches or contour trenching can disperse road water after the water leaves the road surface.

   Dispersal of runoff reduces downstream peak flows and associated scouring of the channels and sediment transport.

   Reduce sediment loads from road surfaces by adding aggregate or paving surfaces or by installing such controls as: sediment filters, settling ponds, and contour trenches. Soil stabilization can reduce sedimentation by lessening erosion on borrow and waste areas, on cut and fill slopes, and on road shoulders.

c. **Implementation**: Project location, design criteria and detailed mitigation are determined and documented during the environmental analysis process. These are then incorporated into the project plan.

   Project crew leaders and supervisors will be responsible for ensuring that force account projects meet construction specifications, and project criteria. Contracted projects are implemented by the contractor, or operator. Compliance with plans, specifications, and operating plans is ensured by the COR, ER, or FSR.

   This practice is required in contracts when the need is identified in the project planning process.

8. Constraints Related to Pioneer Road Construction (Practice: 2-8)

a. **Objective**: To minimize sediment production and mass wasting from pioneer road construction.

b. **Explanation**: Pioneer roads are built to allow equipment access for construction of planned roadways. Pioneering is usually done within the roadway construction corridor of the planned road. To meet the objective of minimizing sediment the following constraints will be followed:

1) Confine construction of pioneer roads to the planned roadway construction limits unless otherwise specified or approved by the ER or COR.
2) Locate and construct pioneering roads to prevent undercutting of the designated final cut slope, avoid deposition of materials outside the designated roadway limits, and accommodate drainage with temporary culverts or log crossings.
3) Complete erosion control work prior to the rainy season and in accordance with contract, or project plan requirements.
4) Dewater sites on live streams crossed by pioneer roads with diversion devices (see Practice 2-15).

c. **Implementation**: Determine and document project location and describe mitigations set forth during the environmental analysis process. Incorporate them into subsequent project plans and/or contracts.

Project crew leaders and supervisors will be responsible for implementing force account projects according to construction specifications and as specified in the project plan.

Contracted projects are implemented by the contractor, or timber sale operator. Compliance with plans, specifications, and operating plans is ensured by the COR, FSR, or ER.

9. Timely Erosion Control Measures on Incomplete Roads and Stream Crossing Projects (Practice: 2-9)

a. **Objective**: To minimize erosion and sedimentation from disturbed ground on incomplete projects.

b. **Explanation**: The best drainage design can be ineffective if erosion control has not been completed by the end of the normal operating season. Affected areas can include roads, road fills, tractor trails, skid trails, landings, stream crossings, bridge excavations, and fire lines.

Preventive measures include:

1) Removal of temporary culverts, culvert plugs, diversion dams, or elevated stream crossings.
2) Installation of temporary culverts, side drains, flumes, cross drains, diversion ditches, energy dissipaters, dips, sediment basins, berms, debris racks, or other facilities needed to control erosion.
3) Removal of debris, obstructions and spoil material from channels and floodplains.
4) Planting vegetation, mulching, and/or covering exposed surfaces with jute mats or other protective material.

c. **Implementation**: Apply protective measures to all areas of disturbed, erosion-prone, unprotected ground that is not to be further disturbed in the present year. When conditions permit operations outside of the normal operating season, update the operating plan as necessary and keep erosion control measures sufficiently current with ground disturbance to allow rapid closure when weather conditions deteriorate. Do not leave project areas for the winter with remedial measures incomplete.

Develop project mitigation measures and layout requirements during the environmental analysis process. Incorporate them into subsequent project plans and/or contracts.

Project crew leaders and supervisors are responsible for ensuring that force account projects meet construction specifications and project criteria.

Contracted projects are implemented by the contractor or operator. Compliance with project plan criteria, contract specifications and operating plans is ensured by the COR, ER, or FSR.

10. Construction of Stable Embankments (Fills) (Practice: 2-10)

a. **Objective**: To construct embankments with materials and methods, which minimize the possibility of failure and subsequent water quality degradation.

b. **Explanation**. The failure of road embankments and the subsequent deposition of material into waterways may result from the incorporation of slash, or other organic matter into fills, from a lack of compaction during the construction of the embankment, or use of inappropriate placement methods.

To minimize fill failures, design and construct the roadway as a stable and durable earthwork structure with adequate strength to support the treadway, shoulders, subgrade and the roads traffic loads. Proper slope ratio design will promote stable embankments. Adjacent to SMZs construct and place embankments of inorganic material by methods 2 to 6 below. Construct or place other embankments of inorganic material by one, or more of the following methods:

1) Sidecasting and end dumping
2) Layer placement
3) Layer placement (roller compaction)
4) Controlled compaction
5) Special project controlled compaction
6) In some situations it will be necessary to minimize fill volumes and/or strengthen fills using retaining walls, confinement systems, plantings or a combination of techniques.
   On projects, where required densities are specified, some type of moisture compaction control will be necessary. Where outer faces of embankments are not stabilized, due to equipment access difficulty, unfinished slopes subject to erosion and slipping will be stabilized following Practice 2-4.

c. **Implementation**: Project requirements and mitigation measures are developed and documented during the environmental analysis and road design process, by the IDT. The appropriate method of embankment placement is chosen during this process.

Project crew leaders and supervisors will be responsible for implementing force account projects, to construction specifications and project criteria. Contracted projects are implemented by the contractor, or operator. Compliance with project plan specifications, and the operating plan is ensured by the COR, CI and ER through inspection.

11. Control of Sidecast Material during Construction and Maintenance (Practice: 2-11)

a. **Objective**: To minimize sediment production originating from sidecast material during road construction or maintenance.

b. **Explanation**: Unconsolidated materials including rocks and boulders that are cast over the side of the road shoulder can roll directly into streams, damage downslope vegetation and create bare areas that are difficult to stabilize with vegetation. Where spoil does not directly reach a stream, it is still highly susceptible to erosion, dry ravel and mass instability, and subsequently can directly deliver sediment to a nearby stream. Site-specific limits and controls for side casting or end hauling are developed and documented during environmental analysis. Loose, unconsolidated sidecast material must not be permitted to enter SMZs, (see Practice 2-17).

   Sidecasting is an unacceptable construction alternative in areas where it can adversely impact water quality. Prior to the start of construction, or maintenance activities, waste areas must be located where excess material can be deposited and stabilized. During road maintenance operations, potential sidecast and other waste material will be utilized on the road surface or removed to designated disposal sites.

   The roadway will be constructed within reasonable limits of the lines, grades, and dimensions given in the engineering drawings and designated on the ground. Provisions for waste material disposal are included in every road construction and maintenance contract.

c. **Implementation**: Project location, selected disposal areas, and mitigation will be developed and documented during the environmental analysis.

   Project crew leaders and supervisors will be responsible for ensuring that force account projects meet construction specifications and project criteria. Road maintenance plans are developed for each forest and include slide and slump repairs and disposal site locations for excess material.

   Contracted projects are implemented by the contractor or timber sale operator. Compliance with project criteria, contract specifications, and operating plans will be enforced by the COR, ER, or FSR. Standard maintenance specifications have been prepared which include disposal area operation, disposal methods, and surface treatment.

   Timber sale contracts include clause C5.4 to address temporary road maintenance specifications, which includes slide and slump repair, surface blading, and side casting during road maintenance.

12. Servicing and Refueling of Equipment (Practice: 2-12)

a. **Objective**: To prevent pollutants such as fuels, lubricants, bitumens and other harmful materials from being discharged into or near rivers, streams and impoundments, or into natural or man-made channels.

b. **Explanation**: During servicing and refueling of logging and road construction equipment, any spilled pollutants can be transported by runoff to surface waters. If the volume of fuel exceeds 660 gallons in a single container, or if total storage at a site exceeds 1,320 gallons, project Spill Prevention, Containment and Counter Measures (SPCC) plans are required. Contaminated upland soils can be a long-term threat to surface and ground water quality. This threat must be managed by disposing of waste material properly, selecting service and refueling areas well away from wet areas and surface water; by using berms around such sites and by utilizing impermeable liners or other techniques to contain spills according to the Forest SPCC plan.

c. **Implementation**: The COR, ER, CI, or TSA are authorized to designate the location, size and allowable uses of service and refueling areas. Operators are required to remove service residues, waste oil and other materials from National Forest land. They must also be prepared to take responsive actions in case of a hazardous substance spill, according to the Forest SPCC plan.

13. Control of Construction and Maintenance Activities Adjacent to SMZs (Practice: 2-13)

a. **Objective**: To protect water quality by controlling construction and maintenance actions within and adjacent to any streamside management zone so that the following SMZ functions are not impaired:

1) Acting as an effective filter for sediment generated by erosion from bare surfaces, road fills, dust drift, and oil traces;
2) Maintaining shade, riparian habitat (aquatic and terrestrial), and channel stabilizing effects;
3) Keeping the floodplain surface in a resistant, undisturbed condition to slow water velocities and limit erosion by flood flows.

b. **Explanation**: Construction and maintenance fills, sidecast, and end-hauled materials are kept out of SMZs except at designated sites to minimize effects on the aquatic environment. Factors such as stream class, channel stability, sideslope steepness, ground cover, and sideslope stability are taken into account in developing zone widths. In some situations, SMZ widths are established by records of decision and by EIS standards and guidelines (e.g. PACFISH EA, Northwest Forest Plan ROD). It is also necessary to stabilize fill slopes to prevent sediment accumulations in the streamside zone.

SMZs are determined and documented during the environmental analysis process by the IDT, which includes hydrologists, fishery biologists, and other specialists as required.

c. **Implementation**: Project location alternatives are formulated, and mitigation measures developed by the IDT are included into the contract by design engineers. Project crew leaders and supervisors are responsible for ensuring that force account projects meet maintenance and construction specifications and project criteria.

Contracted projects are implemented by the contractor, or operator. Compliance with mitigation measures, contract specifications, and operating plans is ensured by the COR, FSR, or ER.

14. Controlling In-Channel Excavation (Practice: 2-14)

a. **Objective**: To minimize stream channel disturbances and related sediment production.

b. **Explanation**: During construction, heavy equipment may need to cross, or work in and near streams or lakes. This is permitted only as necessary in the construction, or removal of culverts and bridges and other facilities (e.g. water sources, boat ramp/launching sites, etc.) and only under specific protection requirements. The Engineering Representative (ER) is authorized to designate the location of crossings or work sites and coordinate with the contractor to manage heavy equipment.

   Excavation during the installation of instream structures must follow all of the following minimum water quality protection requirements.

   1) Unless otherwise approved, no excavation will be made outside of caissons, cribs, cofferdams, or sheet piling.
   2) The natural streambed or lake bottom adjacent to the structure will not be disturbed without prior approval of the ER or COR.
   3) If any excavation, or dredging is made at the site of the structure before caissons, cribs, or cofferdams are sunk in place, all such excavations will be restored to the original surface and the streambed or lake bottom must be protected with suitable stable material.
   4) Material deposited within the stream or lake area from foundation, or other excavation will not be discharged directly into live streams or lakes, but will be put into settling areas as shown on the engineering drawings or as approved by the ER, or COR. (See Practice 2-15)
   5) If the channel or lake bottom is disturbed during construction, it must be restored to its original configuration while minimizing any additional disturbance.
   6) Disturbances of stream or lake banks are kept to a minimum. Disturbed banks are stabilized.

c. **Implementation**. Mitigation measures developed by the IDT are set forth in the environmental documentation and incorporated into the contract by design engineers. Project crew leaders and supervisors will be responsible for ensuring that force account projects meet construction specifications and project criteria.

   Contracted projects are implemented by the contractor or operator. Compliance with mitigation measures, contract specifications, and operating plans is enforced by the CI, COR, FSR or ER.

15. Diversion of Flows around Construction Sites (Practice: 2-15)

a. **Objective**: To ensure that all stream diversions are carefully planned, to minimize downstream sedimentation, and to restore stream channels to their natural grade, condition, and alignment as soon as possible.

b. **Explanation**: Streamflow must be diverted around construction sites such as bridges, culverts and dams. The streamflow will be diverted for all live streams according to the instructions of the ER. The diverted flows are returned to their natural streamcourse as soon as possible after construction or at least prior to the rainy season. All disturbed areas are stabilized prior to the rainy season or as needed.

c. **Implementation**: This practice is required by contract clauses. The NEPA and design process will identify where diversions are required, and the design will include mitigation necessary to protect instream values and downstream beneficial uses of the water. Planning must include environmental analysis to identify and prevent unacceptable effects to the beneficial uses of the water. The planning process may require project review and/or issuance of permits or certifications by other Federal, State, or local agencies and, where appropriate, private parties. Case by case determinations must be made during project planning as to out-service review and consultation needs. Coordination with California Department of Fish and Game (CDFG) is initiated in most all cases.

   Project location, bypass design, and detailed mitigation will be developed in the design and planning process to meet project criteria. Project crew leaders and supervisors will be responsible for implementing force account projects to construction specifications and to meet project criteria.

   Contracted projects are implemented by the contractor, or operator. Compliance with project criteria, contract specifications and operating plans is enforced by the CI, COR, ER, or SA.

16. Stream Crossings on Temporary Roads (Practice: 2-16)

a. **Objective**: To ensure that temporary roads do not unduly damage stream channels and to ensure that fish passage is unimpeded by stream crossing structures.

b. **Explanation**: Stream crossing structures (e.g. culverts, bridges) are required on all temporary roads where it is necessary to cross designated channels. Means of crossing will include but not be limited to, culverts, bridges, coarse rock fills, hardened fords, (using such features as rocked approaches), and low water crossings. Identifying locations to cross streams will be accomplished using an IDT. Such crossings are designed to provide for unobstructed flows and the passage of fish, and to minimize damages to stream channels and water quality.

   The number of crossings is kept to the minimum needed for access. Channel crossings will be as perpendicular to stream courses as possible. Streambank excavation will be kept to the minimum needed for use of the crossings, and entry and exit ramps may need to be rocked. Fords and turnpike crossings hardened with washed rock, concrete planks, slabs or geogrid are sometimes an acceptable alternative, depending on water quality, fishery and hydrological considerations.

   Temporary crossing facilities will be removed and the site stabilized prior to the rainy season each year or when the facility is no longer needed, which ever is earliest.

c. **Implementation**: This practice is required when documented in the project plan. In timber sales, stream crossing are located, and mitigation is implemented by the SA, using instructions in the TSA Handbook, supplemental Forest guidelines, and considering IDT recommendations. Mitigation at sensitive stream crossings must be assessed, and controls prescribed during the environmental analysis by the IDT.

   Project crew leaders and supervisors will be responsible for ensuring that force account projects meet construction specifications and project criteria.

   Contracted projects are implemented by the contractor, or operator. Compliance with the requirements in the project plan, contract and/or operating plan is ensured by the CI, COR, FSR, SA, or ER.

17. Bridge and Culvert Installation (Practice: 2-17)

a. **Objective**: To minimize sedimentation and turbidity resulting from excavation for in-channel structures.

b. **Explanation**: Excavation is a common requirement for the installation of bridges, culverts, weirs, check dam, riprapping and other structures. Spoil material generated during construction should neither obstruct the stream course (including natural floodplains) nor impair the efficiency of the associated structures. Preventive measures include:

1) Keep excavated materials out of channels.
2) Remove any materials stacked, or stockpiled on floodplains prior to the rainy season.
3) Divert flowing water around work sites to minimize erosion and sedimentation.
4) Suitably locate bypass roads and develop plans for their subsequent obliteration and stabilization.
5) In some cases, fill material may have to be imported for better soil compaction. Original fill may have to be exported to a disposal site.

Streams identified as important for fisheries or other aquatic resources may require that the channel not be disturbed except during flow periods specified in the project plan. Normally, this work would occur during low flow periods. Work would not be allowed during spawning periods, or other periods critical to aquatic resources. Downstream sediment basins or other sediment reduction facilities or techniques will be necessary to mitigate impacts.

c. **Implementation**: Project location and detailed mitigation measures will be developed during the design process to meet project criteria, using an interdisciplinary process.

Project crew leaders and supervisors will be responsible for ensuring that force account projects meet construction specifications and project criteria.

18. Regulation of Streamside Gravel Borrow Areas (Practice: 2-18)

a. **Objective**: To limit channel disturbances and sediment production associated with gravel source development.

b. **Explanation**: Materials deposited along channels by storm runoff often provide a source of gravel. With adequate planning gravel can be removed with minimal impact on water resources and channel stability. Gravel removal can alter streamflow characteristics and consequently effect channel stability and create a new sediment source. Borrowing will be limited to material deposited above the bankfull line. Borrow area shaping or other special drainage re-configuration actions are taken to maintain channel function.

   Excavation will not take place below the water table unless sediment basins are built to contain, or catch the resulting sediment. Sediment basins should not be subject to washouts. If excess sediment accumulates in basins, the basin will be cleaned and the sediment deposited and stabilized at approved sites outside the area where it could re-enter the stream.

   Wash water or waste from concrete batching, or aggregate operations will not be allowed to enter streams prior to treatment by filtration, flocculation, settling, and/or other means. (See also Practice 3-3)

c. **Implementation**: Project location, stability and the limits for disturbance and sediment production will be developed through the environmental analysis and the IDT and in consultation with State Fish and Game or other pertinent agency. Detailed mitigation measures will be developed by the design engineer to meet project criteria.

   Project crew leaders and supervisors will be responsible for implementing force account projects to construction specifications and project criteria.

   Contracted projects are implemented by the contractor or operator. Compliance with project criteria, contract specifications, and operating plans is ensured by the CI, FSR, COR, or ER.

   Special us permits issued for gravel bar excavation will include the above requirements, an operating plan and reclamation plan if warranted. District Rangers or their representatives will be responsible for ensuring compliance.

19. Disposal of Right-of-Way and Roadside Debris (Practice: 2-19)

a. **Objective**:

1) To ensure that organic debris generated during road construction is kept out of streams so that channels and downstream facilities are not obstructed.
2) To ensure debris dams are not formed which obstruct fish passage, or which could result in downstream damage from high water flow surges after dam failure.

b. **Explanation**: As a preventive measure, construction debris and other newly generated roadside slash developed along roads in the streamside management zone is disposed of by the following means as applicable: (See also Practice 2-11)

1) On Site:
   a) Piling and burning
   b) Burying
   c) Chipping
   d) Scattering
   e) Disposal in cutting units
   f) Windrowing at the base of fill slopes
   g) Incorporation {only in temporary roads}
2) Removal to agreed upon locations (especially stumps from the road prism).
3) A combination of the above.
4) Large limbs and cull logs are removed to designated sites outside the SMZ or relocated within the zone to meet aquatic resource management objectives.

c. **Implementation**: Criteria for the disposal of right-of-way and roadside debris will be established during onsite evaluation by an IDT. Project location and detailed mitigation measures are also developed and set forth in the environmental analysis and incorporated into project plans and/or contracts.

Project crew leaders and supervisors will be responsible for ensuring that force account projects meet construction specifications.

Contracted projects are implemented by the contractor or operator. Compliance with plans, specifications, and operating plans is ensured by the CI, COR, or ER.

20. Specifying Riprap Composition (Practice: 2-20)

a. **Objective**: To minimize sediment production associated with the installation and utilization of riprap material.

b. **Explanation**: Riprap is commonly used to armor streambanks and drainage ways from the erosive forces of flowing water. Riprap must be sized and installed in such a way that it effectively resists erosive water velocities. On occasion, this may require the use of filter blankets, or other methods to prevent undermining. Stone used for riprap will be free of weakly structured rock, soil, organic material and other material not resistant to streamflow that would only serve as sediment sources. Outlets of drainage facilities on erodible soils commonly require riprapping for energy dissipation. The Corps of Engineers and Federal Highway Administration procedures are commonly used for designing riprap structures.

c. **Implementation**: Project location and detailed mitigation will be developed through the planning and design process to meet the mitigation measures and requirements of the project plan.

Project crew leaders and supervisors will be responsible for implementing force account projects to construction specifications and project criteria.

Contracted projects are implemented by the contractor or operator. Compliance with project criteria and operating plans is ensured by the COR, or ER.

Appendix N

Responses to Comments

Appendix N: Responses to Comments

Introduction

Appendix N, Responses to Comments, summarizes comments submitted between September 26 and December 29, 2008, during the public comment period for Tahoe National Forest (TNF) Motorized Travel Management Draft Environmental Impact Statement (DEIS). The comment period ended December 26, 2008, but comments were accepted through December 29 due to a Presidential Proclamation to close the office on Friday, December 26. In addition, Appendix N summarizes comments submitted on the TNF Motorized Travel Management Supplemental Draft EIS (SDEIS) between February 26 and April 12, 2010. It also documents the Forest Service Responses to Comments and provides related information.

Over 7,000 public comment letters were received on the DEIS and SDEIS**.** The Forest Service then reviewed the submitted comments and suggestions. Where comments questioned some of the data in the DEIS, past NEPA documents were looked at to verify road and trail status decisions. A review of these earlier decisions caused the Forest Service to revise the numbers in the analysis in regard to National Forest System roads and trails and unauthorized roads and trails. The Interdisciplinary Team also found that some roads and trails across private land did not have valid rights-of-ways which was also corrected in the analysis and is displayed in the SDEIS and in the Final EIS. Comments on the DEIS were used to modify Alternative 6, the Preferred Alternative.

This volume is organized somewhat like the Final Environmental Impact Statement (FEIS). Section 1.0 shows public concerns and Forest Service responses about the Purpose and Need. Section 2.0 details public concerns and responses about the Alternatives. Section 3.0 has public concerns and responses about the Affected Environment and Environmental Consequences. Section 4.0 has public concerns and responses about the public involvement process. Section A has site specific public comments on individual roads and trails.

This Appendix contains Public Comment statements, having general or specific ideas and concerns found in the correspondence received during the comment phases of the project. The verbatim use of material from everyone's letter was not feasible in this Appendix. The regulations allow the Forest Service to consolidate comments (40 CFR 1503.4). Every effort was made to ensure that the essence of the concern was retained and that the response captures the full breadth of these concerns. If a subject is of particular concern, looking through other comments and responses may be of assistance in understanding. The content of all correspondence was read, considered, and entered into the project record.

Responses to public comments were finalized during the development of the FEIS. Responses reflect work done after publication of the DEIS and the SDEIS. Following the individual responses to comments is a reproduction of the letters received during the public comment period from tribes, federal and state agencies, county and municipal governments, and from elected officials.

Each comment received was assigned a unique five digit identifier number. At the end of the Appendix is an alphabetical list of the respondents and the identifier number assigned to each commenter.

Comments received on the DEIS begin with a number “0” and comments received on the SDEIS begin with the letter “S.”

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Section 1.0: Purpose and Need

1.00-1 Season of use: The Purpose and Need does not provide for imposing additional seasonal restrictions. Previous administrative decisions regarding seasonal restrictions should not be revisited and are outside of the scope of the project.

Response: The Purpose and Need states "There is a need for limited changes to the TNF transportation system to… Provide a diversity of motorized recreation opportunities (4X4 Vehicles, motorcycles, ATVs, passenger vehicles, etc.)… In meeting these needs, any changes to the NFTS roads, motorized trails and areas should also achieve the following purposes: Minimize damage to soil, vegetation and other forest resources." This element of the purpose need provides for imposing additional wet weather seasonal restrictions.

Chapter 1 in the Decision Framework states *"This proposal does not revisit previous administrative decisions that resulted in the current NFTS. This proposal is narrowly focused on implementing the Travel Management Rule. Previous administrative decisions concerning road construction, road reconstruction, trail construction, and land suitability for motorized use on the existing NFTS are outside of the scope of this proposal."* This means that no decisions will be made in this project regarding closure of existing NFTS roads and NFTS trails. No decisions would be made to include additional motorized roads and trails in lands determined to be unsuitable for motorized use in the Forest Plan such as in the Grouse Lakes non-motorized area. Non-motorized trails would not be converted to motorized uses in this decision.

Commenters: 06248, 06390, 06738, 06752, 06779, 06799

1.00-2 RS2477: Roads and trails on the Tahoe National Forest are subject to Revised Statute (RS) 2477.

Response: Revised Federal Statute 2477 (RS2477) states; "The right-of-way for the construction of highways over public lands, not reserved for public uses, is hereby granted." This means that those Counties or some other entity operating and maintaining roads can assert their right to take over and manage those roads which predate the reservation of the Tahoe National Forest. In the event the County or some other entity were to assert their rights, the Forest Service would review the information they submit and determine 1) if the roads do indeed predate the reservation of the Forest and 2) if the entity has the means to operate and maintain road. If they meet these conditions the Forest Service would issue that entity a right-of-way to those roads. To date, no county or other entity has asserted RS2477 rights for any specific route. Decisions regarding the RS2477 status of roads and trails on the Forest are outside of the scope of this decision.

Commenters: 01367, 06477, 06511, 06710

1.00-3 Non-motorized trail additions: Actions designating non-motorized trails are beyond the scope of this travel management planning effort and requires a separate NEPA analysis.

Response: There are no decisions being made in this project to add any non-motorized trails to the NFTS. The statement referenced in the comment simply reflects that unauthorized routes not included in the NFTS as motorized roads or trails would be available for use by non-motorized users. It also reflects that any effects associated with non-motorized use of these roads and trails would continue into the future.

Commenter: 06701

1.00-4 Decisions regarding existing NFTS roads: Decisions regarding existing NFTS roads should be excluded from this planning effort.

Response: In Chapter 1 the Decision Framework states "*This proposal does not revisit previous administrative decisions that resulted in the current NFTS. This proposal is focused on implementing 36 CFR 212, Subpart B of the Travel Management Rule. Previous administrative decisions concerning road construction, road reconstruction, trail construction, and land suitability for motorized use on the existing NFTS are outside of the scope of this analysis*." This means that no decisions will be made in this project regarding closure of existing NFTS roads and NFTS trails. No decisions would be made to include additional motorized roads and trails in lands determined to be unsuitable for motorized use in the Forest Plan such as in the Grouse Lakes non-motorized area. Non-motorized trails would not be converted to motorized uses in this decision.

Commenter: 06801

1.00-5 Closure/Decommissioning of existing NFTS roads and trails: Closing or decommissioning previously approved NFTS roads and trails should be an action considered in this project.

Response: Closure or decommissioning of existing NFTS roads and trails are actions outside of the scope of this decision.

All of the legal requirements found in 36 CFR 212 are being met. It is fully within the Forest Supervisor's legal authority to determine the scope of this analysis. 36 CFR 212.50(b) states*;*

"The responsible official may incorporate previous administrative decisions regarding travel management made under other authorities, including designations and prohibitions of motor vehicle use, in designating National Forest System roads, National Forest System trails, and areas on National Forest System lands for motor vehicle use under this subpart."

The Forest Supervisor made the decision to incorporate previous administrative decisions in the project direction letter to the Interdisciplinary Team in which he stated; *"Scope of Project – The Scope of the project will include all roads, trails, and areas to be considered as open for motor vehicle use. Motor vehicle use on roads, trails and areas shall be designated by vehicle class and time of year. This designation shall incorporate all applicable administrative and NEPA decisions previously made for existing National Forest System roads, trails and areas. These previous decisions will be incorporated into all alternatives considered in detail."*

The "Decision Framework" as defined in Chapter 1 of the FEIS also states; "This proposal does not revisit previous administrative decisions that resulted in the current NFTS. This proposal is focused on implementing 36 CFR 212, Subpart B of the Travel Management Rule. Previous administrative decisions concerning road construction, road reconstruction, trail construction, and land suitability for motorized use on the existing NFTS are outside of the scope of this analysis."

Commenters: 00028, 00034, 00079, 02719, 03155, 03161, 06384, 06419, 06430, 06457, 06554, 06716, 06729, 06749, 06752, 06753

1.00-6 Definition of existing system: The DEIS fails to adequately define the roads and trails that are part of the existing National Forest Transportation System (NFTS).

Response: The Federal Register, Volume 70, No. 216, November 9, 2005 states the Forest transportation system is the system of National Forest System (NFS) roads, NFS trails, and airfields on NFS lands. A NFS road is a forest road other than a road which has been authorized by a legally documented right-of-way held by a State, county or other local public road authority. A NFS trail is a forest trail other than a trail which has been authorized by a legally documented right-of-way held by a State, county or other local public road authority. A Forest road or trail is a road or trail wholly or partly within or adjacent to and serving the NFS lands that the Forest Service determines is necessary for the protection, administration, and utilization of the NFS lands and the use and development of its resources.

Between Draft and Supplemental Draft EIS the Forest conducted a comprehensive review of all of the existing roads and trails to verify their status in the National Forest Transportations System. Information sources included the last 15 years of NEPA decisions concerning roads and trails, the Rights-Of-Way Atlas, and the INFRA Database. Based on this analysis the following corrections in Table N-1 were made to the existing National Forest Transportation System. These corrections were incorporated into all of the alternatives in the Supplemental Draft EIS and FEIS.

Table N-1. Changes made to the existing National Forest Transportation System

Category of change	Reason for change	Miles
Additional NFTS motorized recreation opportunities	State or County roads determined to be part of the NFTS	32.2
	Previous NEPA decision added road/trail to the NFTS	69.4
	Previous NEPA decision converted non-motorized trail to a motorized road or trail	2.7
	Subtotal	**104.3**
Changes in type of NFTS motorized recreation opportunities	Previous NEPA decision changed the class of vehicle allowed	76.8
	Previous NEPA decision changed season of use on NFTS road/trail	579.6
	Previous NEPA decision changed both season of use and class of vehicle allowed on NFTS road/trail	33.5
	Subtotal	**689.9**

Category of change	Reason for change	Miles
Reductions in NFTS motorized recreation opportunities	Previous NEPA decision scheduled NFTS road/trail for decommissioning	20.7
	NFTS roads/trails on private land determined to not have a valid right-of-way	124.5
	NFTS roads determined to be under State or County Jurisdiction	8.8
	Previous NEPA decision converted motorized road/trail to a non-motorized trail	5.2
	Previous NEPA Decision closed the road/trail	349.7
	Subtotal	**508.9**

Commenters: 06704**,** 06716, 06730, 06781, S0005, S0008, FI, S0014, S0015, S0018, S0023, S0041, S0043, S0062, S0063, S0064, S0067, S0069

1.00-7 TNF open for motor vehicle use: The Tahoe National Forest has historically been an "Open Forest" for motor vehicle use per direction in the 1977 OHV Plan and the 1990 Forest Plan; therefore, all unauthorized routes in areas approved for motor vehicle use should be considered part of the existing National Forest Transportation System.

Response: The 1977 TNF OHV plan divided the Forest into seven different zones which provided guidance for OHV vehicle management within each zone. All of the zones except one specify that land travel is restricted to designated routes. The remaining zone specifies that "Specific Areas may be designated for unlimited use by off road vehicles." These zones are then overlaid over the Forest Visitor map for reference. The Forest Visitor map shown under the 1977 OHV Plan indicates merely the presence of roads and trails on the ground. It cannot be assumed that those roads and trails which are shown on the visitor map are the designated roads, trails, and open areas described in the 1977 OHV Plan.

The 1977 TNF OHV Plan was then superseded by the 1990 Tahoe Land and Resource Management Plan (Forest Plan). This plan contained standards and guidelines for 109 separate Management Areas for "Transportation Management Policy" and "Off-Highway Vehicle Restrictions."

The 1990 Forest Plan was then amended in 2004 by the Sierra Nevada Forest Plan Amendment. This Forest Plan amendment contained a standard and guideline to "Prohibit wheeled vehicle traffic off of designated routes, trails, and limited off highway vehicle (OHV) use areas." The resulting Forest Plan direction regarding motor vehicle use is contained in Chapter 3.00 (Affected Environment and Environmental Consequences) of the EIS.

Regardless of the time period in which the routes were created, or the means by which they were created, they are not currently part of the approved National Forest Transportation System. As such, motorized use of the routes is currently not authorized. One the primary purposes of this project is to determine which, if any, of these routes should be added to the NFTS. On the remainder of the routes, motorized use will be prohibited as part of the prohibition of cross country travel.

Between Draft and Supplemental Draft EIS a comprehensive review of roads and trails was conducted on the Forest to verify their status in terms on the NFTS.

Commenters: 01685, 02556, 02560, 02563, 02936, 05632, 06390, 06557, 06698, 06704, 06730, 06744, 06752, 06783, 06784, 06788, 06796, 06801, 06805, 06806, 06807, 06808, 06809, FI, S0004, S0006, S0007, S0008, S0013, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069, S0072

1.00-8 Difference between mileage of unauthorized routes in the NOI and the DEIS: The Notice of Intent lists different mileages of routes unauthorized for motorized travel than the figures listed in Draft EIS.

Response: The difference between the 2,500 miles in the Notice of Intent (NOI) and the 1,400 miles in the DEIS can be explained as follows:

- 48 miles were found to be existing system roads and trails (motorized and non-motorized). These were included as part of the NFTS.
- 8 miles were closed system roads through Forest Orders and were excluded from all alternatives.
- 7 miles were previously decommissioned roads and trails and were excluded from all alternatives.
- 2 miles were County or private roads
- The remainder (about 1,035 miles) is on private land for which the Forest Service has no authority to add to the National Forest Transportation System (NFTS) motorized recreation opportunities.

In the Draft EIS unauthorized routes were defined as user created routes, temporary roads and Maintenance Level 1 roads. In the Supplemental Draft EIS and FEIS, unauthorized routes include temporary roads and user created routes. Reopening of Maintenance Level 1 roads in the SDEIS and FEIS are listed in Chapter 2 for each alternative under "Changes to the NFTS."

Commenters: 00682, 01426, 02559, 05028, 05636, 06384, 06511, 06624, 06629, 06685, 06698, 06701, 06730, 06740, 06752, 06759, 06760, 06779, 06788, 06789, 06790, 06805, FC, FI, S0008, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

1.00-9 New construction and re-routing of roads and trails: New construction and re-routing of roads and trails should be included in the project.

Response: New construction such as a major re-route of a trail is outside of the scope of this project. A list of those roads and trails where this was identified as a possibility was retained in the project record. As funding becomes available, these projects will be analyzed in future NEPA projects.

Commenters: 06451, 06544, 06752

1.00-10 Historic roads and trails as part of the NFTS: Many existing roads and motorized trails should be considered part of the existing NFTS for the following reasons: (1) they appear on previous maps including visitor maps, previous OHV Plans, and quad maps; (2) they were never signed closed; (3) they pre-date NEPA; (4) they are historic roads and motorized trails; (5) NEPA was never done to close them; (6) use of volunteers; and/or (7) expenditure of grant money; (8) the

Forest Service authorized use of these roads during permitted activities therefore they should be considered part of the NFTS. The Forest Service has historically authorized motorized use of these routes under Special Use Permits.

Response: Between Draft and Supplemental Draft EIS the Forest conducted a comprehensive review of all of the existing roads and trails to verify their status in the National Forest Transportation System. This information has been carried forward in the FEIS. Information sources included the last 15 years of NEPA decisions, if available, concerning roads and trails, the Right-Of-Way Atlas, and the INFRA Database. Each of the reasons given for why these routes should be considered part of the current NFTS, are addressed below:

1) Presence on Maps - USGS Quad Maps and old Forest Visitor Maps indicate only the physical presence of a road or trail on the ground. Neither indicates that these roads or trails were part of the approved NFTS. The 1977 OHV Plan made decisions on OHV guidance for different zones on the forest. These zones were displayed over the Forest Visitor Map for reference. As described above, the presence of roads and trails on a Visitor Map does not mean they were part of the approved NFTS.

2) Not Signed as "Closed" or had a "Trail Sign" - A road or trail does not have to be signed closed to indicate it is not part of the approved NFTS. Many roads and trails not included in the NFTS were never signed closed. Similarly the presence of an un-official "trail" sign in the woods does not mean that a route was part of the approved NFTS. Many such signs were placed by the public to illustrate where trails were located.

3) Predates NEPA - Many of the routes unauthorized for motorized use predate NEPA. Physical existence of a road or a trail on the ground prior to NEPA does not mean it was ever part of the approved NFTS.

4) Historic Trail - A road or trail being "historic" (more than 50 years old) does not mean it is part of the NFTS. Many of routes on the ground are more than 50 years old and were initially created during the gold rush and the railroad logging era. Their age does not mean they are part of the NFTS previously approved by administrative decisions.

5) Never did NEPA to close - If a route was never part of the NFTS, NEPA is not required to "close" them. Motorized use was never authorized. The prohibition of cross country travel in this decision means that motorized travel off designated roads or trails, including use of any non-designated routes, will be prohibited. This EIS is the NEPA document to prohibit such use.

6) Use of Volunteers – The use of volunteers on unauthorized routes was limited to restoration and rehabilitation activities and work associated with Special Use Permits. Neither of these activities required that the work be limited to NFTS roads and trails.

7) Expenditure of Grant Money – The only State of California Grant Monies that were expended on unauthorized routes were associated with Law Enforcement, Restoration and Rehabilitation, and

this Travel Management Project. The Law Enforcement funds were expended to keep visitors on routes identified in the interim Forest Order to prevent the proliferation of additional unauthorized routes. Restoration and Rehabilitation funds were expended on unauthorized routes to repair resource damage. The Travel Management funds were expended to designate motorized roads, trails and areas on the Forest. None of these categories of grant funding required the routes be part of the approved NFTS. Operation and Maintenance funds were expended solely on previously designated roads, trails open areas and their associated facilities.

8) Previous Permitted Authorization – Activities authorized under special use permits such as the California Association of Four Wheel Drive Vehicles Winter Fun Festival are exempt from the prohibition of cross country travel in the action alternatives. Chapter 2 of the SDEIS in the description of cross country travel states; " *Public wheeled motor vehicle travel off designated NFTS roads, NFTS trails, and outside established motorized use areas would be prohibited, except as allowed by permit or other authorization."*

Commenters: 00564, 00601, 00603, 00632, 00643, 00657, 00666, 00672, 01112, 01390, 01422, 01776, 02556, 02936, 06480, 06561, 06568, 06698, 06699, 06704, 06710, 06730, 06744, 06752, 06783, 06790, 06797, 06801, 06805, 06806, 06807, 06808, FI, S0005, S0008, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

1.00-11 Minimum road system: The Forest Service should identify the minimum road system as specified in 36 CFR 212.5, Subpart A.

Response: The Travel Management Rule is comprised of three parts: Subpart A - Administration of the Forest Transportation System; Subpart B - Designation of roads, trails and areas for motor vehicle use; and Subpart C - Use by over-snow vehicles. The immediate focus of national forests in California is on addressing the issue of unmanaged, cross country motor vehicle use through the designation of roads, trails and areas by vehicle class, and if appropriate, time of year, and the production of a Motor Vehicle Use Map (MVUM).

The Forest Service began the current Travel Management decision-making process for national forests in California in 2003 with a commitment to the public to prohibit cross country vehicle travel and to work toward a sustainable system of designated routes. Forests have continued with this route designation commitment and have only departed from the original intent where necessary to align with the national framework and its definitions and terminology, as provided in the Travel Management Rule. The current proposal implements Subpart B. The travel management regulations do not require completion of Subpart A prior to implementation of Subpart B's prohibition and designations, or as a precondition to any project level (site-specific) travel management decisions. Upon completion of this process, it will be determined how to best proceed in the future with the implementation of Subparts A and C.

Under Forest Service regulations and new Forest Service Manual and Handbook direction issued nationally, Subpart A requires a broad-scale planning effort and the consideration of the multiple

resource and other management objectives contained in the Forest Plan. Subpart A, 212.5(b)(1), requires the responsible official to identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands as informed by a science-based roads analysis. Subpart A addresses the roads needed to meet resource and other management objectives identified in the relevant land and resource management plan. Subpart A of the travel management regulations (36 CFR 212.1 – 212.21) does not apply to this proposal. This type of planning effort is time-consuming. It would delay the forests' current efforts to analyze unmanaged motorized recreation and implement a designated system of roads, trails, and areas for motor vehicle use, along with the improved management and resource protection that will result from that effort.

Commenters: 00036, 00069, 00072, 00458, 00459, 00460, 00461, 00462, 00468, 00469, 01102, 01363, 06248, 06703, 06715, 06716, 06729, 06750, FA, S0006, S0012, S0023

1.00-12 Mountain bikes: This project would have potential adverse impacts on mountain bike riders by limiting opportunities for mountain biking.

Response: Mountain bike management is outside of the scope of this decision. This decision only applies to motor vehicles. Mountain bike use is not being restricted by this decision.

Commenters: 00001, 00002, 00052, 00053, 00075

1.00-13 Restoration and rehabilitation needs: The DEIS lacks language that assures the planning and implementation for removal and/or restoration of routes that are not designated. Given the lack of Forest Service funding for law enforcement, motor vehicle use on unauthorized routes will continue, and impacts to soil resources from OHV use will continue, regardless of which alternative is chosen.

Response: Restoration and rehabilitation is outside of the scope of this FEIS. Any serious and adverse environmental impacts which are identified as occurring on unauthorized or existing system routes through this process were documented in the project record and are prioritized for restoration and rehabilitation as funding permits.

Commenters: 06716, 06750, 06805, S0020, S0070

1.00-14 Need for Supplemental Draft EIS: The Forest Service should prepare a Supplement to the September 2008 Draft EIS in accordance with 40CFR1502.9(c)(1).

Response: 40CFR1502.9(c) (1) states "*Agencies:*

1. Shall prepare supplements to either draft or final environmental impact statements if:

(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or

(ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts."

The primary change between the Draft and Supplemental Draft EIS was the comprehensive review of its existing NFTS after the release of the Draft Travel Management EIS (DEIS). The Forest Service validated the status of every NFTS road and trail on the Forest by utilizing the following information:

1. **INFRA Database**: Jurisdiction discrepancies between INFRA and the Project GIS database were corrected.
2. **Previous NEPA Decisions**: Available NEPA decisions regarding road and trail management from last fifteen years were reviewed.
3. **Rights-of-Way Atlas**: The rights-of-way (ROW) status of all NFTS roads and trails were validated based on the Forest ROW Atlas.

Based on this review, corrections were made to the existing NFTS, as described in detail in Chapter 1 of the FEIS. These corrections were incorporated into all of the alternatives.

The Forest Supervisor reviewed this information and based on the interdisciplinary team's recommendation, determined the preparation of a Supplemental DEIS was warranted so that the public had an opportunity to review the proposed action and alternatives in light of the corrections that were made since the DEIS was circulated.

Commenters: 06624, 06698, 06730, 06760, 06779

1.00-15 Funding and timelines limited the NEPA process: The Forest Service has failed to adequately comply with NEPA, specifically 40 CFR 1507.2, due to limited funding and deadlines associated with this travel management planning effort.

Response: The Forest Service in California has been working with the public to designate routes for motor vehicle use since 2003. This has been a long and challenging process and we continue to move forward, encouraging the public to stay engaged to help us find the best solutions to secure a wide-range of recreation opportunities while ensuring the best possible care of the land. The agency fully complied with NEPA in developing this Environmental Impact Statement in accordance with 40 CFR 1502.7, which states; "*Each agency shall be capable (in terms of personnel and other resources) of complying with the requirements enumerated below. Such compliance may include use of other's resources, but the using agency shall itself have sufficient capability to evaluate what others do for it. Agencies shall:*

> *(a) Fulfill the requirements of section 102(2)(A) of the Act to utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on the human environment. Agencies shall designate a person to be responsible for overall review of agency NEPA compliance."*

An interdisciplinary team was used. The interagency team was described in the Forest Supervisors Project Initiation Letter and described in the List of Preparers in the EIS.

"(b) Identify methods and procedures required by section 102(2)(B) to insure that presently unquantified environmental amenities and values may be given appropriate consideration. "

The methods and procedures to insure that presently unquantified environmental amenities and values were given appropriate consideration are contained in Chapter 3 (Affected Environment and Environmental Consequences) of the EIS.

(c) Prepare adequate environmental impact statements pursuant to section 102(2)(C) and comment on statements in the areas where the agency has jurisdiction by law or special expertise or is authorized to develop and enforce environmental standards.

The EIS, as prepared, contains detailed information on:

1. The environmental impact of the Proposed Action is in Chapter 3 of the EIS,
2. Any adverse environmental effects, which cannot be avoided should the proposal be implemented, is in Chapter 3 of the EIS,
3. Alternatives to the proposed action is in Chapter 2 of the EIS,
4. The relationship between local short-term uses of man's environment and the maintenance and enhancement of long term productivity is in Chapter 3 of the EIS, and
5. Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented is in Chapter 3 of the EIS.

(d) Study, develop, and describe alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources. This requirement of section 102(2)(E) extends to all such proposals, not just the more limited scope of section 102(2)(C)(iii) where the discussion of alternatives is confined to impact statements.

A description of alternatives is contained in Chapter 2 of the EIS.

(e) Comply with the requirements of section 102(2)(H) that the agency initiate and utilize ecological information in the planning and development of resource-oriented projects.

The agency initiated and utilized ecological information as part the description of the affected environment and environmental consequences as described in Chapter 3 of the EIS.

(f) Fulfill the requirements of sections 102(2)(F), 102(2)(G), and 102(2)(I), of the Act and of Executive Order 11514, Protection and Enhancement of Environmental Quality, Sec. 2.

Sections 102(2)(F), 102(2)(G), and 102(2)(I), of the Act are national in scope and not relevant to this EIS.

In summary, the unauthorized routes, including those accessing dispersed sites, recommended by the public were site specifically analyzed for possible inclusion in the NFTS. The documentation of this analysis and the rationale for their inclusion or exclusion is described in Chapter 2 (The Alternatives) and Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS as well as the project record.

Commenters: 06384, 06701**,** 06704, 06713, 06730, 06805, FA

1.00-16 User fees: The Forest Service should require special licensing and user fees to support law enforcement, road and trail maintenance, and mitigation of adverse environmental impacts associated with motor vehicle use.

Response: Charging user fees is outside of the scope of this project. A portion of the fees collected by the State of California through gas taxes and the State OHV green sticker registration program are funneled back to the Forest to fund motorized trail maintenance and improvement projects.

Commenter: 06552

1.00-17 Additions to the NFTS: The Forest Service should not sanction existing unauthorized routes. These routes were created illegally, and it sets a bad precedent when the Agency legalizes routes that were created by scofflaws. Including these unauthorized routes in the NFTS invites further illegal incursions in the forest. No trails that were illegally created should be included in the final decision.

Response: Many of the unauthorized routes were actually historic and were built before National Forests existed. Many unauthorized routes are not user-created, and may have been created by logging, mining, and grazing activities. Alternative 3 in the FEIS was developed to respond to this concern. As such, this alternative includes no additions of existing unauthorized routes to the NFTS. The effects of Alternative 3 are analyzed in detail in the FEIS.

The prohibition of cross country travel is included in all of the action alternatives to prevent further proliferation of unauthorized routes. In all the action alternatives, motorized travel would be restricted to designated roads, trails, and "Open Areas".

Commenters: 00064, 01859, 02604, 02626, 04563, 06248, 06448, 06552, 06753, 06805

1.00-18 Project funding: A budget analysis of monies spent on this DEIS should be put in writing and made public.

Response: The TNF costs for the DEIS averaged approximately $700,000 per year for 2007 and 2008. Approximately 25% of these expenditures came from the State of California. The remainder came from the appropriated dollars allocated to the TNF from a variety of budget line items (i.e. fire suppression, vegetation management, road maintenance, trail construction etc.). Those funds which came from the State of California were generated by the Gasoline Tax and Green Sticker sales.

Commenters: 06248, 06802, 06812

1.00-19 Meeting the Purpose and Need: The addition of a small mileage of roads and motorized trails compared to the mileage of existing unauthorized routes on the Forest fails to meet the objective of "providing a diversity of road and trail opportunities (FSM 2353.03(2))" as indicated in the purpose and need.

Response: All the action alternatives considered in detail in the EIS meet the stated Purpose and Need. Chapter 2 of the FEIS describes how each action alternative specifically meets the Purpose and Need. The Tahoe National Forest is a forest with many miles of motorized roads and trails. Although it is difficult to determine all the areas where cross country motorized use occurs, the inventoried unauthorized OHV routes were used to determine the area potentially affected by cross country motorized use. 36 CFR 212.55 sets forth criteria for the designation of roads, trail, and areas. The Purpose and Need section of the FEIS states a need to consider these criteria in making the above-cited limited changes to the NFTS.

Motorized access would be available to the vast majority of the TNF under all alternatives. There is 87.7 percent of the Forest acreage within 0.5 mile of routes that are available for public motorized use under the No Action Alternative. In the action alternatives the range of 83.1 to 83.9 percent of the Forest acreage within 0.5 mile of routes is available for motorized recreation. That leaves 16.1 to 16.9 percent of the Forest available for non-motorized quiet recreation in the action alternatives and 12.3 percent available in the No Action Alternative. The diversity of road and trail opportunities provided in each alternative is described in Chapter 3.07 (Recreation and Visual Resources).

Commenters: 06704, 06719, FE, FI, S0004, S0013, S0014, S0015, S0016, S0018, S0025, S0026, S0027, S0062, S0063, S0064, S0066, S0067, S0069, S0072

1.00-20 Analyze all roads for addition: All existing roads and motorized trails should be analyzed individually for possible inclusion in the NFTS.

Response: The Interdisciplinary Team evaluated all roads, trails and areas specifically requested by the public during the public collaboration process prior to the NOI, during the public scoping period on the Notice of Intent, and the comment periods on the DEIS and SDEIS. Routes requested by the public during any of these timeframes were analyzed for inclusion in the NFTS. The criteria for selection of routes for each alternative are contained in Chapter 2 (The Alternatives). The rationale for either selecting or not selecting each specific route is contained in Appendix A (Site Specific Road, Trail and Open Area Information) and the project record.

Commenters: 00601, 00603, 00604, 00608, 00620, 00626, 00629, 00632, 00633, 00652, 00657, 00658, 00661, 00663, 00675, 00693, 00716, 00741, 01109, 01632, 02520, 02521, 02522, 02523, 02524, 02525, 02526, 02558, 02565, 05628, 06240, 06447, 06448, 06730, 06752, 06760, 06770, FA, FI, S0004, S0008, S0014, S0015, S0018, S0021, S0062, S0063, S0064, S0067, S0069

1.00-21 Examination of the whole transportation system: Travel planning should evaluate and address the environmental, social and cultural impacts associated with unauthorized routes, and currently designated roads, trails, and areas, as identified through a landscape-scale, science-based travel analysis.

Response: The entire road and trail system was analyzed in the cumulative effects sections of the EIS, including NFTS roads and trails, unauthorized routes, state, county and federal roads, and routes on private lands. The EIS did not address closing system roads or trails. Decisions to permanently

close and restore roads and trails to the pre-existing terrain are outside the scope of this project (Refer to FEIS, Chapter 1, Purpose and Need).

Commenters: 06457, 06642, 06716, 06779, 06788, FA, S0023

1.00-22 Temporary Forest Order: The interim Forest Order stopping cross country motor vehicle travel would close existing inventoried routes and violate NEPA. However, a closure order prohibiting cross country use between inventoried and system routes would be acceptable.

Response: The Forest Order referred to in the DEIS Chapter 1 did not close existing inventoried routes: it prohibited motor vehicle cross country travel between inventoried and system routes, as the commenter suggests.

Commenter: 06704

1.00-23 Significant issue not captured: The DEIS does not accurately capture a significant issue raised during scoping: the adverse impacts on motorized recreation and access due to loss of trails and roads where public use has been well-established and accepted by the agency. The DEIS lacks an alternative that responds to this significant issue.

Response: The issue of adverse impacts to motorized recreation and access due to loss of motorized routes historically used by the public is clearly captured in Chapter 1 (Purpose and Need) of the SDEIS and FEIS (Issue 1). This issue states: "The route inventory identified approximately 1,596.3 miles of existing unauthorized routes and the proposed action only adds 36.7 miles of these to the NFTS. Reducing the miles of routes available for public motorized use and prohibiting cross country travel as described in the Proposed Action will adversely affect the quality and quantity of motorized recreation experiences." Alternatives 2, 5, and 6 were developed to address this issue, and these alternatives are analyzed in detail in the FEIS.

Commenter: 06704, S0066

1.00-24 Ranking of purposes: It appears that the ordering of the purposes of the proposal represents their relative importance for determining changes to the NFTS.

Response: The purpose and need statements in Chapter 1 follow the Travel Management Rule (36 CFR 212.55). The ordering of each purpose does not indicate its importance. The list is bulleted, rather than numbered, to indicate that the purposes of the proposal are equally important.

Commenter: 06725

1.00-25 Definition of significant issue: Under NEPA, if a potential concern or issue can be addressed through mitigation it then no longer becomes an issue or concern, let alone a significant issue. The Forest Service should strike this definition of significant issue from the document.

Response: Council on Environmental Quality (CEQ) regulations at 40 CFR 1500.4 and 1501.7 discuss significant issues as they relate to environmental impact statements. These regulations emphasize identifying significant environmental issues deserving of study and deemphasizing

insignificant issues, thereby narrowing the scope of the environmental impact statement process. The Forest Service Handbook (FSH 1909.15, Chapter 10, Section 12.4) states: "Issues serve to highlight effects or unintended consequences that may occur from the proposed action and alternatives, giving opportunities during the analysis to reduce adverse effects and compare trade-offs for the decision maker and public to understand." Mitigation measures and design features, whether incorporated into one or more alternatives, serve to reduce the adverse effects associated with a particular issue or issues. The identification and use of significant issues to develop alternatives, including their mitigation measures and design features, as done for the Tahoe National Forest's motorized travel management planning effort, is consistent with NEPA.

Commenter: 06704, 06730

1.00-26 Rationale for Purpose and Need: The Forest Service has failed to develop a Purpose and Need that addresses local trends and desired conditions specific to the Tahoe National Forest.

Response: Chapter 1 of the FEIS sets the context for why this travel management planning effort is needed on the TNF. It explains how the Forest Service's 2005 final travel management regulations require national forests to designate roads, trails, and areas that are open to motor vehicle use on NFS lands. The FEIS goes on to describe the trend of how existing unplanned motorized routes unauthorized for motorized use have, in some situations, resulted in adverse impacts to natural resources. This travel management effort is needed to (1) regulate unmanaged motor vehicle travel by the public and (2) make limited changes to the TNF's transportation system to provide motorized recreation opportunities while addressing adverse impacts to natural resources, providing for public safety, minimizing conflicts between different recreation users, etc. (Refer to Chapter 3 in the FEIS for the effects on the resources from the No Action and Action Alternatives). Minor modifications were made to the Purpose and Need between the DEIS and SDEIS to improve clarity.

Commenters: 06642**,** 06704, 06770, FI, S0004, S0006, S0007, S0013, S0014, S0015, S0016, S0018, S0021, S0025, S0026, S0027, S0062, S0063, S0064, S0067, S0069, S0072

1.00-27 Directives pertaining to Travel Management: The Preferred Alternative does not conform with, nor foster, Forest Service policy as cited in FSM 2353.03(2).

Response: Forest Service Manual 2353.03(2) states:

"1. Provide trail-related recreation opportunities that serve public needs and that meet land management and recreation policy objectives.

2. Provide trail-related recreation opportunities that emphasize the natural setting of NFS lands and that are consistent with land capability.

3. Provide trail access for management and protection of NFS lands."

The Preferred Alternative is consistent with FS Manual 2353.03. The Preferred Alternative increases the number of system roads and trails authorized for motor vehicle use. The seasonal restrictions are necessary to be consistent with the land capability.

Commenter: 06704, 06782

1.00-28 Public participation: The Forest Service violated NEPA during the collaboration process prior to issuing the Notice of Intent.

Response: The NEPA process begins after the Notice of Intent is issued. The Notice of Intent, including the Proposed Action, was published in the Federal Register on April 11, 2007. The public scoping period on the Notice of Intent and Proposed Action began on April 11, 2007, and ended May 14, 2007.

The Notice of Availability for the Draft EIS was published in the Federal Register on October 3, 2008. Public comments on the Draft EIS, including the Proposed Action, were accepted until December 29, 2008.

The public collaboration process used to gather information for the Notice of Intent was done with full public involvement and disclosure. Documentation of the public collaboration process is fully described in Chapter 4 of the FEIS and the project record.

All routes suggested by the public during: (1) the public collaboration process prior to the NOI, (2) the scoping period on the NOI, and (3) the DEIS and SDEIS public comment processes were fully evaluated for inclusion in the NFTS. The rationale for each route being added to or excluded from NFTS motorized recreation opportunities is found in Appendix A (Site Specific Road, Trail and Open Area Information) and the project record.

Commenters: 06716, 06730, 06779

1.00-29 Scoping: The Forest Service did not conduct adequate scoping in developing the DEIS.

Response: In April, 2007, the Forest Service completed the "Proposed Action and Notice of Intent to Prepare an Environmental Impact Statement" based on comments from the meetings held in the fall, 2006. The public comment period began on April 11, 2007 when the NOI was published in the Federal Register. Presentations to a variety of groups, phone calls, news releases, website postings and e-mails were used to alert the public of the opportunity to comment on the Proposed Action. In 2007, public meetings were held in Truckee (April 18), in Foresthill (April 24) and in Grass Valley (April 26) to explain the Proposed Action. Approximately 3,500 comments were received during April and May. Refer to Chapter 4 of the FEIS for more details of the public involvement process.

Commenter: 06730

1.00-30 Notice of Intent NEPA compliance: The NOI does not comply with NEPA**.** The Forest's NOI states it will prepare an EIS to disclose the impacts of the Proposed Action. It does not describe

possible alternatives. Neither the NOI nor the DEIS disclose why this particular 50 miles of "*existing unauthorized routes*" were selected for inclusion in the Preferred Alternative.

Response: The NOI is fully compliant with NEPA... 40 CFR Sec. 1508.22 of the NOI states: "Notice of intent" means a notice that an environmental impact statement will be prepared and considered. The notice shall briefly: (a) Describe the proposed action and possible alternatives; (b) Describe the agency's proposed scoping process including whether, when, and where any scoping meeting will be held; and (c) State the name and address of a person within the agency who can answer questions about the proposed action and the environmental impact statement.

The proposed action was described in the NOI. The alternatives had not been developed at the time the NOI was published. The scoping process was described in the NOI including the location and timing of the scoping meetings held. The name and address of a person within the agency who can answer questions about the proposed action and the EIS was contained in the NOI. The criteria for selecting for inclusion the additions to the NFTS, establishment of motorized "Open Areas", and reopening Maintenance Level 1 roads for each alternative is described in Chapter 2 of the FEIS.

Commenter: 06730

1.00-31 California Wilderness Act and Multiple Use: The 1984 California Wilderness Act released all of the Inventoried Roadless Areas on the Tahoe National Forest for Multiple Use, therefore unauthorized routes in these areas should be considered part of the existing National Forest Transportation System (NFTS), or added to the (NFTS).

Response: The California Wilderness Act of 1984 released lands for multiple uses thereby making them available for project level decisions that were not consistent with future Wilderness consideration. It did not mandate that such decisions should be made. Nor did it specify that previously unauthorized activities not consistent with future Wilderness considerations were automatically authorized. Rather it allowed such future decisions to be made if all applicable laws, policies and regulations were followed. Therefore release of these Roadless Areas for multiple uses did not make the unauthorized motorized routes in these areas part of the NFTS.

Commenters: S0004, S0006, S0007, S0008, S0013, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069, S0072

1.00-32 Unauthorized versus unclassified: The use of the term "unauthorized routes" is an error since the Tahoe National Forest authorized cross country travel in the past.

Response: The definition of unauthorized rather than unclassified was established by the 2005 Travel Management Final Rule (**Federal Register** / Vol. 70, No. 216 / Wednesday, November 9, 2005 / Rules and Regulations). The definition of unauthorized routes used by the Forest is consistent with this definition. The Department of Agriculture addressed this issue in the "**Public Comments on Proposed Rule and Department Responses"** in the Final Rule where it states "*The Department believes that the term "unauthorized or unclassified road or trail" is cumbersome and that*

"unauthorized" more accurately captures the nature of these routes than "unclassified." Accordingly, in the final rule, the Department is changing "unauthorized or unclassified road or trail" to "unauthorized road or trail." The definition for unauthorized road or trail (a road or trail that is not a forest road or trail or a temporary road or trail and that is not included in a forest transportation atlas) makes clear that unauthorized roads and trails are not part of the forest transportation system and are not officially recognized by the Forest Service. Stating that an unauthorized road or trail is not included in a forest transportation atlas does not imply that it can be authorized simply by including it in the atlas. As stated in the preamble to the proposed rule, user-created roads and trails may be identified through public involvement and considered in the designation process. After public consideration and appropriate site specific environmental analysis, some user-created routes may be designated for motor vehicle use pursuant to § 212.51 of the final rule. These routes would become NFS roads or NFS trails and would be included in a forest transportation atlas and reflected on a motor vehicle use map. The final rule contains a prohibition at 36 CFR 261.13 pertaining to motor vehicle use. Under this provision, after NFS roads, NFS trails, and areas on NFS lands have been designated pursuant to 36 CFR 212.51 on an administrative unit or a Ranger District, it is prohibited to possess or operate a motor vehicle on NFS lands in that unit or District other than in accordance with those designations. At that point, motor vehicle use off designated routes and outside designated areas will be prohibited under § 261.13."

Commenter: FA, FI, S0003, S0008

1.00-33 Additions to NFTS are not new activities Additions to the NFTS are not new activities and as such are not subject to the Sierra Nevada Framework requirement for evaluation of all proposals for new roads and trails.

Response: Additions of unauthorized routes to the National Forest Transportation System is a new activity and as such are subject to NEPA and the Standards and Guidelines in the Sierra Nevada Forest Plan Amendment. The fact these routes are currently receiving unauthorized use by the public does not mean their addition to the NFTS is exempt from these requirements.

Commenter: S0008

1.00-34 Issues in NOI predetermined scoping comments Assumptions made in the Notice of Intent (NOI) and Purpose and Need predetermined the issues and limited the Range of Alternatives.

Response: Over 3,500 scoping comments were received on the Notice of Intent. All of these scoping comments were considered by the Forest Service. The process the Forest Service used for consideration of these comments is described in Chapter 1 of the FEIS. The consideration of scoping comments was not limited by the background information in the Notice of Intent.

Commenter: S0008

Section 2.0: Alternatives

2.00-1 Alternative 1 (Support): The Forest Service should select the No Action Alternative (Alternative 1).

Response: Supportive comments regarding Alternative 1 were considered in making modifications to Alternative 6 (the Preferred Alternative) between Draft and Supplemental Draft EIS by increasing motorized recreation opportunities. These changes have been carried forward in the FEIS. The rationale for the Selected Alternative will be included in the Record of Decision.

Commenters: 00043, 00056, 00087, 00550, 00580, 00750, 00762, 00818, 01396, 01683, 04568, 05281, 06234, 06384, 06593, 06670, 06752, 06779, 06792, 06796, FC, S0005, S0006, S0007

2.00-2 Alternative 1 (definition of the No Action Alternative): The DEIS does not include a map of the No Action Alternative, nor does it include a comprehensive analysis of all the existing unauthorized routes on the Forest. The No Action Alternative needs to include all of the mileage of unauthorized routes in addition to simply the acres open to cross country travel. These unauthorized routes need to be included on the map of the No Action Alternative. The DEIS identifies the No Action Alternative as a “no management alternative” The Forest has not been directed by any regulation or the Forest Plan to ignore travel management.

Response: Alternative 1 would not prohibit cross country travel nor prohibit motorized use on any existing unauthorized routes on the Tahoe National Forest. A map of the No Action Alternative was included in the DEIS and SDEIS.

In addition, existing unauthorized routes and National Forest Transportation System (NFTS) routes on National Forest System lands are displayed on the Existing Condition map in the SDEIS and carried forward into the FEIS. The Existing Condition Map does not show the unauthorized routes if it is closed by a forest order.

The environmental effects of the No Action Alternative, associated with the mileage of unauthorized routes as well as the acres of cross country travel, are analyzed in detail in Chapter 3 (Affected Environment and Environmental Consequences) of the FEIS.

The additional effects of the existing NFTS as well as routes on private lands are included in the cumulative effects analysis for each affected resource.

Alternative 3 can also be used as a baseline for comparison in that it makes no additions to the NFTS motorized recreation opportunities and implements the prohibition of cross country travel contained in the Tahoe Land and Resource Management Plan (1990) as amended by the Sierra Nevada Forest Plan Amendment (2004).

Commenters: 02558, 06378, 06704, 06730, 06752, 06756, S0005, S0008

2.00-3 Alternative 1 (Cross country travel prohibition): Cross country is prohibited by Executive Orders 11644 and 11989, the Travel Management Rule, and by the Sierra Nevada Forest Plan

Amendment of 2004, which requires forests to "prohibit wheeled vehicle traffic off designated routes, trails, and limited off-highway vehicle (OHV) use areas.

Response: Executive Orders 11644 and 11989 establish policies and provide for procedures that will ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands. These Executive Orders by themselves do not prohibit cross country travel.

Each of the action alternatives is designed specifically to implement 36 CFR 212 Subpart B – Designation of Roads, Trails, and Areas for Motor Vehicle Use. The No Action Alternative does not implement 36 CFR 212 Subpart B.

The Sierra Nevada Forest Plan Amendment Record of Decision (2004) contains a Forest-wide Standard and Guideline (S&G) which states in part "Prohibit wheeled vehicle travel off of designated routes, trails, and limited off highway vehicle (OHV) use areas." Standards and Guidelines are not decision documents on their own. An authorized officer needs to say where motorized use is allowed or not. The Travel Management Project, and resulting Motor Vehicle Use Map, is the mechanism for designating these areas. Therefore, this FEIS is needed to designate routes in order to implement this S&G.

Commenter: 00685

2.00-4 Alternative 2 (Support): The Forest Service should select Alternative 2, the Motorized Recreation and Access Opportunities Alternative.

Response: The support for Alternative 2 was considered in the modifications to the Preferred Alternative by increasing motorized recreation opportunities. All of the unauthorized routes added to the NFTS and Maintenance Level 1 roads reopened in Alternative 2 were also included in the Preferred Alternative unless there were resource concerns such as to the Inventoried Roadless Area characteristics etc. In addition portions of the established "Open Areas" at Boca, Prosser and Stampede Reservoirs were added to the Preferred Alternative. The rationale for the development of the Selected Alternative will be contained in the Record of Decision.

Commenters: 00009, 00047, 00069, 00073, 00074, 00475, 00477, 00480, 00558, 00559, 00569, 00582, 00586, 00587, 00810, 00811, 00819, 00824, 01099, 01368, 02545, 02549, 05280, 05284, 05285, 05401, 06270, 06387, 06724

2.00-5 Alternative 3 (Support): The Forest Service should select Alternative 3.

Response: The support of Alternative 3 was considered in the modifications of the Preferred Alternative (Alternative 6). Elements of Alternative 3 which were used in the modifications to Preferred Alternative include increased protection for Inventoried Roadless Areas and the affordability of the NFTS (road/trail maintenance costs). The rationale for the Selected Alternative will be included in the Record of Decision.

Commenters: 00579, 00683, 00823, 04558, 05639, 06474

2.00-6 Alternative 3 (Interim Forest Order): The environmental effects analysis should assume that the Step 2 Interim Forest Order prohibiting cross country travel is in effect for all the action alternatives.

Response: The Forest Order issued on October 26, 2007 and re-issued on July 13, 2009 is an interim Forest Order issued for one year. Alternative 3, which is analyzed in detail in the FEIS, addresses this comment in that it proposes to adopt only existing NFTS roads and trails, with no additions, and prohibits cross country as contained in the interim Forest Order.

Commenter: 06716

2.00-7 Alternative 4 (Support): The Forest Service should select Alternative 4.

Response: Supportive comments regarding Alternative 4 were considered in making modifications to Alternative 6 (the Preferred Alternative) between Draft and Supplemental Draft EIS by reducing the amount of impacts to Inventoried Roadless Area characteristics. These changes have been carried forward in the FEIS. The rationale for the Selected Alternative will be included in the Record of Decision.

Commenters: 00008, 00015, 00030, 00040, 00093, 00589, 00805, 06243, 06474, 06478, 06675, 06749, S0021, S0054, S0060

2.00-8 Alternative 5 (Support): The Forest Service should select Alternative 5.

Response: Supportive comments regarding Alternative 5 were considered in making modifications to Alternative 6 (the Preferred Alternative) between Draft and Supplemental Draft EIS by increasing the amount of motorized recreation opportunities. These changes have been carried forward in the FEIS. The rationale for the Selected Alternative will be included in the Record of Decision.

Commenters: 00594, 06732

2.00-9 Alternative 5 (Not representative of OHV user group's concerns): Local OHV advocates, organizations, and clubs were excluded from development of a so-called "Pro OHV" alternative. No outreach was made to local OHV leaders to help shape a Pro OHV alternative. In addition, of approximately 1,400 miles of historic user routes available, only a small amount of user routes are being considered by the agency. The number of trails added to the NFTS should be significantly higher.

Response: As described in Chapter 2 (The Alternatives) of the EIS, Alternative 5 is based on the Proposed Action contained in the Notice of Intent as modified by an alternative submitted by the Blue Ribbon Coalition during the scoping process. Alternative 5 was developed to address the issue of providing sufficient wheeled motorized public access to TNF lands as well as public concerns about reduced motorized recreation opportunities. The Forest Service met frequently with members

of the OHV community in addition to the Blue Ribbon Coalition throughout the Travel Management project to insure both of their concerns were addressed as documented in the project record.

The mileage of additions to the National Forest Transportation System in Alternative 5 included routes: 1) Site specifically recommended by the public, 2) Located in the Cal-Ida, French Meadows, Mosquito Ridge, Boca/Prosser/Stampedes Reservoir areas, and 3) previous NFTS roads and trails.

An alternative which added all unauthorized routes to the NFTS was considered but eliminated from detailed study as described in Chapter 2 of the FEIS.

Commenters: 02956, 06698, 06752, FE

2.00-10 Alternative 5 (Description): The public is misled, by identifying Alternative 5 as being the Blue Ribbon Coalition (BRC) alternative. Alternative 5 is not endorsed by BRC without modification.

Response: Alternative 5 is not represented in the FEIS as the "Blue Ribbon Coalition Alternative." Nor does it state that Alternative 5 is endorsed by the Blue Ribbon Coalition. As stated in Chapter 2 (The Alternatives) of the FEIS, Alternative 5 is based on the Proposed Action contained in the NOI as modified by an alternative submitted by the Blue Ribbon Coalition during the scoping process. Alternative 5 was developed to address the issue of providing sufficient wheeled motorized public access to Tahoe NFS lands as well as public concerns about reduced motorized recreation opportunities.

Commenter: 06752, FE

2.00-11 Alternative 6 (Support): The Forest Service should select Alternative 6 (the Preferred Alternative).

Response: Modifications were made to Alternative 6 in the SDEIS based on public comments. See response to comment 2.00-12 below. These changes have been carried forward in the FEIS.

Commenters: 00011, 00039, 00060, 00070, 00557, 00563, 04556, 04572, 05295, 05632

2.00-12 Alternative 6 (Opposition): The Forest Service should not select Alternative 6 (the Preferred Alternative).

Response: Modifications were made to the Preferred Alternative between Draft and Supplemental Draft EIS in response to public comments. These modifications include:

- Increasing motorized access to dispersed recreation sites;
- Providing motorized access to the shoreline at Boca, Prosser, and Stampede Reservoirs;
- Providing wheeled over-the-snow travel on the Fordyce Jeep Trail;
- Shortening the wet weather seasonal restrictions on the west side of the Forest to improve motorized recreation opportunities;
- Allowing mixed use during the deer rifle hunting season on key roads; and
- Improving protection for Inventoried Roadless Areas.

These changes have been carried forward in the FEIS. The criteria for selection of routes for each alternative are contained in Chapter 2 (The Alternatives).

Commenters: 00032, 00044, 06478, 06689, FG

2.00-13 Alternative 7 (Support): The Forest Service should select Alternative 7.

Response: Alternative 7 is the Proposed Action Alternative and is the starting point for the action alternatives. Alternative 7 proposes adding motorized trails to the NFTS, but did not add any motorized roads to the NFTS. Comments received during scoping showed a need to develop other alternatives based on the issues. Support for Alternative 7 was considered in modifying the Preferred Alternative in the SDEIS. Refer to the response to comment 2.00-12 above for changes made to the Preferred Alternative between the Draft and Supplemental Draft EIS. These changes have been carried forward in the FEIS. The rationale for the Selected Alternative will be included in the Record of Decision.

Commenter: 05640

2.00-14 Additional alternatives suggested (Responsible Recreation Alternative): A "Responsible Recreation Alternative" would consider the value of historic human experience in the forest (including the 1850's). Such an alternative would provide the public with needed access to the Tahoe National Forest while meeting the ultimate goal of prohibiting cross country travel. All requested trails are currently in use, and user maintained as also demonstrated by the fact they were included in the inventory.

Response: The Responsible Recreation Alternative was considered but eliminated from detailed study due to its lack of specificity in recommendations and its similarity to Alternative 5.

Commenters: 06258, 06396, 06410, 06467, 06479, 06510, 06683, 06754, 06789, FH

2.00-15 Additional alternatives suggested (Keep all unauthorized routes open to OHV's): All routes currently used by OHV's should be allowed to be used by OHV's in the future. These routes included old haul roads, old mining trails, and routes constructed or maintained by OHV riders and/or groups.

Response: Adding all unauthorized routes to NFTS motorized recreational opportunities and keeping them open to public motorized use was an alternative considered but eliminated from detailed study. This alternative was eliminated from detailed study based on the affordability of such a large system and the adverse impacts associated with soil, water, native vegetation, wildlife and other resources. Also, refer to response to comment 1.00-10 and Chapter 2 (The Alternatives) in the FEIS.

Commenters: 00601, 00603, 00626, 00629, 00632, 00661, 00715, 01362, 02565, 05631, 06237, 06267, 06384, 06448, 06476, 06480, 06576, 06583, 06742, FC, S0008

2.00-16 Additional alternatives suggested (Stewards of the Sierra Alternative): The Forest Service should consider the alternative submitted by the Stewards of the Sierra.

Response: This alternative was considered but eliminated from detailed study. The rationale for eliminating this alternative from detailed study is presented in Chapter 2 (The Alternatives).

Each unauthorized route proposed for addition to the NFTS in one or more of the action alternatives is described in Appendix A (Site Specific Road, Trail and Open Area Information) including the rationale for its inclusion in the Preferred Alternative. The project record describes the reasons for excluding specific routes from all alternatives.

Commenter: 06704

2.00-17 Support for OHV recreation: Motorized access to the TNF is important.

Response: Providing motorized access to the TNF, including OHV's is a key element of the Preferred Alternative as described in the Chapter 2 (The Alternatives) of the FEIS. The action alternatives address the different types and goals of motorized recreation in various ways and balance that need with the resource issues.

The Tahoe National Forest is a forest with many miles of motorized roads and trails. Although it is difficult to determine all the areas where cross country motorized use occurs, the inventoried unauthorized OHV routes were used to determine the area potentially affected by cross country motorized use. There is 87.7 percent of the Forest acreage within 0.5 mile of routes that are available for public motorized use under the No Action Alternative. In the action alternatives the range of 83.1 to 83.9 percent of the Forest acreage within 0.5 mile of routes is available for motorized recreation. That leaves 16.1 to 16.9 percent of the Forest available for non-motorized quiet recreation in the action alternatives and 12.3 percent available in the No Action Alternative. The diversity of road and trail opportunities provided in each alternative is described in Chapter 3.07 (Recreation and Visual Resources).

Commenters: 00017, 00018, 00027, 00045, 00057, 00071, 00085, 00096, 00560, 00565, 00618, 00624, 00629, 00648, 00653, 00655, 00665, 00673, 00674, 00685, 00687, 00690, 00691, 00695, 00696, 00697, 00705, 00706, 00711, 00717, 00720, 00729, 00736, 00739, 00746, 00751, 00754, 00756, 00757, 00763, 00775, 00776, 00779, 00789, 00808, 00809, 00813, 00815, 00817, 00821, 01023, 01112, 01113, 01274, 01367, 01402, 01409, 01411, 01412, 01450, 01481, 01510, 01511, 01517, 01523, 01565, 01572, 01575, 01580, 01621, 01630, 01632, 01636, 01654, 01657, 01658, 01661, 01663, 01665, 01668, 01670, 01696, 01724, 01730, 01732, 01738, 01744, 01763, 01779, 01785, 01797, 01817, 01818, 01825, 01877, 02507, 02528, 02529, 02530, 02536, 02540, 02541, 02542, 04546, 04569, 05289, 05290, 05320, 05329, 05636, 06036, 06303, 06348, 06460, 06474, 06480, 06584, 06606, 06650, 06656, 06671, 06698, 06700, 06719, 06733, 06743, 06744, 06779, 06789, 06802, 06812, FE, S0030

2.00-18 Opposition to motor vehicle use: The Forest Service should limit motorized access to the TNF.

Response: Motor vehicle use is a legitimate use of some NFS lands. Protection of resource values adversely impacted by motor vehicle use was a key component of the Preferred Alternative as described in the FEIS. The resources considered included: Inventoried Roadless Areas characteristics, Wild & Scenic Rivers, air quality, cultural resources, wildlife, watershed, recreation opportunities and others.

Commenters: 00005, 00016, 00022, 00041, 00061, 00063, 00084, 00135, 00199, 00460, 00557, 00574, 00582, 00683, 00812, 00816, 00822, 00823, 00990, 01058, 01107, 01233, 01384, 02159, 02234, 02413, 02607, 02664, 02758, 02793, 02805, 02812, 03057, 03077, 04550, 04566, 05423, 05457, 06221, 06276, 06552, 06599, 06688, 06689, 06692, 06721, 06730, 06753, 06787, FD, S0057

2.00-19 Wet weather seasonal restrictions: The Forest Service should implement wet weather seasonal restrictions for motor vehicle use: wet season use causes more road/trail and watershed damage than dry season use.

The Forest Service should not impose wet weather seasonal restrictions: wet season use of roads/trails does not cause damage to the route or watershed resources. There is support for seasonal closures based on weather or soil conditions, rather than dates.

Response: The condition of native surface roads and motorized trails can quickly decline during winter or wet weather use due to rutting. Rutting is the process where soils are displaced and deform to the shape of the tire tracks that make their way through saturated soils. Rutting during the wet season can cause the breakdown of drainage control structures and increases the risk of runoff concentration and erosion; both from the tread surface and off the trail. Rutting can occur if traffic enters the area before the soils have sufficient drying time. To some extent wet season damage can be influenced by soil type, but all soil types are susceptible.

Wet weather seasonal restrictions also provide benefits to mule deer, bald eagles, Lahontan cutthroat trout, Lahontan Lake tui chub, foothill yellow legged frog, mountain yellow legged frog, California red-legged frog, northwestern pond turtle, and Great Basin Ramshorn snail by reducing the time periods when motor vehicles and these animals might be using the same area. This would help to reduce direct impacts and disturbance at critical times and would also reduce sedimentation of the water.

It is recognized however that wet weather seasonal restrictions may have an adverse impact on motorized recreation and the local economy in some small communities.

The references contained in Chapter 3.02 (Watershed Resources: Geology, Soil, Hydrology) illustrate that wet season use of native surface roads and trails can have adverse impacts on water quality. The USGS OHV publication (Ouren et. al 2007) points out that wet soils have less bearing capacity than dry soils, which can lead to rutting and subsequent channeling of surface water flow and increased erosion on and off the trail. Personal observations of the Forest Soil Scientist and West Zone Hydrologist along with the inventories conducted for this project agree with the literature that wet season use can result in increased impacts to soil and watershed resources.

The Preferred Alternative imposes wet season restrictions on all native surface roads and trails. These additional wet weather seasonal restrictions are imposed to minimize erosion and protect water quality. To provide additional flexibility the Preferred Alternative shortened the wet weather seasonal restrictions proposed in the Preferred Alternative by one month on the western slopes of the Forest. This one month reduction is designed to provide additional motorized recreation opportunities and minimize adverse impacts to local economies while still providing protection for soil, water, native vegetation, and aquatic species. It is anticipated however, that additional temporary seasonal restrictions may need to be imposed to minimize erosion and protect water quality at some point in the future. These closures could begin earlier and end later than the specified dates, based on Forest specialist assessments of field conditions. Any such closures would be handled under a temporary forest order with associated environmental analysis.

Commenters: 00009, 00029, 00031, 00033, 00081, 00085 00096, 00476, 00481, 00558, 00570, 00590, 00591, 00599, 00625, 00645, 00650, 00656, 00683, 00685, 00707, 00709, 00719, 00725, 00727, 00728, 00734, 00740, 00747, 00749, 00760, 00771, 00780, 00792, 00803, 00820, 00821, 01100, 01251, 01363, 01371, 01683, 01720, 01854, 02507, 02519, 02550, 03567, 04542, 04557, 05270, 05633, 05636, 05639, 06231, 06237, 06244, 06248, 06266, 06270, 06277, 06378, 06381, 06387, 06418, 06437, 06455, 06455, 06463, 06464, 06469, 06472, 06480, 06510, 06511, 06516, 06533, 06551, 06555, 06556, 06564, 06566, 06575, 06578, 06581, 06589, 06593, 06626, 06635, 06643, 06650, 06670, 06684, 06685, 06687, 06692, 06693, 06699, 06700, 06701, 06704, 06718, 06724, 06733, 06738, 06745, 06749, 06755, 06765, 06773, 06774, 06779, 06784, 06790, 06797, 06799, 06800, 06806, 06808, 06810, 06811, FC, FE, FI, S0014, S0015, S0018, S0021, S0023, S0055, S0056, S0057, S0061, S0062, S0063, S0064, S0067, S0069

2.00-20 Rainfall-based seasonal restrictions: The Forest Service should use a rainfall-based wet seasonal restriction for motor vehicles rather than fixed dates.

Response: The Forest Supervisor has concluded that it is not reasonable to implement this strategy across the Forest, because of the staffing needed to implement signing, gate management, etc., and the ability to inform the diverse publics that use the Forest in a timely way.

To provide additional flexibility the Preferred Alternative shortened the wet weather seasonal restrictions proposed in the Draft EIS by one month on the western slope of the Forest. This one month reduction is designed to provide additional motorized recreation opportunities and is analyzed in the SDEIS and FEIS.

To explore the feasibility of rainfall-based wet-weather seasonal restrictions, the Forest is perusing additional funding through the Pacific Southwest Research Station to study the feasibility of implementing a rainfall-based method of seasonal restrictions in the Sugar Pine area near Foresthill.

Commenters: 00029, 00031, 00067, 00580, 00590, 00591, 00598, 00599, 00652, 00765, 01251, 01594, 02548, 02551, 02968, 05628, 05632, 06224, 06247, 06383, 06393, 06417, 06564, 06579,

06607, 06620, 06626, 06636, 06639, 06650, 06680, 06698, 06699, 06731, 06738, 06744, 06773, 06779, 06789, 06797, 06802, 06812, FC, FE, FI, S0021, S0055, S0061

2.00-21 Big game retrieval: The Forest Service should allow cross country motor vehicle travel for big game retrieval.

Response: The California Department of Fish and Game (CDF&G) define Big Game on the TNF as deer and black bear. It is illegal to pursue, drive, herd, or take any bird or mammal from any type of motor-driven air or land vehicles, motorboat, airboat, sailboat, or snowmobile, except when the motor is off and/or the sails furled and it is drifting, beached, moored, resting at anchor, or is being propelled by paddle, oar or pole.

During informal consultation between the USFS and the CDF&G associated with the travel management process the CDF&G understood the agency's intent and were in support of the strategy for planning and implementing a system of designated routes in California and did not support the limited use of cross country travel.

A proposed designation including the limited use of motor vehicles within a specified distance of a certain forest road or forest trail, and if appropriate within specified time periods, solely for the purpose of retrieval of a downed big game animal by an individual who has legally taken that animal was carefully analyzed and determined not to be appropriate on the TNF due to the adverse environmental impacts associated with cross country travel as described in the FEIS. Non-motorized retrieval would still be allowed.

Commenters: 00564, 06270, 06480, 06724, 06792

2.00-22 Motorized access to dispersed sites and one vehicle length parking: The Forest Service should provide motorized access to dispersed recreation sites and include the numerous site specific recommendations. The Forest Service should consider designating corridors for dispersed camping along roads or trails. The Forest Service should allow more time to fully identify all of the motorized access routes to dispersed sites. Finally, the one vehicle length parking restriction off of designated roads, trails and areas is too restrictive: parking should be allowed approximately 300-500 feet from the edge of a road."

Response: All site specific requests for additions to the NFTS made by the public during the comment period were reviewed. All of those proposals that did not have serious adverse environmental effects associated with them were proposed for addition to the NFTS in the Preferred Alternative. By adding these short spur routes which provided access to dispersed sites, adverse impacts to recreation access will be mitigated. Site specific information and mitigation measures for each route analyzed are contained in Appendix A (Site Specific Road, Trail and Open Area Information). Access to 437 dispersed recreation sites was provided in the Preferred Alternative.

In all of the action alternatives, parking off of designated roads, trails and areas is limited to one vehicle length. Parking was limited to this distance to prevent the proliferation of new unauthorized

routes and minimize adverse impacts to the physical and biological environment. When additional routes accessing dispersed sites are identified by the public and Forest Service over time, they will be analyzed in subsequent NEPA documents and, if appropriate, added to the NFTS.

The impacts associated with the one vehicle length restriction are disclosed in the FEIS. The one vehicle length parking restriction is clarified under "Elements Common to All Action Alternatives" in Chapter 2 (The Alternatives) of the SDEIS and FEIS.

The scoping and public comment process associated with the DEIS provided the public with an opportunity to identify any routes accessing dispersed recreation sites they wanted added to the NFTS. Those areas that were important for equestrian staging and camping were also identified during the public comment period on the DEIS. Those routes accessing dispersed recreation sites recommended by the public were added to the Preferred Alternative provided they did not have significant resource concerns which could not be mitigated.

Commenters: 00006, 00014, 00018, 00020, 00026, 00059, 00062, 00094, 00564, 00597, 00635, 00652, 00732, 02507, 02564, 05271, 06244, 06270, 06378, 06460, 06474, 06480, 06562, 06565, 06610, 06611, 06635, 06645, 06681, 06688, 06713, 06718, 06720, 06724, 06736, 06742, 06752, 06763, 06782, 06792, 06796, 06803, 06891, FC, FE, FI, S0014, S0015, S0018, S0023, S0062, S0063, S0064, S0067, S0069

2.00-23 Wheeled over-the-snow use: The Forest Service should include wheeled over-the-snow travel in the decision. Other commenters oppose wheeled over-the-snow travel. The Forest Service should allow wheeled over-the-snow travel on the Fordyce 4X4 Trail.

Response: Under all alternatives, over-the-snow travel with wheeled vehicles is allowed on all Maintenance Level 3-5 roads unless they are designated snowmobile trails.

Wheeled over-the-snow travel will not be allowed on Maintenance Level 3-5 roads which are groomed snowmobile trails due 1) to safety considerations, 2) the need to prevent conflicts between snowmobile users and wheeled vehicle users, and 3) the need to protect the financial investment made during the grooming of the snowmobile trail.

Wheeled over-the-snow travel will generally not be allowed on ML-2 roads and motorized trails because of the concern over inconsistent, variable snow levels, especially with changes in aspect and elevation. These changes make it extremely difficult to accurately determine snow depths, and are likely to cause the user to drive on shallow snows which could impact adjacent soils, leading to unacceptable levels of soil erosion.

In response to public comments wheeled over-the-snow travel will also be allowed on a 3.7-mile portion of the Fordyce Jeep Trail when there is a minimum of 15 inches of snow. When the snow depth approaches this minimum, snow conditions will be monitored to verify snow depth is sufficient to start or continue wheeled over-the-snow travel. This change was made in the Preferred

Alternative (Alternative 6) to provide additional wheeled over-the-snow recreation opportunities. This trail was selected since it is one of the most popular trails on the TNF for this activity.

The environmental effects associated with wheeled over-the-snow travel are discussed throughout Chapter 3 (Affected Environment and Environmental Consequences) of the FEIS.

Commenters: 00033, 00114, 00569, 00606, 00637, 00642, 00658, 00661, 00571, 00572, 00573, 00588, 00616, 00620, 00628, 00638, 00647, 00648, 00656, 00659, 00662, 00671, 00680, 00688, 00689, 00692, 00694, 00699, 00703, 00707, 00708, 00710, 00713, 00714, 00718, 00721, 00722, 00723, 00724, 00730, 00731, 00733, 00735, 00737, 00738, 00740, 00741, 00742, 00743, 00745, 00746, 00749, 00751, 00753, 00755, 00763, 00766, 00767, 00768, 00770, 00771, 00772, 00778, 00781, 00782, 00784, 00786, 00787, 00798, 00806, 01110, 01859, 02528, 02533, 02870, 02956, 04547, 04557, 05633, 05636, 05710, 06036, 06237, 06244, 06277, 06373, 06378, 06383, 06455, 06480, 06481, 06544, 06566, 06572, 06573, 06574, 06589, 06605, 06692, 06698, 06704, 06720, 06724, 06738, 06744, 06752, 06779, 06808, FG, FI, S0061

2.00-24 Increasing recreational access to areas currently gated and closed: The Forest Service should remove existing gates and lift motorized closures to allow additional access to closed areas, especially those associated with water bodies.

Response: Reopening Maintenance Level 1 roads is one of the elements of the decision being made in each of the alternatives. The alternatives range from 0 to 93.4 miles of Maintenance Level 1 roads being reopened for public motorized use.

Between the Draft and Supplemental Draft EIS a comprehensive review of the last 15 years NEPA decisions on road and trail closures was conducted. It was determined through this review that the reasons behind the road and trail closures in these decisions were still valid. Refer to comment 1.00-5.

Commenter: 00680

2.00-25 Designating roads and trails on private land: The Forest Service should have considered adding roads and trails to the NFTS on private land in the action alternatives.

Response: The FS has no legal authority to designate NFTS roads or trails on private land without first obtaining an easement from the land owner.

Commenter: 06724

2.00-26 Existing Closures: Several existing NFTS roads and trails depicted on the maps are actually closed.

Response: Existing closures of NFTS roads were reviewed between Draft and Supplemental Draft EIS. The Alternatives were updated to correct any errors in existing closures approved by Forest Orders or previous Administrative Decisions. These corrections are described in Chapter 2 (The Alternatives) of the SDEIS. These changes have been carried forward in the FEIS.

Commenters: 06480, 06642

2.00-27 Management Area 84 Forest Plan amendment: There is both support and opposition for the Forest Service's proposal to amend the Forest Plan to remove the November 1 to May 1 seasonal closure in Management Area 84 for key winter deer range.

Response: In response to the proposed changes to the seasonal deer closure within Management Area 84 (Humbug Sailor), the FEIS Preferred Alternative (Alternative 6) would amend the Tahoe NF Land Management Forest Plan to remove the current seasonal deer closure. The FEIS acknowledges that increased impacts to deer could occur on key winter range in this area as a resulting of shortening the period of time when motorized vehicular access would be restricted (Chapter 3.03, Terrestrial and Aquatic Species). However, the seasonal wet weather restrictions that are part of Alternative 6 would have an associated beneficial effect of minimizing disturbance to deer utilizing this key winter range for a 3-month period during the height of winter.

Commenters: 06271, 06704, 06716

2.00-28 Prohibition of cross country travel: There is general public support for the prohibition of cross country travel by wheeled motor vehicles.

Response: The Preferred Alternative prohibits cross country travel off of designated roads, trails and "Open Areas". This prohibition of cross country travel is one of the key elements of regulation of unmanaged motor vehicle traffic. Unmanaged OHV use on NFS lands has resulted in unplanned roads and trails, erosion, watershed and habitat degradation, and impacts to cultural resource sites. Compaction and erosion are the primary effects of OHV use on soils. Riparian areas and aquatic dependent species are particularly vulnerable to adverse impacts from OHV use.

Commenters: 00096, 04572, 05271, 06552, 06737, 06753, 06755, S0023, S0066

2.00-29 Snowmobiles: It is unclear whether the decision to be made would apply to snowmobiles.

Response: Snowmobile use is outside of the scope of this decision.

Commenters: 00004, 00023, 00061, 00066, 05305, 00564, 02956, 06684

2.00-30 Permitted activities: It is unclear whether elements of the decision to be made would pertain to FERC projects, utilities, and irrigation districts and permitted activities, such as mining and grazing.

Response: The decision being made is not applicable to permitted activities, including grazing permits, special use permits, road use permits, and mining plans of operation.

Commenters: 00021, 05634, 06252, 06697, 06792, FI, S0014, S0015, S0018, S0019, S0038, S0057, S0062, S0063, S0064, S0067, S0069

2.00-31 Alternative Comparisons: Information presented in the summary comparisons in Chapter 2 of the DEIS is inconsistent with the environmental effects analyses in Chapter 3.

Response: The alternative comparison summaries presented in Chapter 2 (The Alternatives) is based entirely on the information contained in Chapter 3 (Affected Environment and Environmental Consequences). Data on the unauthorized routes currently available for motorized use is contained in the No Action Alternative. All of these roads and trails were addressed in the effects analyses.

The Tables in Chapter 2 of the DEIS, SDEIS, and FEIS were presented in a comparative format in accordance with 40 CFR 1502.14. The baseline for comparison in the Tables is Alternative 1, the No Action Alternative.

Commenter: 06730, S0008

2.00-32 Criteria for designating roads, trails and "Open Areas" for motorized use: The DEIS does not disclose the criteria used to select roads to be added to the NFTS under each alternative.

Response: The purpose and need section in Chapter 1 of the FEIS discloses the criteria used to make changes to the NFTS, including route additions to the NFTS and the establishment of "Open Areas." Table 2-13 in Chapter 2 (The Alternatives) of the FEIS provides further details on how the criteria were applied under each alternative. Appendix A (Site Specific Road, Trail and Open Area Information) includes the rationale for either excluding or including each road/trail/area in the Preferred Alternative. The project record includes the reasoning behind excluding some routes from all alternatives.

Commenters: 00028, 00081, 00601, 00632, 00643, 01421, 04556, 06270, 06373, 06424, 06563, 06591, 06676, 06698, 06700, 06703, 06704, 06705, 06716, 06729, 06730, 06731, 06740, 06749, 06752, 06753, 06754, 06792, 06801, FB

2.00-33 Mitigation measure timing: The DEIS does not disclose why some mitigation measures must be implemented prior to a trail being open to public motorized use, while other trails could continue to be used while the mitigation measures were being implemented. It is unclear what would happen in the event mitigation measures were not implemented.

Response: Mitigation measures required for any of the motorized roads or trails proposed for addition to the National Forest Transportation System or proposed "Open Areas" in any of the action alternatives are contained in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS. Scheduling of mitigations is based on the following considerations:

- Roads and trails where the location or deteriorated condition is causing substantial effects to riparian, watershed, threatened, endangered or sensitive species, or significant cultural resources whether or not motor vehicle use is occurring.
- Mitigations on routes requiring relatively low-cost, easily implemented work (such as signage or simple barriers) when mitigations must occur prior to public use.
- Roads and trails that provide connectivity and important access for the transportation network or other routes that have been identified as providing key public benefit and opportunities, and which require mitigation before designation.

Routes with mitigations will not be open to motorized use until this work is accomplished. After mitigation has been performed, the route will appear as a designated public motorized road or trail on the next revision of the Motor Vehicle Use Map (MVUM.) Mitigations have been analyzed for their potential to reduce or eliminate effects on specific resources associated with motorized use of the routes. These effects are disclosed in the resource sections of Chapter 3 (Affected Environment and Environmental Consequences) of the FEIS.

Commenters: 00028, 00580, 06248, 06716, 06725, 06729, 06773

2.00-34 Law, Policy and Regulation (Forest Order No. 08-01 36 CFR 261.50(b)): Region-wide Forest Order No. 08-01 requires a Supplemental DEIS.

Response: Forest Order No. 08-01 was issued by the Regional Forester of the Pacific Southwest Region. It enables FS law enforcement personnel to implement Division 16.5 of the California Vehicle Code on NFS roads and trails. This Forest Order will be used in implementation of the alternative selected.

The CEQ Regulations in section 1502.9(c) state "Agencies: Shall prepare supplements to either draft or final environmental impact statements if:

- The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or
- There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

Forest Order No. 08-01 represents neither "substantial changes in the proposed action that are relevant to environmental concerns"; nor "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts."

Commenters: 06802, 06812

2.00-35 Law, Policy and Regulation (Executive Order 11644): The Tahoe National Forest's travel management planning effort is not consistent with Executive Order 11644.

Response: The direction in the Executive Orders and Travel Management Regulations to consider minimizing impacts to various resources does not require the Forest Supervisor to select the most restrictive alternative. As described in the Preamble to the national Travel Management regulations *"(i)t is the intent of E.O. 11644 that motor vehicle use of trails and areas on Federal lands be managed to address environmental and other impacts, but that motor vehicle use on Federal lands continue in appropriate locations. An extreme interpretation of "minimize" would preclude any use at all, since impacts always can be reduced further by preventing them altogether. Such an interpretation would not reflect the full context of E.O. 11644 or other laws and policies related to multiple use of NFS lands" (Fed Reg V.70, No. 216, p 68281).* The Record of Decision will more thoroughly describe the Forest Supervisor's rationale for his decision based on consideration of the criteria in the Executive Order and regulations.

Commenters: 00794, 06729

2.00-36 Range of alternatives: The DEIS does not present an adequate range of alternatives for the following reasons: (1) No alternative closes NFTS roads and trails currently opened to motorized use and develops a minimum road system, (2) Existing alternatives show only a slight variation in Equivalent Road Acre (ERA) effects; and (3) All alternatives significantly reduce the motorized recreation opportunities from historic levels.

Response: 40 CFR 1502.14(a) requires rigorous, objective analysis of all reasonable alternatives, and brief discussion of reasons that any alternatives were eliminated from detailed study. Reasonable alternatives are developed to meet the Purpose and Need and address significant issues related to the proposed action (36 CFR 220.5(e)). NEPA does not require the consideration of every conceivable alternative. Instead, the range of alternatives considered is determined by the Purpose and Need for action. Due to the nature of this project, there may exist a very large or even infinite number of possible reasonable alternatives. Each unauthorized route is individually considered for possible addition to the NFTS. Each proposal to add a route to the NFTS includes numerous possible options for vehicle class and season of use.

The FEIS examined seven alternatives in detail, which are described in Chapter 2 and analyzed for effects in Chapter 3. There were also 13 alternatives that were not considered in detail, which are described in the FEIS along with explanations of why they were not carried forward for detailed study. This is consistent with the requirements at 40 CFR 1502.14(a), and the definition of a reasonable alternative in FSH 1909.15, Section 14.

The EIS presents a wide range of alternatives. The following addresses each of the specific concerns raised regarding the range of alternatives:

Not closing NFTS roads and trails currently opened to motorized use and developing a minimum road system: Identifying the minimum road system and proposing additional closure of NFTS roads and trails currently designated as open for is outside of the scope of this decision. The Travel Management Rule is comprised of three parts: Subpart A - Administration of the Forest Transportation System; Subpart B - Designation of roads, trails and areas for motor vehicle use; and Subpart C - Use by over-snow vehicles. The immediate focus of national forests in California is on addressing the issue of unmanaged, cross country motor vehicle use through the designation of roads, trails and areas by vehicle class, and if appropriate, time of year, and the production of a Motor Vehicle Use Map.

The national forests in California began the current Travel Management decision-making process in 2003 with a commitment to the public to prohibit cross country vehicle travel and establish a sustainable system of designated routes. Forests have continued with this route designation commitment and have only departed from the original intent where necessary to align with the national framework, its definitions and terminology as provided in the Travel Management Rule.

Upon completion of this process, it will be determined how to best proceed in the future with the implementation of Subparts A and C.

Under Forest Service regulations and new Forest Service Manual and Handbook direction issued nationally, Subpart A requires a broad-scale planning effort and the consideration of the multiple resource and other management objectives contained in the forest plan. This type of planning effort is time-consuming. It would delay forests' current efforts to analyze unmanaged motorized recreation and implement a designated system of roads, trails, and areas for motor vehicle use, along with the improved management and resource protection that will result from that effort.

Only a slight variation in Equivalent Road Acre (ERA) effects: Equivalent Road Acres (acres of disturbance divided by acres of HUC7 watershed) are a measure of watershed disturbance typically used in watershed cumulative effects analysis. Cumulative Watershed Effects (CWE) are the combined effects of past, present, and future land management activities within a watershed that may affect the watershed's structure or process. Refer to Chapter 3.02 for more information on the watershed analysis.

Since this project would not change the footprint of current wheel-tracks on the Tahoe National Forest a typical Cumulative Watershed Effects analysis using Equivalent Road Acres shows no measurable changes between the alternatives in the short term (1 year from the date of action) and would have beneficial effects over the long term (20 or 30 years) owing to passive restoration of routes close to motorized use. In the short term, all action alternatives would result in a very slight decrease in the risk of negative cumulative effects to watersheds. The cumulative impacts on ERAs resulting from this project are displayed in Chapter 3.02 (Watershed Resources: Geology, Soil, Hydrology) of the FEIS.

Significant reductions in motorized recreation opportunities from historic in all alternatives: There are 868.7 miles of unauthorized routes and 829 miles of closed NFTS roads still receiving some motorized use on TNF system lands. Motorized recreational use of these routes was never authorized. In the No Action Alternative, these routes remain available for motor vehicle use. The action alternatives range from 0 to 173.8 miles of these routes being managed for NFTS motorized recreational opportunities. All routes site specifically requested were analyzed for inclusion in Alternative 2.

Commenters: 05633, 06244, 06704, 06716, 06752, 06756, 06788, FA, FE, FH, FI, S0004, S0006, S0007, S0008, S0023

2.00-37 Riparian Reserves: OHV use should not be permitted in Riparian Reserves unless there are no impacts to riparian-dependent species.

Response: The TNF does not include NFS lands designated as Riparian Reserves. Riparian Reserves are only found on forests operating under the Northwest Forest Plan. A Riparian Conservation Objectives analysis has been conducted and is located in Appendix I of the FEIS.

Commenter: 06750

2.00-38 Old Forest Emphasis Areas and Riparian Conservation Areas: The DEIS alternatives are inconsistent with Forest Plan direction for Old Forest Emphasis Areas and Riparian Conservation Areas.

Response: All of the alternatives are consistent with Forest Plan direction for Old Forest Emphasis Areas and Riparian Conservation Areas. There are no standards and guidelines for Old Forest Emphasis Areas or Riparian Conservation Areas that prohibit additions to the NFTS, re-opening of Maintenance Level 1 roads, establishing OHV "Open Areas", or changing season or class of vehicles on NFTS routes.

Commenter: 06721

2.00-39 Seasonal Closures Affect Access for Hunting and Fishing Trout: The seasonal closures affect access for hunting of bear, fox, bobcats, squirrels, quail, and fishing for trout. The hound dogs used for hunting may end up on a road that is not accessible due to the seasonal closures.

Response: The effects of wet weather seasonal restrictions on motorized public use are discussed in Chapter 3.07 of the FEIS. The following Table N-2 summarizes that effects analysis in regards to specific hunting seasons.

Table N-2. Hunting season use

SPECIES	ZONE	Hunting Season	Season of Allowed Use (Alternatives 4,5 and 6)	Portion of Season Limited to ML 3-5 Roads
Quail	**Q2**	Sep 26 - Jan 31	April 1 to December 31	Jan 1 to Jan 31
			May 1 to December 31	Jan 1 to Jan 31
	Q3	Oct 17 - Jan 31	April 1 to December 31	Jan 1 to Jan 31
			May 1 to December 31	Jan 1 to Jan 31
Bear	**X7a/XD7b**	Oct 10 – Dec 26	April 1 to December 31	None
			May 1 to December 31	None
	D4/D5	Sep 22 – Dec 26	April 1 to December 31	None
			May 1 to December 31	None
Deer	**All**	Sep 22 – Nov 4	April 1 to December 31	None
			May 1 to December 31	None
Squirrel	**All**	Sep 14 – Jan 31	April 1 to December 31	Jan 1 to Jan 31
			May 1 to December 31	Jan 1 to Jan 31
Bobcat	**All**	Oct. 15 –Feb 28	April 1 to December 31	Jan 1 to Feb 28
Fox			May 1 to December 31	Jan 1 to Feb 28
Trout	**Sierra**	Season generally opens the last Saturday in April	May 1 to December 31	Apr 24 to Apr 30

The impacts to hunting season are limited to January 1 to February 28 and the impacts to trout season are limited to April 24 to April 30. During these times motor vehicle use would be limited to

hardened surface roads (Maintenance Level 3-5) to protect water quality, prevent erosion and soil loss, and minimize increased costs. Dogs used for hunting would need to be retrieved by searching for them by walking on the seasonally closed roads.

Commenter: FI, S0013, S0014, S0015, S0016, S0018, S0025, S0026, S0027, S0062, S0063, S0064, S0067, S0069, S0072

2.00-40 Roadless Rule: The Roadless Rule(s) do not equate to prohibiting use on all unauthorized routes in Inventoried Roadless Areas and managing them for quiet recreation. The motorized use on all unauthorized routes is already occurring in these areas; therefore, adding these routes to the system is not a new impact.

Response: Neither of the 2001 or 2005 Roadless Rules prohibits unauthorized routes in Inventoried Roadless Areas (IRAs) from being added to the NFTS. The alternatives considered in detail in the FEIS include the addition of unauthorized routes to NFTS ranging from 0 miles (Alternatives 3 and 4) to 9.8 miles (Alternative 5). In addition the alternatives consider the re-opening on Maintenance Level 1 roads in IRA's up to 1.6 miles in Alternative 5. The Roadless Rules do not require that IRA's be managed for quiet recreation. The effects analysis for quiet recreation was included in the SDEIS and FEIS in response to issues raised by the public.

The effects analysis for IRAs also includes the impacts to Roadless Area Characteristics as well as Wilderness Characteristics. These were included to inform the public about the overall effects on the roadless area characters of these areas as well as any possible effect on their future consideration for inclusion in the National Wilderness Preservation System.

While the impacts from motorized recreation use are currently occurring in the IRA's, such use has not been authorized. Authorizing such use by including these routes in the NFTS is an impact which needs to be analyzed under the National Environmental Policy Act (NEPA).

Commenter: S0066

2.00-41 Definition of Year-Round: It is not clear whether limited year-round motorized mixed use literally means year-round.

Response: Limited year-round motorized mixed use means year-round motorized mixed use would be restricted or limited to certain roads.

Commenter: S0055

2.00-42 D-sites (Dispersed sites) are not in all alternatives for range of analysis: A majority of these dispersed camping additions to trails are shown only under Preferred Alternative 6. The SDEIS fails in its requirement to adequately inform the public by not analyzing these dispersed camping site spur additions for their inclusion/exclusion for each of the other alternatives.

Response: As explained in Chapter 1 of the SDEIS and during the public meetings held on the SDEIS, the only modifications made to the Alternatives (other than the Preferred Alternative)

between the DEIS and SDEIS were the *Corrections To The NFTS*. In addition to the *Corrections to the NFTS*, The Preferred Alternative was also modified to respond to comments raised by the public on the DEIS. These modifications made to the Preferred Alternative included the addition of numerous unauthorized routes to the NFTS to provide access to dispersed recreation sites. These changes have been carried forward in the FEIS.

Commenter: S0023

2.00-43 Display of Corrections to the NFTS: The change between the DEIS and SDEIS was not clearly represented in the description of the numerical display, alternatives, or maps.

Response: The changes between the DEIS and the SDEIS was summarized in Chapter 1of the SDEIS, public meetings, and Appendix A. Details of the corrections to the NFTS was available for review in the project record. Separating out the Corrections to the NFTS as described in Chapter 1 in all of the Tables used in the SDEIS and the Alternatives Maps would have rendered the document not understandable. To remedy this, the corrections were summarized in one location of the SDEIS (Chapter 1) to improve the readability of the document.

In addition as described in the SDEIS and during the public meetings, the changes made to the Alternatives (other than the Preferred) were limited to only the Corrections to the NFTS. This was done to enable the reader to focus their comments on the SDEIS to only those changes associated with the Corrections to the NFTS. The following information, in Tables N-3 and N-4, summarize the information contained throughout the SDEIS regarding the Corrections to the NFTS made between the DEIS and SDEIS.

Table N-3. Changes to proposed actions due to corrections to the NFTS

Proposed Actions		Alternative [1]						
		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Prohibition of cross country travel	DEIS	Current Prohibitions Only	Forest Wide	Forest Wide	Forest Wide	Forest Wide	Forest Wide	Forest Wide
	SDEIS	No Change	No Change	No Change	No Change	No Change	No Change	No Change
Additions to the NFTS and Re-opening ML1 Roads [1]	DEIS	0	72.5	0	31.2	282.8	70.3	45.1
	SDEIS	No Change	59.6	No Change	26.4	173.8	65.1	37.8
Establishment of "Open Areas" [1]	DEIS	None	2,700	None	None	None	None	None
	SDEIS	No Change	No Change	No Change	No Change	No Change	No Change	No Change
Change In Class of Vehicles	DEIS	0	481.2	0	3.4 miles	481.2	276.4	3.4 miles
	SDEIS	No Change	398.7	No Change	No Change	398.7	252.8	No Change
Change in Season of Use	DEIS	None	None	None	Wet Weather Seasonal Restriction	Wet Weather Seasonal Restriction	Wet Weather Seasonal Restriction	None
	SDEIS	No Change	No Change	No Change	No Change	No Change	No Change	No Change
Forest Plan Amendment	DEIS	None	Remove Deer Winter Range Seasonal Restriction in Management Area 84	None	None	Remove Deer Winter Range Seasonal Restriction in Management Area 84	Remove Deer Winter Range Seasonal Restriction in Management Area 84	None
	SDEIS	No Change	No Change	No Change	No Change	No Change	No Change	No Change

[1] This table only reflects those changes to the alternatives a result of the corrections to the NFTS. It does not include changes made to the Alternative 6 in response to public comments made on the Draft EIS, such as changes to Open Areas or the additions to the NFTS.

Table N-4. Summary of changes in miles to the environmental effects due to corrections to the NFTS

Motorized road and trail category [1]		Alternative [1]						
		Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7
Roads open to highway legal vehicles only	DEIS	632.8	213.1	629.4	629.4	213.1	387.9	629.4
	SDEIS	616.8	218.3	616.8	613.4	218.3	481.7	613.4
Roads open to all vehicles	DEIS	1,896.2	2,315.9	1,899.7	1,899.7	2,316.3	2,141.2	1,899.7
	SDEIS	1,450.9	1,854.3	1,450.9	1,457.9	1,933.7	1,601.7	1,455.2
Trails open to high clearance vehicles	DEIS	189.8	233.3	189.8	203.3	434.1	227.1	214.6
	SDEIS	133.8	158.1	133.8	139.4	178.5	156.4	150.8
Trails open to ATV's and motorcycles only	DEIS	17.5	20.4	17.5	20.4	29.4	29.4	20.4
	SDEIS	25.5	29.9	25.5	28.4	44.2	38.8	28.9
Trails open to motorcycles only	DEIS	127.4	153.2	127.4	141.6	154.3	148.6	144.7
	SDEIS	168.8	194.8	168.8	183.0	194.9	189.9	185.3
State, County or other jurisdiction roads	DEIS	928.8	928.8	928.8	928.8	928.8	928.8	928.8
	SDEIS	868.2	868.2	868.2	868.2	868.2	868.2	868.2
Private roads	DEIS	1,584.9	1,584.9	1,584.9	1,584.9	1,584.9	1,584.9	1,584.9
	SDEIS	1,816.5	1,816.5	1,816.5	1,816.5	1,816.5	1,816.5	1,816.5
Unauthorized routes and closed NFTS roads still receiving motorized use	DEIS	1,410.7	0	0	0	0	0	0
	SDEIS	1,698.3	0	0	0	0	0	0
Total miles motorized roads and trails available for public use	**DEIS**	**6,788.1**	**5,449.7**	**5,377.5**	**5,408.0**	**5,660.9**	**5,447.8**	**5,422.5**
	SDEIS	**6,778.8**	**5,140.0**	**5,080.5**	**5,106.9**	**5,254.3**	**5,153.2**	**5,118.3**
Percent Change		**0%**	**-6%**	**-6%**	**-6%**	**-7%**	**-5%**	**-6%**

[1] This table only reflects those changes to the alternatives a result of the corrections to the NFTS. It does not include changes made to the Alternative 6 in response to public comments made on the Draft EIS.

The map of the changes between DEIS and SDEIS was displayed at public meetings and is shown here. This map has been and is available for review as part of the project record. A copy of this map is shown below in Figure N-1.

Finally, the SDEIS repeated all of the information and analysis included in the DEIS as modified by the Corrections to the NFTS as described in Chapter 1. The analyses for each resource are displayed in Chapter 3. The SDEIS is a stand-alone document. This was done so the reader would not need both documents in front of them at the same time. Thus the public could have commented on any portion of the EIS(s) with or without the Corrections to The NFTS. These changes have been carried forward in the FEIS.

Commenter: S0023, S0055

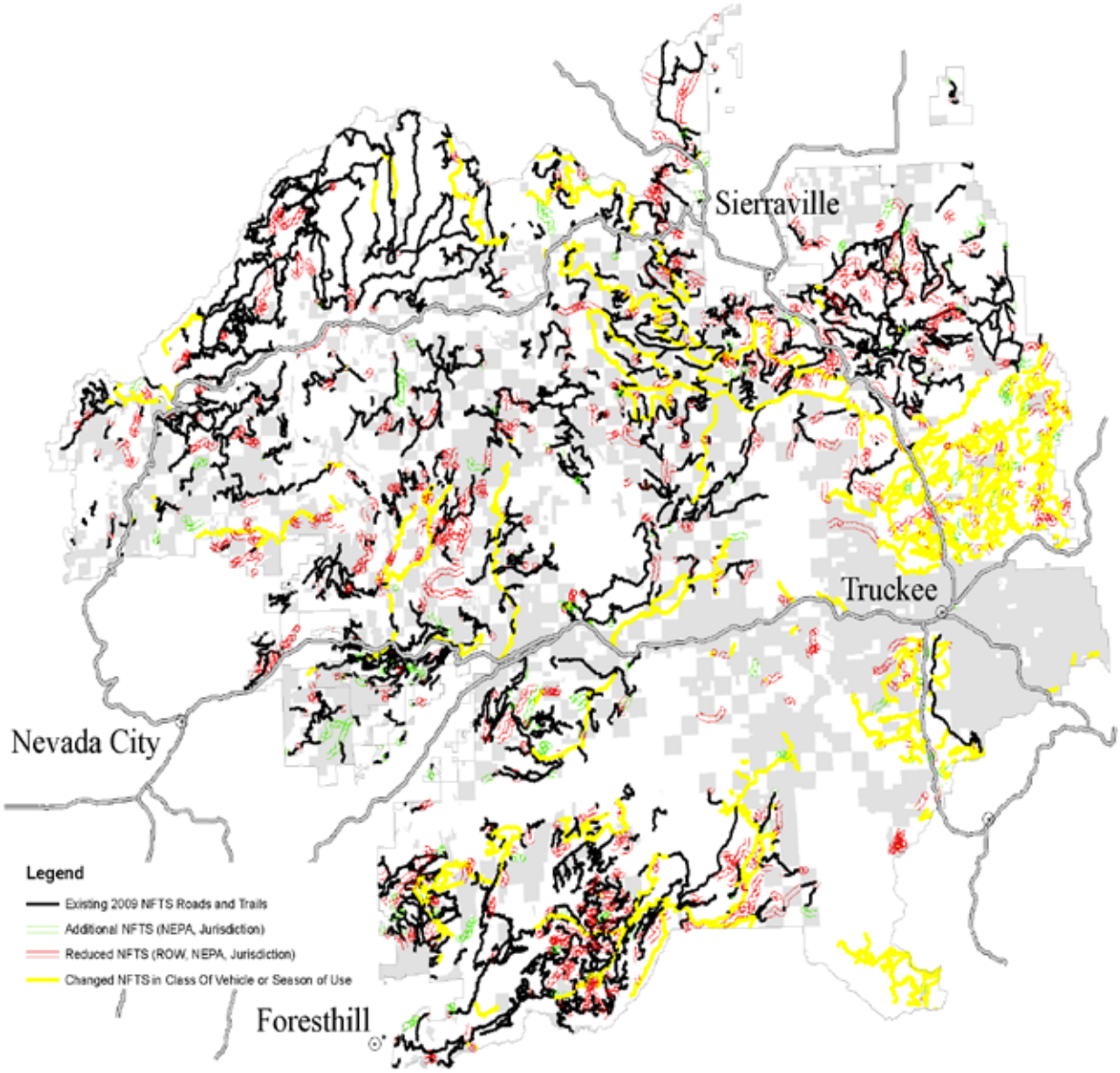

Figure N-1. Summary of changes to environmental effects due to corrections to the NFTS

This figure only reflects those changes to the alternatives a result of the corrections to the NFTS. It does not include changes made to the Alternative 6 in response to public comments made on the Draft EIS.

2.00-44 Consistency with Forest Plan Direction for Roadless: Areas prohibiting use on the majority of unauthorized routes in Inventoried Roadless Areas are not consistent with the Forest Plan direction that states: "Regulating for single purpose use is not acceptable when the designation is to satisfy one group's desires"

Response: Any Forest Plan Amendments required for implementation of the Alternatives are described in Chapter 2 of the FEIS. The Forest Plan direction reference in the comment is contained under the Forest Wide Standards and Guidelines for Transportation Management. The Standard and

Guideline reference is one of several contained in the Forest Plan. The following are Transportation Standards and Guidelines contained in the Forest Plan:

1. Restrict road, trail, and off-highway use to the extent necessary for protection of

a. Threatened, endangered, and sensitive plants or animals.

b. Essential wildlife functions.

c. Cultural resources.

d. Riparian zones and wetlands.

2. Eliminate motor vehicle use in riparian areas and wetlands except on system roads and designated routes and stream crossings.

3. Maintain the transportation system to a standard that is commensurate with user types and amount of use. Closure of roads and trails will be appropriate if the cost for maintenance and resource protection exceeds the benefits received or the financial ability of the Forest to pay for these services.

4. Seasonal road and trail restrictions are preferred over permanent closures.

5. Before deciding to regulate by signing and public announcements as opposed to physical barriers. Consider the risk to resource values and the magnitude of maintenance costs resulting from violation. If physical barriers are used, make sure that private land access needs or cooperative agreement requirements are met.

6. ***Regulating for single purpose use is not an acceptable objective only enacted to meet one group's desire.*** *A need to regulate because of user conflict will be evaluated on a case-by-case basis.*

7. Close roads and trails or regulate traffic when necessary to protect the safety of Forest users. Candidates for regulation or closure include roads with hazards such as avalanche, landslides, forest fires, flooding, timber operations, etc.

8. Conduct a separate analysis to correlate land capability, user needs, and user or landowner conflicts Forest-wide for all dispersed recreation travel ways.

9. Consider the need to protect administrative or special-use facilities when deciding whether to close certain roads. Lookouts, guard stations, and transmission sites are examples of such facilities.

10. Consider the quality of dispersed recreation opportunities when deciding whether to close a road. It may be beneficial, for example, to separate four-wheeled motorized recreation use from other forms of motorized recreation, especially when simultaneous use diminishes the quality of the recreation experience for both users.

11. Based on the results of a transportation analysis, close and obliterate roads that are not necessary for resource management, private land uses, or public uses. Bring the roadbed into resource production. Prevent potential resource damage by the obliterated road.

12. Construct the minimum number of miles of road and meet the minimum design standards possible while still meeting safety, user, and resource needs with economic efficiency. Logging system design, timber sale design, and transportation planning must be emphasized on all limber sales to comply with this policy. No new roads will be constructed or reconstructed without an approved transportation plan and Environmental Assessment, or Environmental Impact Statement, if required.

13. Proposals for subdivision access over existing National Forest System roads will be addressed as follows:

a. Where County jurisdiction and maintenance would be appropriate, the County will be asked in accept a USDA easement and the maintenance responsibility for the access road.

b. Where the access remains under Forest Service jurisdiction and public use is regulated, a letter indicating such restrictions will be provided to the county when requested for processing of subdivision approval. A road-use permit assigning maintenance responsibilities and required work will be issued to a property owners' association when actual road use is to occur.

c. Where access remains under Forest Service jurisdiction and public use is not regulated, a letter to this effect will be provided to the County when ask for processing of subdivisions. The letter will ask the County to include the following clause on the parcel map: "Access is across National Forest System land administered under U S Department of Agriculture regulations. The Forest Service may at any time regulate use by imposing seasonal road closure or other restrictions."

14. When planning recreation development projects and resource management activities, coordinate with State and local road agencies to address potential traffic impacts and mitigation measures.

15. Cooperate with the State, other agencies, and user groups to identify and where compatible with Forest Plan management objective, develop segments of trail that would contribute to a Statewide trail system. A State wide system would connect use areas and provide the opportunity for long-distance trail touring.

All of the Alternatives are consistent with these standards and guidelines. Prohibiting cross country travel and thereby use of unauthorized routes not added to the NFTS is consistent with this direction.

Commenter: S0008

2.00-45 Use on Unauthorized Routes: The Forest Service, in the description of the alternatives and the affected environment in Chapters 2 and 3, needs to include a discussion about the amount and type of use on unauthorized routes currently receiving motorized use by the public. Failing to do so results in an inadequate comparison of the current environment to what will result from implementation of the alternatives.

Response: Actual use levels by types of vehicles for each of the unauthorized routes are not presently known. Obtaining such information for each route, by means such as traffic counters or user surveys, would be cost prohibitive. Where such information is known from personal field

observations it is documented in Appendix A. Incomplete and Unavailable Information is described in Chapter 3.0 of the FEIS where it states in part:

"The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) describes how Federal agencies must handle instances where information relevant to evaluating reasonably foreseeable adverse impacts of the alternatives is incomplete or unavailable. Federal agencies must make clear that such information is lacking, and decide whether this incomplete or unavailable information is "essential to a reasoned choice among alternatives" (Title 40 of the Code of Federal Regulations, 40 CFR, Part 1502.22). If the information is deemed essential to a reasoned choice among the alternatives, it must be included or addressed in the environmental impact statement.

Incomplete or unavailable information is made clear in sections titled Assumptions and Limitations so the reader understands how unavailable information was addressed. The EIS summarizes existing credible scientific evidence relative to environmental effects and makes estimates of effects on theoretical approaches or research methods generally accepted in the scientific community.

Knowledge about the biological, physical, and social aspects of ecosystems is, and always will be, incomplete. The ecology, inventory, and management of large landscapes are complex and constantly changing. For example, analysis of the impacts of alternatives on specific plant or animal species prompts questions about population dynamics and habitat relationships. Key relationships and basic data are well established for only a few Tahoe National Forest ecosystems and species. The alternatives were analyzed using the best available information. As data gaps were encountered during analysis, the interdisciplinary team posed the question of whether the missing information was "essential to a reasoned choice among alternatives." The team concluded that while new information could add precision to estimates or better specify relationships; it would be unlikely to significantly change our understanding of the basic relationships that were used to analyze the effects of the alternatives. New information is always welcome, but no missing information was deemed essential to making a reasoned choice among the alternatives being considered in this EIS. In some instances, information was unavailable to confidently estimate environmental effects; the text indicates that this information is incomplete or unavailable. In such situations, the EIS summarizes existing credible scientific evidence relative to the significant effects and makes estimates of effects"

Commenter: S0008

Section 3.0: Affected Environment and Environmental Consequences

3.00-1 Disclosure of information gaps: The DEIS fails to disclose information gaps as required by 40 CFR 1502.22.

Response: Incomplete and unavailable information is described in Chapter 3.00 (Affected Environment and Environmental Consequences) of the FEIS. The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) describes how Federal agencies must handle instances where information relevant to evaluating reasonably foreseeable adverse impacts of the alternatives is incomplete or unavailable. Federal agencies must make clear that such information is lacking, and decide whether this incomplete or unavailable information is "essential to a reasoned choice among alternatives" (Title 40 of the Code of Federal Regulations, 40 CFR, Part 1502.22). If the information is deemed essential to a reasoned choice among the alternatives, it must be included or addressed in the environmental impact statement.

Incomplete or unavailable information is made clear in sections titled "Assumptions and Limitations" so the reader understands how unavailable information was addressed. The FEIS summarizes existing credible scientific evidence relative to environmental effects and makes estimates of effects on theoretical approaches or research methods generally accepted in the scientific community.

Knowledge about the biological, physical, and social aspects of ecosystems is, and always will be, incomplete. The ecology, inventory, and management of large landscapes are complex and constantly changing. For example, analysis of the impacts of alternatives on specific plant or animal species prompts questions about population dynamics and habitat relationships. Key relationships and basic data are well established for only a few TNF ecosystems and species. The alternatives were analyzed using the best available information. As data gaps were encountered during analysis, the interdisciplinary team posed the question of whether the missing information was "essential to a reasoned choice among alternatives." The team concluded that while new information could add precision to estimates or better specify relationships, it would be unlikely to significantly change our understanding of the basic relationships that were used to analyze the effects of the alternatives. New information is always welcome, but no missing information was deemed essential to making a reasoned choice among the alternatives being considered in this FEIS. In some instances, information was unavailable to confidently estimate environmental effects; the text indicates that this information is incomplete or unavailable. In such situations, the FEIS summarizes existing credible scientific evidence relative to the significant effects and makes estimates of effects on theoretical approaches or research methods generally accepted in the scientific community.

Commenter: 06730

3.00-2 Impacts from non-motorized use on unauthorized routes: The Forest Service failed to include the effects of non-motorized recreation use on the existing unauthorized routes not added to the NFTS. A total of 3,930,000 VUD's were reported in the 2005 NVUM. 3.9% of that is 155,327. All

other trail-based non-motorized activities totaled 26.8% of respondents, which totals 1,053,240 people. These folks will still be using the routes (according to the Transportation Chapter). So, fixing the exact same negative outcome for every species by eliminating only motorized users from these routes is simply not credible.

Response: The effects analysis throughout the FEIS accounts for unauthorized routes not added to the NFTS being available for non-motorized uses and the associated impacts resulting from such uses.

Commenter: 06730, S0008

3.00-3 Cumulative effects analysis (Excluded past activities): The cumulative effects analyses should strike any results that incorporate past activities.

Response: Cumulative impact is defined in 40 CFR 1508.7 as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal or person undertakes such other actions." Therefore striking any results that would incorporate past activities would not be consistent with the regulations.

Chapter 3, According to the Council on Environmental Quality (CEQ) NEPA regulations, "cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions (40 CFR 1508.7).

In order to understand the contribution of past actions to the cumulative effects of the proposed action and alternatives, this analysis relies on current environmental conditions as a proxy for the impacts of past actions. This is because existing conditions reflect the aggregate impact of all prior human actions and natural events that have affected the environment and might contribute to cumulative effects.

This cumulative effects analysis does not attempt to quantify the effects of past human actions by adding up all prior actions on an action-by-action basis. There are several reasons for not taking this approach. First, a catalog and analysis of all past actions would be impractical to compile and unduly costly to obtain. Current conditions have been impacted by innumerable actions over the last century (and beyond), and trying to isolate the individual actions that continue to have residual impacts would be nearly impossible. Second, providing the details of past actions on an individual basis would not be useful to predict the cumulative effects of the proposed action or alternatives. In fact, focusing on individual actions would be less accurate than looking at existing conditions, because there is limited information on the environmental impacts of individual past actions, and one cannot reasonably identify each and every action over the last century that has contributed to current conditions. Additionally, focusing on the impacts of past human action risks ignore the important residual effects of past natural events, which may contribute to cumulative effects just as much as human action. By looking at current conditions, we are sure to capture all the residual effects of past

human actions and natural events, regardless of which particular action or event contributed those effects. Third, public scoping for this project did not identify any public interest or need for detailed information on individual past actions. Finally, the Council on Environmental Quality issued an interpretive memorandum on June 24, 2005 regarding analysis of past actions, which states, "agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions." Past actions are treated similarly in the recently published Forest Service Regulations for implementing the National Environmental Policy Act (36 CFR 220). For these reasons, the analysis of past actions in this section is based on current environmental conditions.

Commenter: 06704

3.00-4 Cumulative effects analysis (Failure to consider existing NFTS): The cumulative effects analyses fail to consider effects of the existing NFTS.

Response: Existing NFTS roads and trails were included in the environmental consequences. The Travel Management FEIS documents the analysis of existing NFTS routes as part of cumulative effects analysis for each resource including wide-ranging species, aquatic systems, and noxious weeds.

Commenters: 00028, 06704, 06716, 06721, S0020

3.00-5 Cumulative effects analysis (Spatial boundaries): There are differences in the basis for the cumulative effects analyses throughout the DEIS. In some resource sections, the basis is the entire area within the Forest boundary; in other sections, it is limited to NFS lands. This makes comparison of the information provided extremely difficult.

Response: The cumulative effects analysis area is described under each resource, and in most cases includes the entire TNF including private and other public lands that lie within the Forest boundary. Past activities are considered part of the existing condition and are discussed in the "Affected Environment (Existing Conditions)" and "Environmental Consequences" section under each resource in the FEIS.

Commenter: 06701

3.00-6 Cumulative effects analysis (Area size): Respondents suggest that the analysis shows only minor differences between alternatives because effects are analyzed on such a large scale.

Response: Scale, in the effects analyses for this project, was dictated by the size and scope of the effects for each resource relative to the effects of the proposed project. For each resource analyzed, the FEIS (Chapter 3, Affected Environment and Environmental Consequences) discloses the rationale for the selection of the appropriate cumulative effects analysis area. Analyses by resource area did take into consideration other resources, as well as routine actions taking place within forest boundaries.

Commenter: 06701

3.00-7 Climate change: The DEIS fails to adequately address climate change. The public, interested parties and those with expertise in climate change have not been given the opportunity to review a climate change analysis or to provide input to the Forest Service about its accuracy or completeness. This is a violation of NEPA's objective to educate and inform both the public and the decision maker.

Response: The Forest Service reviewed ongoing climate change research in reports by the United Nations Intergovernmental Panel on Climate Change (IPCC) (www.ipcc.ch), US Climate Change Science Program's Science Synthesis and Assessment Products and the US Global Change Research Program. These reports concluded that climate is already changing; that the change will accelerate, and that human greenhouse gas (GHG) emissions, primarily carbon dioxide emissions (CO_2), are the main source of accelerated climate change.

Climate change was incorporated into the SDEIS in Chapter 3.00 in the following manner:

- **The effect of a proposed project on climate change -** It is not currently feasible to quantify the indirect effects of implementation of this Travel Management project on global climate change and therefore determining significant effects of the alternatives on global climate change cannot be made at this scale. However, the effects of the alternatives on greenhouse gas emissions, particularly carbon dioxide, are discussed in the FEIS (Chapter 3.01).
- **The effect of climate change on the Travel Management Project -** Projected climate change impacts include air temperature increases; sea level rise; changes in the timing, location, and quantity of precipitation; and increased frequency of extreme weather events such as heat waves, droughts, and floods. These changes will vary regionally and affect renewable resources, aquatic and terrestrial ecosystems, and agriculture. While uncertainties will remain regarding the timing and extent magnitude of climate change impacts, the scientific evidence predicts that continued increases in GHG emissions will lead to increased climate change. Since the Motor Vehicle Use Map will be published on an annual basis, the implications of climate change will be incorporated into future Travel Management decisions as the scope and magnitude of climate change impacts become better understood. This analysis identified that implementation of any of the alternatives under this project along with environmental changes brought about by climatic change combine to create conditions conducive to the spread of noxious weeds.
- **Uncertainty regarding climate change -** There is uncertainty about the actual intensity of the Travel Management project's indirect effects on global climate change. Uncertainty in climate change effects is expected because it is not possible to meaningfully link individual project actions to quantitative effects on climatic patterns (Kimbell, Abigail R. USDA Forest Service, February 15, 2001, letter to Forest Service National Leadership Team).

  Complete quantifiable information about project effects on global climate change is not currently possible and is not essential to a reasoned choice among alternatives. However, based on climate change science, we recognize the relative potential of some types of proposals and alternatives to

affect or influence climate change and therefore provide qualitative analysis to help inform project decisions.

- **Significance of impacts** - We recognize that global climate change may affect human health, that there is uncertainty and unknown risks associated with global climate change, and that the ultimate effects on climate change are indeed the results of incremental cumulative effects of many actions, most of which are outside the Agency's control. However, we cannot discern significant climate change effects of Travel Management Project's alternatives, given the context of the project and the lack of effects that can be meaningfully evaluated under current science, modeling, and policies.

  It is difficult to determine the significance of effects of the Travel Management Project on greenhouse gases directly, and therefore climate change indirectly, as there are currently no Federal statutes, regulatory standards, or policy direction on the significance of such effects. Until meaningful, accepted thresholds are adopted against which to weigh any project-related GHG emissions, it will not be possible to determine whether this project will have a significant effect.

Commenters: 02413, 06248, 06716

3.00-8 Effects analysis regarding change in mileage between NOI and DEIS: The DEIS does not analyze the effects on resources due to the difference in mileage between the NOI and the DEIS**.** The Forest Service did not conduct NEPA to reduce the 2,500 miles of trail identified in the NOI, but not analyzed in the DEIS.

Response: All of the routes were accounted for in the effects analysis. The difference between the 2,500 miles in the NOI and the 1,400 miles in the DEIS can be explained as follows:

- **1,043 miles** were located on private land - the FS has no authority to add these miles to NFTS motorized recreational opportunities.
- **48 miles** were found to be existing system roads and trails (motorized and non-motorized). These were included as part of the NFTS.
- **8 miles** were closed system roads through Forest Orders and were excluded from all alternatives.
- **7 miles** were previously decommissioned roads and trails and were excluded from all alternatives.
- **2 miles** were County or private roads

All of these routes were accounted for in the effects analysis if appropriate for that particular resource. These changes have been carried forward in the FEIS.

Commenter: 06730

3.00-9 OHV effects on the environment: The DEIS does not contain supporting documentation that OHV use affects the environment.

Response: The impacts associated with motor vehicles are supported throughout the document with appropriate scientific literature and references. The list of references is contained in Appendix D.

Commenters: 00049, 00604, 00612, 00789, 01363, 01816, 06405, 06560, 06617, 06716, S0021

3.00-10 Projections of recreation use: The DEIS makes inappropriate projections for future recreation use.

Response: Projections about increased demand for different categories of recreation activities are contained in Chapter 3.11 (Society, Culture & Economy) of the FEIS. Recreation use for all activities (including OHV's) is expected to increase in the future. The level of increase is expected to be the same in all alternatives. The same increased number of people will continue to come to the TNF regardless of which alternative is selected.

Predictions about changes in the amount of recreational use that may occur on the Forest are difficult to make and would be highly speculative. The Forest Service believes that under all action alternatives, levels of use would increase in the future by the same amount, although the use patterns may change. For example, even though the overall number of available roads and trails is reduced in all of the action alternatives, the same levels of use would simply become more concentrated in those available areas. However, motor vehicle use is already concentrated in some areas of the Forest, so this effect may not be realized either during implementation. However, at some point some users may not attain the experience they desire and would likely seek other areas off-forest. The point at which this would occur is speculative.

Commenters: 06454, 06455, 06459, 06460, 06511, 06685, 06715, S0021

3.00-11 Size/type of vehicles and level of traffic: The DEIS does not analyze the differences between different types of vehicles using the forest roads and trails. In addition, the DEIS fails to display a range of environmental effects relating to volume of traffic, traffic type, and use rates.

Response: The actual types of vehicles, air pressure in tires, height of tires and width of tires is outside of the scope of this decision. The public will be allowed to use whatever type of vehicle they desire consistent with the class of vehicles specified on the Motor Vehicle Use Map (MVUM).

Limitations dictated by the terrain, site distance, and condition of the road surface make the routes suitable for addition to the NFTS as low standard roads or motorized trails rather than higher standard roads. The number of roads and trails available for use in the Preferred Alternative is expected to result in a low traffic density on most of the NFTS, although some congestion may occur near staging areas and on more popular routes. Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS includes mitigation measures such as signs to warn drivers of the class of vehicles authorized and expected on particular routes. Authorized vehicles will be shown on or adjacent to route markers. Maintenance Level 3 NFTS routes designated for mixed use will be signed appropriately to warn drivers of mixed use

Commenters: 02956, 05632, 06237, 06274, 06684, 06703, 06730, 06752, 06758, 06759, 06784 S0008

3.00-12 Best available science: The Forest Service should base decisions around hard science that is site-specific. In addition, the DEIS makes assertions and claims based on stale and incomplete data and information.

Response: The impacts associated with motor vehicles are supported throughout the environmental analyses presented for each affected resource in the FEIS with appropriate discussion, scientific literature, and references. The list of references is contained in Appendix D.

Chapter 3.0 (Affected Environment and Environmental Consequences) describes how the Forest Service handled instances where information relevant to evaluating reasonably foreseeable adverse impacts of the alternatives was incomplete or unavailable. The FEIS summarizes existing credible scientific information relative to environmental effects and makes estimates of effects on theoretical approaches or research methods generally accepted in the scientific community.

Commenters: 06480, 06704, FA

3.00-13 Science Consistency Review: The Forest Service should conduct a science consistency review report to judge whether the scientific information is of appropriate content, rigor and applicability and whether the information has been considered, evaluated, and synthesized in the document(s) that underlie this decision.

Response: This project utilized the best available information in conducting the effects analysis for each resource. The scientific research papers and their applicability to the effects analysis are described in each resource section.

There is no law, policy, or regulation requiring a Science Consistency Review for project level decisions. Each resource section contained the appropriate citations of the scientific papers used in the effects analysis.

If commenters questioned the specific application of these scientific papers in the effects analysis, then they are addressed in the Responses to Comments in that specific section. If additional scientific research papers were brought forward that were relevant to the effects analysis they were also addressed in the Responses to Comments for each resource area.

Commenter: S0008

3.00-14 Cumulative Effects of All USFS and BLM Travel Management Decisions in California: The Forest Service needs to consider all Travel Management decisions being made in the State of California. Between the BLM and the USFS combined with private closures.

Response: The cumulative effects section for recreation bounds the analysis within the Tahoe NF (FEIS Chapter 3.07, Cumulative Effects section), and provides a rationale for the bounding. If the cumulative effects analysis considered a larger spatial bounding, addressing the effects of the proposed action and the interaction with similar actions on adjacent national forests, the site specificity would have been lost among all the assumptions. Decisions on the national forests do

affect regional recreation use; however, the effects of evolving decisions would be difficult to quantify.

Commenter: S0008

Section 3.01: Air Quality

3.01-1 Air emissions: The DEIS fails to adequately analyze the effects of the alternatives on air quality in terms of: levels of emissions, emissions regulations, and use of diesel fuels.

Response: Predictions about changes in total amount of emissions (sulfur compounds, nitrogen compounds and carbon oxides) generated from recreational use that may occur on the TNF are difficult to make and would be highly speculative. The FS believes that (under all alternatives) levels of emissions (other than fugitive dust) from motorized recreation use would increase based on population growth in the market area. Although the use patterns may change, it is expected that total visitation, and hence emissions would increase by the same amount in all alternatives. For example, even though the overall number of available motorized roads and trails is reduced in all of the action alternatives, the same levels of use would occur and simply become more concentrated in those areas. Hence, the amount of pollutants other than fugitive dust is anticipated to increase by the same amount in all alternatives**.**

Regulation of emissions is the responsibility of the Environmental Protection Agency and the State of California. The FS has no authority to regulate or enforce emission standards.

There is no new data available on the particulate matter after October 2006, when all diesel fuels were required to switch to low sulfur.

Commenters: 00003, 00078, 00580, 03824, 06279, 06418, 06704, 06716, 06718, 06749

3.01-2 Naturally occurring asbestos: If roads and trails are added to the NFTS, the EIS should provide the rationale for their addition and include data to demonstrate that these additional miles would not significantly increase the risk of adverse human health effects from naturally occurring asbestos.

Response: Motor vehicle users on native surface roads and trails with Naturally Occurring Asbestos (NOA) may have increased potential risks for adverse effects to their health. Asbestos is classified as a known human carcinogen by state, federal, and international agencies. State and federal health officials consider all types of asbestos to be hazardous. Information on the health effects of asbestos can be found in the *Toxicological Profile for Asbestos* by the Agency for Toxic Substances and Disease Control (2001). Chapter 3.01 (Air Quality) of the FEIS displays the area available for motor vehicle use on lands “most likely” to contain naturally occurring asbestos by alternative.

The No Action Alternative poses the greatest potential risk of human exposure to airborne asbestos due to the continuation of cross country travel on 1,660 acres “most likely” to contain naturally occurring asbestos. This includes 53.6 miles of trails unauthorized for motorized use. All of the

action alternatives reduce the potential human exposure to asbestos by prohibiting cross country travel and public use of those unauthorized routes not being added to the NFTS. The Preferred Alternative would reduce the amount of motorized use on native surface roads and trails "most likely" to contain naturally occurring asbestos by 40 percent. It also prohibits cross country travel on all lands "most likely" to contain NOA

Any routes proposed for addition to the NFTS on lands "most likely" to contain NOA have mitigation measures specified in Appendix A (Site Specific Road, Trail and Open Area Information) in the FEIS to reduce significant risks to human health prior to being open to public motorized use.

Commenters: 05296, 06703, 06716, 06729

3.01-3 Impacts from Fugitive Dust: The DEIS analysis of fugitive dust is misleading because only Alternative 1 will not increase negative impacts from fugitive dust: the decreased mileage presented in the other alternatives will only concentrate any possible negative impacts in a smaller area. Conversely, the DEIS is deficient in its treatment of fugitive dust because it accounts for the prohibition of cross country travel, but subsequently fails to discuss the alternatives in regard to the effects of adding motorized roads to the existing system.

Since OHV use won't be allowed, due to seasonal closures when roads are wet, then the trails won't be appropriately compacted, forming a crust. The "crust" protects the trail, but in the wisdom to not let anyone out until the trails have dried, they will not be protected by compaction, creating dust quicker.

Response: Fugitive dust is analyzed in Chapter 3.01 (Air Quality) of the FEIS. The analysis assumes that the alternatives that provide the greatest number of miles available for use by motor vehicles will produce the greatest amount of fugitive dust. (Refer to Table 3.01-4). While the "concentration" of dust over a smaller number of trails may be higher with a smaller number of trails (such as in Alternatives 2-7), the FEIS considers the impacts of the larger distribution area of dust that would occur with a larger number of trails. Alternative 1 would be distributed over approximately 717,900 acres; each action alternative would be distributed over considerably less land. The smaller amount of area affected would improve air quality compared to Alternative 1.

The amount of fugitive dust produced was not used as a selection criterion for additions to the NFTS motorized recreational opportunities in any alternative. The analysis assumes that the wet weather seasonal restrictions will have no benefit in terms of the amount of fugitive dust produced on native surface roads and trails during the dry season.

While the statement regarding "crust" and compaction is true, and may occur in several reports, it has been taken out of context. This refers to hand-constructed and single-track trails constructed in surface soils, typically high in organic matter and often derived from volcanic bedrock. When dry, traffic in these situations leads to entrenchment by dusting. Proper trail design and construction would excavate through the topsoil down to the more clayey subsoil where a compacted tread could be created. Under proper moisture conditions, traffic helps compact the treads and results in less soil

loss by dusting. In any case, the cited statement does not apply to properly constructed single-track trails or to roads. In addition, while the "crust" generated on routes during proposed wet weather seasonal closures suggested by the commenter may change dust generation on some routes at specific times, the effects of opening routes during wet weather would be variable and likely negative to soil and water resources over the majority of the diverse routes managed in the NFTS.

Commenters: 00037, 01868, 6715, 06716, 06740, 06559

3.01-4 SO_2 and NO_2 deposition: Both SO_2 and NO_2 are gases and therefore cannot be deposited on vegetation surfaces. Therefore, please delete the whole paragraph that this is contained in from the DEIS.

Response: The sentence regarding SO_2 and NO_2 deposition is not included in the FEIS. The potential for SO_2 and NO_2 to affect the atmosphere is discussed in Chapter 3.01 (Air Quality).

Commenter: 06291

3.01-5 National Ambient Air Quality Standards: Table 3.01-1 (page 35 of Chapter 3 of the DEIS) lists the Ambient Air Quality Standards attainment status for areas affected by the proposed rulemaking. The table contains several errors. Most notably, Nevada County is listed as Attainment for federal ozone standards. Reductions in off-road vehicle emissions would ease the burden on other pollution sources such as businesses and residential development projects to reduce emissions, would lessen the chance of federal sanctions being implemented against the area, and would also assist in the protection of public health.

Response: Western Nevada County is Non-Attainment, and we have added or corrected information to accurately represent Air Quality in Chapter 3.01 of the FEIS. We project that the same increased number of people will use the NFTS regardless of the alternative that is implemented, although the distribution of users may change compared to the existing conditions.

Commenter: 05296

3.01-6 Air quality thresholds: This document has failed to display the threshold of use to air quality to determine the range of positive, neutral and adverse affects. In addition, there will be an increase of air pollution by adding motorized trails and from increased use on the extensive existing system is eminently foreseeable. OHV use has increased dramatically in the last several years and will likely continue to increase. The environmental effects of these increases and measures to mitigate them must be discussed in the EIS.

Response: The FEIS did not establish air quality thresholds since State and Federal agencies have established ambient air quality standards for criteria pollutants. If the permissible levels of a particular pollutant are not exceeded in an area, the area is said to be in attainment for that pollutant; if the standards are violated, the area is designated as non-attainment. Chapter 3.01 (Air Quality) shows the designations for the affected counties in the TNF.

The Forest did not use route lengths to analyze pollution effects, as it is predicted that the same number of visitors will use the forest regardless of the alternative chosen, resulting in the same amount of emissions across the action alternatives.

Commenters: 06704, 06716

3.01-7 Air quality analysis: Since none of the alternatives would exceed Federal or State air quality standards, there should be no analysis of the impacts to air quality.

Response: Under the National Environmental Policy Act, the FS is required to address the effects on the human environment even though those effects may be similar across all alternatives.

Commenter: 02562

Section 3.02: Watershed Resources

3.02-1 Erosion: Soil erosion is associated with motorized roads and trails.

Soil erosion associated with motorized roads and trails is insignificant.

Response: Chapter 3.02 (Watershed Resources: Geology, Soil, Hydrology) covers effects of the alternatives on watershed resources including soil erosion. Roads are considered the principal cause of accelerated erosion in forests throughout the western United States (California Division of Soil Conservation 1971, California Division of Forestry 1972, Reid and Dunne 1984, McCashion and Rice 1983, Furniss and others 1991, Harr and Nichols 1993). The locations of roads determine the degree of potential impacts, making some roads more environmentally sensitive than others. The presence of roads can increase the frequency of slope failures compared with the rate for undisturbed forest by hundreds of times (Sidle and others 1985). A single, poorly designed trail on a highly erosive soil could cause unacceptable soil loss, but result in no impact to water quality if not delivered to a stream. A very high density of trails on a moderately erosive soil in an area with a high stream density could be unacceptable for water quality (the likelihood of delivery is high), but not necessarily a major impact to the soil resource.

This project would not change the footprint of current wheel-tracks on the Tahoe National Forest. It would decide which native surface roads and motorized trails are authorized for motorized use. All action alternatives would result in a net reduction in the density of native surface roads and motorized trails in all river basins. All action alternatives would result in a slight decrease in the risk of negative cumulative effects to watersheds. The cumulative impacts on the density of native surface roads and motorized trails resulting from this project are displayed in Chapter 3.02 of the FEIS. Alternative 1 represents the existing condition. Alternatives 2 through 7 represent the density of native surface roads and motorized trails after 20 years (when many of the routes not designated for motorized use would have recovered hydrologically). Alternatives 3, 4, and 7 have the same cumulative reductions in the density of native surface roads and motorized trails after 20 years. Alternative 6 has a higher density of native surface roads and motorized trails after the same time

period. The seasonal closures proposed in Alternatives 4, 5 and 6 would decrease the risk of erosion on and adjacent to native surface roads and motorized trails by reducing the rutting and channeling of surface water flow.

Commenters: 00059, 00067, 00081, 00601, 00758, 01251, 01363, 06281, 06668, 06701, 06704, 06716, 06721, 06749, 06758, 06799, 06800

3.02-2 Erosion hazard: The Forest Service should not designate routes on highly erodible soils.

Response: All routes considered for addition to the NFTS were field reviewed and determined to not be on highly erodible soils. For those routes where erosion was identified as a resource concern, the appropriate mitigation measures to reduce erosion risks were specified in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS.

Commenters: 06668, 06749

3.02-3 Soil erosion risk assessment and specific soil types: The EIS should include a revised soil risk assessment to more accurately reflect existing conditions relating to soil types and effects of motor vehicle use.

Response: Many factors can influence the risk of erosion and potential impacts to watershed resources including: soil erosivity; stream density; and the type and density of roads on the landscape. The presence of highly erosive soils/landscapes or high native-surfaced, motorized route density does not mean that there will be negative effects to soil and watershed resources. But the presence of both high erosion risks and high motorized route density indicates that there could be a higher risk of accelerated erosion and sediment production due to motorized roads and trails.

The inherent risk of erosion of the soils within the Tahoe National Forest (TNF) was assessed using the Ecosystem Management Decision Support Model. The parameters used in the EMDS model to assess soil erosion risk were 1) presence of geo-debris slides, 2) soil erodibility (K factor), 3) slope, and 4) precipitation. The EMDS model compared the K factor, percent slope, precipitation, and presence of geodebris slides of each route segment (~300 meters) to all other road and motorized trail segments on the TNF. The length of roads and motorized trails in each HUC7 watershed was grouped by modeled erosion hazard to define the potential erosion risks on the watersheds on the TNF.

The soil types for individual routes are documented in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS.

Commenter: 06704

3.02-4 Sediment: Motorized roads and trails have the potential to adversely impact streams through soil erosion and subsequent deposition of sediment into streams.

Stream sedimentation is not associated with motorized roads and trails.

Response: The effects of OHV on sediment are discussed in Section 3.02 of the FEIS. See responses to erosion and water quality comments, also.

Commenters: 06701, 06704, 06716, 06721, 06725, 06749

3.02-5 Effects on water quality from OHV roads and trails: Motorized roads and trails that cross and/or are near streams may adversely impact water quality and aquatic habitats.

Motorized roads and trails do not adversely impact water quality.

Response: The Purpose and Need for this project is to regulate unmanaged motor vehicle travel and provide limited motorized use to existing dispersed activities. The effects analysis in Section 3.02 of the FEIS discloses the potential effects of adding some of these existing routes to the NFTS. Generally, all action alternatives decrease motorized use in all HUC7 watersheds on the TNF. Native surface, motorized route density in Riparian Conservation Areas and stream crossing density also decrease with the action alternatives.

Eighty-five percent of the routes inventoried for this project had acceptable levels of water and soil resource impacts. The primary impact found was erosion on the trail, which is a trail tread maintenance issue since the eroded soil does not leave the trail. Of the 40 existing stream crossings proposed for designation, only 3 require immediate attention and another 14 need to be prioritized for trail maintenance/drainage control. See "Site Specific Road, Trail and Open Area Information (Appendix A)" for site-specific mitigation measures that address these impacts and timing of those mitigations.

Commenters: 00081, 00601, 01441, 06704, 06716, 06721, 06737, 06749, 06750, 06753, 06755

3.02-6 Clean Water Act (Point Sources): The Forest Service is required to obtain an NPDES permit to add roads and trails to the NFTS because stream crossings associated with motorized roads and trails are point sources of water pollution.

Response: Point sources of water pollution are those which are discharged from a discrete conveyance, such as a pipe. OHV trails are not currently considered point sources.

The Forest Service and the California State Water Board are currently working on an updated Water Quality Management Program (WQMP) and Management Agency Agreement, which is expected to be completed in January 2011. The WQMP will include requirements needed for compliance with the Clean Water Act, including OHV Best Management Practices. The Tahoe National Forest will comply with all aspects of the new WQMP.

Commenter: 06721

3.02-7 Clean Water Act (Non-Point Sources): The Forest Service is required to meet its own water quality management plan for non-point source pollution.

Response: The Tahoe National Forest Travel Management Project is designed to comply with the Clean Water Act and its implementing regulations and policies. The primary method for assuring

compliance with the Clean Water Act is through implementation of Best Management Practices (BMPs). BMPs are implemented as mitigation measures specified in FEIS Appendix A (Site Specific Road, Trail and Open Area Information) for any motorized trail to be added to the National Forest Transportation System or any lands to be established as "Open Areas." These mitigation measures would meet water quality objectives and maintain and improve the quality of surface water on the Forest.

An August 4, 2009 California State Water Board resolution directed their staff to develop a statewide waiver that will cover all non-point source activities on NFS lands, including OHV use. The Forest Service and the California State Water Board are currently working on an updated Water Quality Management Program (WQMP) and Management Agency Agreement, which is expected to be completed in January 2011. The WQMP will include requirements needed for compliance with the Clean Water Act, including OHV Best Management Practices. The Tahoe National Forest will comply with all aspects of the new WQMP.

Commenter: 06721

3.02-8 Impacts to riparian areas/ Riparian Conservation Areas: No motorized routes within Riparian Conservation Areas (RCAs) should be added to the NFTS, and efforts should be made to restore any damage that has occurred therein. The DEIS fails to analyze the impacts of the OHV trail designations on specific riparian areas.

Response: The FEIS (Chapter 3, Part 3.02) discloses the potential effects of adding existing routes within RCAs to the NFTS. Generally, all action alternatives decrease motorized use in RCAs. Stream crossing density also decreases under the action alternatives. Appendix I of the FEIS describes how this project is consistent with the Forest Plan's Riparian Conservation Objectives. Site specific effects can be found in the Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS, which includes detailed mitigation measures and their timing.

Commenters: 04566, 06668, 06703, 06716, 06762

3.02-9 Stream crossings: Stream crossings increase soil erosion and deposition of sediment into streams as well as degradation of stream channel structure, water quality, and spawning beds.

Response: The greatest risk of sediment moving into streams occurs where routes cross streams. Routes near streams are also commonly connected to the stream network. Coe's studies (2006) on the Eldorado NF found that 25 percent of the routes surveyed were hydrologically connected and that 59 percent of the connectivity was apparent at stream crossings (2006). Routes that cross streams have the potential for direct impacts to streams in 3 different ways:

- **Travel through a stream** can cause disturbance to the stream bed or banks.
- **Contaminants** such as petroleum products, sediment and or anything that is spilled on the roadway can enter the stream at crossings.

- **Stream crossings fail**: Roads often divert stream flow at road-stream crossings, and these diversions can result in erosion of native hill slopes, as well as road surfaces. When a stream crossing fails, a large pulse of sediment is typically released into the stream system. All crossings are designed for failure associated with storms of particular recurrence intervals.

All action alternatives would result in fewer stream crossings compared to the existing condition (Alternative 1). The number of stream crossings in Alternatives 2 and 6 would be slightly higher than Alternatives 3, 4 and 7, which would have the fewest stream crossings. Alternative 5 would result in the highest number of stream crossings of the action alternatives.

Commenters: 06424, 06668, 06721, 06725, 06749, 06750

3.02-10 Wet weather seasonal restrictions: Wet weather seasonal restrictions are important to protect watershed resources

Wet weather seasonal restrictions provide no benefit to watershed resources.

Response: The condition of native surface roads and motorized trails can quickly decline during winter or wet weather use due to rutting. Rutting is the process where soils are displaced and deform to the shape of the tire tracks that make their way through saturated soils. Rutting makes the route more susceptible to damage in the spring as the area begins to dry out. Rutting can occur if traffic enters the area before the soils have sufficient drying time. To some extent wet season damage can be influenced by soil type, but all soil types are susceptible to wet season use. Native surface roads and motorized trails are most susceptible to damage by motor vehicles when wet. Twenty percent of the routes inventoried had trail incision. One of the primary causes of route incision was use when soils were saturated. “Higher Risk Route” use when soils were saturated and soil strength was low is also a contributing factor in the inventoried routes with erosion.

Implementing seasonal closures would reduce rutting and subsequent channeling of surface water runoff. Seasonal closures would decrease the potential effects of motor vehicle use on native surface roads and motorized trails by decreasing erosion and sedimentation.

Alternatives 1, 2, 3 and 7 have the vast majority of native surface roads and motorized trails open year-round and, therefore, have a higher risk to soil resources. The wet weather seasonal closures imposed in Alternatives 4, 5 and 6 would result in all of the native surface roads and motorized trails being closed to motorized use during the wettest time of the year, thus greatly reducing potential negative impacts to soil resources and to water quality (FEIS Chapter 3.02, Watershed Resources: Geology, Soil, Hydrology).

Commenters: 01251, 01363, 02519, 03567, 06387, 06511, 06701, 06799, 06800

3.02-11 Thresholds: The cumulative effects analysis based on route density does not include any specific thresholds to assess the contribution made by OHV’s to resource degradation, nor does it describe whether or not the resource is significantly affected by OHV’s and how that determination was made.

Response:

Thresholds for Soils: The Soil Management Handbook (USDA 1991) is a national soils handbook that establishes thresholds to assist in forest planning. Soil quality standards (threshold values where soil disturbances become detrimental, that is, result in significant change) are intended for areas where management prescriptions are being applied, such as timber harvest areas and range allotments. They are not intended to apply to administrative sites or other areas with dedicated uses.

Thresholds for Watersheds: Cumulative watershed effects (CWE) are the combined effects of past, present, and future land management activities within a watershed that may affect the watershed's structure or hydrologic processes. The CWE analysis presented in the FEIS considers a number of assessment methods at multiple scales. One method assesses the potential for adverse CWE by comparing the current level of watershed disturbance to an estimate of "the upper limit of watershed tolerance to externally applied factors such as climate and land use," called the Threshold of Concern (TOC). The Equivalent Roaded Acre (ERA) is used as the standardized unit of measure for land disturbance and the current level of watershed disturbance is expressed as "percent ERA". The current "percent ERA" of a watershed is compared to the TOC to provide an assessment of the potential for adverse cumulative watershed effects.

As described in the FEIS, Chapter 3.02 under "Existing Equivalent Road Acres", a forest-wide review of project-level cumulative watershed effects (CWE) analyses was conducted to determine whether any of the Tahoe National Forest's 224 HUC 7 watersheds are currently at or over Threshold of Concern (TOC). (Note that HUC 7 watersheds are smaller subwatersheds nested within larger HUC 6 watersheds.) The FEIS (Chapter 3.02) discloses that this forest-wide review found two HUC7 watersheds on the Forest (less than 1 percent of the Forest's HUC 7 watersheds) currently over the TOC: the Trout Creek and Alder Creek watersheds. The majority of the Equivalent Roaded Acre (ERA) disturbance in these watersheds is due to the Tahoe Donner Subdivision, which is located on private lands. No routes are proposed for addition to the NFTS in these two watersheds under the action alternatives, and the prohibition on cross country motorized travel under all of the action alternatives would result in beneficial effects over the long term (20 or 30 years) due to passive restoration of unused routes, ultimately reducing ERAs in these watersheds over the long-term.

Cumulative Effects Analysis Designed to Assess the Contribution of OHVs to Potential Adverse Watershed Impacts: The forest-wide review of smaller HUC 7 watersheds shows that the majority (99 percent) of the Forest's watersheds are below their TOCs; therefore, larger-scale watersheds (HUC 6 and HUC 5) would not be expected to exceed the TOC. This allowed a forest-wide ERA analysis to be conducted at the HUC 6 watershed scale, keeping other ERA disturbance factors constant and varying the miles of motorized routes by alternative (and including existing routes on private lands), to assess the contribution of motor vehicle use to cumulative watershed effects. The results of this analysis are included in the FEIS, Appendix F. Table 3.02-23 in Chapter 3.02 of the

FEIS presents the results of this ERA analysis at the river basin (approximately HUC 5) scale, contrasting the differences between the alternatives in terms of the contribution of motorized routes to potential cumulative watershed effects, as measured by ERAs within each of the Forest's nine river basins.

Because the actions proposed under the action alternatives (for example, prohibiting cross country motor vehicle travel, changing the season of use, and changing the types of vehicles allowed on certain routes) would not change the existing disturbance footprint in the short term, a cumulative watershed analysis based on ERAs shows no measureable changes between the alternatives in the short term (1 year from the date of action) and only slight beneficial effects over the long term (20 to 30 years), owing to passive restoration of unused routes. For example, the Donner Lake HUC 6 watershed currently has 152.3 miles of motorized routes (136.8 miles of routes on private lands and 15.5 miles on national forest lands). Alternative 6 would prohibit motor vehicle travel on 6.9 miles of existing routes on national forest lands. If these 6.9 miles of routes were converted to ERAs (square feet of routes converted to acres divided by acres in HUC 6), they would equal 0.1 percent ERA. Assuming a 20-year recovery rate, the Donner Lake HUC 6 route-related ERAs would decrease by 0.003 percent ERA each year for 20 years. Therefore, the FEIS analysis uses additional indictors, such as near stream route miles/density and number/density of stream crossings, to further assess and disclose potential cumulative environmental effects on watershed resources.

Commenters: 00028, 06701, 06704

3.02-12 Watershed cumulative effects: The DEIS should compare the relative contribution of watershed degradation from OHV use to that from other causes such as naturally occurring erosion, erosion and sedimentation following fires, logging, mining and hydroelectric dams. In addition, the DEIS analysis of cumulative watershed effects is inadequate because the effects of closing routes across private lands are not analyzed by alternative.

Response: Please see the response to Comment 3.02-11 above. The ERA analysis of cumulative watershed effects does compare the alternatives in terms of motor vehicle use on designated roads and motorized trails and established "Open Areas." This approach allows the public and decision maker to compare the relative contribution of motor vehicle use under each alternative on potential cumulative watershed effects.

Existing routes on private lands are included in the ERA analysis. Closure of existing routes on private lands was not a reasonably foreseeable future action included in the cumulative watershed effects analysis.

Commenter: 06701

3.02-13 Significance of effects: The DEIS describes how the prohibition on cross country travel would decrease the average "Higher Risk Route" density by 0.5 mi/square mile, but does not indicate the significance of this reduction.

Response: Language throughout Chapter 3.02 (Watershed Resources: Geology, Soil, Hydrology) of the FEIS refers to slight to very slight reductions in risk. This language indicates there is not a significant change in native surface road and motorized trail density between any of the alternatives

Commenter: 06701

3.02-14 Effects on 303(d) listed water bodies and TMDL Compliance: Allowing off highway vehicle use in 303(d) listed water bodies would result in unacceptable adverse impacts on these impaired water bodies.

The Forest Service should address the concerns with how the Preferred Alternative complies with the Truckee River and Squaw Creek TMDL sediment reduction goals.

Response 303(d) listed water bodies: The effects on 303 (d) listed water bodies are displayed in Chapter 3.02 (Watershed Resources: Geology, Soil, Hydrology) of the FEIS. There are six water bodies on the Tahoe National Forest that are listed as impaired on the EPA's 303(d) List. These are the Truckee River (sediment); Stampede Lake (pesticides of unknown origin), Donner Lake (PCBs), Kanaka Creek (arsenic), Squaw Creek (sediment and siltation) and Humbug Creek (lead, sediment, etc.).

Response TMDL Compliance: There are two 303(d) listed water bodies which have established TMDLS. These are the Middle Truckee River and Squaw Creek. Each of these is described below. TMDL implementation/compliance analysis looks only at routes under TNF jurisdiction on TNF lands. The information for TMDL compliance is contained in Appendix F of the FEIS.

The Truckee River is listed as a 303(d) Impaired Water Body by EPA due to sedimentation and siltation. A Total Maximum Daily Load for the Middle Truckee River for sediment was completed in 2008. Lahontan Water Quality Control Board Staff Report states that dirt roads are a sediment source that needs to be controlled. The Staff Report also stated that not all dirt roads are a problem. The importance of this Motorized Travel Management analysis was also recognized in the Staff Report for the Middle Truckee River TMDL: "This program will be a key component to meeting the load reductions required from dirt roads, particularly where they occur on public lands. (Page 10-11, May 2008)."

TMDL Compliance for the Middle Truckee River was evaluated through the following indicators: 1) Cross country travel, 2) Amount of motorized native surface roads and trails, 3) Season of use on motorized native surface roads and trails, 4) Amount of established "Open Areas" and their season of use, 5) Stream crossings, 6) Native surface roads and motorized trails within close proximity to streams (RCA's), and 7) Land ownership patterns. This information was contained in detail in Appendix F (Watershed Analysis) of the FEIS. It was not summarized in the body of the document to improve readability. The following summarizes the information presented in Appendix F.

1) Cross Country Travel: Cross country travel by motor vehicles can also have an impact of sedimentation and siltation. Cross country travel is prohibited in all of the action alternatives.

2) Amount of motorized native surface roads and trails: Approximately half (628 miles) of the native surface roads in this watershed are privately owned. None of the alternatives change the amount of private roads or their season of use. The Forest Service has jurisdiction of 685 miles of native surface roads and motorized trails within this watershed. Since this project would not change the footprint of current wheel-tracks on the Tahoe National Forest, there are no measurable changes in the presence of native surface roads and motorized trails between the alternatives in the short term (1 year from the date of action); however, all of the action alternatives would have beneficial effects over the long term (20 to 30 years) due to passive restoration of unused routes.

All of the action alternatives would prohibit cross country motorized travel and would therefore not allow motorized travel on approximately 100 miles of native surface roads and motorized trails on TNF lands. Prohibiting cross country travel under Alternative 6, the Preferred Alternative, would result in 43 percent reduction in route mileage for motorized use on TNF lands in the Middle Truckee River watershed and 34 percent in the Little Truckee watershed. Over the whole Truckee River basin Alternative 6 would reduce route mileage for motorized use by 37 percent (Table N-5).[1]

Table N-5. Alternative 6: Percent Reduction in Miles Currently Being Used by Motor Vehicles

Watershed	Percent Reduction in Miles Currently Being Used by Motor Vehicles
Middle Truckee River	43
Little Truckee River	34
Truckee River	37

3) Season of use on NFTS motorized native surface roads and motorized trails: Alternatives 4, 5 and 6 include seasonal restrictions which prohibit use of these roads during the wet time of the year thereby reducing the potential for sedimentation and siltation.

4) Amount of established "Open Areas" and their season of use: There are four established or proposed OHV "Open Areas" within Little Truckee River watershed: Prosser Pits, Stampede Reservoir, Boca Reservoir and Prosser Reservoir. The Prosser Pits OHV Open Area is already designated as an "Open Area." Any sedimentation being generated by from Prosser Pits would continue under all alternatives. Boca, Prosser and Stampede Reservoirs have been and currently are being used by motor vehicles to access the shoreline below the high water line as the reservoirs are drawn down. Speeds are generally slow and since this access is allowed on dry soils only, any additional sediment generated by vehicles accessing the

[1] Source data for watershed analysis can be found in Appendix F of the SDEIS.

shoreline is minimal. Some fugitive dust could be created by the vehicles on the dry soils and possible drift into the reservoir, but the amount is also felt to be minimal. These reservoirs are established as formal "Open Areas" for shoreline access by motor vehicles in Alternative 2 (2,549 acres) and current level of sedimentation would continue. In Alternative 6, 244 acres of the most stable, highly used areas are established as "Open Areas." This is a 90 percent reduction in shoreline use compared to existing condition and would result in a reduction in the amount of sediment currently being generated. The use of these dry lake beds by motor vehicles is prohibited in Alternatives 3, 4, 5, and 7. Use is not prohibited at these reservoirs in Alternative 1 (2,549 acres).

5) Stream Crossings: Section 3.02 of the FEIS states that stream crossings and native surface roads and motorized trails within close proximity to streams are the areas of highest potential sediment delivery to the stream channel. All action alternatives would decrease the miles and density of stream crossings of native surface roads and motorized trails. Table N-6 shows the reduction in number of stream crossings for the Preferred Alternative. The highest reductions would be in the Middle Truckee River. Slightly lower reductions would occur in the Little Truckee River.

Table N-6. Percent Reduction in Number of Motorized Stream Crossings

Watershed	Percent Reduction in Number of Motorized Stream Crossings
Middle Truckee River	44
Little Truckee River	33
Truckee River	35

6) Native surface roads and motorized trails within close proximity to streams (RCA's): The "Basin Plan Amendment Total Maximum Daily Load for Sediment Middle Truckee River Watershed" states: "Focus on dirt roads with high potential for sediment delivery to surface waters (e.g., within 200 feet of watercourse) (Page 5, May 2008)." This would correspond to routes within Riparian Conservation Areas. Section 3.02 of the FEIS states that roads and native surface trails within close proximity to streams are the areas of highest potential sediment delivery to the stream channel. All action alternatives would decrease the miles of native surface roads and motorized trails within riparian conservation areas. The percent reduction in motorized route miles in Riparian Conservation Areas on TNF lands is shown below in Table N-7. The highest reductions would be in the Middle Truckee River. Slightly lower reductions would occur in the Little Truckee River.

Table N-7. Percent Reduction of Motorized Route Miles in Riparian Conservation Areas

Watershed	Percent Reduction in Miles of Motorized Routes in Riparian Conservation Areas
Middle Truckee River	52
Little Truckee River	39
Truckee River	43

7) Land Ownership Patterns: TMDL implementation/compliance analysis looked only at routes under TNF jurisdiction on TNF lands. Land ownership and route jurisdiction are also important when responding to concerns over high route and crossing densities within the watershed and how the SDEIS would help to reduce impacts.

The TNF manages 38 percent of the Middle Truckee River, 81 percent of the Little Truckee River, and an average of 59 percent of the Truckee River watershed. Current RCA motorized route density on TNF is roughly half of the density found on private lands. Stream crossings on TNF lands in the Middle Truckee River are roughly half of private land densities. In the Little Truckee River, stream crossings on TNF lands are approximately 75 percent of private land densities. Table N-8 shows the proposed percent reductions in native surface motorized routes on TNF lands. Alternative 6 would reduce miles of motorized routes by 34 to 43 percent depending on watershed; stream crossing densities would be reduced by 33 to 44 percent, and miles of motorized routes in RCAs would be reduced by 39 to 52 percent.

Table N-8. Motorized RCA route density and crossing density by land ownership and watershed

	Land Ownership			RCA Motorized Route Density			Motorized Stream Crossing Density		
Watershed	**% TNF Lands**	**% Other**	**All**	**TNF**	**Other**	**All**	**TNF**	**Other**	**All**
Middle Truckee River	38%	62%	100%	2.4	4.3	3.6	6.5	13.7	11.1
Little Truckee River	81%	19%	100%	2.2	4.1	2.6	12.3	17.6	13.5
Truckee River	59%	41%	100%	2.3	4.2	3.1	10.6	14.8	12.4

Summary: The following actions would meet TNF obligations under the Truckee River TMDL, conform to the Truckee River Basin Plan Prohibitions, and maintain or improve water quality in the Truckee River:

- Prohibiting cross country travel
- Reducing the use of unauthorized roads and trails by motor vehicles
- Reducing the season of use on motorized native surface roads and trails
- Reducing the amount of “Open Areas” and limiting their season of use
- Reducing stream crossings

- Reducing native surface roads and motorized trails within close proximity to streams (RCA's)
- Accounting for land ownership patterns.

It is not possible to quantify the load reduction expected from the proposed action. This document does not propose to change the hydrologic footprint on the TNF; it only defines where motorized use is acceptable. Passive recovery would occur on the majority of the routes not designated for motorized use over the next 10 to 20 years. Some routes may warrant active restoration.

Squaw Creek is listed as a 303(d) Impaired Water Body by EPA due to sedimentation and siltation. Native surface roads and trails and their season of use can contribute to sedimentation and siltation. Virtually all of the native surface roads in this watershed are privately owned. None of the alternatives change the amount of private roads or their season of use. The Forest Service manages 24 percent of the Squaw Creek HUC7 and has less than one mile of unauthorized motorized trail in this watershed. None of the alternatives except Alternative 5 add this route to the NFTS; however, seasonal restrictions prohibit use of this motorized trail during the wet time of the year thereby reducing the potential for sedimentation and siltation.

Cross country travel by motor vehicles can also have an impact of sedimentation and siltation. Cross country travel is prohibited in all of the action alternatives.

Commenters: 06701, 06703, 06716, 06725, 06729, S0012, S0070

3.02-15 EMDS modeling: The Erosion Risk Assessment does not include analysis to show significance between action alternatives.

Response: The EMDS Erosion Risk Assessment was used as an accounting tool to display relative inherent erosion risk by watershed across the Forest. As described in Chapter 3.02 of the FEIS under "Soil Erosion Risk Assessment", it is a GIS model that is used to assign relative potential route-related erosion risk associated with different soil types, slopes, presence of geo-debris slides, precipitation zones. Watersheds with a high percentage of routes on highly erodible soils, steep slopes, with geo-debris slides present, and in higher precipitation zones would have higher erosion risks than watersheds without those features.

The FEIS analyzes the potential erosion/sedimentation risk under each alternative by combining the inherent erosion risk (as indicated by EMDS Erosion Risk Assessment) by watershed with the density of native surface roads and motorized trails that would be included in the NFTS under each alternative. (Refer to Tables 3.02-21 and 3.02-22 and Figure 3.02-5 in Chapter 3.02 of the FEIS and the accompanying discussion). The analysis concludes that native surface road and motorized trail density would decrease between 20 and 40 percent, depending on the alternative, with an associated decrease in erosion/sedimentation risk.

Commenter: 06701

3.02-16 Changes in road Maintenance Level: Changing roads from Maintenance Level 3 to Maintenance Level 2 has an adverse impact on water quality.

Response: In Chapter 3.02 (Watershed Resources: Geology, Soil, Hydrology) of the FEIS, changing NFTS roads from a Maintenance Level 3 to Maintenance Level 2 was accounted for in the effects analysis as a potential adverse impact; however, this change in maintenance levels would not result in a decrease in the emphasis put on resource protection. It simply results in a decrease in passenger car comfort. All NFTS roads would be maintained for resource needs no matter what maintenance level.

Commenters: 06424, 06701, 06703, 06729, 06739

3.02-17 No differences between alternatives for watershed effects: Soil erosion, sedimentation, and the effects of roads and trails on watershed resources are among the most important considerations in the DEIS. In the effects analysis to these resources in Chapter 3 there are repeated statements that direct effects to soils, watersheds and stream courses are limited as the addition of roads and trails to the NFTS is not new ground disturbing activity.

Response: Direct impacts to watersheds and stream courses that result from this project are limited. There are no new ground disturbing activities proposed with this project. The routes being evaluated in this analysis already exist on the ground, but may require upgrading to NFTS standards as well as periodic maintenance. They are compacted and generally lack vegetation. Runoff from the surface is collected and discharged as potentially erosive flows at points below the road or motorized trail. Some are eroded or causing erosion, while others are stable and are not causing any negative resource impacts. From the standpoint of watershed resources, most of the adverse impacts associated with these roads and motorized trails have already occurred. Therefore, on these routes the potential effects on watershed resources would be associated with the motorized use of these routes, and are related to sustaining road or trail function and protecting water quality.

All alternatives would have direct and indirect effects on watershed resources that vary by alternative. A key distinguishing factor between alternatives is the amount of soil erosion that could potentially be generated by motor vehicle *use*. Route designation would affect soil erosion and subsequent sediment delivery to streams to the extent that activities resulting from designation or prohibition of use (1) affect the amount of *traffic* on routes; (2) affect the season of use (3) add motorized trails to the NFTS with highly erosive soils; (3) affect types of *maintenance*; and (4) affect the potential for *recovery* and restoration. A number of indicators are used to compare the impacts of the alternatives on hydrology and water resources, as described in Chapter 3.02 under "Water Resources Methodology by Action." The rationale for selection of each indicator is described in detail in this section of the FEIS. The analysis presented in Chapter 3.02 of the FEIS shows differences between the alternatives in terms of their direct, indirect, and cumulative effects on water quality based on proposed routes in riparian conservation areas, proposed native surface road and motorized trail stream crossings, proposed routes with documented erosional features, and native surface road and motorized trail route density.

Commenters: 06701, 06725

3.02-18 Impacts of route proliferation at dispersed campsites: The EIS should evaluate the effects of the alternatives on route proliferation at dispersed campsites near streams, lakes, springs, and meadows, and the related impacts to water and riparian resources

Response: All routes proposed for designation were analyzed for potential encroachment into sensitive environments. If existing encroachment was identified as a resource concern, mitigation measures were specified in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS and would be implemented prior to opening the route to motorized use.

Commenters: 06703, 06729, S0012, S0023

3.02-19 Abandoned mine lands: In considering the proposed new routes, the Tahoe National Forest should remediate the abandoned mine lands that are near existing trails used by recreationists

Abandoned mines pose no safety risks to OHV users.

Response: To assess the potential health and safety risks from abandoned mine lands (AML) effects, the alternatives are compared by the number of known, mapped AML sites within 100 feet of roads and motorized trails. There are currently 96 AML sites within 100 feet of roads and motorized trails. Those alternatives with the greatest number of AML sites within 100 feet of roads and motorized trails are expected to have the highest risk to public safety. There is no way of knowing how many people using the roads and motorized trails may be accessing the mine sites. Chapter 3.02 (Watershed Resources: Geology, Soil, Hydrology) of the FEIS describes the number of AML sites which could have potential public safety concerns related to motorized public access. The No Action Alternative (Alternative 1) would have the highest risk to public safety. Alternative 3 would have the lowest risk to public safety because it has the lowest number of AML sites near motorized roads and trails. All other action alternatives would add three motorized trails to the National Forest Transportation System (NFTS) near AML sites. Mitigation measures to assure public safety is included in Appendix A (Site Specific Road, Trail and Open Area Information) for these sites.

Commenters: 06429, 06752

3.02-20 Definition of high risk routes: The assumption that user created trails are eroded and in poor condition or have a high risk of accelerated erosion is conjectural and not supported by any analysis or documentation in the DEIS.

Response: User-created trails were not constructed to National Forest Transportation System (NFTS) standards. These trails are not maintained and are higher risk routes in terms of erosion and water quality risks. Generally, the more un-maintained, unauthorized routes there are in a watershed, the higher the risk to soil and watershed resources.

This statement has been changed in the FEIS to read, “Unless survey information indicated otherwise, user-created trails are assumed to have a higher risk of accelerated erosion because they were not designed/located to Forest Service Standards and often lack drainage.”

In the FEIS "higher risk routes" has been changed to "native surface roads and motorized trails".

Commenters: 06281, 06704, 06758

3.02-21 Debris slides: The Forest Service should delete the sentence, "Roads and motorized trails that cross debris slides can increase debris slide activity, increasing sediment delivery to channels."

Response: The sentence has been deleted.

Commenter: 06457

3.02-22 Basin Discharge Plan Prohibitions: The "Open Area" proposal increases the risk of violating the Water Quality Control Plan for the Lahontan Region.

Response: The Basin Plan discharge prohibitions address discharge of wastes from boats, marinas, or other shoreline appurtenances to surface waters of the Little Truckee or Truckee River Hydrologic Units (HU). This project does not affect boats or marinas. There is no reservoir shoreline use in the Truckee River HU. Most action alternatives (except Alternative 2) would decrease the use of reservoir shorelines in the Little Truckee River HU. Alternative 6 would decrease reservoir shoreline use by 90 percent compared to existing situation.

Basin plan prohibitions also address discharge of waste or other deleterious material to surface waters or the 100-year floodplain of the Little Truckee River, the Truckee River, or any tributaries. All action alternatives would reduce the miles of routes within Riparian Conservation Areas and the number of stream crossings. Alternative 6 would reduce near stream routes in the Little Truckee River HUC6 by 39 percent and stream crossings by 33 percent. Alternative 6 would also reduce near stream miles by 52 percent and stream crossings by 44 percent in the Middle Truckee River.

The following proposed actions would meet the Truckee River Basin Plan Prohibitions and would maintain or improve water quality in the Truckee River:

- Decreasing the miles of motorized routes, number of motorized stream crossings, miles of motorized routes in RCAs, and acres of reservoir shoreline use.
- Prohibiting cross country travel.
- Seasonal closure of native surface routes.
- Continuing TNF monitoring, maintenance, and restoration/rehabilitation program.

See also the response to comment 3.02-14.

Commenter: S0070

3.02-23 Proliferation into Sensitive Areas from Dispersed Sites: The Forest Service should take action to prevent the proliferation of additional unauthorized routes off of the routes added to the NFTS for access to dispersed recreation sites.

Response: Mitigation measures are specific in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS for routes added to the NFTS where the proliferation of additional unauthorized routes was identified as a resource concern.

Commenter: S0012

Section 3.03: Terrestrial and Aquatic Species

3.03-1 Wildlife Habitat Impacts: The presence of roads and use of OHV's, including noise and other disturbances, have the potential to adversely affect wildlife and fisheries.

Response: These, and a number of additional road and trail-associated factors, have been analyzed in Chapter 3.03 (Terrestrial and Aquatic Species) Wildlife Environmental Consequences Section of the FEIS.

Commenters: 00016, 00028, 00081, 00439, 00456, 00474, 00584, 00823, 02826, 03057, 06474, 06554, 06704, 06716, 06730, 06749, 06750

3.03-2 Deer (seasonal restrictions): It makes no sense to close any trails because of deer migration when most OHV's only off-road during the weekend.

Response: Chapter 3.03 (Terrestrial and Aquatic Species) addresses the impacts of trail and road associated factors to deer particularly during the winter months. Only a small percentage of deer closures are proposed where deer are most vulnerable during the winter season. The seasonal restriction for deer winter range in Management Area 84 was lifted in the Preferred Alternative to provide additional motorized recreation opportunities.

Commenters: 00057, 06710

3.03-3 Deer (key summer and winter range effects): The DEIS is inconsistent with Forest Plan direction to limit vehicular access to key deer summer and winter ranges. In addition, action alternatives would not result in a "low" influence to key summer and winter ranges, as stated in the DEIS.

Response: The DEIS deer analysis in Chapter 3.03 (Terrestrial and Aquatic Species) indicates that the **direct and indirect effects** of proposed motorized route additions results in a "low" influence to key summer and winter ranges and that the **cumulative impacts** to deer, when adding together all existing motorized routes and proposed motorized route additions, result in a low to moderate impact to deer depending upon the specific deer herd and the specific key deer summer or winter habitat analyzed. The prohibition of cross country travel results in prohibiting motorized use within key winter and summer ranges on 429.8 to 457.5 miles of existing routes unauthorized for public motorized use for all the action alternatives as shown in the FEIS. The addition of less than 19 miles of roads and motorized trails is clearly a "low" impact when considering that over 400 miles of motorized routes would not allow public motorized access under the action alternatives as compared to the No Action Alternative, where motorized cross country travel would continue. Chapter 3.03

(Terrestrial and Aquatic Species) of the FEIS under the section "Compliance with the Forest Plan and Other Direction" further describes how the Travel Management action alternatives complies with the Tahoe Land and Resource Management Plan management direction to "limit vehicle access on key deer winter ranges when deer are present, and limit vehicle access in key summer range habitats during periods of migration and fawning." The Tahoe Travel Management FEIS provides project design standards for minimizing effects of deer habitat on key deer winter ranges and key summer ranges by designating a travel management system, restricting vehicle access by prohibiting cross country travel, and maintaining the majority of existing deer seasonal restrictions, with the exception of the Humbug-Sailor Management Area 84 that currently receives a high amount of recreational use. Without the prohibition of cross country travel, motorized route proliferation would continue to increase. Forest-wide, the ban on cross country travel under the action alternatives would result in the prohibition of motorized use on existing routes unauthorized for public motorized use across all deer habitat ranges on the TNF. Clearly, the Travel Management FEIS demonstrates reasonable and proactive actions to limit motorized access and minimizing effects to deer habitat on key deer winter and summer ranges, while providing for diverse recreational experiences and opportunities.

Commenter: 06716, 06721

3.03-4 Deer (cumulative effects analysis): The DEIS cumulative impacts analysis is inadequate because deer habitat capability for summer and winter ranges is not analyzed.

Response: Management Indicator Species (MIS) for the Tahoe National Forest, including deer, are identified in the Sierra Nevada Forests Management Indicator Species Amendment (SNF MIS Amendment) Record of Decision (ROD) signed December 14, 2007. The Amendment replaces the Tahoe National Forest's former MIS list contained in the 1990 Tahoe National Forest Land and Resource Management Plan (LRMP) with a list of 13 MIS.

The SNF MIS Amendment ROD states, "This decision modifies Appendix E of the 2001 Sierra Nevada Forest Plan Amendment (SNFPA) FEIS, as adopted by the 2004 SNFPA ROD in the following manner: this decision removes the 'X' in the MIS column in Tables E-9, E-10, and E-11 of Appendix E. This decision drops these species as MIS" (SNF MIS ROD, pg. 5). Hence, the population monitoring requirements of the 2004 SNFPA Record of Decision have been replaced by the 2007 MIS Amendment ROD, and therefore no longer apply. Deer are on the MIS list and are still monitored.

Guidance regarding MIS set forth in the Tahoe LRMP as amended by the 2007 SNF MIS Amendment ROD directs Forest Service resource managers to (1) at project scale, analyze the effects of proposed projects on the habitat of each MIS affected by such projects, and (2) at the bioregional scale, monitor populations and/or habitat trends of MIS, as identified in the Tahoe LRMP as amended.

The bioregional scale monitoring strategy for the Tahoe NF's MIS is found in the 2007 SNF MIS Amendment ROD. Bioregional scale habitat monitoring is conducted for all 12 of the terrestrial MIS.

In addition, bioregional scale population monitoring, in the form of distribution population monitoring, is identified for all of the terrestrial MIS except for the greater sage-grouse. For aquatic macro invertebrates, the bioregional scale monitoring identified is Index of Biological Integrity and Habitat. The current bioregional status and trend of populations and/or habitat for each of the MIS is discussed in the Sierra Nevada Forests Bioregional Management Indicator Species (SNF Bioregional MIS) Report (USDA Forest Service 2008).

All habitat monitoring data, including data on deer, are collected and/or compiled at the bioregional scale, consistent with the Tahoe National Forest LRMP as amended by the 2007 SNF MIS Amendment ROD. Habitats are the vegetation types (for example, early seral coniferous forest) or ecosystem components (for example, snags in green forest) required by an MIS for breeding, cover, and/or feeding. MIS for the Sierra Nevada National Forests represent 10 major habitats and 2 ecosystem components (USDA Forest Service 2007), as listed in Table 1 of the MIS Report (pg. 5) prepared for this project.

As noted in the comment response above, the Sierra Nevada Forest Plan Amendment Final Environmental Impact Statement (SNFPA FEIS 2001) identified Species at Risk (SAR) to include: (1) Federally Threatened, Endangered, and Special Concern Species, (2) Forest Service Sensitive Species; (3) species identified in the Sierra Nevada Forest Plan Amendment's "high vulnerability" group; and (4) species identified in the Sierra Nevada Forest Plan Amendment's "moderate vulnerability" group with small populations or suspected population declines. Species at risk are assessed in Appendix R and listed in Appendix E of the SNFPA FEIS. The use of the SAR concept was a forward-looking attempt to implement the 2000 planning rule. The 2000 planning rule was never implemented, and there are no legal requirements for monitoring SAR.

The DEIS deer effects analysis included a detailed description of the direct and indirect effects to deer habitat from motor vehicle use. Indicators used for this analysis included: total route miles, route density, and zone of influence of all motorized routes on the TNF, including system routes and routes proposed for addition to the NFTS motorized recreational opportunities (cumulative motorized impact). The direct and indirect impacts of all cumulative motorized routes were then combined with the cumulative impacts to past, present, and reasonably foreseeable impacts on deer habitat, including grazing impacts, wildfires, vegetation management, and recreation impacts for each of the alternatives

Commenter: 06716, 06721.

3.03-5 Deer (Wet weather seasonal restrictions): Deer would not benefit from wet weather seasonal closures as indicated in the DEIS Table 3.01-15 (Motorized Seasonal Closures Benefiting Deer Ranges on the Tahoe National Forest)

Response: Although the wet weather seasonal closures are intended to protect motorized roads and trails, there would still be some beneficial protection to deer as a result of the wet weather seasonal restrictions. The SDEIS acknowledges that this modification in seasonal restriction in Management

Area 84 (Humbug Sailor) could potentially increase impacts to deer when they are on their winter ranges. However, with the exception of the Humbug Sailor area, Alternatives 4, 5, and 6 benefit deer on their winter ranges in areas that do not currently have any type of deer seasonal restrictions. The wet weather closure would be an added benefit in areas that currently do not have any seasonal restriction. The FEIS clarifies this point.

Commenters: 06271, 06716

3.03-6 Deer (location of proposed routes): The DEIS does not describe the site-specific location or geographic position of the proposed route additions relative to deer winter range.

Response: The location of each route proposed for addition to the NFTS motorized recreational opportunities is described in the FEIS and is displayed on the alternative maps. While we agree that the location of roads/trails/areas relative to slope type and geographic location may provide useful information on the potential distribution of deer during the winter months, specific deer distribution in any given year would vary depending upon the specific geographic location, elevation, annual precipitation levels, weather patterns, etc. and therefore the location of routes on south facing slopes and ridge tops may not necessarily provide meaningful information. Several indicators or metrics were chosen to disclose the potential impacts associated with motorized roads and trails in the FEIS. For the four primary deer herds - Blue Canyon, Downieville, Nevada City, and Loyalton-Truckee that occur on the TNF, the number of miles, the route density, and zone of influence within 200 meters of routes were analyzed to disclose the relative potential disturbance to deer from motorized routes within key summer and key winter ranges. While each proposed route was not described as to the exact physical location and condition, it is assumed the entire key habitat type could be potentially impacted by motorized routes. An analysis that only included consideration of south facing slopes and ridge tops may actually underestimate the impacts to deer in the winter months.

Commenter: 06716, 06721

3.03-7 California spotted owl (effects analysis misrepresented): The California spotted owl is likely habituated to road and trail factors due to continued use over a long period of time and existing proximity to highly traveled byways, such as Hwy 20.

Response: The California spotted owl is the same species as the northern spotted owl, but they are considered different subspecies. Therefore, effects to the California spotted owl are expected to be similar to the effects to the northern spotted owl because they behave in similar ways, respond to disturbance in similar ways, share similar biological requirements and environmental niches, etc. This has been clarified in the FEIS. There is no evidence or studies that indicate that the California spotted owls become habituated to road and trail factors due to continued use over a long period of time, including from existing proximity to high traveled byways such as Highway 20. Effects of road and trail factors on spotted owls, regardless of the subspecies, are uncertain. Making a statement that the California spotted owl is likely to be habituated to road and trail factors due to continued use over a long period of time is not substantiated by scientific studies.

Commenter: 06715

3.03-8 California spotted owl (mortality from vehicle collisions): Spotted owl deaths should not be blamed on OHV activities.

Response: The section on spotted owl mortality and vehicle collision in Chapter 3.03 (Terrestrial and Aquatic Species) of the FEIS clarifies that there was one reported incidence of spotted owl mortality on the Eldorado NF that was attributed to collision with a highway vehicle.

Commenter: 06456

3.03-9 Wolverine (effects analysis): The one documented wolverine in the TNF within the last year was sighted in a snowmobile area. Hence, it is likely that OHV use is beneficial to the wolverine.

Response: The wolverine that was detected on the TNF was located within an area of an ongoing American marten study site that had a large concentration of baited camera and track stations. The stations were baited to attract the American marten, a medium sized member of the weasel family. The initial wolverine detection was photographed at one of these baited camera stations. It is not known that the wolverine inhabits the area where it was originally located. One possibility is that the wolverine may have been passing through the area and was attracted to the bait stations. Wolverines are known to travel long distances within a given day and have large home ranges. Although the wolverine was detected in an area used by snowmobiles, it does not mean that motorized recreation is beneficial to the wolverine. While there is uncertainty about the cause and effect relationship between motorized recreation and wolverines, it is widely accepted that wolverines are elusive and are generally found in areas that are relatively remote from human activities.

Commenters: 06715, 06718

3.03-10 Wolverine and red fox (cumulative effects): Grazing effects should not be included in the cumulative effects analysis for wolverine and red fox.

Response: References in the FEIS to grazing impacts are found under the cumulative effects section for the wolverine and red fox in Chapter 3.03 (Terrestrial and Aquatic Species). The National Environmental Policy Act (NEPA) requires that all federal actions disclose all cumulative impacts to the environment, including all past, present, and reasonably foreseeable actions. Current grazing management on the TNF has the potential to affect habitat used by both the wolverine and the red fox. Therefore, it is appropriate to disclose the cumulative impacts of grazing on wolverine and red fox in the FEIS.

Commenter: 06718

3.03-11 Fisher (science references): Studies cited in the DEIS on fisher in Massachusetts and Maine, are not comparable to the routes and trails proposed, since motorized use on OHV trails typically involves slower travel.

Response: The FEIS acknowledged that collisions are much less likely to occur along the slower speed native surfaced roads and trails that are being evaluated in this project.

Commenter: 06715

3.03-12 California red-legged frog (recovery objectives): California red-legged frog recovery objectives should be removed from the DEIS since the DEIS indicates that Tahoe National Forest does not have designated critical habitat for this species.

Response: Potential suitable habitat for the California red-legged frog occurs on the TNF. On March 17, 2010, the U.S. Fish and Wildlife Service published a final rule on the designation of revised critical habitat for the California red-legged frog and includes critical habitat located on or near the Tahoe National Forest (Federal Register: Vol. 75, Number 51: 12815-12959). The Motorized Travel Management FEIS and Biological Evaluation/Assessment incorporate new information on the revision of designated critical habitat for this species. In addition, there are known occurrences of California red-legged frogs on private lands immediately adjacent to Tahoe NFS lands. Therefore, it is appropriate to identify recovery objectives for the California red-legged frog, since the TNF is within the historic range of the species, it occurs within close proximity to the NFS lands, and suitable habitat for the species is located within the TNF.

Commenter: 02561

3.03-13 Mountain quail (potential impacts): Mountain quail would likely be adversely affected by off highway vehicle use, particularly in the Prosser Lake area.

Response: Effects to mountain quail were addressed in the FEIS, Chapter 3.03 (Terrestrial and Aquatic Species) and in the Management Indicator Species Report, located in the project record**.**

Commenters: 04563, 06716

3.03-14 Meadows and wetlands: Close all motorized trails in meadows and wetlands that are important to wildlife.

Response: Effects to wildlife are addressed in Chapter 3.03 (Terrestrial and Aquatic Species) of the FEIS. Specifically, meadow habitat was addressed under the following species sections: Pacific tree frog, American marten, and willow flycatcher.

Commenter: 01363

3.03-15 Willow flycatcher meadows: The DEIS should identify roads that result in the additional meadow impacts on willow flycatchers emphasis habitat between Alternative 3 and Alternative 4 (DEIS volume 3, page 327, Table 3.03-88).

Response: The FEIS identifies the proposed additions to the NFTS that impact willow flycatcher meadows in each of the alternatives.

Commenter: 06248

3.03-16 Open Areas (wildlife impacts): There would be no adverse effects on wildlife associated with motor vehicle use in "Open Areas" (particularly Eureka Diggings, Greenhorn Area, and access to Boca, Stampede, and Prosser Reservoirs).

Response: Chapter 3.03 (Terrestrial and Aquatic Species) of the FEIS for wide-ranging species indicates that impacts to wide-ranging species in these areas would likely be minimal, but that there could be some direct disturbance to animals passing through the proposed Greenhorn "Open Area" and the reservoir areas. (The "Open Area" at Eureka Diggings proposed in the DEIS is not included under any action alternative in the SDEIS or FEIS since it was determined to be eligible for inclusion in the National Register of Historic Places.) In addition, for other species, the effects of adding these areas would vary depending on the species. For example, under the bald eagle section, the effects analysis indicates that increased use and motorized access within the "Open Area" at Prosser Reservoir under Alternative 2 could potentially result in disturbance and ultimately loss in reproductive productivity for bald eagles at this site. The "Open Area" at Prosser Reservoir under the Preferred Alternative is restricted to prevent any significant disturbance to the bald eagle. Furthermore, for aquatic species, such as the Lahontan tui chub, the effects analysis indicates motorized shoreline access at Boca, Prosser and Stampede Reservoirs under Alternative 2 has the potential to increase soil erosion and sediment delivery, and thereby affect water quality for Lahontan tui chub and other aquatic species. Shoreline access at these reservoirs under the Preferred Alternative is restricted to only those areas that would not have a significant effect on water quality.

Commenter: 06704, S0071

3.03-17 Snags and downed logs: The Forest Service claims that snags will be removed for public safety under all action alternatives. While this may be true for Maintenance Level 3-5 roads as they are subject to the National Highway Safety Act, it is not a valid requirement for Maintenance Level 1-2 roads and trails. Please refer to Forest Service Road Maintenance Manual and direction given by the Sierra Nevada Framework regarding snags.

Response: The assumption of similar snag removal actions on all maintenance level roads enables a relative comparison among alternatives. While it is true that hazard tree removal is a higher priority along ML 3-5 roads, the Forest Service has an obligation to manage and maintain facilities for public safety including ML 1-2 roads and motorized trails. We recognize that removal of hazard trees along ML 1-2 roads and motorized trails is likely to be an incidental activity and have clarified this in the SDEIS.

Commenters: 06456, 06704

3.03-18 Lahontan cutthroat trout (streams covered under Endangered Species Act): On page 366 of the DEIS it says that introduced Lahontan cutthroat trout in the Truckee River and Sagehen Creek are not covered under the Endangered Species Act (ESA). This is not true. All existing Lahontan cutthroat trout populations on the Tahoe National Forest are covered under the ESA including, Independence Creek, Independence Lake, Sagehen Creek, Truckee River, Pole Creek,

East Fork Creek, Macklin Creek, and an unnamed tributary to East Fork Creek. All occupied waters should be considered in the FEIS analysis.

Response: The FEIS was modified to include the analysis of Lahontan cutthroat trout within the Truckee River and Sagehen Creek in Chapter 3.03 (Terrestrial and Aquatic Species) and the Biological Assessment included in the project record. Other named creeks were also considered.

Commenter: 06419

3.03-19 Yellow-legged frogs (net versus gross effects): It is unclear whether Table S-30 displayed the **Net** effects or the **Gross** effects to mountain yellow-legged frog.

Response: Table S-30, in the DEIS summary, does not discuss the net or gross effects. It summarizes the overall direct, indirect, and cumulative impacts.

Commenter: 06715

3.03-20 Terrestrial and aquatic species (existing motorized trail system): Wildlife and habitat impacts for the alternatives are based on comparison between the action alternatives and the No Action Alternative. This comparison does not address the impacts of the existing system on wildlife and habitats.

Response: Chapter 3.03 (Terrestrial and Aquatic Species) of the FEIS analyzed impacts of the existing motorized system in the cumulative effects analysis for terrestrial and wildlife species. Summary tables in the FEIS have been simplified to more cogently show differences among alternatives.

Commenter: 06711

3.03-21 Terrestrial and aquatic species (impacts over time on routes not added to the NFTS): For motorized trails not added to the NFTS, impacts to habitat will increase in the long-term near these trails, contrary to the claim made in the DEIS.

Response: Studies of the length of time it takes a disturbed area to achieve vegetative recovery indicate that the amount of time varies, and that extrapolation of the time frames from one site to another require an accounting of site-specific historical and environmental factors. In addition, the limiting factors of the disturbed area (e.g. seed availability, plant recruitment and survival, and soil compaction) need to be defined (Roovers et al. 2005). It is important to estimate how long it might take for an unauthorized motor vehicle route to recover its vegetation after it is closed to understand the impact to habitats.

It is anticipated that some of the unauthorized routes not added to the NFTS will not recover without restoration actions. These routes may be restored by the TNF as budgets and personnel are available. Some unauthorized routes may be proposed for addition to the TNF travel management system at a later date after conducting NEPA and implementing mitigations to reduce and/or eliminate existing resource damage. Other unauthorized routes may be used for non-motorized recreation. Still others will be left alone and they will revegetate without restoration actions. All of these scenarios add to or

reduce impacts to native vegetation. As stated above, it is recognized that non-motorized recreational use may also negatively impact native vegetation, and therefore, habitats. However, motor vehicle use is recognized as more damaging to vegetation than pedestrians (USDA et al. 1998). In addition, the rate of vegetative recovery of any route unauthorized (for public use) will vary from site to site based on the soil type, amount and type of vegetative cover at the site, topography of the area disturbed, and intensity of the motor vehicle use (USDA et al. 1998).

Commenter: 06711

3.03-22 Management Indicator Species (MIS) List: The MIS analyzed in the DEIS are inconsistent with the existing Forest Plan MIS list.

Response: The Sierra Nevada Forests Management Indicator Species Amendment Record of Decision amended the MIS list on 10 Sierra Nevada Forests, including the TNF on December 14, 2007. Therefore, the MIS list used in the Travel Management FEIS is appropriate.

Commenter: 00028

3.03-23 Old Forest Emphasis Areas: Proposed motorized route additions within Old Forest Emphasis Areas (OFEAS) would fragment habitat for old forest associated species, contrary to direction in the Tahoe Forest Plan, as amended by the Sierra Nevada Forest Plan Amendment (SNFPA).

Response: The Standards and Guidelines in the SNFPA do not explicitly direct the FS to prohibit motorized roads and trails within OFEAs; therefore no violation of laws, regulation or policy has occurred. Chapter 3.03 (Terrestrial and Aquatic Species) describes the effects of motorized routes within OFEAs. The Preferred Alternative would affect only 1% of OFEAs within a 200-meter zone of influence from proposed additions to the NFTS motorized recreational opportunities, compared to 17% in the No Action Alternative, where existing motorized trails unauthorized for public motorized use would continue. Existing NFTS motorized routes affects approximately 24 % of OFEAs. The prohibition of cross country travel reduces the impact to OFEAs where motorized cross country travel would be prohibited on approximately 400,000 acres of OFEAs.

Commenters: 06716, 06721

3.03-24 Best available science (wildlife and motor vehicle interactions): The Forest Service did not use sound, or best available, science or literature to appropriately describe and analyze the effects of motorized routes or trails to wildlife species, including inadequate local or specific scientific evidence to support that motorized recreation (OHV's) cause adverse impacts to various wildlife species.

Response: A recent Ninth Circuit "en banc" decision (Lands Council v. McNair, No. 07-35000-9th Cir. July 2, 2008 en banc) clarified that the FS has the responsibility to disclose and acknowledge scientific uncertainty in the analysis of effects, however, the FS is not required to address every possible uncertainty, given that experts routinely disagree. In order to analyze the effects of

motorized use on wildlife in the FEIS, the best available science on interactions between motorized use and wildlife was utilized, including whatever information was available on motorized trails and wildlife interactions. Furthermore, the agency does not have the burden to respond to uncertainties that are not reasonably supported by any scientific authority, but must acknowledge and disclose the uncertainty. As stated above and in the FEIS, the information presented represents the best available science available from which to analyze the impacts of motorized impacts to wildlife. Using the available literature, reviews and studies on wildlife and motorized routes represents a reasonable approach to analyzing the impacts to wildlife.

Chapter 3.03 (Terrestrial and Aquatic Species) of the FEIS was completed using a thorough review of available literature and studies on wildlife and motorized route interactions, species habitat relationships information, species biology, and professional judgment to develop a reasonable risk assessment or effects analysis for each species. Based on the review of available literature on wildlife and road/trail interactions, known biology for each species, and professional judgment, the wildlife effects analysis in Chapter 3.03 of the FEIS provided an appropriate level of potential relative impacts (risk analysis) to wildlife species from which to compare the alternatives, even though the actual route/wildlife interaction or impact may be uncertain.

The DEIS wildlife analysis incorporated wildlife and road interaction literature as appropriate for the various species that were analyzed. The referenced document (*Environmental Effects of Off-Highway Vehicles on Bureau of Land Management Lands: A Literature Synthesis, Annotated Bibliographies, Extensive Bibliographies, and Internet Resources*) has been reviewed and was included in the list of references in the DEIS. Upon careful review of the BLM document, it was determined that the Travel Management DEIS used pertinent literature pertaining to wildlife and traffic/road interactions, and a conclusion can be made that the analysis of effects of wildlife/road interactions conducted for the FEIS was sufficient. Many of the references cited in the BLM referenced document were included in the analysis of wildlife and motorized route interactions in the Travel Management FEIS. Therefore, we feel Chapter 3.03 of the FEIS provides a thorough and appropriate level of analysis to sufficiently address wildlife and motorized route interactions on many species of aquatic and terrestrial wildlife species at various scales, both site-specifically and at a larger landscape scale. Over 30 species or species groups were analyzed in the FEIS, including birds, mammals, amphibians, reptiles, and macro invertebrates, representing threatened, endangered, and sensitive species; game species; non-game species; management indicator species; and other species of concern, together representing the many diverse habitats occurring across the TNF.

Commenters: 00028, 06704, 06715, 06718, 06752

3.03-25 Deference to wildlife: The Forest Service should give deference to old forest associated wildlife species over motorized recreation opportunities, especially within California spotted owl and northern goshawk Protected Activity Centers (PACs).

Response: Both Congress and NFMA are explicit that wildlife viability is not the Forest Service's only consideration when developing site-specific actions for NFS lands. Furthermore, the recent Ninth Circuit "en banc" ruling reaffirms this (Lands Council v. McNair, No. 07-35000 (9th Cir. July2, 2008, en banc). In Chapter 3.03 (Terrestrial and Aquatic Species) of the FEIS, a thorough and detailed analysis of effects of motor vehicle use to old forest habitat and associated species was completed, including effects to California spotted owls, goshawk, Old Forest Emphasis Areas (OFEAs), habitat fragmentation, etc. In most cases, additions to the NFTS motorized recreational opportunities were not included within California spotted owl and northern goshawk PACs. For example, out of 180 spotted owl PACs on the TNF, only 4 PACs are intersected by additions to the NFTS motorized recreational opportunities totaling 2.5 miles. About 78 miles of routes unauthorized for public motorized use would not be available for motorized use. In the Preferred Alternative, the proposed additions to the NFTS motorized recreational opportunities either occurred on the edge of a spotted owl PAC or the route was considered to be an important motorized recreational opportunity. Furthermore, the prohibition of cross country travel potentially reduces wildlife disturbance and old forest habitat fragmentation for spotted owl, goshawk, and other old forest associated species. In addition, riparian and meadow habitats were avoided, except when the motorized routes deemed to be sustainable and in good resource condition or with mitigatable resource concerns. Finally, the prohibition of cross country travel, including within California spotted owl and goshawk PACs, late-successional habitat, and OFEAs, eliminates and reduces the adverse impacts of motorized travel.

Commenters: 00028, 06716, 06753

3.03-26 Minimizing harassment/disturbance to wildlife (California spotted owl): Forest Service policy is to minimize damage to vegetation, avoid harassment to wildlife, and avoid significant disruption of wildlife habitat while providing for motorized public use on National Forest System (NFS) lands. However, this guidance is not adhered to under the Preferred Alternative as existing and proposed additional trails are allowed to go through California spotted owl Protected Activity Centers, nesting areas, and home ranges.

Even though wildlife impacts are noted for various approved routes in the Preferred Alternative 6, no mitigation measures were ever suggested. For example, routes were added that go through PACS and MIS habitat (i.e. SV-005), but no alternative routes were suggested, or avoidance was required during nesting season. No mitigation measures are being required.

Response: All of the action alternatives prohibit cross country travel, thereby reducing the overall impact to spotted owl, goshawks, Management Indicator Species, and other wildlife. The action alternatives were designed to generally avoid spotted owl and goshawk Protected Activity Centers and bald eagle nest areas, unless a motorized route proposed for addition to the NFTS motorized recreational opportunities was considered important or essential to be included in the transportation system. For example Table 2.03-57: "Miles of Motorized Route Additions by Spotted Owl PAC and Route ID" shows that out of 98 miles of existing unauthorized routes, only 2 miles of motorized routes would be added to the NFTS under Alternative 6 (FEIS, Spotted Owl Disturbance at a

Specific Site). Furthermore, Table 3.03-60 displays a detailed effects analysis of how a route addition or reopened route would contribute noise to individual spotted owl PACs. Generally, the routes that are proposed in the Preferred Alternative 6 are considered to have a low contribution to spotted owl noise disturbance since the routes are generally short segments accessing dispersed recreation and exceed ¼ mile of a known nest or roost site (activity center), with the exception of YRN-2 which crosses PAC SI060. YRN-2 is considered to have a moderate contribution to disturbance due to its ~ 1 mile length and just under ¼ mile of the activity center. However, the last known reproduction at PAC SI060 was in 1992 and surveys in 2008 indicated no owls were detected within the PAC. In actuality, YRN-2 likely poses a low to no contribution of disturbance currently. Finally, only 1 of 181 PACs or <1% under Alternative 6 would pose a moderate risk of increased noise from motorized route additions (See Summary of Individual PAC Analysis).

Similarly, an analysis of goshawk PACs shows that less than 1 mile of motorized routes out of 42 miles of existing unauthorized routes would be added to the NFTS within goshawk PAC (FEIS Table 3.03-75).

Commenter: 06711, S0023

3.03-27 Wildlife analysis indicator measures and assumptions (over-reliance on proximity): The DEIS inappropriately analyzes effects on wildlife, since site specific considerations, such as trail location, vegetation type, trail width, speed, and frequency of use, are not considered. Chapter 3.03 uses proximity, and proximity alone, as the measure of effects on wildlife. The discussions consider one activity in a complete void (motor vehicle access) and ignore all other related activities (other 24 uses of the roads and trails). We find no scientifically credible analysis. In fact, there is no evidence that the agency has done the necessary environmental analysis.

Response: Impacts on wildlife from motorized use vary depending on a number of factors including the type of vehicle, the local conditions, the intensity and frequency of use, and the particular species' response to disturbance associated with motorized use. The assumptions used in the wildlife analysis were used as an approximation to estimate the relative impacts to wildlife so that the alternatives could be compared.

The commenter also expressed concern regarding the analysis assumption in the DEIS that "all routes will produce the same disturbance effects." We recognize that noise generated disturbance depends upon the specific physical aspects of each route including its geographic location, slope steepness, position on the landscape, surrounding vegetation, etc. This assumption was used as a basis to evaluate the relative impacts to wildlife in order to compare differences between the alternatives.

Data on "frequency of use" for each route is not available on the TNF, except for some anecdotal knowledge of particular routes or use areas. The Forest Service has an obligation to disclose when information is lacking, and decide whether this incomplete or unavailable information is "essential to a reasoned choice among alternatives" (40 CFR, Part 1502.22). "Frequency of use," while

informative, is not "essential to a reasoned choice among alternatives" and, therefore "frequency of use" was determined to be unlikely to significantly change the understanding of the basic relationships that were used to analyze the effects of the alternatives on wildlife species. However, anecdotal information on "frequency of use" was qualitatively used by the interdisciplinary team as rationale on whether or not specific routes were considered to be important to include in the transportation system, combined with whether or not a route was within close proximity to a sensitive wildlife resource area or site.

Using these analysis assumptions as a basis to compare alternatives meets the Forest Service obligations under laws, regulations and policy. The FEIS (Chapter 3.03 under "Assumptions for Wildlife Effects Analysis") describes the analysis assumptions (and limitations) and explains why they were chosen.

Commenter: 06704, S0008

3.03-28 Habitat fragmentation: OHV use doesn't cause "habitat fragmentation", especially not for the owls. OHV use doesn't cut down trees like a timber harvest, or thin the brush like in the fuels reduction. Such assertions show a disregard for the subject matter (of trails and routes) under study.

Response: All of the action alternatives reduce the amount of habitat fragmentation by prohibiting cross country travel and reducing the total number of miles available for wheeled motorized use. While any individual motorized route in and of itself may not cause habitat fragmentation in the same way that timber harvest activities can, the incremental increase of motorized routes on the landscape can be considered habitat fragmentation by reducing habitat effectiveness for certain species. Motorized routes can fragment habitat by causing a barrier to some species, especially amphibians. Obviously, the wider the route and the more use on the route, the greater the "fragmentation." For other species, the amount of disturbance over time on motorized routes, depending upon the frequency and intensity of use, can reduce habitat effectiveness causing animals to avoid an area. This avoidance of a route (zone of influence) can be considered habitat fragmentation because the amount of disturbance can render the area unsuitable, in a similar way that changing structural attributes of habitat can render an area unsuitable (i.e. such as canopy reduction). In addition, some species prefer large blocks of undisturbed habitat. Allowing motorized access to wildlife habitats can increase disturbance and alter wildlife behavior by causing avoidance. This also can be construed as reducing habitat effectiveness and therefore fragment habitat.

Commenter: 06715

3.03-29 Wildlife analysis (No Action Alternative): Summary tables in Chapter 3.03 Terrestrial and Aquatic Species indicate that the No Action Alternative negatively affects wildlife species, and increases disturbance. The DEIS fails to take into account that routes in Alternative 1 represent the existing condition, not new construction. Any "negative effects" and "increased disturbances" under Alternative 1 are highly speculative and inaccurate.

Response: Chapter 3.03 (Terrestrial and Aquatic Species) acknowledges that Alternative 1, no action, is the existing condition and not new construction. The FEIS analyzed the effects of the No Action Alternative and displays the comparison of effects of implementing Alternative 1 compared to implementing the various action alternatives. Cross country travel would continue and is expected to increase under implementation of the No Action Alternative. Therefore, under the No Action Alternative, it is appropriate to display that negative effects and a higher level, or increased, disturbance to wildlife species is likely to occur compared to the action alternatives.

Commenter: 06715

3.03-30 Wildlife impact analysis (assumptions regarding vehicle type): The wildlife effects analysis presented in the DEIS incorrectly assumes that all vehicle types result in the same disturbance to wildlife and that all routes resulted in the same disturbance effects regardless of their location and physical setting.

Response: The DEIS acknowledges that an array of environmental factors and impacts from different classes of vehicles may result in different types of impacts to wildlife (Chapter 3.03, Terrestrial and Aquatic Species). However, no data are available with regard to the abundance and type of each class of vehicle and the intensity of use for each route by class of vehicle. Therefore, the analysis uses the assumption that all classes of vehicles generally have similar impacts to wildlife. In most cases, a worst case scenario was used to analyze impacts to wildlife and the actual impacts to wildlife from vehicle class and use may in reality be less. Furthermore, the analysis relies on an approach that models and displays the relative impacts to wildlife from motorized routes from which to compare and contrast the different alternatives. For many wildlife species, the specific impacts from different types of vehicles and amount of use is unknown. The research and literature available on wildlife and road interactions is limited and general. The wildlife analysis of effects uses the best available information pertinent to wildlife/road interactions for species addressed in the FEIS. In summary, it is the Forest Service's obligation to disclose whenever information is incomplete or unavailable, and it was determined that the specific information on class of vehicle, frequency of use, etc. was not deemed "essential to make a reasoned choice among alternatives" (Title 40 of the Code of Federal Regulations, 40 CFR, Part 1502.22 for the wildlife analysis). The Assumptions and Limitations section in Chapter 3.03 (Terrestrial and Aquatic Species) of the FEIS clarifies our obligations whenever information is lacking or unavailable to confidently estimate wildlife effects, including class of vehicles, frequency of use, location of route, etc.

The wildlife analysis assumptions in Chapter 3.03 of the FEIS were used only as an approximation to estimate the relative impacts to wildlife in order to compare the differences among the various alternatives. Furthermore, Chapter 3.03 of the FEIS describes in detail the different types of effects motorized routes and use on motorized routes has on wildlife including habitat fragmentation, mortality, edge effects, etc. These are all described in Chapter 3.03 and elsewhere in the FEIS.

Commenters also expressed concern regarding the analysis assumption in the DEIS that "all routes will produce the same disturbance effects" irrespective of their location and physical setting. Again, we recognize that noise generated disturbance also depends upon the specific physical aspects of each route including its geographic location, slope steepness, position on the landscape, surrounding vegetation, type of vehicle, etc. As stated above, this assumption was used as a basis to evaluate the relative impacts to wildlife in order to assess the differences between the alternatives and not necessarily the actual impacts to wildlife. Analyzing every variation of a route and the type of vehicles would have been complex, cumbersome, and speculative regarding the intensity, and amount of use on each route without much added benefit.

Using these analysis assumptions as a basis to compare alternatives meets the Forest Services' obligations under laws, regulations and policy. The FEIS clarifies the analysis assumptions and why they were chosen.

Commenters: 00028, 06704, 06711

3.03-31 Wildlife cumulative effects (incorporation of past projects): Existing vegetation and travel system maps do not incorporate the effects of past actions. Previous analyses are not sufficient to allow development of a cumulative effects analysis that includes measurement or modeling of impacts of motor vehicle travel or recreation to wildlife. The last major analysis of routes was the Roads Analysis conducted by the Tahoe National Forest in 2002. There must be a true accounting of impacts to wildlife, including the cumulative effects of all major disturbances (including noise) across the entire route network.

Response: In order to understand the contribution of past actions to the cumulative effects of the proposed action and alternatives, this analysis relies on current environmental conditions as a proxy for the impacts of past actions. This is because existing conditions reflect the aggregate impact of all prior human actions and natural events that have affected the environment and might contribute to cumulative effects.

This cumulative effects analysis does not attempt to quantify the effects of past human actions by adding up all prior actions on an action-by-action basis. There are several reasons for not taking this approach. First, a catalog and analysis of all past actions would be impractical to compile and unduly costly to obtain. Current conditions have been impacted by innumerable actions over the last century (and beyond), and trying to isolate the individual actions that continue to have residual impacts would be nearly impossible. Second, providing the details of past actions on an individual basis would not be useful to predict the cumulative effects of the proposed action or alternatives. In fact, focusing on individual actions would be less accurate than looking at existing conditions, because there is limited information on the environmental impacts of individual past actions, and one cannot reasonably identify each and every action over the last century that has contributed to current conditions. Additionally, focusing on the impacts of past human actions risks ignores the important residual effects of past natural events, which may contribute to cumulative effects just as much as human actions. By looking at current conditions, we are sure to capture all the residual effects of past

human actions and natural events, regardless of which particular action or event contributed those effects. Third, public scoping for this project did not identify any public interest or need for detailed information on individual past actions. Finally, the Council on Environmental Quality issued an interpretive memorandum on June 24, 2005 regarding analysis of past actions, which states, "agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions."

The cumulative effects analysis in this FEIS is consistent with Forest Service NEPA Regulations (36 CFR 220.4(f)) (July 24, 2008), which state, in part:

"CEQ regulations do not require the consideration of the individual effects of all past actions to determine the present effects of past actions. Once the agency has identified those present effects of past actions that warrant consideration, the agency assesses the extent that the effects of the proposal for agency action or its alternatives will add to, modify, or mitigate those effects. The final analysis documents an agency assessment of the cumulative effects of the actions considered (including past, present, and reasonable foreseeable future actions) on the affected environment. With respect to past actions, during the scoping process and subsequent preparation of the analysis, the agency must determine what information regarding past actions is useful and relevant to the required analysis of cumulative effects. Cataloging past actions and specific information about the direct and indirect effects of their design and implementation could in some contexts be useful to predict the cumulative effects of the proposal. The CEQ regulations, however, do not require agencies to catalogue or exhaustively list and analyze all individual past actions. Simply because information about past actions may be available or obtained with reasonable effort does not mean that it is relevant and necessary to inform decision making (40 CFR 1508.7)."

As the commenter noted, the Forest Service incorporated the cumulative effects of past projects as reflected in maps of the existing vegetation and existing motorized travel system, including both NFTS routes and private land routes. Since the cumulative effects of noise and other disturbances to wildlife associated with motorized use were modeled and analyzed using maps of existing vegetation and the existing motorized routes across the entire TNF in the FEIS, the incorporation of past projects within maps of existing vegetation and existing motorized routes, is appropriate and relevant in the determination of cumulative impacts to wildlife. In addition, the cumulative effects to wildlife from past, present, and reasonably foreseeable impacts were summarized and described in Cumulative Effects section of Chapter 3.03 (Terrestrial and Aquatic Species) and in Appendix H Reasonably Foreseeable Projects and Cumulative Effects of the FEIS.

Commenter: 06711

3.03-32 Noise analysis: The DEIS fails to adequately analyze the impacts of noise from off-highway vehicles on wildlife.

Response: The effects of noise and other disturbance impacts to wildlife species from existing and proposed motorized routes were thoroughly addressed and analyzed in the FEIS. The effects of noise

and other disturbance impacts associated with motorized routes were modeled using a GIS-based analysis where "zones of influence" or area affected by motorized routes were calculated and disclosed for various species and species groups. The noise impacts were assessed using an analysis process similar to the approach used in a paper described by Gaines et al. 2003 "Assessing the Cumulative Effects of Linear Recreation Routes on Wildlife Habitats on the Okanogan and Wenatchee National Forests." Various sized "zones of influence" were analyzed depending upon the species or species group being analyzed. Zones of influence were derived by calculating an affected area (disturbance zone) using a specific linear distance from either side of motorized routes (zone width) multiplied times the length of the route. The widths used for calculating the zones of influence (i.e. 60 meters, 200 meters, etc.) for the various species or species groups were based on a thorough review of available literature on wildlife and motorized route interactions, as well as species-specific information about known distribution, range, and species' habitat requirements. See the Effects Analysis Methodology section in Chapter 3.03 (Terrestrial and Aquatic Species) of the FEIS for a detailed description of how the effects of noise impacts to wildlife were modeled.

Commenter: 06711

3.03-33 California spotted owls (motorcycle noise impacts): Impacts on California spotted owls related to motorcycle noise are not conclusive at this point. The EIS should include the statement: "Motorcycle manufacturers continue to manufacture motorcycles that produce less and less noise."

Response: The FEIS clarifies that motorcycle noise levels vary depending on the type of machine, and that manufacturers are producing motorcycles with less noise.

Comment: 06456

3.03-34 Route density: The route density calculations should include effects from the existing NFTS and routes on private lands. Existing route density should have been a criterion for developing the alternatives.

Response: The FEIS calculated route density using existing baseline route densities and proposed additions to the NFTS motorized recreational opportunities for the alternatives. Route densities under Alternative 1, No Action, also included existing routes. Road density was analyzed within the TNF checkerboard lands including both NFS lands and private lands. For clarification purposes, an explanation of how densities were calculated is expanded upon in the FEIS in Chapter 3.03 (Terrestrial and Aquatic Species) under the section "Analysis Measures or Indicators, Density of motorized routes for habitat effectiveness."

Actually, the DEIS shows that 83-85% of TNF lands managed for late-seral habitats are impacted by motorized route density that exceed 2 miles/square mile for Alternative 1. The Preferred Alternative reduces the overall amount of impact of TNF lands managed for late-seral habitat condition affected by motorized route densities exceeding 2 miles/square mile down to 73-76%. Motorized route density was not the sole criteria for selecting additions to the NFTS motorized recreational opportunities. A number of factors, including late-successional habitat condition, soil and watershed

condition, archeology, botanical resources, and recreational opportunities, were considered to determine whether or not a given route was proposed for addition to the NFTS motorized recreational opportunities. With the exception of adding trails to the NFTS within the Inventoried Roadless Areas (IRAs), the majority of proposed additions to the NFTS motorized recreational opportunities are in areas that already have relatively high route densities. An analysis of IRA area impacts can be found in Chapter 3.09 (Inventoried Roadless Areas & Special Areas) of the FEIS.

Commenter: 06248, 06691, 06711

3.03-35 California Red-Legged Frog (critical habitat): Page 451 of the SDEIS states "No critical habitat has been designated on the Tahoe National Forest," however, on March 17, 2010, the (U.S. Fish and Wildlife) Service published a final rule in the Federal Register (Federal Register 75 (51): 12815-12949) redesignating critical habitat for the frog. This designation becomes effective on April 16, 2010, and includes critical habitat located on Tahoe National Forest near the community of Michigan Bluff. As such, we recommend that this section be updated to include the designated critical habitat. We also recommend the discussion of direct and indirect effects beginning on page 453 include an analysis of effects to critical habitat.

Response: The Biological Evaluation/Assessment and the FEIS includes the new information regarding designation of revised critical habitat by U.S. Fish and Wildlife Service on March 17, 2010. A review of revised critical habitat for the California red-legged frog indicates no proposed routes would be added to the NFTS within designated critical habitat identified (NEV-1 and PLA-1) on the Tahoe NF. Therefore, no direct or indirect effects to designated critical habitat for the California red-legged frog would occur from the Travel Management Project.

Commenter: S0017

3.03-36 California Red-Legged Frog (Spivey pond): On Page 452 of the SDEIS is an account of the known frog occurrences near national forest lands, which includes a single record of a frog in "Spivey Pond on the El Dorado NF on Ralston Ridge." While there exists a known population at Spivey Pond, Spivey Pond is located along Weber Creek, near Placerville, California, on lands managed by the Bureau of Land Management. There is record of a known frog sighting on Ralston Ridge in an unnamed pond. As such, we recommend removing the Spivey Pond title from this reference.

Response: The reference to Spivey Pond has been corrected in the FEIS and Biological Assessment.

Commenter: S0017

3.03-37 California Red-Legged Frog (design criteria- areas RCA, riparian reserves): In a December 2006 letter the Service provided concurrence that the implementation of the route designation activities as described in the Design Criteria will have no effect on or is not likely to adversely affect specific endangered or threatened species, including the frog. However, this concurrence was contingent upon the replacement of Design Criteria #5 with: "If within California red-legged frog habitat, areas are located outside of Riparian Reserve, Riparian Conservation Areas, meadows, and wetlands." Since the effects analysis in the SDEIS relies on this programmatic

consultation, the language for Design Criteria #5 on pages 452 and 454 of the SDEIS should be changed to include the language that the Service used for our determination.

Response: Design Criteria #5 has been replaced with the replacement design criteria as stated above in the Biological Evaluation/Assessment and the FEIS. There are no proposed areas designated within Riparian Reserve, Riparian Conservation Areas, meadows, and wetlands for California red-legged frog habitat.

Commenter: S0017

3.03-38 California Red-Legged Frog (suitable habitat): In the discussion on the potential effects to the frog to areas of occupied breeding habitat, rather than all suitable aquatic habitat, which includes non-breeding habitat. Specifically, the criteria include:

Design Criteria #2. In suitable California red-legged frog habitat, routes avoid Riparian Reserve and Riparian Conservation Areas except where necessary to cross streams. Crossing approaches get the riders in and out of the stream channel and riparian area in the shortest distance possible while meeting the gradient and approach length standards.

Design Criteria # 5. If within California red-legged frog habitat, areas are located outside of Riparian Reserve, Riparian Conservation areas, meadows, and wetlands.

While comparing the proposed action to the Design Criteria for these two items, page 454, the SDEIS states that "No routes…within proximity to any of the CRLF occupied habitat." Although routes may not be proposed for designation within or near known occupied habitat, it is the Service's understanding that items #2 and #5 of the Design Criteria were in reference to all suitable aquatic habitat for the frog, not just occupied. As such, the page 454 should be updated to include how the route designation will affect all aquatic habitats suitable for the frog.

Response: Based on technical assistance from the U.S. Fish and Wildlife Service to clarify the Design Criteria and defining suitable habitat, the Design Criteria #2 and 5 are addressed below and modified in the Biological Assessment and the FEIS for the California red-legged frog:

Design Criteria #2. In suitable California red-legged frog habitat, routes avoid Riparian Conservation Areas and Riparian Reserves except where necessary to cross streams. Crossing approaches get the riders in and out of the stream channel and riparian area in the shortest distance possible while meeting the gradient and approach length standards.

Occupied Habitat*: No routes would be proposed within Riparian Conservation Areas and Riparian Reserves that are within close proximity (500 feet) to any of the CRLF occupied habitat.*

Critical Habitat*: Within critical habitat, no routes would be proposed for addition within Riparian Conservation Areas and Riparian Reserves.*

Suitable Habitat*: Within CRLF suitable habitat, ten route additions are proposed "where necessary to cross streams" and, "the crossings get riders in and out of the stream channel and riparian area in the shortest distance possible while meeting the gradient and approach length standards." The*

selected alternative is not consistent with Design Criteria #2, where 38 routes are proposed for addition to the NFTS are located within Riparian Conservation Areas and Riparian Reserves (within 300 feet of lakes, ponds, springs, meadows, and perennial/intermittent streams below 5,000 ft. elevation) that are not necessary to cross streams. The majority of the 38 routes are short route segments used for access to dispersed recreation. None of the routes would pose an increased risk of sediment delivery to CRLF occupied habitats or would likely pose a very low or minimal risk of sediment delivery to CRLF occupied habitats. In addition, within suitable habitat, routes are scattered across several 7th field watersheds.

Design Criteria #5. If within California red-legged frog habitat, areas are located outside of Riparian Conservation Areas, meadows, and wetlands.

No designated open areas would be added within close proximity to any of the CRLF occupied habitat, designated critical habitat, or suitable habitat. Suitable habitat for the CRLF includes Riparian Conservation Areas, meadows, and wetlands.

All proposed "Open Areas" are located on the eastside of the Tahoe NF adjacent to Prosser, Stampede, and Boca reservoirs, outside the geographic distribution of the CRLF on the Tahoe NF. As such, no "Open Areas" are proposed within Riparian Reserve or Riparian Conservation areas, meadows, and wetlands within close proximity to CRLF habitat (including critical, suitable and occupied) on the Tahoe NF, which includes lakes, ponds and intermittent and perennial streams below 5,000 feet elevation.

Commenter: S0017

3.03-39 Lahontan Cutthroat Trout (section 7 consultation): Your proposed project is located within a potential and existing metapopulation for LCT, and as such, the area is necessary for species' recovery. The LCT Truckee River Recovery Implementation Team (TRIT) has finalized a Short-Term Action Plan (Service 2003) for the species in the Truckee River basin. This Short-Term Action Plan identifies priority areas with current or potential opportunities to support LCT or important habitats that would sustain various life history stages. Under the Endangered Species Act of 1973, as amended (Act), completed projects should not preclude future recovery and survival of this species. We recommend that actions be reviewed for all direct and indirect impacts that they may have to riparian and aquatic habitats as they relate to LCT, and that you consult with the Service accordingly under section 7 of the Act.

Response: The Tahoe NF initiated Section 7 consultation, under the Endangered Species Act of 1973, as amended, with the U.S. Fish and Wildlife Service (Service) on August 22, 2007 for the Tahoe NF Travel Management Project EIS. On June 10, 2010, a letter was sent to the Service requesting concurrence with the determination that implementing the Tahoe NF Travel Management Project "may affect, but is not likely to adversely affect" the Lahontan cutthroat trout (LCT) as described in the Biological Assessment. In a letter dated July 7, 2010, the Service concurred with the determination that implementing the Tahoe NF Travel Management Project "may affect, but is not likely to adversely affect" the LCT (File Number 84320-2010-0348).

Commenter: S0020

3.03-40 Lahontan Cutthroat Trout (remove reference to recreational Lahontan Cutthroat Trout populations): We request that you remove all references to recreational LCT populations in the Final EIS. The (U.S. Fish and Wildlife) Service does not recognize any such designation for LCT. All LCT present on the Tahoe National Forest are fully protected under the (Endangered Species) Act. Currently there are seven streams (Truckee River, Independence Creek, Sagehen Creek, Pole Creek, Macklin Creek, East Fork Creek (Austin Meadows), and an unnamed tributary to East Fork Creek) and one lake (Independence Lake) which are occupied by LCT on the Tahoe National Forest. Additionally, the TRIT has identified priority areas which are currently not occupied but may be important in future recovery activities.

Response: The Biological Assessment for LCT and the FEIS has removed all references to recreational LCT populations.

Commenter: S0020

3.03-41 Lahontan Cutthroat Trout (impacts of stream crossings): One of the most significant impacts from roads is the creation of upstream fish migration barriers. The SDEIS discusses the number and density of unauthorized stream crossings within occupied LCT watersheds; however, there is no discussion on the impacts of these stream crossings. Please provide information on any culverts or headcuts associated with these stream crossings and whether they are a fish migration barrier.

Response: Evaluating the site-specific direct and indirect effects of unauthorized stream crossings is outside the scope of the Tahoe NF Travel Management Project. However, for the majority of unauthorized routes that would not be designated for motorized travel, passive recovery would occur over the next 10 to 20 years. (See cumulative effects for the LCT in the FEIS and the Biological Evaluation. Also, see response to comment 3.02-14). Since many of the unauthorized routes may have been user created, generally culverts would not have been constructed at crossings unless the route was a historic route. In addition to passive restoration, active restoration is a priority with the Forest Service where resource damage is occurring. In addition, the Tahoe NF would continue to pursue opportunities for active restoration especially when a federally listed species is involved. Over the entire Truckee River basin Alternative 6 would reduce motorized routes by 37 percent. In addition, all action alternatives include seasonal restrictions which prohibit use of these roads during the wet season of the year thereby reducing the potential for sediment delivery.

Commenter: S0020

3.03-42 Lahontan Cutthroat Trout (Consistency with project design criteria): The U.S. Forest Service entered into a programmatic consultation with the (U.S. Fish and Wildlife) Service for route designations (travel management) for motor vehicles on 14 National Forests in California in 2006. Design criteria were developed to have no effect or not likely to adversely affect determinations. The Nevada Fish and Wildlife Office provided comments on these design criteria in a letter dated September 11, 2006 (File No. 1-5-06-TA-283).

Response: The FEIS and the Biological Assessment are consistent with the project design criteria to achieve "No Effect" and "May Affect Not Likely to Adversely Affect" Determinations as follows:

1. ***Routes and areas do not cross any stream within the occupied range of Lahontan cutthroat trout.***
   - There are no proposed route additions to the NFTS that cross any stream occupied by Lahontan cutthroat trout.
   - The change in maintenance standards from ML 3 (smooth surfaced) to ML 2 (rough surfaced) on the Pole Creek Road (Road #5708) that are proposed in Alternatives 2, 5, and 6 are outside the Pole Creek Riparian Conservation Area (RCA). Therefore, occupied habitat in Pole Creek would not be affected. The section of the Pole Creek Road that is within the RCA would be maintained at the current ML3 maintenance standard, and therefore would not increase sediment delivery to Pole Creek.
   - The 11 Road within the Sagehen basin would be changed from a ML 3 road to a ML 2 road, although the 11 Road is currently operationally maintained at ML 2 standard, and the risk of increased sediment delivery to Sagehen Creek is low.

2. ***Routes and areas are not located on active landslides and do not re-route surface water onto active landslides within watersheds that provide habitat for Lahontan cutthroat trout.***
   - There are no proposed route additions located on active landslides and do not re-route surface water within watersheds that provide habitat for LCT.

3. ***Within watersheds that provide habitat for LCT, routes within Riparian Conservation Areas do not have gullies.***
   - All proposed motorized routes additions must meet the "green" soil condition rating prior to adding them to the NFTS, including routes that are within watersheds that provide habitat for LCT. Therefore routes within Riparian Conservations Areas within watersheds that provide habitat for LCT would not have gullies. In addition, no routes would be added within Riparian Conservations Areas of any occupied LCT habitat.

4. ***Within watersheds that provide habitat for LCT, the surfaces of route stream crossing approaches are stable with little evidence of erosion and approach gradients are appropriate to site stability (using the "green criteria" from the soil ranking system – up to 8 percent rail gradient with a maximum approach length of 150 feet). Both sides must be evaluated and each must meet the standard.***
   - As stated above under Design Criteria #3, all routes must meet the "green" soil condition rating prior to adding them to the NFTS, including routes that are within watersheds that provide habitat for LCT. In addition, under the Preferred Alternative, no routes would be added to the NFTS or reopened within Riparian Conservation Areas within LCT habitat, as indicated under Design Criteria #8.

5. ***Within watersheds that provide habitat for Lahontan cutthroat trout, routes or areas do not have the potential to capture surface run-off and then deliver sediment into a stream.***

- The Travel Management action alternatives do not propose route or area additions that have the potential to capture surface run-off and then deliver sediment into any occupied LCT streams.
- A ½-mile segment of the existing Pole Creek Road (Road #5708) parallels occupied LCT habitat within Pole Creek. This ½-mile road segment is within the Pole Creek RCA and would be maintained at the current Maintenance Level 3 standard, and therefore would not increase sediment delivery to occupied Lahontan cutthroat trout habitat at Pole Creek.
- The action alternatives do not propose motorized area additions or reopen ML 1 roads that are within watersheds that provide habitat for Lahontan cutthroat trout.

6. ***Within watersheds that provide habitat for LCT, routes or areas do not have the potential to capture or divert stream flow. The approaches to stream crossings are downsloped toward the stream on both sides***.
   - All stream crossings and open areas that are proposed for addition are required to meet soil condition rating of green prior to inclusion to the NFTS, including routes or areas within watersheds that provide habitat for LCT.

7. ***Areas are located outside of Riparian Conservation Areas that are within watersheds that provide habitat for Lahontan cutthroat trout.***
   - None of the proposed motorized "Open Areas" at Boca, Stampede, or Prosser reservoirs are located within Riparian Conservation Areas that are within watersheds that provide habitat for LCT. Selected access routes represent the shortest distance needed to access the shoreline when soils are dry. Shoreline access at these reservoirs under the Preferred Alternative is restricted to only those areas that would not have a significant effect on water quality. Designation of these "Open Areas" would not affect LCT habitat, and would not affect downstream sediment delivery to any LCT habitat. The proposed "Open Area" designations (244 acres) around these three reservoirs reduces current reservoir access and sediment risk by 90% under Alternative 6 compared to the existing situation where motorized access is currently not prohibited along the shoreline (2,549 acres).

8. ***Within watersheds that provide habitat for Lahontan cutthroat trout, "motorized routes" avoid Riparian Conservation Areas except where necessary to cross stream channels. Crossing approaches get the riders in and out of the riparian zone and stream channel in the shortest distance possible while meeting gradient and approach length standards.***
   - The Preferred Alternative does not propose motorized route additions or reopening ML 1 roads within Riparian Conservation Areas of any occupied Lahontan cutthroat trout stream. Additionally, any route that is proposed for addition to the NFTS must meet the "green" soil condition rating prior to inclusion, including watersheds that provide habitat for LCT. Therefore, the potential to delivery sediment within watersheds that provide habitat for LCT is low.

Commenter: S0020

3.03-43 Lahontan Cutthroat Trout (Site specific physical impacts and disturbance to occupied LCT streams)

Middle Truckee River-Lower Prosser Creek: Please clarify if the two routes being proposed are upstream or downstream of Prosser Creek Dam. If the routes are downstream of the dam, sediment which enters Prosser Creek from the proposed routes will be transported downstream into the Truckee Rivers.

Response: Within the Middle Truckee River-Lower Prosser Creek watershed, TKN-M1 is upstream from Prosser Creek Dam. TKN-PP is located below Prosser Creek Dam; however, it would not pose a risk to sediment delivery downstream as surveys indicate either a "green" or "yellow" condition rating where it crosses an intermittent tributary to Prosser Creek. All motorized routes must be mitigated and meet a "green" soil condition rating prior to addition to the NFTS as shown in Appendix A Road Cards of the SDEIS and FEIS.

East Fork Creek- unnamed tributary: LCT occupy two separate stream reaches within the East Fork Creek watershed. The SDEIS only mentions one stream, presumably East Fork Creek in the Austin Meadows area. Please discuss any direct or indirect impacts to the LCT population in the unnamed tributary.

Response: The Biological Assessment for the LCT evaluated potential direct and indirect impacts to both East Fork Creek in the Austin Meadows area and the unnamed tributary to East Fork Creek in sections 26, 35, and 36 within Township 19N and Range 11E. The FEIS also includes this unnamed tributary to East Fork Creek. The Biological Assessment stated that there would be no direct or indirect effects to LCT within either the Austin Meadow section or to the unnamed tributary to East Fork Creek, since no route additions are proposed under any of the action alternatives."

Commenter: S0020

3.03-44 Lahontan Cutthroat Trout (supports alternatives that do not add routes or crossings in LCT watersheds): The U.S. Fish and Wildlife Service supports alternatives which do not designate any routes or stream crossings in the Middle Truckee River-Cabin Creek, Middle Truckee River-Silver Creek, Upper Middle Truckee River, Middle Truckee River-Pole Creek, Independence Lake 7th Field Watershed, Middle Yuba River-Milton Reservoir 7th Field Watershed, and East Fork Creek 7th Field Watershed, as described in the SDEIS.

Response: Alternative 6 does not designate routes in the above watersheds. The Tahoe NF is committed to the management, protection, and recovery of the federally listed LCT, and we appreciate that the Service supports Alternative 6, the Preferred Alternative, as proposed in the SDEIS and FEIS.

Commenter: S0020

3.03-45 Lahontan Cutthroat Trout (route density and crossing density): It is not clear what data were used in Figures 3.03-9 (route density) and 3.03-10 (stream crossing density). The title and y-axis indicate the data depict route densities or stream crossing densities in "suitable" LCT habitat. In contrast, the captions describe route densities or stream crossing densities in "occupied" LCT waters. Please clarify if the route and stream crossing densities are for occupied or suitable LCT habitat. If it is suitable LCT habitat, please describe the criteria used to define suitable LCT habitat.

Response: Figures 3.03-9 (route density) and 3.03-10 (stream crossing density) depict route density or stream crossing densities at the basin scale within the combined eleven 7th field watersheds which contain occupied LCT streams. It does not represent route density or stream crossing density for the individual occupied LCT streams, nor does it represent route densities for the suitable LCT streams. The Biological Assessment now clarifies this.

Commenter: S0020

3.03-46 Use of Gaines et al 2003 Publication: The Forest Service uses a credible scientific model (Gaines et al 2003) for the analysis, but changes the key terminology. The actual relationship in Gaines' original model, the emphasis is not on "*risk*." The emphasis is on "*interactions.*" The SDEIS has discarded that word, and instead says it's "risk." This is a significant alteration to the intent and purpose of the modeling.

Response: The Gaines et al (2003) publication, "Assessing the Cumulative Effects of Linear Recreation Routes on Wildlife Habitats on the Okanogan and Wenatchee National Forests," describes road and wildlife interactions as hunting, trapping, poaching, collisions, negative human interactions, displacement or avoidance, disturbance, snag reduction, competition or predation, habitat loss or fragmentation, or collection. The analysis in the SDEIS and FEIS considered all these interactions as adverse impacts, in other words risks or threats to wildlife. Risk analysis is the process of assessing identified risks or threats to estimate their impact and probability of occurrence (likelihood). Therefore, the SDEIS and FEIS appropriately used the wildlife-road interaction assumptions from Gaines et al (2003) as a basis to conduct a wildlife risk analysis of potential negative wildlife-road interactions as a way to compare and contrast the differences between the alternatives.

Commenter: S0008

3.03-47 Use of Delaney and Grubb Publication: The research showed no measurable differences in the critical life-stages of the owls whose nests were subjected to very loud and intentional noise harassment--much worse than the simple event of a motor vehicle passing nearby a nest (which also showed no substantial effect). The same research also showed that the owls' responses to the noises differed due to frequency range hearing limitations. This does not support the SDEIS cumulative effects discussion for spotted owls. Therefore the Forest Service has failed to comply with §1502.24.

Response: Although, the spotted owl study by Delaney and Grubb (2003) showed that experimental treatments of running loud motorcycles near spotted owl nest sites did not affect nesting success during a single year or a difference in fledging rates between manipulated and non-manipulated

spotted owl territories, this study was limited by sample population size. Delaney and Grubb also cautioned against making definitive conclusions from these preliminary results without further experimental studies. In addition, the FEIS acknowledged that spotted owl responses to OHV noise and other motorized road and trail factors may differ depending upon a variety of factors in the FEIS section "Assumptions for Determining Effects to Spotted Owl" (FEIS, Chapter 3.03).

The Center for Conservation Biology at the University of Washington conducted a recent study to measure the effects of OHV use on the Northern spotted owl (NSO) on the Shasta-Trinity and Mendocino National Forests of northern California, in collaboration with USFS, USFWS, Hubbs-Sea World, the Blue Ribbon Coalition and other motorcycle non-profit groups (http://conservationbiology.net/research-programs/northern-spotted-owl-research/). Results from this research suggested that OHV exposure had negative effects on the Northern spotted owl by increasing levels of stress steroids (glucocorticoids) and metabolic hormones (thyroihormones). The following graphs from the study illustrate the impacts of OHV noise and the proximity to roads impacts to spotted owls (Figures N-2 through N-5):

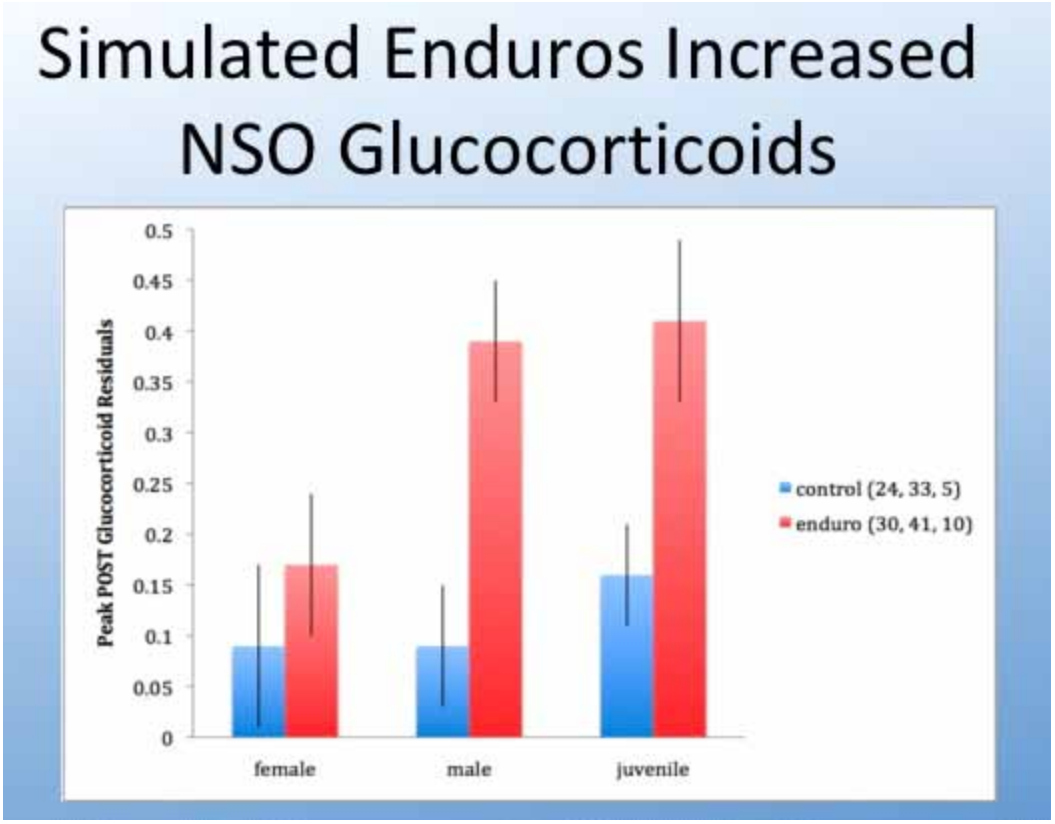

Figure N-2. Spotted owls exposed to one hour of experimentally applied motorcycle exposure showed elevated fecal glucocorticoids relative to controls. Overall, males and juveniles were more responsive than females. Sample sizes are shown in parenthesis.

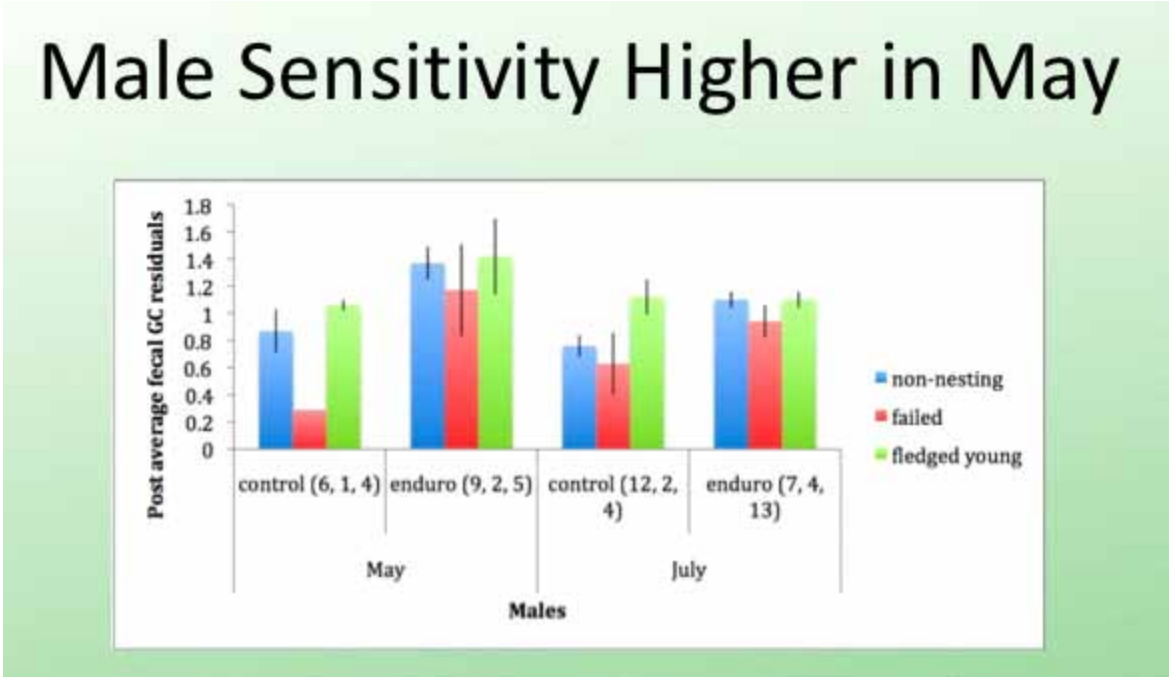

Figure N-3. Male NSO showed higher glucocorticoid response to motorcycles in May than in July. Controls with young had higher glucocorticoid than controls without young. Sample sizes shown in parenthesis.

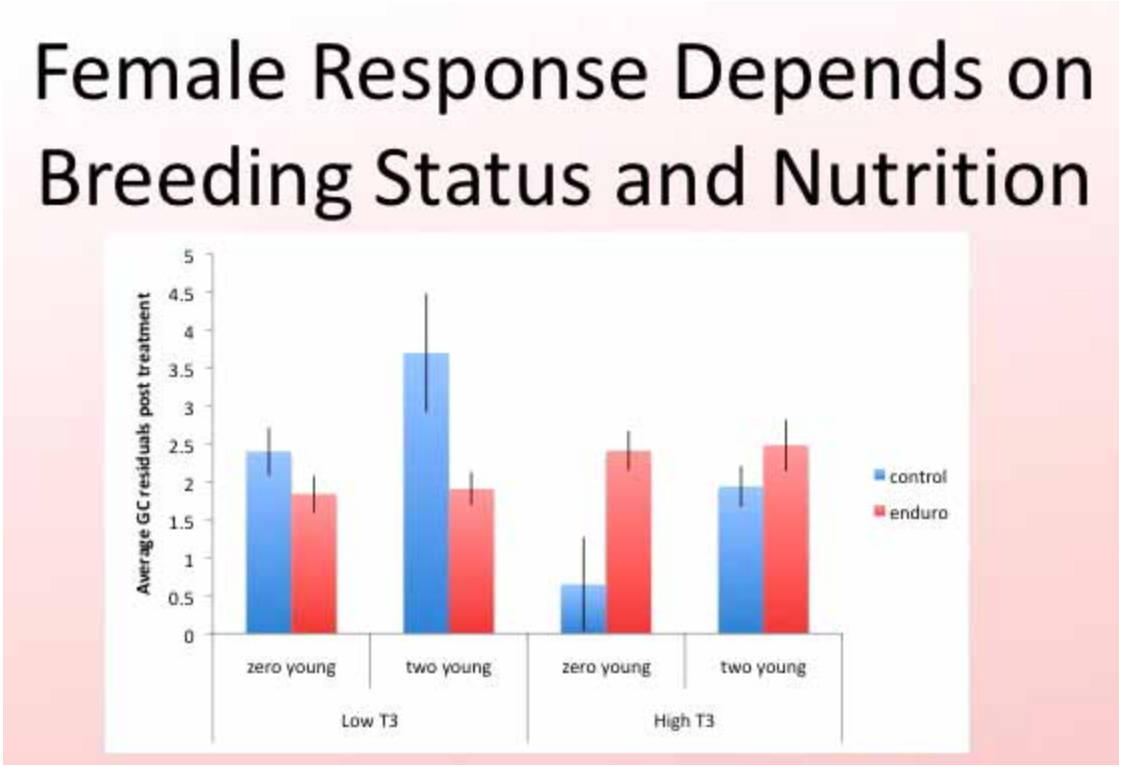

Figure N-4. Females in good nutritional condition (as indicated by high T3) with no young increased GCs in response to motorcycle exposure relative to controls. Females in poor nutritional condition (low T3) showed decreased GCs after motorcycle exposure relative to controls. Decreased GCs are a marker of extreme, debilitation stress.

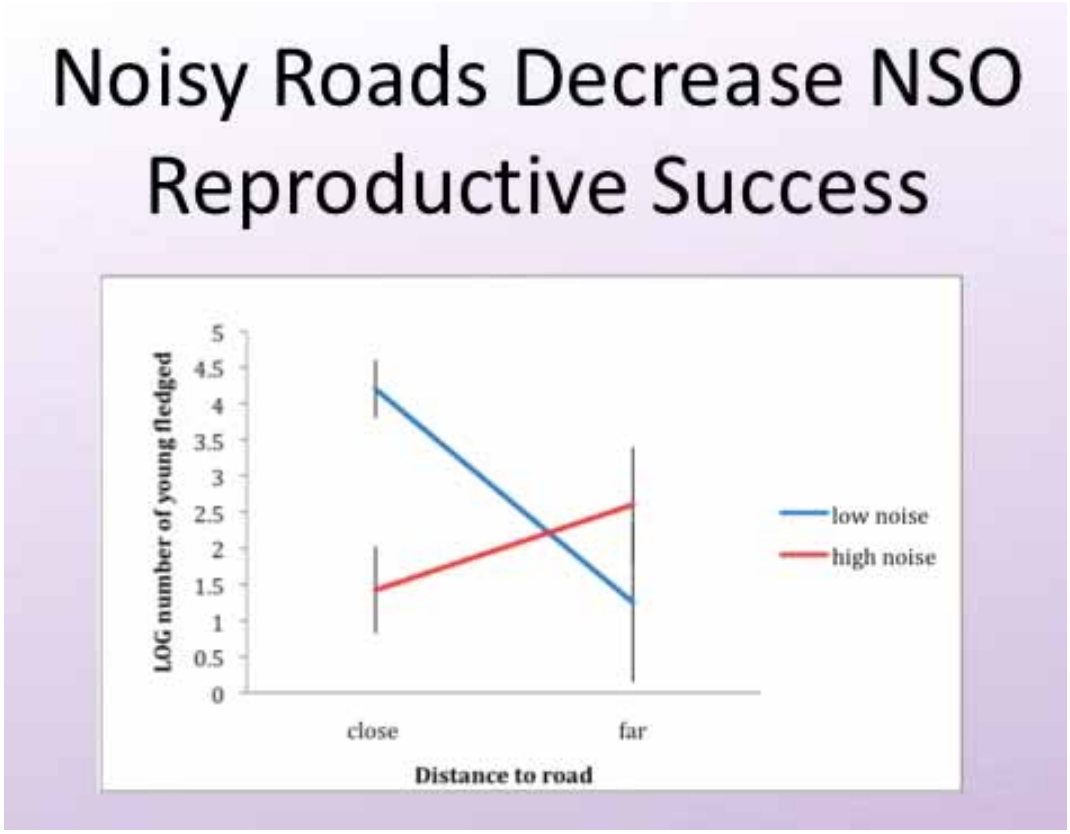

Figure N-5. Among the NSO in our population, proximity to a quiet road (i.e., one with no traffic) was strongly associated with increased reproductive success. Because T3 increased with proximity to road (regardless of noise on that road), this is probably due to more prey near roads or easier hunting. However when road noise (i.e., traffic) was high, NSO reproductive success dropped off steeply on sites close to that road.

These study results concluded that: 1) Northern spotted owl show a physiological response to traffic exposure that varies with sex, season, breeding status and nutritional condition; 2) Spotted owls close to roads were in better nutritional condition; and 3) Reproductive success was higher close to *quiet* roads (likely due to better feeding). However, proximity to roads with high noise (i.e. traffic) *decreased* spotted owl reproductive success. These results represent the first evidence to date that Off-Highway Vehicle use is having a strong negative impact on Northern spotted owl population viability. The recent spotted owl research conducted by the Center for Conservation Biology validates the assumptions and best science used in the FEIS that were used to evaluate direct, indirect, and cumulative effects of OHV noise and road related factors to spotted owls where it has been shown that spotted owls with territories closest to roads have higher fecal glucocorticoids (stress hormones) than owls with territories further from roads. Moreover, fecal glucocorticoids appear to increase as the proximity to roads increases.

Commenter: S0008

3.03-48 Programmatic Concurrence under the Endangered Species Act for Section 7 consultation for the California red-legged frog and Lahontan cutthroat trout: The Forest

Service is relying on a "programmatic concurrence" letter to meet its Section 7 consultation obligations with regard to California red-legged frog and Lahontan cutthroat trout. We do not believe the 2006 programmatic concurrence letter is a valid way to meet the Forest Service's consultation obligations under the ESA.

Response: As the appropriate responsible regulatory agency, the U.S. Fish and Wildlife Service jointly entered into programmatic consultation with the U. S. Forest Service to conduct section 7 consultation for federally listed species for Route Designation (Travel Management) projects for 14 National Forests in California, under the ESA of 1973, as amended. Project design criteria were developed jointly, which includes measures to avoid impacts to federally listed species. The U.S. Fish and Wildlife Service has agreed that, by using the Project Design Criteria for each of the Threatened and Endangered species and Critical Habitat, route designation will meet "No Effect" or "May Affect Not Likely to Adversely Affect" determinations and that they would concur with these determinations on a programmatic basis. Forest consultation can tier to the programmatic consultation with no further consultations. In addition to following design criteria per the programmatic concurrence for the California red-legged frog (CRLF), the Tahoe NF conducted additional consultation on Lahontan cutthroat trout (LCT) with the Nevada Field and Wildlife Office (NFWO) as specified in the programmatic consultation. The Tahoe NF Travel Management Project is consistent with the Project Design Criteria provided in the programmatic concurrence, and with additional design criteria provided by NFWO for the LCT [NFWO memo dated September 11, 2006, File No. 1-5-06-TA-283); SDEIS page 426; Response to Comment 3.03-42]. Furthermore, species were site-specifically analyzed as shown in the FEIS and the Biological Assessment in context of their distribution and status on the Tahoe NF. Both the Sacramento and the Nevada Field Offices of Fish and Wildlife Service have reviewed the environmental analyses presented in the FEIS for the California red-legged frog and the Lahontan cutthroat trout, which were based on the Biological Assessment, and have provided comments (See Responses to comments for 3.03-35 to 3.03-45). A letter of concurrence was received from the Nevada Fish and Wildlife Service Field Office for the Lahontan cutthroat trout. Since programmatic concurrence specifically stated that as long the Travel Management Project tiers to the programmatic Design Criteria for the CRLF, no further consultation is necessary, and therefore, the Forest Service's legal obligation under ESA has been met.

Commenter: S0023

3.03-49 Great Gray Owl: Two peer reviewed papers report that 1) the status of the great gray owl population in the Sierra Nevada is at risk and has been determined to be a subspecies distinct from other North American populations, and 2) new information on effective population size required for long-term species viability have revised upward the recommended values for minimum viable population size. We submit that these reports document new concerns over the ability of the Sierra Nevada population of the great gray owl, including its occurrence on the Tahoe Forest, to persist under present management and the proposed changes in travel management under the present Travel Management Project. Habitat fragmentation and car strikes, both outcomes of proliferated motorized travel) are known contributors to owl declines (Hull et al. in press). The Department of

Fish and Game has recently confirmed a nesting pair and two juveniles on Pliocene Ridge, with a sighting on Tahoe NF land. Also page 386 of the SDEIS states "Although the Tahoe NF does not currently support known great gray owl nesting pairs, potentially suitable great gray owl meadows were analyzed to determine potential impacts from the Tahoe NF Travel Management Project." The owls are often found in second growth oak habitat, utilizing existing nest structures for their own nest establishment. This habitat is found at Pliocene Ridge. The Travel Management Plan should be re-analyzed and revised to consider this new information.

Response: The new information regarding the ecological status of the great gray owl in the Sierra Nevada and the species nesting status on the Tahoe NF was evaluated, and it was determined that the analysis presented in the SDEIS regarding great gray owl status on the Tahoe NF would not necessitate additional analysis since no route additions or reopened ML 1 routes would affect the nesting great gray owl in the Pliocene Ridge area. At the time the SDEIS was written, the location of the nesting great gray owls located in the Pliocene Ridge area is the same as the great gray owl observation described in the SDEIS as "an adult on private land near the town of Alleghany (5/2006, 4/2007) (SDEIS page 386). In addition, in the Sensitive Species Determination Section of the SDEIS (page 395), it was stated that "the addition of motorized routes to the NFTS would not directly, indirectly or cumulatively affect known locations of great gray owls since no motorized route additions are proposed in the vicinity of the documented owl sightings that would potentially disturb them." A great gray owl PAC was delineated for the Pliocene Ridge great gray owl nest site per direction in the Forest Plan, as amended by the Sierra Nevada Forest Plan Amendment. No routes additions or reopened ML 1 roads are proposed within the great gray owl PAC or environs under the Preferred Alternative. Furthermore, the Preferred Alternative would benefit the great gray owl by eliminating motorized route proliferation by banning cross country travel forest-wide, and therefore reduce potential effects to great gray owls that may occur on the Tahoe NF. This has been carried forward in the FEIS.

Commenter: S0023

Section 3.04: Fire and Fuels Management

3.04-1 Fire suppression and emergency response: Roads and motorized trails should remain open for access for fire suppression. In addition, roads serve as natural fire breaks.

Response: As discussed in Chapter 3.04 (Fire Fuels Management), depending on weather and fuel conditions, fires can burn with such intensity that a road width or trail width may not be an effective fire break. Under the worst conditions for high winds, low humidity, and high temperatures, fires can send embers ahead of the fire perimeter to start new fires over ¼ mile away.

Road access does allow for a more rapid initial attack by suppression forces, as well as a point of initial fire attack. If line officer and the fire management determine that closed roads are needed to respond to an emergency, the closed roads are opened for use by the fire suppression personnel.

Commenters: 00062, 00066, 00068, 05636, 06604, 06608, 06718, 06768, 06791

3.04-2 Fire risk: The DEIS does not adequately analyze risk associated with increased threats of man-made wildland fire incidences due to motor vehicle use.

Response: The effects associated with potential increased fire risk are disclosed in Chapter 3.04 of the FEIS. Motor vehicle access into an area can increase the risk of a wildfire being started by humans. The density of open routes is used to assess potential risk of human caused fires resulting from motor vehicle access.

Commenters: 00683, 00822, 00823, 02159, 02413, 06424, 06544, 06599, 06748, 03567

Section 3.05: Heritage Resources

3.05-1 Sierra Nevada Wood and Lumber Company: The historical logging significance of the Sierra Nevada Wood and Lumber Company (SNWLC) should be recognized and disclosed in the EIS.

Response: The heritage resource analysis is included in Chapter 3.05 (Cultural Resources) of the FEIS.

The historical significance of the SNWLC, with its Truckee area base of operations at Overton/ Hobart Mills, has been recognized by the heritage resources program on the TNF. Numerous components of the logging system, including railroad grades, donkey platforms, log loading ramps, work camps, maintenance stations, and rail road trestles, have been recorded on both the Truckee and Sierraville ranger districts. The specificity of significance of the SNWLC (i.e., is the SNWLC eligible for inclusion in the National Register of Historic Places) is not relevant to the proposed action because it would not be affected by any elements of the decision being made for this travel management planning effort. The roads accessing the private property in Section 18, T18N, R16E, are not affected by any elements of the decision being made.

Commenters: 00032, 00044

3.05-2 Boca, Prosser, and Stampede Reservoirs: Heritage sites at Boca, Prosser and Stampede Reservoirs are vulnerable to disturbance by motor vehicles during dry periods when motor vehicles are allowed access to the shorelines below the high water line. Major effects to heritage sites should be mitigated through signing, barricading, road engineering, or other appropriate measures to minimize impacts from motor vehicle use.

Response: High use areas associated with shoreline access via a National Forest System road at Boca and Prosser were surveyed as part of this FEIS. Limited survey was conducted at Stampede. Surveys were limited at Stampede due to pending plans by the Bureau of Reclamation to increase water storage at the reservoir. Monitoring to access current condition and motor vehicle effects of recorded heritage sites was completed. Depending on the geophysical location of the site in relation to the shoreline, wave action, deflation, and boating access are having a major effect on archaeological sites; however, the monitoring results indicate that motor vehicle use is having a major to moderate effect on sites. Severe effects were observed at archaeological sites from vehicles

spinning and "mud-bogging." The Preferred Alternative in the FEIS proposes limited "Open Area" shoreline access below the high water line at the reservoirs to minimize impacts to heritage resources.

Commenters: 06721, 06724

3.05-3 Hawley Lake Petroglyph: The Forest Service should address adverse impacts to the Hawley Lake Petroglyph.

Response: Under the National Historic Preservation Act, the FS is tasked with protecting archaeological resources. The existing FS system route, 11E67, will remain open maintaining public access to the area and the private property at Hawley Lake. The TNF may consider removing the interpretive sign if there is a significant problem with graffiti and vandalism of the petroglyph.

Commenter: 00042

3.05-4 Effects on cultural resources: Adding more motorized trails will result in increased access to cultural resources formerly protected by their inaccessibility. Increased accessibility often results in looting and vandalism.

Response: Roads, trails, and "Open Areas" unauthorized for motorized use have already affected historic properties within route/area prisms. Under the action alternatives, use will continue at current levels or increase over time on the designated system with the prohibition of cross country travel. The effects analysis focused on the potential for any effect associated with current or increased use levels.

Site specific observations (monitoring) were completed as required under the *Motorized Recreation Programmatic Agreement*. Each site was monitored for current conditions and to document any existing impacts and potential effects from motorized and non-motorized recreation.

An adverse effect on a historic property can occur when an undertaking a) directly or b) indirectly alters its important values and is measured by the degree to which it diminishes its integrity.

Direct effects are/will be caused by motor vehicle uses/or the consequences of such use, including physical damage resulting in or from erosion, down-cutting, rutting, or displacement or damage to cultural features.

Indirect effects are associated with motor vehicle uses but occur outside designated routes and areas, such as adjacent dispersed camping areas or areas where travel off of designated routes or areas may occur. The proximity of sensitive cultural resources (i.e., rock art) to designated routes is important when determining where resources could be susceptible to greater threats or risks. Indirect effects could include those listed for direct effects, but also include destructive actions like vandalism and looting.

The integrity measures were used to characterize the nature of any potential effects, whether they are direct, indirect or cumulative; and their severity, whether they are negligible, minor, moderate, or

major. The degree to which historic property values are diminished will be used to measure the direct, indirect and cumulative effects of motorized use on the NFTS.

There can be a direct or indirect effect on historic properties if use by motor vehicles diminishes the values of a historic property. If there are effects, mitigation measures can be used to maintain and protect the site values. The mitigation measures are specified in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS. Use of these mitigation measures should result in a no adverse effect to historic properties. Where there are ambiguous effects, a provision for monitoring is also specified in Appendix A to identify if future management actions would be needed to reduce or eliminate effects.

Commenter: 06689

3.05-5 Section 106 consultation (Western States Trail): Based on the historic qualities of the Western States Trail, including its listing on the National Register of Historic Places from Michigan Bluff to Last Chance and eligibility for listing on the entire 100-mile trail, the Forest Service should not authorize or expand motorized or mechanized use without the statutory Section 106 consultation. Legislation (S.2909) has been introduced in the current session of Congress to study the entire trail from Squaw Valley to Auburn for designation as a National Historic and Scenic Trail.

Response: The TNF is not expanding motorized or mechanized use of the Western States Trail in this FEIS.

Commenter: 06629

3.05-6 Road Closures in or near archeological sites: The Forest Service should close roads in or near historical areas or cultural sites.

Response: Closing existing NFTS roads and trails is outside of the scope of this decision. Proposed additions to the NFTS motorized recreational opportunities were surveyed for historic and cultural sites. Assessments and monitoring for potential impacts from motorized use was also completed at historic and cultural sites. Mitigation measures for the protection of historic and cultural sites following the programmatic agreement (PA) are listed in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS.

Commenter: 06248

Section 3.06: Plant Communities

3.06-1 Adverse impacts on plant communities: The DEIS fails to disclose that sensitive plants and fungi, and watchlist plants and plant communities are adversely impacted by motor vehicle use.

Response: The FEIS discloses that motor vehicle use can negatively impact sensitive plants and fungi, and watchlist plants and plant communities. Mitigation measures for sensitive plants and watchlist plants and plant communities were developed to reduce and/or eliminate impacts to rare

plants and plant communities known to occur along the motorized trails and can be found in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS.

Commenter: 00456, 06721

3.06-2 Aquatic/riparian plant communities (impacts): Motor vehicle use does not negatively impact aquatic/riparian plant communities.

Response: Motor vehicle use can negatively impact these plant communities by changing the pattern of water flow, reducing vegetative cover, compacting soil, causing erosion, deposition of petroleum products/sediment thereby reducing water quality, and introducing invasive non-native plants (weeds).

Commenter: 06701, 06715

3.06-3 Aquatic/riparian plant communities (seasonal closures): The DEIS analysis of aquatic and riparian plant communities is based on the number of water crossings; however, the analysis is misleading because it fails to consider the effects of seasonal closures and time of use.

Response: Riparian and aquatic vegetation are associated with water. Some sensitive and watchlist plant species only occur in aquatic/riparian plant communities. The number of perennial and intermittent water crossings by alternative provides a relative method of comparing possible impacts to those sensitive and/or watchlist species that are dependent on aquatic/riparian habitats. Since these plant communities always have moist/wet soils, the timing of the use is not a significant factor. While seasonal closures may reduce sediment movement impacts by eliminating motorized crossings when water flows can be very high, seasonal closures would not completely eliminate impacts to these plant communities.

Commenter: 06701, 06613

3.06-4 Serpentine plant communities (impacts): The Forest Service should clarify the relationship between serpentine habitats and the occurrence of sensitive plants in these habitats on the Tahoe National Forest.

Response: The Tahoe National Forest has several serpentine watchlist plant species (and potential habitat for several sensitive plant species) that only occur on serpentine soil that are currently being impacted by cross country motor vehicle use (use on and off of motorized trails unauthorized for public use). Refer to Chapter 3.06 (Plant Communities) in the FEIS.

Commenter: 06715

3.06-5 Noxious weeds (introduction): The DEIS fails to explain why implementation of the No Action Alternative (continuing existing management) would increase the risk of weed introductions when Tahoe National Forest System lands are currently considered to be “weed free.”

Response: Weeds continue to spread in the state of California and elsewhere. TNF, County and State personnel continue to find new weed occurrences annually. The existing situation exposes more TNF

System land area to "unauthorized use" and cross country travel, thereby increasing the risk of introducing more weeds due to spreading on these additional areas. Refer to Chapter 3.06 (Plant Communities) in the FEIS.

Commenter: 06715

3.06-6 Noxious weeds (motor vehicle spread): Off highway vehicles may be only one of many factors, and not the most important factor, in the spread of invasive weeds.

Response: Motor vehicles are not the only method by which weeds are spread from place to place, nor are they the major factor in the spread of cheatgrass. The FEIS analyzes how weeds are introduced and/or spread by motor vehicles since when and where motor vehicles will be allowed on the Tahoe National Forest is the project proposal.

Commenter: 06701

3.06-7 Noxious weeds (detection): Roads and trails provide an opportunity for early identification and rapid response toward invasives and could potentially improve noxious weeds management resulting in a net benefit in the management of invasive and non-native plants (USDA Second Avoiding Arm Report 2004).

Response: Designated roads and trails provide opportunities for early detection of weeds and provide access for weed treatment. However, roads and trails also increase the amount of area where weed seed can be introduced. Adding trails to the NFTS would increase the amount of area where vehicles could potentially introduce weeds. However when taken in the context of prohibiting cross country travel, including prohibiting use on unauthorized routes not added to the NFTS, there will be an overall net reduction in the risk of noxious weed spread.

Commenter: 06701

3.06-8 Habitat fragmentation in Inventoried Roadless Areas: The discussion and associated chart on Inventoried Roadless Areas in Chapter 3.06 of the DEIS are not germane to the topic "Native Plant Habitat Fragmentation" and is out of place.

Response: Roads and trails do fragment plant communities by creating linear strips of bare soil through them. Please refer to the consequences section of Chapter 3.06 (Plant Communities) of the FEIS. Since Inventoried Roadless Areas (IRAs) are considered some of the largest un-roaded native plant communities on the Tahoe National Forest, impacts were analyzed. In addition, the biggest risk to IRA plant communities from motor vehicle use comes from increased risk of introduction and spread of weeds.

Commenter: 06715

3.06-9 Consistency between soils and botanical effects analyses: The impacts disclosed for plants in the DEIS appear to be inconsistent with the impacts reported for soils. It appears that the effects analysis to sensitive plants assumes that the project includes ground disturbing activities.

Response: This project proposes no new ground disturbing activities. Chapter 3.06 (Plant Communities) of the FEIS discloses that there could be direct impacts to vegetation within 30 feet of the edge of the road or trail since 30 feet is the distance chosen to represent one vehicle length and vehicles would be allowed to pull off the road/trail for one vehicle length.

The significance of the OHV impact to plants/vegetation is dependent on many factors including whether the plant is dormant, the amount of soil moisture, the amount of disturbance, etc. Section 3.06 provides information about possible impacts to potential additions and changes to the system. Chapter 3.06 also provides information about impacts to rare plants that are known to exist within 30 or 100 feet of a proposed addition to the NFTS motorized recreational opportunities. One hundred feet was used as the distance from the road/trail where plants/vegetation could be indirectly impacted (primarily from dust and the possibility of weed introduction and spread).

Commenter: 06715

3.06-10 Unpublished studies: The DEIS cites an unpublished study by Rooney (2003) in support of the spread of invasive and non-native plants by off highway vehicles. Unpublished studies are not subject to peer review and should not be cited as if they are scientific references.

Response: Unpublished studies may be referenced as long as they are identified as unpublished and included in the project record.

Commenter: 06701

3.06-11 Human-induced changes: The DEIS (page 494) states: *"Human disturbances such as extensive motor vehicle use within headwater systems can result in water pollution, stream filling, and/or the introduction of weeds and other exotic species, can diminish the biological diversity of the systems and affect downstream rivers and streams."* The reference cited in support of this statement is, Meyer, Judy L. et al. This paper does not contain a single reference to motorized roads or trails… This reference does not support the contentions of the author …" The reference cited - Meyer, Judy L. et al. "indicates that intact headwater systems are robust entities that can protect watersheds from the effect of sedimentation from forest roads.

Response: This reference has been removed in the FEIS.

Commenter: 06701

3.06-12 Viability of specific plants and fungi: The DEIS (page 488, paragraph 3) states the following: An important assumption in this analysis is that motor vehicle use within and adjacent to rare plant species occurrences have the ability to negatively impact the long term viability of specific plant and fungi species. However, the DEIS offers limited evidence to support this assumption

Response: This statement has been changed to read: *"An important assumption in this analysis is that motor vehicle use within and adjacent to rare species occurrences have the ability to negatively impact the trends of specific plant and fungi species."* in the FEIS.

Commenter: 06701

3.06-13 Moss, lichen, and fungi (impacts): Based on the information presented in the DEIS, there appears to be very little impact to bryophytes, lichens and fungi from the existing NFTS or unauthorized motorized trails.

Response: Information about potential habitats for sensitive plant and fungi species and watchlist plants and/or plant communities is provided so that an analysis of possible impacts can be analyzed. Information about specific species along proposed additions to the NFTS motorized recreation opportunities is provided so that site specific analysis can be done. The commenter refers to the affected environment section of Chapter 3.06 (Plant Communities) that sets the background/provides information about the plant and fungal resources that may be and/or are impacted by motor vehicle use. Site specific information is provided when it is available.

The determination statement on page 525 of the DEIS identifies that implementation of the action alternatives could impact *Bruchia bolanderi*, *Cudonia monticola*, *Dendrocollybia racemosa*, *Fissidens aphelotaxifolius*, *Helodium blandowii*, *Hydrothyria venosa*, *Meesia triquetra*, *Meesia uliginosa*, *Mielichhoferia elongata*, and/or *Phaeocollybia olivacea*, but would not contribute to a trend toward federal listing or loss of viability for these species within the planning areas of the TNF. This determination was carried forward into the FEIS.

Commenter: 06701

3.06-14 Aquatic/riparian plant communities (cumulative effects): The DEIS fails to compare the relative scale of habitat alterations due to the lengthy list of major actions, such as hydraulic mining, hydroelectric development, railroad construction and urbanization to that from NFTS motorized roads and trails or trails unauthorized for motorized use.

Response: The affected environment section of Chapter 3.06 (Plant Communities) of the FEIS provides a description of the existing condition of aquatic/riparian plant communities and provides reasons why there are fewer aquatic/riparian plant communities now than there have been in the past. The existing and possible impacts to aquatic/riparian plant communities from motor vehicle use are then identified. This information provides background for the analysis - where the significance of impacts from the proposed project is addressed.

Commenter: 06701

Section 3.07: Recreation and Visual Resources

3.07-1 Visual quality: The Forest Service should consider forest topography and terrain features in analyzing impacts on visual quality.

Response: The effects analysis considers geographic features, such as topography, as well as screening in assessing effects on visual quality. Visual quality is addressed in Chapter 3.07 (Recreation and Visual Resources) of the FEIS. All of the alternatives meet the Visual Quality Objectives as specified in the Forest LRMP.

Commenter: 06730

3.07-2 Quiet recreation: Numerous recreational experiences are negatively impacted by OHV "noise." The DEIS fails to assess the effects of noise on recreational experiences.

Response: A review of the scientific literature indicates that off highway vehicle noise can have an adverse effect on quiet recreation within ½ mile of the motorized use. A section has been added to the SDEIS in Chapter 3.07 (Recreation and Visual Resources) and carried through to the FEIS displaying the acreage greater than ½ mile from any motor vehicle use, providing quiet recreation. All of the action alternatives increase the available acreage for quiet recreation compared to the existing condition.

Commenters: 00081, 06418, 06544, 06599, 06675, 06684, 06737, 06749, 06752, S0071

3.07-3 Effects of concentrating use on the motorized recreation experience. The DEIS fails to analyze the adverse effects of concentrating motorized use on fewer roads and trails on the quality of the motorized recreation experience. The DEIS does not analyze the cumulative effects on the recreational experience of concentrating motorized use into smaller areas.

Response: The cumulative effects on the recreation experience of concentrating use into smaller areas was contained in Chapter 3.11 of the DEIS and SDEIS and carried through to the FEIS. Predictions about changes in recreational use that may occur on the Forest are difficult to make and would be highly speculative. The FS believes that under all action alternatives, levels of use would increase by the same amount, although the use patterns may change. For example, even though the overall number of available roads and trails is reduced in all of the action alternatives, the same levels of use would simply become more concentrated in those areas. However, motor vehicle use is already concentrated in many areas of the Forest at this time, so this effect may not be realized during implementation; but at some point some users would no longer attain the experience they desire and would likely seek other areas off-forest. The point at which this would occur is speculative.

The Preferred Alternative increases the amount of NFTS road and trail mileage available for motor vehicle use. However, the Preferred Alternative prohibits cross country motor vehicle use and use of many miles of routes receiving unauthorized use, leading to a rider/driver perception that the FS is reducing mileage available for motor vehicle recreation opportunities. Routine maintenance should reduce resource damage and help to maintain trail tread in acceptable conditions. However, there may be an increase in the density of riders (and the potential for crowding), and a possible reduction in safety compared to current conditions.

Reducing road/trail mileage will concentrate users, increasing the potential for some OHV riders/drivers to experience an elevated level of perceived crowding. Crowding is a negative reaction to a particular real-time density. While it is reasonable to assume a reduction in miles available for motorized use will increase the density of riders on the remaining road/trail system, the extent and location of riders feeling crowded is extremely difficult to predict. For instance, if visitors feel crowded, they may choose to ride/drive at a different time of day, month, year, or may choose a

different activity in the same area, or continue the same or different activity in a different area. Users may also adjust their expectations. For example, OHV's generally prefer an extremely low density of "other riders/drivers," but will still visit during high use times. Why? Generally speaking, visitors often adjust their expectations to fit the existing conditions, allowing them to enjoy fulfilling recreational opportunities even in a high density situation. A concentration of OHV use is likely to occur; however, whether this concentration will leave visitors crowded is unknown, and is extremely difficult to predict.

Visitor safety is extremely important to the TNF. While an increased density of riders could potentially increase the risk of collisions between riders, and between riders and objects adjacent to the trail, this risk can be mitigated through agency mapping and signing, working with user groups, designing trails to reduce average trail speeds, increasing sight distances in problems area, and other methods. The USFS will also continue to work with OHV users groups and the OHV community as a whole to improve trail user etiquette and increase self-policing via peer pressure, to reduce user conflicts and simultaneously improve visitor safety. These approaches may not only reduce the accident rate, but are likely to improve rider/driver perceptions of safety, increasing the likelihood that visitors would utilize and enjoy the designated motorized trail system. In addition, the mixed use analysis is expected to improve rider/driver safety by separating highway travel with motorized use on trails and primitive roads. Overall this process will increase opportunities for riders and drivers to enjoy a designated, maintained OHV trail system where the users will enjoy a safe, moderate-density experience, where the impacts of off-highway use are managed and mitigated.

Commenters: 06384, 06577, 06580, 06716, 06730, FA, S0008, S0066

3.07-4 New facilities: The Forest Service should not consider addition of unauthorized routes to the NFTS as "new" facilities.

Response: Additions of unauthorized routes to the NFTS are considered new facilities for the purpose of this project. The site specific existing condition of these unauthorized routes was considered in the environmental effects analysis and in the consideration for their addition to the NFTS.

Commenters: 06544, 06752

3.07-5 Granite Chief Wilderness Area: The Forest Service should not authorize motorized use within the Granite Chief Wilderness Area.

Response: The Travel Management Project FEIS does not propose the addition of any roads or trails to the NFTS motorized recreation opportunities within the Granite Chief Wilderness. The Preferred Alternative does not propose changes to the management of Granite Chief Wilderness.

Commenters: 06248, 06587, 06588, 06629, 06750

3.07-6 Pacific Crest Trail: The Forest Service should close motorized roads and trails on/or adjacent to the Pacific Crest Trail.

Response: Closure of system roads/trails is outside the scope of this decision. Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS identifies two potential routes that would cross the PCT at 90 degree angles. Forest Service policy allows motorized roads and trails to cross the PCT. The resource concerns with these two routes are identified in Appendix A and mitigation measures would be implemented to prevent motor vehicles from using the PCT.

Commenters: 06248, 06430, 06599

3.07-7 National Wild and Scenic Rivers: The Forest Service should not authorize any additional motorized activities within designated or recommended Wild and Scenic Rivers.

The Forest Service should consider improving motorized access and recreational opportunities within designated and recommended Wild and Scenic Rivers.

Response: The analysis of effects on Wild and Scenic Rivers is included in Chapter 3.09 (Inventoried Roadless Areas & Special Areas) of the FEIS. All additions to the NFTS in each Wild and Scenic River was evaluated considering the outstandingly remarkable values associated with its recommendation for inclusion in the National Wild and Scenic River system. All outstandingly remarkable values for each included river will be maintained or enhanced

Alternatives 3 and 4 do not propose any additions to the NFTS in Wild and Scenic Rivers, Alternatives 2, 5, 6 and 7 propose additions to the NFTS to improve motorized recreation opportunities while maintaining the outstandingly remarkable values associated with each river. No unauthorized routes were added to the NFTS in any alternative which were not consistent with the rivers outstandingly remarkable values.

Commenters: 06458, 06750

3.07-8 User conflicts: The Forest Service has failed to address conflicts between motorized and non-motorized users of roads and trails, such as equestrians, hikers, etc. The Forest Service has failed to include an analysis of the frequency of encounters in analyzing use conflicts.

Response: User conflicts are analyzed in Chapter 3.07 (Recreation and Visual Resources) of the FEIS. Conflicts between motorized and non-motorized users in the general forest are analyzed by examining the amount of acreage greater than ½ mile from any motorized road or trail. All of the action alternatives increase the amount acreage greater than 1/2 mile from motorized roads or trails. Conflicts between motorized and non-motorized users on designated roads and trails would be minimized through implementation of the MVUM which designates specific roads and trails for motorized use. Conflicts between different types of motor vehicles on designated roads and trails will also be minimized through implementation of the MVUM showing the specific class of vehicles permitted on each individual road and trail.

No data was available on the frequency of encounters collectively or on individual routes. Incomplete and Unavailable Information is described in Chapter 3.00 of the FEIS where it states in part:

"The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) describes how Federal agencies must handle instances where information relevant to evaluating reasonably foreseeable adverse impacts of the alternatives is incomplete or unavailable. Federal agencies must make clear that such information is lacking, and decide whether this incomplete or unavailable information is 'essential to a reasoned choice among alternatives' (Title 40 of the Code of Federal Regulations, 40 CFR, Part 1502.22). If the information is deemed essential to a reasoned choice among the alternatives, it must be included or addressed in the environmental impact statement.

Incomplete or unavailable information is made clear in sections titled Assumptions and Limitations so the reader understands how unavailable information was addressed. The EIS summarizes existing credible scientific evidence relative to environmental effects and makes estimates of effects on theoretical approaches or research methods generally accepted in the scientific community.

Knowledge about the biological, physical, and social aspects of ecosystems is, and always will be, incomplete. The ecology, inventory, and management of large landscapes are complex and constantly changing. For example, analysis of the impacts of alternatives on specific plant or animal species prompts questions about population dynamics and habitat relationships. Key relationships and basic data are well established for only a few Tahoe National Forest ecosystems and species. The alternatives were analyzed using the best available information. As data gaps were encountered during analysis, the interdisciplinary team posed the question of whether the missing information was "essential to a reasoned choice among alternatives." The team concluded that while new information could add precision to estimates or better specify relationships; it would be unlikely to significantly change our understanding of the basic relationships that were used to analyze the effects of the alternatives. New information is always welcome, but no missing information was deemed essential to making a reasoned choice among the alternatives being considered in this EIS. In some instances, information was unavailable to confidently estimate environmental effects; the text indicates that this information is incomplete or unavailable. In such situations, the EIS summarizes existing credible scientific evidence relative to the significant effects and makes estimates of effects"

Commenters: 00059, 05568, 06682, 06728, 06742, S0008, S0055, S0066

3.07-9 Dual-sport motorcycles and mixed use: Mixed use decisions would result in a disconnected trail system, forcing riders to utilize dual-sport motorcycles on high and very high difficulty rated trails.

Response: Efforts were made to connect motorized trails through the mixed use determination where safety permitted. An analysis of the effects of the alternatives on difficulty level of trails was added to Chapter 3.07 (Recreation and Visual Resources) of the FEIS. Where it was not possible to connect these trails through approval of mixed use, future opportunities for new trail construction were identified and these are included in the project record.

Commenter: 06784, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

3.07-10 Very high difficulty-level motorcycle trails: The Forest Service has failed to consider the importance of very high difficulty-level motorcycle trails on the Tahoe National Forest in the context of the region.

Response: An analysis of how the alternatives would affect the difficulty levels of motorized trails is included in the Chapter 3.07 (Recreation and Visual Resources) of the FEIS. There are currently 84.5 miles of difficult and extremely difficult NFTS motorcycle trails on the TNF. The Alternatives range from 0 to 2.4 miles of difficult and extremely difficult motorcycle trails being added to the NFTS.

The EIS scoping process provided members of the public an extensive opportunity to share the location and importance of all motorized trails unauthorized for public use within the Tahoe National Forest. The Forest Service reviewed these submissions on a case-by-case basis. The rationale for each recommended route's inclusion in, or exclusion from, the NFTS under the Preferred Alternative is included in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS. The rationale for excluding recommended routes from the action alternatives is available in the project record.

Commenters: 06383, 06410, 06797

3.07-11 "Open Areas" ("Trials Riders"). The Forest Service has failed to designate "Open Areas" for "Trials Riders."

Response: The DEIS scoping process provided members of the public an extensive opportunity to share the location and importance of all areas for motorized use within the Tahoe National Forest. The Forest Service reviewed these submissions on a case-by-case basis. The rationale for each recommended "Open Area's" inclusion in, or exclusion from, the Preferred Alternative is included in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS. The rationale for excluding recommended "Open Areas" from all action alternatives is available in the project record.

Commenters: 06237, 06752

3.07-12 Sound and fire concerns associated with motorcycles. The Forest Service should enforce some sort of reasonable sound, noise, and fire safety control on excessively loud and most likely un-fire safe dirt bikes.

Response: Through the California Vehicle Code, both sound and fire safety mechanisms are already in place. Currently section 38370, governs noise emissions of OHV's operated on public land. For example, non-competition OHV's manufactured on or after 1/1/86 are limited to not more than 96 dBA and OHV's manufactured before 1/1/86 are limited to 101 dBA when measured from a distance of 20 inches. On NFS lands, spark arresters are required on all motorcycles and quads. In addition, this travel management process and the forthcoming MVUM will display all routes and many staging areas for motorized use improving education and enforcement capabilities.

Commenter: 06748

3.07-13 Use volunteers. The Forest Service should utilize volunteers to maintain trails and other recreational facilities to: reduce costs, maintain access, and build relationships between user groups, and between user groups and the USFS.

Response: The TNF acknowledges the value of assistance from our partners to build and maintain our recreation infrastructure. Decisions on specific funding mechanisms for road, trail and other recreational facilities are outside of the scope of this project as defined in Chapter 1 of the SDEIS.

Commenters: 00048, 06446, 06447, 06460, 06480, 06808, S0066

3.07-14 Designation of dispersed sites: The DEIS fails to identify and designate dispersed sites.

Response: The scope of the project is limited to designating National Forest Transportation System roads, trails, and areas for motor vehicle use. This project's decision regarding dispersed sites will be limited to authorizing motorized access to those sites. Designation of dispersed recreation sites, including individual or group camping sites, and associated activities are outside the scope of this decision.

Commenters: 06688, 06742, FC, S0061

3.07-15 Definition of motorized recreation. The Forest Service should use a consistent definition of motorized use.

Response: The FEIS uses a consistent definition of motorized use as follows: "public use of a wheeled motor vehicle on National Forest System lands." The FEIS definition of motor vehicle use includes situations where the motor vehicle use is the primary objective of the visit (driving for pleasure, off-highway vehicle use) as well as situations in which a motor vehicle is used to access non-motorized recreational activities (such as hiking, fishing, photography, horseback riding, and so forth).

Commenters: 06398, 06460, 06738, 06782

3.07-16 Change in class of vehicle (Support): The Forest Service should change the class of vehicle on existing NFTS roads to allow all vehicles on as many roads as safely possible.

Response: Vehicle class changes from "highway legal vehicles only" to "open to all vehicles" results when one of two cases occurs: (1) when the road is maintained for high-clearance vehicles instead of passenger cars, or (2) when the road continues to be maintained for passenger cars but is designated safe for motorized mixed use. Effects of changing class of vehicles are described throughout Chapter 3 (Affected Environment and Environmental Consequences) of the FEIS, including impacts on recreation users, watershed, wildlife, and other resources. Individual roads recommended by the public for change in class of vehicle are addressed in the site-specific responses to comments (presented later in this Appendix).

Commenters: 00009, 00580, 00613, 00660, 01067, 02968, 05636, 06371, 06414, 06424, 06458, 06642, 06704, 06715, 06724, 06730, 06744, 06752, 06796, 06797, S0021

3.07-17 Change in class of vehicle (Opposition): The Forest Service's proposal to change road designations from "highway legal vehicles only" to "all vehicles" will limit recreation opportunities for those with passenger vehicles. These changes in class of vehicles mean that only high clearance vehicles will be able to access certain areas: those with regular highway vehicles will no longer be able to hike and camp in these areas.

Response: Vehicle class changes from "highway legal vehicles only" to "open to all vehicles" results when one of two cases occurs: (1) when the road is maintained for high-clearance vehicles instead of passenger cars, or (2) when the road continues to be maintained for passenger cars but is designated safe for motorized mixed use. Environmental concerns must still be addressed and necessary drainage structures installed and maintained even when a road is maintained for high clearance vehicles.

The diversity of motor vehicle opportunities under each alternative is displayed in Chapter 3.07 (Recreation and Visual Resources) of the FEIS. Individual roads recommended by the public for change in class of vehicle are addressed in the site-specific responses to comments (presented later in this Appendix). In addition, the Preferred Alternative was modified to provide additional motorized recreation opportunities for passenger cars to access high value non-motorized recreation opportunities, such as the Grouse Lakes area.

Commenters: 00459, 00460, 00461, 00462, 00468, 00469, 06424, 06438, 06675, 06688, 06742, S0055

3.07-18 Expenditure of green sticker funds: Green sticker funds should not be used for purposes other than maintaining or expanding off-highway vehicle recreation opportunities.

Response: Each Green Sticker grant given the TNF is provided for a specific purpose. These purposes include :

- developing new trails and related facilities for motorcyclists, snowmobilers, ATV enthusiasts, and 4x4 drivers, including safe parking areas, comfort stations, and more;
- maintaining trails and related facilities for these same enthusiasts;
- providing law enforcement support for management of OHV activity; and
- mitigating environmental damage from OHV activity.

All Green Sticker grants are expended for the specific purpose for which they were provided.

Commenters: 06802, 06812

3.07-19 Off-highway vehicle impacts to non-motorized recreationists: Off-highway vehicle use does not adversely affect non-motorized recreation opportunities.

Response: During the public comment period on the DEIS, the Forest Service received extensive comments regarding the adverse impacts associated with noise from motor vehicle use on non-motorized recreation users. To address these concerns, an analysis of impacts on quiet recreation is included in Chapter 3.07 (Recreation and Visual Resources) of the SDEIS and FEIS.

Commenter: 06370

3.07-20 Connectivity: Maintenance Level 3 and 4 roads are a vital component of a managed OHV trail system, providing connectivity to designated OHV trails.

Response: As described in Chapter 3.07 it is acknowledged that providing mixed use on Maintenance Level 3-5 roads "… contribute to the continuity of the motor-touring opportunities by reducing dead-end routes, increasing loop and connector opportunities, and providing access to a diversity of dispersed recreation activities for non-highway-legal vehicle operators, providing beneficial effects to motorized recreation opportunities."

The effects on the connectivity of the designated OHV trail system resulting from approval of mixed use is described for each alternative in Chapter 3.07 (Recreation and Visual Resources) of the FEIS.

Commenter: FI, S0008, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

3.07-21 Historical enforcement: The SDEIS states Maintenance Level 3 roads as being previously closed to OHV use. While some ML 3 roads have been signed closed, all ML 3 roads were not closed as stated in the SDEIS. ML 3 roads are the connectors to designated OHV routes."

Response: Although the Tahoe National Forest has not historically enforced it, Maintenance Level 3-5 roads meet the Federal definition of a "Highway." The California Vehicle Code (CVC) requires motor vehicles operated on "Highways" be highway-legal and be operated by licensed drivers.

As described in Chapter 3.07 (Recreation and Visual Resources) of the FEIS, it is recognized that many of the roads provide important connectors between OHV routes. The alternatives vary in the amount of mixed use proposed on these roads to provide such connectivity. The impacts on OHV route connectivity are described for each alternative in Chapter 3.07.

Commenter: FG, FI, S0008, S0014, S0015, S0018, S0028, S0062, S0063, S0064, S0067, S0069

3.07-22 Effects of prohibiting cross country travel on ROS not accounted for: The number of required plan amendments by alternative in regard to both ROS and changes to the season of use is displayed in Table 3.07-1. Addressing only "*additions to the NFTS*" is literally a trick. The closure of the existing and presently in-use but unclassified (unauthorized) trails in ROS classes SPM, RN, and R is not addressed. This is a conspicuous omission, because the closures will alter the nature and type of activities that are presently occurring in these motorized ROS areas. Without this analysis and disclosure, the magnitude of the change and the cumulative effects cannot be determined from this Travel Management SDEIS.

Response: Recreation Opportunity Spectrum (ROS) classes and their associated standards and guidelines are established for each Management Area in the Forest Plan. These standards and guidelines are permissive, that is they determine what types of management activities are allowed in each management area. They do not require any level of development or use to actually occur. Rather they represent ceilings on the maximum amount of resource development or management activities which could be permitted. They do not dictate that such development or activities actually occur.

This is very similar to city or county zoning ordinances. As described in the Chapter 3.07 of the FEIS the Alternatives are consistent with the ROS standards and guidelines.

The effects on both motorized and non-motorized recreation opportunities are fully described in Chapter 3.07 (Recreation and Visual Resources) of the FEIS.

Commenter: S0008

3.07-23 Increased mileage of non-motorized trails Just how, exactly, the non-motorized trail mileage in the DEIS Table 2.07-14 jumps from 286.3 miles in the No Action Alternative to 1,112.9 miles in the Preferred Alternative is a substantial omission. This Table was omitted from the SDEIS.

Response: Table 2.07-14 was included in only in the DEIS, it was not included in the SDEIS to prevent confusion for the reader. Table 3.07-14 in the DEIS should have had the row titled "*Trails open only to non-motorized users"* actually read *"NFTS Trails and unauthorized routes open to only non-motorized users"* The numbers in the row represented the amount of NFTS non-motorized trails, combined with the number of un-authorized routes not added to the NFTS as motorized roads trails. Unauthorized routes not added to the NFTS as motorized roads and trails were considered to be available for non-motorized recreation.

Commenter: S0008

3.07-24 Use conflict (definition): The use of the phrase "*user conflict*" has been changed. It has not changed in substance, only in words. It is now called "*use conflict*." However, the indicator measures all "*indicate*" proximity, and nothing else. Apparently, there is some kind of conflict when motorized and non motorized users come close to one another. However, we don't know what that conflict is. Nowhere in the SDEIS is this "*conflict*" defined.

Results from the NVUM indicate that crowding is not an issue and therefore there may not be the use conflicts which the Forest Service then used in the development of alternatives.

Response: Comments regarding user conflict were raised during public scoping for the NOI and comments on the DEIS. There were numerous comments stating that Tahoe NF needed to develop a motor vehicle transportation system that minimized conflicts between motorized and non-motorized recreation users.

Recreation research has identified that conflict is almost always identified as "the impact of mechanized recreationists upon those who prefer non-mechanical activities" (Jackson and Wong 1982). In comparison to comments received from quiet recreation proponents, there were only limited comments from motorized recreation users expressing feelings of conflict with non-motorized users.

Several comments in response to the NOI and DEIS indicated that unmanaged OHV use was a disruption to quiet recreation activities such as dispersed recreation, hiking, equestrian use, viewing wildlife, and camping. Specific comments included complaints that excessive noise from OHV use diminishes the quality of experience for people participating in non-motorized recreation activities.

Other comments indicated that visual and environmental impacts (e.g., streambank erosion, vegetation damage, dust) occurring from unmitigated OHV use was disturbing to non-motorized recreation users and leading to their displacement from certain areas. Forest Service research indicates that noise from motorcycles us detected less than five percent of the time at a distance of ½ mile from the nearest motor vehicle route (Harrison 1975). For the SDEIS, a buffer of ½ mile or more from an open motor vehicle route or established "Open Area" was used to define outer boundaries of "quiet" areas. This indicator was based on the assumption that areas located more than ½ mile from an open motor vehicle route or established "Open Area" provide the best opportunities for quiet recreation in the project area. This was carried forward in the FEIS.

Commenter: S0008

3.07-25 Quiet recreation (legal standard): There is no legal standard for how much noise, dust or physical presence should be allowed in the general access portions of the Forest to trigger any duty to act to resolve user conflicts. Yet this Travel Management Project uses the allegation as one of its foundational guidelines (indicator measures).

Response: Quiet recreation is used as a measurement indicator to address how each alternative addresses significant issues identified in scoping, specifically non-motorized recreation opportunities. The number of acres located ½ mile away from roads, motorized trails, and boundaries was used to analyze the opportunity for non-motorized and "quiet" recreation. This indicator measure was not used in the context of legal standard to trigger any specific action. Rather it was used to provide a relative comparison between the alternatives of the impacts to quiet recreation. There was no threshold established for a specific amount of quiet recreation to be provided.

Commenter: S0008

3.07-26 Quiet recreation (science for ½ mile distance): Forest Service use of a ½ mile distance for the analysis of quiet recreation is not supported by the literature cited in the SDEIS.

Response: Forest Service research indicates that noise from motorcycles us detected less than five percent of the time at a distance of ½ mile from the nearest motor vehicle route (Harrison 1975). For the SDEIS, a buffer of ½ mile or more from an open motor vehicle route or established "Open Area" was used to define outer boundaries of "quiet" areas. This indicator was based on the assumption that areas located more than ½ mile from an open motor vehicle route or established "Open Area" provide the best opportunities for quiet recreation in the project area. This was carried forward in the FEIS.

Commenter: S0008

3.07-27 Quiet recreation (definition): The Forest Service has not established that areas within ½ mile of a motorized road or trail not "quiet" or defined what "quiet" is.

Response: The assumption was documented in Chapter 3.07 (Recreation and Visual Resources) of the FEIS that the area of influence (dust, noise) of motorized use on non-motorized (quiet recreation)

opportunities is ½ mile from motorized activities. Forest Service research indicates that noise from motorcycles us detected less than five percent of the time at a distance of ½ mile from the nearest motor vehicle route (Harrison 1975). For the FEIS, a buffer of ½ mile or more from an open motor vehicle route or established "Open Area" was used to define outer boundaries of "quiet" areas.

Since this Measurement Indicator was used to address the relative impacts to non-motorized recreation opportunities between the alternatives it was not necessary to establish that areas within ½ mile of a motorized road or trail not "quiet" or to define what "quiet" is terms of a specific decibel level.

Commenter: S0008

3.07-28 No requirement for providing quiet recreation: There is no regulatory nor Forest Plan requirement to provide for "quiet" recreation in general Forest areas.

Response: There is no requirement for providing any specific level of quiet recreation. However, Significant Issue #2 as described in Chapter 1 of the FEIS is that public motorized use of roads of roads and trails as described in the Proposed Action will adversely affect non-motorized recreation experiences. Areas within ½ mile of motorized, roads, trails, and "Open Areas" were used to address to address this issue in the FEIS. There was no specific amount of quiet recreation established as a threshold for any alternative.

Commenter: S0008

3.07-29 Discrepancy in visitor use figures: The Forest Service has a discrepancy in the visitor use figures used in the EIS, showing 1,791,300 VUD's in one location and 3,930,000 elsewhere.

Response: The 3.9 million figures came from the 2000 NVUM survey. In the 2000 NVUM survey 100% of downhill skiing use was included even though only a portion of the ski areas may have been located on NFS lands. The 1,791,300 figures came from the 2005 survey and only included that portion of the downhill skiing use which occurred on NFS lands. The figures were corrected in the FEIS to reflect the 2005 NVUM survey results.

Commenter: S0008

3.07-30 Forest Plan Management Area ROS classes and quiet recreation: The Forest Plan establishes ROS Classes for each Management Area. The SDEIS implies that these areas should be managed for quiet recreation. This is not consistent with the Forest Plan direction.

Response: The alternatives are consistent with the ROS classes established by the Forest Plan for each Management Area. There was no implication made that these management areas should be managed for quiet recreation.

Commenter: S0008

Section 3.08: Transportation

3.08-1 Traffic analysis: The Forest Service should use well-established Federal Highway Administration traffic analysis tools to investigate the effects of the alternatives on the National Forest Transportation System.

Response: Traffic analysis tools are designed for use in an urban environment for such items as location of detours, installation of stop lights and traffic flows on freeways with much higher traffic volume. We are aware of no practical applications of such models in a National Forest Travel Management setting.

Commenter: 06739

3.08-2 Maintenance agreements, cooperative agreements, and permits: The EIS should disclose the effects of the alternatives on existing road maintenance and cooperative agreements as well as permits between the Tahoe National Forest and partners like Pacific Gas and Electric (PG&E) and Sierra Pacific Industries.

Response: Permits and Road Maintenance and Cooperative Agreements are outside the scope of this project. The project proposal and alternatives would only affect public motorized travel on the NFTS. People and/or companies with Special Use Permits would still be able to use the roads that apply to their permit and these impacts are considered.

Commenters: 00021, 06252, 06424, 06451, S0019

3.08-3 Decommissioned roads: Previously decommissioned roads should not be considered for future public motorized use.

Response: Between publication of the DEIS and preparation of the SDEIS, the Forest Service conducted a comprehensive review of the previous 15 years of NEPA decisions involving road or trail management. The DEIS states that 100 miles of roads have previously been decommissioned. The review found an additional 24 miles of roads scheduled for decommissioning, bringing the total to 124 miles of roads previously decommissioned or currently scheduled for decommissioning. All roads and trails previously decommissioned or scheduled for decommissioning were excluded from future motorized public use.

Commenter: 00028

3.08-4 Affordability: The Forest Service does not have the funding to maintain its existing transportation system, let alone new roads and trails. In addition, the DEIS does not address the cost of the NFTS.

Response: The affordability of the NFTS is analyzed in Chapter 3.08 (Transportation) of the FEIS in accordance with 36 CFR 212.55. A section on development of the Annual Road Maintenance Plan is included. In addition, the Travel Management Rule requires the Forest Supervisor to consider the cost of maintaining the designated route system. The Preferred Alternative reduces the cost of maintaining the NFTS compared to the existing condition.

The Forest Service maintains system roads to one of the five defined levels of maintenance assigned to the road. The majority of the NFTS is secondary roads assigned Maintenance Level 2. The objective at this level is to accommodate high clearance vehicles and as such may not be suitable for passenger cars.

Funding available to the Forest Service for road maintenance fluctuates. In leaner times, the priority for scarce funds is often those primary system roads that are maintained for use with passenger cars (Maintenance Levels 3, 4 and 5).

Commenters: 00026, 00028, 00029, 00034, 00064, 00081, 00458, 00571, 00604, 00683, 00822, 01058, 01067, 01112, 04560, 05639, 06216, 06248, 06266, 06270, 06424, 06475, 06511, 06544, 06593, 06642, 06684, 06685, 06703, 06704, 06715, 06716, 06725, 06729, 06732, 06753, 06779, 06789, 06792

3.08-5 Loss of green sticker funds: Mixed use decisions restricting non-street legal vehicles from Maintenance Level 3 to 5 roads would reduce sales of green sticker licenses, reducing funds available for OHV management on the Tahoe National Forest.

Response: Loss of green sticker funds is outside the scope of this decision. Affordability of the motorized road and trail system was one of the factors used in developing the Preferred Alternative. The affordability of the road and trail system is addressed in Chapter 3.08 (Transportation) of the FEIS.

The TNF seeks maintenance funding from any appropriate source and appreciates the efforts of organizations that assist in obtaining grants and other funds.

Commenters: 06270, 06784, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

3.08-6 Coordination with counties: The Forest Service should consult with the counties to provide an interconnected transportation system for non-highway legal vehicles.

Response: The Forest Service has regularly sought county input. Tahoe National Forest staff attended boards of supervisors meetings and met with the interested counties' public works departments. No responses regarding mixed use were received.

Commenter: 06270, 06724

3.08-7 Motorized mixed use analyses: Motorized mixed use analyses fails to include adequate crash data. In addition, there is inadequate analysis of safety risks.

Response: Motorized Mixed Use analyses and reports are contained in the project record. Available crash data and dangerous road features such as steep side slopes are identified in the reports.

Commenters: 02968, 06414, 06424, 06554, 06715, 06730, 06740, 06745, 06752, 06790

3.08-8 Consistency with the California Vehicle Code: The Forest Service inaccurately defines Maintenance Level 3 roads as highways under the California Vehicle Code. A reference to California Vehicle Code Division 16.5 should be provided.

Response: NFTS roads are each maintained in one of three categories: Maintenance Level 1 roads closed to motor vehicles in long term storage (closed roads), Maintenance Level 2 roads maintained for high clearance vehicles only (high clearance roads), and Maintenance Level (ML) 3 to 5 roads maintained for standard four-wheel passenger cars (passenger car roads).

As stated in a letter written on 1/13/09 from the Regional Forester to Forest Supervisors "Consistent with 23 USC 101 and 23 CFR 460.2, the Forest Service considers these ML 3 to 5 roads to be public roads and highways. Under 36 CFR 212.5(a)(l), state traffic laws generally apply on National Forest System roads. Therefore, anyone operating a motor vehicle on ML 3 to 5 roads in California must have a valid driver's license in accordance with Forest Service Manual 7700, Chapter 7730, Section 7731.2(5)."

Those roads maintained for standard passenger cars are subject to the Highway Safety Act and are considered by the Forest Service to be highways for purposes of the California Vehicle Code (CVC). The Highway Safety Act necessitates that a qualified engineer for the Forest Service does a mixed-use analysis to determine crash probability and crash severity. Designating NFTS roads for motorized mixed use involves safety and engineering considerations. The risk is lowered when there is mitigation such as: separate use, signing, informed communication, road maintenance, and restrictions.

The California Vehicle Code (CVC) requires motor vehicles operated on highways be highway-legal and be operated by licensed drivers. The CVC allows the operation of non-highway-legal vehicles operated by unlicensed drivers on roughly graded roads. The Forest Service considers roads maintained for high clearance vehicles (Maintenance Level 2) as roughly graded and considers operation of OHVs on these roads as consistent with state law.

The Forest Service has worked closely with the California Highway Patrol (CHP) who has authority for enforcing the California Vehicle Code to develop a mutual understanding on how to apply California Vehicle laws on National Forest System lands. The Forest Service met with CHP leadership and we have a common understanding of how federal regulations intersect with the California Vehicle Code.

Higher standard roads may be designated to allow mixed use of non-highway-legal (OHV) and highway-legal (passenger cars) vehicles based on an engineering safety analysis in accordance with direction contained in Forest Service Engineering manual 7700-30 "Guidelines for Engineering Analysis of Motorized Mixed Use on National Forest System Roads". The TNF used the most recent safety and traffic data in this engineering safety analyses. That analysis which supports the decision being made to allow motorized mixed use on Maintenance Level 3-5 roads considers safety risk and the probability and severity of accidents.

The California Vehicle Code Division 16.5 is titled Off-Highway Vehicles and it has Chapter 1, General Provisions, Chapter 2 Registration, Chapter 5 Off-Highway Vehicle Operating Rules, Chapter 6, Equipment; and Chapter 7 has codes for All-Terrain Vehicles including: safety,

monitoring, conditions for operating, violations. Refer to http://www.dmv.ca.gov for more information.

Commenters: 02956, 06237, 06270, 06704, 06724, 06744, 06752, 06796, S0005, S0008, S0014, S0015, S0018, S0055, S0062, S0063, S0064, S0055, S0067, S0069

3.08-9 Road and trail maintenance reporting: The Forest Service should provide annual updates on the status and maintenance of the Tahoe National Forest Transportation System.

Response: The TNF publishes a "Forest Facts and Figures" report annually. Part of this report includes general data on road and trail work, such as miles of road decommissioned, as well as updated road and trail total mileages.

Commenter: 06725

3.08-10 Tracking unclassified roads: The Forest Service should document and record unauthorized roads in INFRA and the transportation atlas.

Response: All of the unauthorized routes are contained in the travel management project database, and were fully analyzed and considered for additions to the NFTS. The INFRA database is updated on a continual basis.

Commenter: 06730

3.08-11 Motor vehicle use map: Routes scheduled to be closed should not appear as existing system roads and trails on the motor vehicle use map (MVUM).

Response: The MVUM map will not display closed roads (including roads for which a closure decision has been made). We appreciate the public's help in identifying data and mapping errors. Such errors can be corrected in subsequent Motor Vehicle Use Maps, since the map will be produced annually.

Commenter: 06716

3.08-12 Signing: The Forest Service should appropriately sign roads and trails designated for motorized use on the motor vehicle use map.

Response: Road and trail signing is scheduled to be accomplished over the next 3 to 5 years as funding permits.

Commenter: 06248, FA

Section 3.09: Inventoried Roadless Areas and Special Areas

3.09-1 Roadless (General comments): The Forest Service should remove existing motorized routes from Inventoried Roadless Areas where there is not a clear and compelling management justification for their existence. Additions of motorized trails to the NFTS should be prohibited in Inventoried Roadless Areas to protect intact headwater areas, wildlife values, and recreation opportunities.

Existing NFTS roads and motorized trails as well as motorized trail additions to the NFTS should be allowed in Inventoried Roadless Areas. The DEIS fails to show that inclusion of these routes in the NFTS would have adverse effects on the pristine qualities afforded by roadless areas.

Respondents both supported and did not support OHV use in roadless areas. They stated many trails have been in the roadless areas historically, and use predated roadless rules. Commenters were concerned that when the document said no roads were added to roadless, readers would understand that to mean no trails, as well.

Response: Closure of existing NFTS roads and trails is beyond the scope of this decision.

The Code of Federal Regulations (36 CFR Part 294, Subpart B – protection of Inventoried Roadless Areas, 294.11) describes nine roadless area characteristics. Roadless area characteristics are described as "resources or features that are often present in and characterize Inventoried Roadless Areas":

1. high quality or undisturbed soil, water, and air;
2. sources of public drinking water;
3. diversity of plant and animal communities;
4. habitat for threatened and endangered, proposed, candidate and sensitive species for these species dependent on large, undisturbed areas of land;
5. primitive, semi-primitive non-motorized, and semi-primitive motorized classes of dispersed recreation;
6. reference landscapes;
7. natural appearing landscapes with high scenic quality;
8. traditional cultural properties and sacred sites; and
9. other locally identified unique characteristics – solitude.

Each motorized trail considered for addition to the NFTS was evaluated individually and collectively for its impact on the above roadless area characteristics. Alternative 1 (the No Action Alternative) does not prohibit cross country travel and allows motorized use to continue on unauthorized routes within Inventoried Roadless Areas. All of the action alternatives improve the roadless area characteristics by prohibiting cross country travel and reducing the miles available for motorized use in Inventoried Roadless Areas.

Of the action alternatives, Alternatives 2 and 5 do not specifically use impacts to roadless area character as criteria for adding routes to the NFTS. Alternative 7 would have a slight negative impact to roadless area character. Alternatives 3 and 4 do not add any routes in Inventoried Roadless Areas to the NFTS. Alternative 6 (the Preferred Alternative) does not add any routes to the NFTS that have significant impacts individually or collectively on any of the roadless area character criteria.

The Preferred Alternative adds existing unauthorized trails to the NFTS in specific Inventoried Roadless Areas as described in Chapter 3.09 (Inventoried Roadless Areas & Special Areas) of the FEIS. All of these road additions are short spurs, averaging 100 feet in length, and come off existing

authorized roads to access existing dispersed recreation sites.The roadless area character of each Inventoried Roadless Area is described in Chapter 3.09 of the FEIS.

Commenters: 00016, 00028, 00058, 00478, 00595, 01363, 01859, 01864, 02185, 02805, 04572, 06248, 06439, 06446, 06447, 06554, 06668, 06702, 06715, 06717, 06721, 06750, 06752, 06753, 06787

3.09-2 Roadless (State of California): The State of California has filed a massive lawsuit against four national forests in Southern California. The Forest Service should ensure that the State will not sue them over this decision as in Southern California.

California SB742 makes it clear that the State of California believes that no new roads or trails should be approved in Inventoried Roadless Areas, since it will not support their maintenance.

Response: The Forest Service has briefed the State of California regarding proposed actions in Inventoried Roadless Areas. The State has provided no indication of any intent to file a lawsuit at this time.

California SB742 pertains to state funding for off-highway vehicles through the grant process ("green sticker dollars"). The Forest Service is responsible for the operation and maintenance of NFTS roads and trails, including those in roadless areas. SB742 prohibits using grant monies for the operation and maintenance of any NFTS routes designated in Inventoried Roadless Areas after January 1, 2009. The Forest Service will comply with that stipulation for the expenditure of any grant monies. The context of the lawsuit being referenced by the commenters is in regards to roadless area direction found in revised forest plans, not travel management documents.

Commenters: 06248, 06812, S0023

3.09-3 Research Natural Areas (Road closure/decommissioning): The Forest Service should close and decommission roads and trails in Research Natural Areas unless overriding safety issues are involved.

Response: Closure and/or decommissioning of system roads and trails, including those within RNAs, is outside of the scope of this decision. However, there are no proposed road or trail additions to the NFTS located within RNAs. Unauthorized routes that exist within RNAs would revegetate naturally.

Commenter: 06248

3.09-4 Research Natural Areas (Route additions): The Forest Service should not add motorized routes to the NFTS in Research Natural Areas.

Response: The Preferred Alternative does not propose the addition of any motorized routes to the NFTS within RNAs.

Commenter: 06750

3.09-5 SNEP designated Late Successional Old Growth (LSOG): The Forest Service should consider closing roads and trails in SNEP designated LSOG rank 4 or 5 habitats.

Response: The Sierra Nevada Ecosystem Project (SNEP) Late Successional Old Growth (LSOG) 4 and 5 maps represent landscape scale maps of old forests developed for policy analysis. These landscape polygons were delineated based on changes in the mosaic (types and mixtures) of patch types. Local resource experts delineated the polygons using aerial photography, field data, and satellite maps.

The Sierra Nevada Forest Plan Amendment (SNFPA 2004) utilized the SNEP LSOG 4 and 5 in the designation of Old Forest Emphasis Areas (OFEA) land allocations. The standards and guidelines for the OFEA land allocations in the SNFPA 2004 do not include and standards and guidelines regarding motor vehicles. The "Desired Conditions" in the SNFPA 2004 for Old Forest Emphasis Areas are limited to forest structure and stand composition. There are no desired conditions related to motor vehicle use. The "Management Intent" and "Management Objectives" contained in the SNPA 2004 are similarly only related to stand conditions and fuel treatments. They contain no direction related to motor vehicle use.

The effects on Old Forest Emphasis Areas from the alternatives are described in Chapter 3.03 (Terrestrial and Aquatic Species) of the FEIS. All of the action alternatives reduce the amount of motor vehicle use with OFEAs and reduce habitat fragmentation.

Commenters: 06248, 06734

3.09-6 Road closures in or near Special Interest Areas: The Forest Service should close roads and trails in or near special interest areas including scenic, geological, botanical, zoological, paleontological, and historical areas.

Response: Closure of existing NFTS roads and trails, including those located within Special Interest Areas, is outside the scope of this decision. Effects of the alternatives on Special Interest Areas are described in Chapter 3.09 (Inventoried Roadless Areas & Special Areas) of the FEIS. Roads and trails located near Special Areas provide important access to the unique features found within Special Areas. For example, the picnic area and road near Placer County Big Tree Grove Botanical Area provides access to the northern most grove of giant sequoia. The TNF LRMP has already determined that it is appropriate to foster public use and enjoyment of these areas (TNF LRMP Appendix C of the FEIS).

Commenters: 06248, 06750

3.09-7 Changes in Roadless Area Information: In the Inventoried Roadless Areas (IRA), there are changes in the acres between the DEIS and the SDEIS. There are also discrepancies with the mileage tables for the IRAs. The assertions made in the SDEIS are not all correct. All the routes in each IRA should be listed in the text and shown on maps.

Response: The DEIS had the original numbers from the 1990 Tahoe National Forest Land and Resource Management Plan. The new numbers in the SDEIS are based on the changes in the land status that has been updated and is therefore more accurate. The routes considered to be added are listed in Appendix A (Site Specific Road, Trail and Open Area Information) and most are discussed briefly in Chapter 3.09 (Inventoried Roadless Areas & Special Areas) by each special area. The tracking of changes between DEIS and SDEIS for each resource would have complicated the readability and added to the volume of this document. While the change between the DEIS and the SDEIS was not easily tracked for the public, it was not the change but the analysis of the overall impact to each IRA that was considered. The maps of the IRAs were not added to the SDEIS or FEIS to keep down the length of the document. The maps can be viewed in the DEIS and are part of the project record.

Commenter: S0055, S0066

3.09-8 Citizen Inventoried Roadless Area Maps: The addition of Citizen Inventoried Roadless Area Maps to the document would have made the document better understood.

Response: The maps of the Citizens Inventoried Roadless Areas were not added to the FEIS to keep down the length of the document. Those maps are included in our GIS database and are available as part of the project record.

Commenter: S0055

3.09-9 Resource Effects Analysis within Inventoried Roadless Areas: The environmental consequences on various resources within the roadless areas were not analyzed for this project.

The effects on resources do not change based on a land-use allocation. For example, erosion could still occur if the road is in an Inventoried Roadless Area or not. The effects of erosion were addressed for the specific roads and for the overall effect on the watershed (Section 3.02 Wathershed Resources: Geology, Soil, Hydrology) of the FEIS. While it is true that a watershed would have less sediment delivery to the creek in a lightly roaded area, this is not always the case so watersheds are not broken out by land-use allocation. The larger blocks of old-forest habitat for wildlife and plants were addressed in the specific sections (3.03 Terrestrial and Aquatic Species and 3.06 Plant Communities of the FEIS) wherever those blocks occurred. The other resources that may be affected by the proposed actions occurring in the Inventoried Roadless Areas are addressed under that specific resource. In addition, the roads that were added to the Inventoried Roadless Areas are listed in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS and the resource effects are listed as needed.

Commenter: S0055

3.09-10 Citizen Inventoried Roadless Areas The analysis of Citizen Inventoried Roadless Areas is violation of the 1984 California Wilderness Act where Congress specifically prohibited the Forest Service from any further "*roadless area review and evaluation of National Forest System lands in the*

State of California for the purpose of determining their suitability for inclusion in the National Wilderness Preservation System." Without Congress' express consent.

Response: The analysis of Citizen Inventoried Roadless Areas (CIRAs) was included in the analysis because CIRAs were identified by commenters as areas of the forest that are important to them as potential future wilderness areas. The analysis of CIRAs or any other area that meets the statutory definition of wilderness is not a violation of the 1984 California Wilderness Act, because that law has been superseded by subsequent legislation and planning direction. Forest Service Handbook 1909.12, Chapter 70, describes the process for identifying and evaluating potential wilderness in the National Forest System. Based on the inventory criteria found in FSH 1909.12. 71.1, the CIRAs and Inventoried Roadless Areas discussed in FEIS qualify for potential wilderness inventory in the next forest planning process on the Tahoe National Forest.

Commenter: S0008, S0023

3.09-11 Roadless Area Management Direction The SDEIS suggests that roadless characteristics would be affected if the current travel situation were to remain the same in areas near Downieville. Please remove this and all other references that suggest IRA's need to be, should be or is preferred to be, managed by special characteristics other than multiple use. The roadless characteristics would not be affected since these areas were designated by Congress for multiple use. The document seems to have redefined "roadless" characteristics by insinuating that roadless is *"without roads"* rather than *"no new roads"*.

Response: The 2001 Roadless Area Conservation Rule (RACR) has been used as the legislation guiding Forest Service roadless area direction in the FEIS. The roadless area values and characteristics as identified in the 2001 RACR serve as the foundation of the FEIS analysis of Inventoried Roadless Areas.

Commenter: S0008

Section 3.10: Adjacent Ownerships and Permitted Activities

3.10-1 Motorized access for mining: The DEIS fails to disclose how proposed road closures would harm existing mining claimants within the Tahoe National Forest. The DEIS does not present any management tool to allow mineral exploration as a means to accommodate the "free and open" mandate of the Mining Law.

Response: If a mining claim has an approved Plan of Operation, access is approved and granted through that Plan, including the use of roads or trails closed for other uses, if needed. As for exploration, access is restricted to those roads granted to the rest of the public, but if resources are located and a Plan of Operation is filed and approved, access is governed through that plan. If public access is proven to impact mining operations, this may be addressed in the Plan of Operations and could include road or trail closure for public access.

Commenters: 00037, 00566, 02936, 06242, 06477, 06511, 06593, 06670, 06685, 06792, 06794, 06795, S0006, S0007, S0009

3.10-2 Impacts to private landowners: The Forest Service should consider impacts to private lands within the Tahoe National Forest boundary.

Response: An analysis of the impacts to private landowners from implementing the various alternatives is displayed in Chapter 3.10 (Adjacent Ownerships) of the FEIS.

When NF road/trail management objectives differ from private land management objectives there is potential for conflicts. Generally these private land interface areas arise where the private land owners have different perceptions about how NFS roads/trails adjacent or near their property should be managed. The effects to private landowners were analyzed by considering the amount of motor vehicle use within ¼ mile of private land.

All of the action alternatives reduce the number of miles of roads/trails open to public motor vehicle use within ¼ mile of private land. In addition, all of the action alternatives also prohibit cross country travel on NFS lands. Both of these actions are expected to reduce the proliferation of additional unauthorized routes on NFS lands adjacent to private land and reduce any adverse effects associated with motor vehicle use on private landowners.

No roads or trails are proposed for addition to the NFTS on private land where the Forest Service does not have a valid right-of-way. For any additions to the NFTS on National Forest System lands requiring access across private land to reach them, mitigation measures are specified in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS requiring permission to first be obtained from the private landowner to grant public access across their lands. Once this permission is obtained, the portion of the road/trail on NFS lands would be added to the NFTS motorized recreation opportunities and put on the Motor Vehicle Use Map (MVUM.) Prior to the permission being obtained, public use of the portion of these roads/trails on NFS lands would be prohibited. If the landowner is unwilling to give permission for public access, these roads/trails would not be added to the NFTS motorized recreation opportunities and public use would be prohibited.

Commenters: 00010, 00019, 00281, 02559, 02968, 06378, 06424, 06608

3.10-3 Right-of-ways: The DEIS maps show existing NFTS roads and trails on private lands for which the Forest Service does not have a valid right-of-way.

Response: Between the DEIS and SDEIS a comprehensive review of the existing NFTS was conducted for each road and trail to determine if the Forest Service had a valid right-of-way. Any route which crossed private land for which the Forest Service did not have a valid right-of-way was removed from the NFTS and the alternatives. A total of 124.5 miles were removed from the NFTS on private land where the Forest did not have a valid right-of-way. This information was carried forward in the FEIS.

Commenters: 00021, 05634, 06252, 06424, 06805, S0021, S0038, S0057

3.10-4 Impacts to PG&E and SPI lands: The Forest Service needs to consider the impacts from management of the NFTS routes on lands owned by Pacific Gas and Electric (PG&E) and Sierra Pacific Industry (SPI). Any additions to the NFTS also need to consider impacts to PG&E and SPI owned lands.

Response: Management (including signage) of NFTS roads and trails on lands owned by PG&E and SPI will be conducted in same manner as routes on NFS lands. Between the DEIS and SDEIS a comprehensive review of right-of-ways was conducted. This information was carried forward in the FEIS. No routes on private lands without a valid right-of-way will be added or shown on the Motor Vehicle Use Map (MVUM). Management of private roads on private lands is the responsibility of the land owner.

Commenters: 00021, 06424

3.10-5 SPI policy on motorized public use: The claim "SPI has stated that they are opposed to public OHV use on their lands" is unsubstantiated and must be struck from the document."

Response: In their comment letter on the DEIS SPI stated; "*Of great concern to SPI are many of the route designations and how public access to the routes will adversely affect our ability to control access to our private roads and land base. Many examples already exist of trespass and unauthorized use creating damage to SPI roads, plantations, meadows, riparian zones, archaeological sites, highly erosive soils and sensitive plant and wildlife areas. It appears no attempt was made to check the validity, logic or usefulness of the designated routes or how many of these routes will negatively affect TNF neighbors. Some examples of these inadequacies are:*

- *Many route designations stop at the entrance of blocks of SPI property but the road system continues into SPI property as an SPI private road. The designation leaves SPI's roads and property wide open to OHV trespass.*
- *Many route designations pass through large blocks of SPI property leaving our private spur roads wide open to OHV trespass."*

In addition, in their brochure "*Sierra Pacific Industries – Forest Use Guidelines*" the following recreational day use activities are allowed on their private land: Hiking, Mountain Biking, Hunting, Fishing, Horseback Riding, Birding, Special Group permitted uses. The following recreational activities are listed as not allowed: campfires and overnight camping, any illegal activity, off-road use of motor vehicles, and trail building. The brochure also states under "Access" that "Access methods include walk-in, bicycle, or horseback. In **some areas**, motor vehicles are allowed but only on **established roads**.

Based on this information the Forest Service decided not to propose any additions to the NFTS which required access through SPI property for which the Forest Service did not have a valid right-of-way.

Commenter: 02559, 06424

3.10-6 Access by private landowners: The Forest Service should grant access to private property owners to access to their lands, even under seasonal closures.

Response: Road Use permits will be granted to all private property owners needing access over unauthorized routes needed to access their property. Road use permits will also be granted to private property owners to access their lands on roads subject to seasonal closures for the public.

Commenters: 00021, 04541, 06475, 06715, 06780

3.10-7 Show routes crossing private land: The Forest Service showed routes leading to private property, traversing private property, and exiting private property. A large number of roads were created with Federal funds to access Federal land beyond the private property boundaries. By omitting these roads and allowing the private property owners to close the access roads, they are now the only ones that have access to the Federal lands beyond their property and the roads previously built by Federal funds. This deprives the public from accessing those federally funded road and public lands beyond the private property boundaries.

The Forest Service should pursue obtaining right-of-ways across private land.

Response: The Forest Service has no legal authority to add roads or trails to the NFTS across private land without a valid right-of-way.

Existing NFTS roads isolated behind private land on which there is no valid right-of way, will still be shown on the Motor Vehicle Use Map. The public will be allowed to continue to use these roads and trails provided access to them through the private property is not prohibited by the private land owner. Any proposed additions to the NFTS which cross private land include a mitigation measure in Appendix A (Site Specific Road, Trail and Open Area Information) of the FEIS that permission for public access must first be obtained from the private landowner prior to opening the portion of the route on NFS land.

Prescriptive easements may be pursued by any private individuals with the private land owners to gain access across their land.

The TNF routinely works with private land owners who have lands adjacent to NFS lands and/or within the Forest boundary. The TNF will continue to work with private land owners regarding obtaining right-of-ways across private land.

Commenters: 00021, 00028, 00032, 00604, 00612, 00658, 00661, 00666, 01112, 02580, 02936, 02956, 02968, 05283, 06204, 06248, 06274, 06382, 06397, 06608, 06704, 06732, 06748, 06752, FC

3.10-8 Regulatory actions on private lands (SPI): SPI is subject to the regulatory actions by the Regional Water Quality Control Board for sedimentation emanating from TNF controlled roads crossing SPI land. Other than mutually agreed to historically gated systems, SPI has no control over the timing or extent of the public use of these roads. The Regional Board views any actual or potential impact to water quality to be the responsibility of the landowner, regardless of who controls the road.

Response: NFTS roads crossing private land, including SPI land, will be maintained to meet Regional Water Quality Control Board water quality standards for sedimentation. This includes roads with changed maintenance levels from "Maintained for passenger cars" to "Maintained for high clearance vehicles."

Commenter: 06424

3.10-9 Analysis of private lands: The DEIS states that it does not include any private or other Federal lands in the planning area for alternatives. There should be no further discussion of private lands.

Response: Roads or trails to or through private lands affect National Forest System lands, although the Forest Service does not have the legal authority to designate roads or trails on privately owned lands without first obtaining an easement. Thus, the effects of these roads are discussed in the document so that an informed decision can be made, especially about the cumulative effects of all roads and trails within the Tahoe NF.

Commenter: 02559

Section 3.11: Society, Culture and Economy

3.11-1 Economic effects (Motor vehicle use): The Forest Service should adequately account for the economic benefits generated by motor vehicle use. Reducing motorized recreation opportunities will affect local business in this already ailing economy and force some to close.

The Forest Service should consider the loss of recreational and seasonal income the proposed seasonal restrictions will have on the local population that requires this income to survive. In a time when we are all struggling to make ends meet, losing four months of income will likely be the end of the majority of the businesses in this area.

Business owners will be adversely impacted by the enforcement of the current designation of Highway Legal Vehicles only.

Response: The employment and income derived in local communities from motor vehicle use on the National Forest is displayed in Chapter 3.11 (Society, Culture & Economy) of the FEIS.

Predictions about changes in recreational use and associated employment and income that may occur on the Forest are difficult to make and would be highly speculative. The Forest Service believes that under all action alternatives, levels of use would be relatively static although the use patterns may change. For example, even though the overall number of available roads and trails is reduced in all of the action alternatives, the same levels of use would simply become more concentrated in those available areas. However, motor vehicle use is already concentrated in many areas of the Forest at this time, so this effect may not be realized either during implementation; but, at some point some users would no longer attain the experience they desire and would likely seek other areas off-forest. The point at which this would occur is speculative.

Seasonal closures on native surface (dirt) Maintenance Level 2 roads and system trails in the Preferred Alternative are likely to have some level of impact to the local economy. Any potential effects would likely impact gas stations, convenience stores, and other retail stores in local communities. To mitigate these effects, the Preferred Alternative shortened the wet weather seasonal restrictions on the west side of the Forest by one month to provide additional OHV opportunities. In addition the Fordyce Jeep trail was opened to over-the-snow travel once snow depths reach 15 inches. In addition, most ML 3-5 roads are open to wheeled over-the-snow travel year-round.

Commenters: 00026, 00033, 00066, 00067, 00068, 00473, 00476, 00481, 00558, 00559, 00560, 00601, 00607, 00615, 00616, 00619, 00622, 00637, 00645, 00651, 00660, 00671, 00684, 00685, 00686, 00714, 00727, 00741, 00749, 00760, 00784, 00792, 01371, 01382, 01563, 01603, 01781, 02509, 02539, 02542, 02553, 02952, 02966, 04540, 04543, 04557, 04560, 04571, 05270, 05289, 05306, 05636, 06036, 06303, 06373, 06378, 06455, 06480, 06502, 06556, 06572, 06573, 06575, 06578, 06580, 06583, 06605, 06710, 06715, 06733, 06744, 06799, 06811, FC, FG, S0008, S0011

3.11-2 Economic effects (Non-motorized use): My hiking groups – about 20 participants per hike – 30 times a year support the local Auburn, Foresthill and Soda Springs' business communities. They buy gas, food, drinks, frequently stay for dinner etc. They will not want to be hiking on trails overrun with noisy, smelly, and dangerous vehicles.

Response: The employment and income derived in local communities from non-motorized recreation use on the National Forest is displayed in Chapter 3.11 (Society, Culture & Economy) of the FEIS.

Predictions about changes in recreational use and associated employment and income that may occur on the Forest are difficult to make and would be highly speculative. The Forest Service believes that under all action alternatives, levels of non-motorized recreation use would increase by the same amount in all alternatives, although the use patterns may change. For example, even though the overall number of non-motorized opportunities is increased in all of the action alternatives, the same levels of use would simply become more dispersed in those available areas. At some point some users would no longer attain the experience they desire and would likely seek other areas off-forest. The point at which this would occur is speculative.

Commenter: 00823

3.11-3 Social Values of Non-Motorized Users: The Forest Service should consider the impact on the non-motorized recreationists including their lifestyles attitudes, beliefs and values. Some examples of these perceived effects are:

"Aggressive gasoline motor powered outdoor activities that pollute the air and noise pollution can find their "recreational" activities on a reclaimed landfill or quarry area. They do not need to further damage the environment. Have them change over to electric power (solar, etc.) and put speed limits on the outdoor activities so as to minimize the negative effects of their presence. Our national parks and wildlands are too precious a resource to allow such mindless activities; there is no appreciation

of those outdoors when such participants zoom through them disturbing the wildlife and the very environment that may never recover from the abuse."

"The forest is the home for the bears, coyotes, hawks, mountain lions, birds, trees, plants. What right do we have to drive all over someone's home? That would be like someone driving an ATV into your bedroom. Weird! And not very thoughtful."

"Historically, our National Forests were created in large part for Americans to be able to seek solitude – and quietude – in peaceful surroundings. The contempt for nature – that we seek to preserve – displayed by you and this "administration" knows no bounds."

Response: A social impact assessment has been included in Chapter 3.11 (Society, Culture & Economy) of the FEIS. It includes an analysis of impacts of the alternatives on social groups' lifestyles, attitudes, beliefs and values. Chapter 3.07 (Recreation and Visual Resources) describes the effects of noise on recreationists. Chapter 3.03 (Terrestrial and Aquatic Species) describes the effects of noise on terrestrial species.

Commenters: 00019, 00036, 00040, 00063, 00064, 00076, 00087, 00091, 00095, 00121, 00474, 00581, 00593, 00790, 00822, 00923, 01058, 01105, 01384, 01867, 01869, 02154, 02185, 02267, 02326, 02801, 02805, 03014, 03030, 03161, 03360, 03541, 04556, 04563, 05271, 05450, 05591, 05647, 06266, 06614, 06668, 06677, 06749, 06753

3.11-4 Social Values of Motorized Users: The SDEIS provides no social description of the activities under discussion. A description of the social benefits of the motor recreation activities would correct this omission.

The Forest Service should consider the impact on the non-motorized recreationists including their lifestyles attitudes, beliefs and values. Some examples of these perceived effects are:

- "Riding dirt bikes is not only a hobby, but a lifestyle"
- "I can only imagine a world where one day I'm telling my grandchildren about all the fun that their grandfather and great-grandfather had in the backcountry. But they and their father will never be able to experience the great outdoors."
- "Both them and myself learning not only the actual construction of these Jeeps but more importantly the strengthening of our relationships. I feel that four wheeling, motorcycle riding and camping has made my relationship with my boys irreplaceable."
- "I ask you keep California recreational trails open for my grandsons and many other fine young men to use and enjoy. Rather than choosing drugs, alcohol or other abusive choices a better alternative is the out-of-door entertainment."

Response: A social impact assessment has been included in Chapter 3.11 (Society, Culture & Economy) of the FEIS. It includes an analysis of impacts of the alternatives on social groups' lifestyles, attitudes, beliefs and values. Chapter 3.07 (Recreation and Visual Resources) describes the effects on motorized recreation opportunities.

Commenters: 00012, 00092, 00439, 00445, 00575, 00578, 00593, 00593, 00596, 00614, 00650, 00651, 00664, 00698, 00701, 00744, 00758, 00783, 01251, 01416, 01429, 01436, 01470, 01587, 01624, 01650, 01677, 01679, 01680, 01735, 01747, 01778, 01823, 01834, 01839, 01849, 04538, 04567, 05632, 05651, 06303, 06305, 06477, 06502, 06577, 06580, 06606, 06621, 06625, 06672, 06710, 06718, 06730, 06749, 06758, 06761, 06776, 06790, 06808, S0006, S0007, S0008, S0021, S0036.

3.11-5 Fuel Wood Opportunities: The road closures will force the fuel-wood cutting community into a very confined area and in some cases, these confined areas will be cleaned out and may not allow all of the local residents to complete their fuel wood gathering."

Response: The effects on fuelwood gathering opportunities are displayed in Chapter 3.11 (Society, Culture & Economy). The Preferred Alternative was modified between the DEIS and SDEIS to provide additional opportunities for fuelwood gathering by increasing the amount of total roads available for motorized use and shortening the wet weather seasonal restrictions on the westside of the Forest by one month. This information was carried forward in the FEIS.

Commenters: 00580, 06715, S0007

3.11-6 Effects to American Indians: There is nothing quantifiable in regards to access for American Indian Rights and Interests

Response: The effects of implementing the alternatives to American Indian rights are analyzed in Chapter 3.11 (Society, Culture & Economy) of the FEIS. Concerns were raised by American Indians and tribal representatives that this proposal would unduly restrict access to sacred sites or traditional gathering areas that are accessed via motorized cross country travel, including unauthorized routes. Elderly or infirm tribal members may be prevented from participating in tribal activities if motor vehicle access is denied. Such access has been traditionally granted as long as resource damage can be prevented. Motor vehicle use that is specifically authorized under a written authorization issued under Federal law or regulations is exempt from route designations (36 CFR 212.51 (8)). Therefore, motor vehicle access to sacred sites or gathering areas may be authorized by the Forest Service and will not be affected by this proposal.

Commenter: 06715

3.11-7 American with Disabilities Act and elderly impacts: As more and more roads and trails are closed the handicapped and elderly are once again pushed aside.

Response: The Preferred Alternative includes those additions to the NFTS that were identified as being of special importance to the elderly and disabled. These additions include ARM-3r (family oriented ATV/motorcycle), YRS-B5 (low difficulty motorcycle), TKN-J5 (4wd access to views along Sierra crest), access to the shoreline at Boca, Prosser and Stampede Reservoirs, and numerous routes accessing dispersed recreation sites. In addition, more than 83% of the TNF would be within ½ mile of a motorized road or trail in the Preferred Alternative.

The Rehabilitation Act of 1973, which was amended by the Americans with Disabilities Act of 1990, set the direction that no person with a disability can be denied participation in a Federal program that is available to all other people solely because of their disability. This Travel Management project is designed to provide reasonable access for public wheeled motor vehicles and the decision to be made would apply to all Forest visitors. As stated in the preamble to the National Travel Management regulations, there is no requirement to allow people with disabilities to use motor vehicles on roads or trails otherwise closed to motor vehicles since such an exemption could fundamentally change the Travel Management program (Fed Reg V.70, No. 216, p 68285). The analysis of effects in Chapter 3.11 (Society, Culture & Economy) of the FEIS display the impacts of restricting public motor vehicle access, including access by people with disabilities, so that the Forest Supervisor can make an informed decision. The effects analysis does recognize that those alternatives with greater restrictions on public wheeled motor vehicle use of roads and trails impact persons with disabilities to a greater extent than those alternatives with fewer restrictions, particularly for those routes which provide access to recreation opportunities such as dispersed camping, streamside access, etc. Restrictions on motor vehicle use that are applied consistently to everyone are not discriminatory. Generally, granting an exemption from designation for people with disabilities would not be consistent with the resource protection and other management objectives of designation decisions and would fundamentally alter the nature of the Forest Service‘s travel management program.

The analysis in the FEIS recognizes that access to certain routes will be restricted by this project, and that access will apply to all public wheeled motor vehicles. An exception is for the use of a wheelchair that meets the legal definition, which may be used wherever foot travel is permitted. A wheelchair is defined as a device designed solely for the use by a mobility impaired person for locomotion, which is suitable for use in an indoor pedestrian area (ADA Title V Section 507c and Forest Service Manual 2353.05).

Commenters: 00089, 00090, 00580, 00631, 00748, 01724, 01755, 01837, 01840, 02158, 04569, 06427, 06460, 06556, 06779, S0037

3.11-8 Analyze Effects on Human Environment: The effects on humans were not addressed.

Response: The effects on humans are fully analyzed in Chapter 3.01 (Air Quality), 3.04 (Fire and Fuels), Chapter 3.07 (Recreation and Visual), 3.08 (Transportation), 3.09 (Inventoried Roadless and Special Areas) 3.10 (Adjacent Ownerships) and 3.11 (Society, Culture & Economy) of the FEIS.

Commenters: S0006, S0007, S0008

Section 4.0: Public Involvement

4.00-1 Extend DEIS comment period. The Forest Service should extend the public comment period on the DEIS.

Response: Agency regulations provide for a minimum comment period of 45 days. Recognizing the complexity of the documents, the TNF first extended the DEIS comment period for an additional 15 days, and then another month for a comment period totaling 3 months.

Commenters: 00795, 00796, 00800, 00825, 01379, 01381, 01382, 01459, 01769, 01862, 02546, 02939, 02941, 02942, 02943, 02944, 02945, 02946, 02947, 02948, 02949, 02950, 02951, 02952, 02953, 02954, 02958, 02959, 02965, 02966, 05525, 05620, 05658, 06421, 06480, 06593, 06704, 06740, 06779, 06796, 06797, 06812, FC

4.00-2 Individual responses: Comments and concerns should be addressed in the formal document as well as in a written response to individuals.

Response: All substantive comments have been responded to in the FEIS. Each letter received was assigned a unique number, so the individual can see the responses to their comments. Over 7,000 public comment letters were received on the DEIS and SDEIS**.** All of these comment letters were considered by the Forest Service. The process the Forest Service used to consider these comment letters is described in Chapter 4 (Consultation and Coordination) and Appendix N (Responses to Comments) of the FEIS. Consideration of these public comments was not limited by the background information in the Purpose and Need.

Commenters: 00795

4.00-3 Additional public meetings: Additional public meetings were requested in Foresthill and the Bay Area.

Response: The FS held public meetings to assist the public in reviewing the DEIS. Four of the meetings composed of both an open house in the afternoon and a more formal meeting in the evening were scheduled for this purpose: one in Nevada City, (Nevada County) on October 1; Sierraville (Sierra County) on October 3, Truckee (Nevada County) on October 7; and in Auburn (Placer County) on October 9, 2008. The decision was made to hold the meeting in Auburn instead of Foresthill to reach audiences in Foresthill, Auburn, and Sacramento. After many phone calls and contacts from the OHV community requesting a meeting in the Bay Area, the FS provided a presentation at a meeting in Pleasant Hill.

Commenters: 01382, 01862, 02966, 02967

4.00-4 Automatic e-mail response: Please have an automated response so the public has a "receipt" and can tell if their comments have been received.

Response: The FS has implemented this suggestion by establishing an automated return receipt for incoming e-mail comments on this project.

Commenters: 01380, 02970, 02979

4.00-5 ID Numbers for unauthorized routes: All of the unauthorized routes on the No Action Alternative should have had ID Numbers on the maps for the public to provide site specific

comments. Respondents also commented that maps were hard to use to identify roads with which they had concerns. In addition, Appendix A should include all unauthorized routes.

Response: Placing identification (ID) numbers on all of unauthorized routes would have made the maps illegible due to large amount of ID numbers on the maps. If the public wished to comment on a specific route, they were encouraged to simply circle it on a map and submit their comments.

Comments about individual routes were submitted by a number of methods. Methods included: identifying routes by number, by description of location within a grid coordinate printed on each map, highlighting routes on copies of portions of maps, and by personal contact at the public meetings or at TNF offices.

Appendix A includes all the roads proposed for addition to the system in the action alternatives. Appendix A is used to track the resource information, mitigation measures, and monitoring requirements needed if one of the action alternatives is chosen. The unauthorized routes not included in Appendix A are listed in the project record along with the rationale for not including those routes in the action alternatives.

Commenters: 00580, 02945, 02559, 05628, 06384, 06448, 06704, 06752, 06760, FA, S0005, S0023, S0066

4.00-6 Public notification: Several different groups (mining council members, Ruby Development Company, private landowners, etc) or individuals should have been notified about this project by the Forest Service.

Response: Information was released broadly over a 6-year period. News releases were sent out with corresponding articles in a variety of newspapers, websites, and radio stations announcing this process and how the public could be involved in 2004 through 2010. Public meetings were held and presentations were given throughout this process again inviting anyone that might be interested in participating. Public meetings took place in Downieville, Sierraville, Truckee, Nevada City, Grass Valley, Foresthill, Auburn, and Pleasant Hill from 2004-2010. E-mail notifications were sent out and e-mail lists expanded as more and more individuals expressed interest in this process. The DEIS announcements were sent to the e-mail list containing over 5,000 e-mail addresses as well as hard mail addresses. Meetings were held with a variety of groups at their request. The Forest website and many interest group websites contained the information. Information was posted at a variety of campgrounds and trailheads on the bulletin boards provided.

Miners with a legitimate plan of operation will be able to continue to use the roads identified in their plan of operation. Private land owners will also continue to be able to access their property as will others that have a special use permit that allows access.

Commenters: 00795, 06593, 06779, 06794

4.00-7 Requests for additional materials: Several requests were received for additional documents or information including current Forest Orders that would affect seasonal closures and a listing of the "unauthorized routes" excluded from all alternatives.

Response: The FS worked hard to respond to any and all requests for documents, special maps, additional information, etc. and sent out a considerable amount of material. We apologize if we missed some of the requests or what we sent out did not meet the specific needs of the requesters. A copy of the current Forest Orders was available in the project record and sent to several members of the public. The list of unauthorized routes which were recommended but not included in any alternative is in the project record.

Commenters: 06533, 06760

4.00-8 Extend the SDEIS comment period: There is too much information to review in 45 days.

Response: Since the SDEIS included limited changes from the DEIS, the Forest Service made the decision to not extend the comment period.

Commenter: S0042

4.00-9 Limited public participation in Proposed Action development The Forest Service utilized only a limited number of the public to participate in developing the Proposed Action relative to the total number of forest visitors.

Response: It is unclear what the commenter is referring to, however, the meetings held in 2006 to identify routes that the public would like the Forest Service to consider in the Proposed Action were open public meetings. They were advertised in the media, in a Forest e-mail update to several thousand recipients, and on the Forest website. Several hundred people participated in the 6-meeting series to develop the Proposed Action.

Commenter: S0008

Section A: Site Specific Comments

Addition 03ML223-1 - Parallel Route to Craycroft Road: The Forest Service should include the short cut to keep bikes off the road from the upper part of Craycroft Ridge road to the lower portion of Craycroft Ridge Road.

Response: This route was excluded from all alternatives since it is an old skid trail that does not show evidence of consistent OHV use, is overly steep and would require heavy maintenance.

The Preferred Alternative proposes mixed use on the Craycroft Ridge Road (open to all classes of motor vehicles) making this parallel route redundant.

Commenters: 05632, 06237, 06698, 06699, 06773, 06789, 06790, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition 53CF019 Chimney Rock to Poker Flat Bypass Jeep Trail (support): The Forest Service should add the existing jeep road to the NFTS that connects Chimney Rock Trail and the Poker Flat 4x4 Trail to get OHV's off of the main road (25-29 Road), like the Forest Service desires.

Response: The Preferred Alternative designates the parallel 25-29 Road as open to all vehicles. Therefore this route was excluded from all alternatives since this bypass jeep trail would be a duplicate OHV access connection between Chimney Rock trail and Poker Flat.

Commenters: 02936, 06704, 06797

Addition 71-4 - Calpine area OHV route (support): The Forest Service should add the route to the NFTS that individuals in the Calpine area use for recreation. This is a very short road which was used for logging near the origin of road 71 and reconnect to road 71 be designated as part of the trail system so as to provide continued access to this valuable resource to the community.

Response: This route was excluded from all alternatives since it was previously decommissioned.

Commenter: 05283

Addition 86-40 - Trail to Lacy Peak out of Meadow Lake (support): The trail up to Lacy Peak has been blocked, or "decommissioned" and looking at any of the choices for route designation in the TNF DEIS, it doesn't appear to be included. The Forest Service should include this trail as one of the trails to be enjoyed in the TNF by off-roaders and hikers alike.

Response: This route was excluded from all alternatives since it is located on private land for which the Forest Service does not have a valid right-of-way.

Commenters: 00804

Addition 93-002-03 - Sierra Buttes Lookout (support): This is a legal route that has been omitted. This gate has been erected under a temporary order over a decade ago. Forest orders cannot be used to affect a permanent change, such as a road closure. The road from the gate to Sierra Buttes Lookout has no supporting NEPA document, record of a public process or site specific analysis to affect a legal NEPA closure. This road segment has been omitted from the DEIS map. The closure of this legally created road is outside the scope of this process and must be shown as a legal motorized route.

Response: This route was excluded from all alternatives since it is located on private land for which the Forest Service does not have a valid right-of-way.

Commenters: 05632, 06237, 06480, 06744, 06773, 06784, 06790, 06797, 06806, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition ARM-2 (support): Please add this trail to the system as it provides a loop and easier terrain for beginners

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during the collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

Commenters: 06704, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition ARM3r (convert to "Open Area"): ARM-3r also known as the "Spaghetti Bowl" should be designated as an "Open Area" at Foresthill. Beginner practice trails. This area was devastated by logging and all existing trails destroyed. This should be an "Open Area" to develop a play area for beginner/mini bike riders.

Response: ARM-3r is comprised of a high density of routes in a relatively small area. This area has dispersed camping sites with family-oriented ATV activities. The area provides good opportunities for less experienced riders. These routes are included in the Preferred Alternative since they were site specifically recommended during the public collaboration meetings prior to the NOI and have no significant resource concerns which could not be mitigated. Since the area is in a municipal watershed it is not suitable for designation as "Open Area"

Commenters: 05632, 05633, 06231, 06704, 06773, 06784, 06790, 06797, 06806, FE, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition ARM-5 (support): Respondents want ARM-5 to be an open OHV use.

Response: This route is not included in the Preferred Alternatives since it would encourage non-highway-legal vehicle use on County Road 5001 which is not approved for Combined Use resulting in safety concerns.

Commenters: 06704, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition ARM-7 (support): Add ARM-7 to the system to be open to OHV use.

Response: This route goes through a plantation that provides easier terrain and shortens a loop. It is included in the Preferred Alternative since it was site specifically recommended by the public during the collaboration process prior to the NOI and has no significant resource concerns.

Commenter: 06704, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition ARM-13 (support): ARM-13 has listed mitigation measures that could easily be completed. This route should be included in the Forest Service's final decision.

Response: This route comes off the 88-39 road on the ridge between Tadpole Creek and New York Canyon. Route continues through to Forest System road 88-41. The route was expanded in the Preferred Alternative (Alternative 6) to connect to the Foresthill Divide Road. This route is included in the Preferred Alternative since it was site specifically recommended by the public during the collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

Commenter: 06454

Additions - Bear Valley dispersed sites D_4-2_b, D_5650, D_650-60, D_SIE-650, D_SIE-650_c (support): The dispersed camping area that is above the Bear Valley Campground has been used

for many years by many families. Needless to say the small campground at Bear Valley can't begin to accommodate the number of people that come there to camp.

Response: These routes were added to Preferred Alternative since they were site specifically recommended by the public during the comment period on the DEIS and have no significant resource concerns which could not be mitigated.

Commenter: 06736

Additions - D_18-14_c, D_18-14_d, D_18-14_f (opposition): This dispersed recreation site which is adjacent to Clear Creek where it crosses Bowman Lake road has no bathroom facilities which allow waste to go right into the creek drainage. Camping in these areas should be discouraged.

Response: These routes are included in the Preferred Alternative since they were site specifically recommended by the public and have no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information).

Regulation of dispersed camping is outside of the scope of this decision.

Commenter: 00024

Additions - D_3013-20, D_NEV-3013, D_NEV-3013_a and D_NEV-3013_b Rubicon Trail dispersed sites (support): Along the Rubicon Trail, at Miller Lake, there is an unmaintained group camping area with metal fire rings. This area needs to remain. This area needs to be maintained by the FS or local club. This is a beautiful area near but across the trail from the lake. There is a natural boat launch spot that provides for fishing, boating and swimming.

Response: These routes were added to the Preferred Alternative based on public comments on the DEIS since they provide access to dispersed recreation site and have no significant resource concerns which could not be mitigated.

Commenters: 06610, 06611, 06694, 06762, 06763,

Addition - D_P-6001_b Onion Creek Experimental Forest dispersed site access (support): Near Onion Creek Experimental Forest, one motorized trail which provides access to a dispersed site immediately adjacent to the County Road will be added to the NFTS in Alternatives 2, 5 and 6, this motorized spur should remain open to motorized access.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during scoping comments on Notice of Intent and has no significant resource concerns.

Commenter: 06453

Addition - Ford at the end of Maybert 4x4 Trail (opposition): ORV enthusiasts have forced the old ford at the end of Maybert Road. The south riverbank consists of unsubstantiated soils and is subject to erosion. Ownerships issues are complex in this area. USFS lands are interspersed with private property. The USFS property should be managed in accordance to the spirit of the Wild &

Scenic status that this section of the river enjoys. An ORV ford of the South Yuba River in the Wild & Scenic River corridor should not be allowed.

Response: None of the action alternatives proposed that a ford or trail cross the South Yuba River at the end of Maybert road. All of the action alternatives maintain or enhance the outstandingly remarkable values of Wild & Scenic Rivers.

Commenter: 06273

Addition - H3-4-4: The Forest Service should leave open the route to the Rubicon Trail which you show as H3-4-4 from Cothrin Cove. This trail is an easier way to get a wounded Jeep out of Rubicon.

Response: This is an existing Maintenance Level 1 NFTS road number 3-4-4. It was reopened to public motorized use in Alternative 5. Although H3-4-4 may be an easier access for "wounded Jeeps", it was not re-opened to public motorized use in the Preferred Alternative since the Barker Meadow OHV route is an already existing NFTS motorized trail that connects the Rubicon to NFTS road 03-4 in the same vicinity.

Commenter: 06382, S0061

Additions - Jackson Meadows Reservoir area (support): All roads and trails in Jackson Meadows that lead to mountain peaks, scenic vistas, lakes and streams should remain open…All authorized and unauthorized routes need to remain open for our family to access.

Response: All existing NFTS roads and trails in the Jackson Meadows area will remain open for motor vehicle use. All routes in this area site specifically recommended by the public which did not have significant resource concerns which could not mitigated were added to the NFTS in the Preferred Alternative.

Commenter: 06480

Additions - Little Truckee Meadows (opposition): I have seen dirt bike tire marks through the meadows [Little Truckee Meadows] heading right into the stream itself emerging on the opposite bank. That is totally unacceptable in my opinion.

Response: None of the action alternatives allow any motorized use within the Little Truckee Meadows. All of the action alternatives, including the Preferred, require motor vehicles to remain on designated roads and trails and within identified areas. Cross country travel is prohibited in all of the action alternatives.

Commenter: 05282

Additions - Little Truckee River (opposition): The Little Truckee River below Stampede Dam is one of the best "tailwater" fisheries many of us have experienced, and efforts to keep the area pristine should receive the highest priority

Response: The Preferred Alternative prohibits cross country and does not propose any additions to the NFTS or re-opening of Maintenance Level 1 roads in this area.

Commenters: 04550, 06750, FD

Addition - Lost Camp: The Lost Camp is a public road that has been in constant use by the public to access the North Fork of the North Fork of the American River for over 100 years

Response: This route is outside of the proclaimed boundary of the TNF and is therefore outside of the scope of this decision.

Commenter: 06380

Addition - Mt. Lola access (support): I have driven the Independence Lake Rd. turnoff towards Mt. Lola, a logging road showing off and on use, and I can honestly say it is an easier access to the beautiful trailhead to Mt. Lola. The Forest Service should designate this route for motor vehicle use.

Response: The beginning of this route is on private land with no valid right-of-way and therefore will not be included on the MVUM. The remainder of the route is a Maintenance Level 2 NFTS road number 320-25 and is open to all vehicles in all alternatives.

Commenter: 06438

Additions - Sierra Valley (support): If closing the trails between Boca, Prosser, and Stampede Reservoirs is needed then keep open the trails from Stampede north to the Sierra Valley.

Response: All routes in this area site specifically recommended by the public were added to the NFTS in the Preferred Alternative if they did not have significant resource concerns which could not mitigated.

Commenters: 00027, 00033, 00085, 05282, 06739.

Addition SV-004 (support and opposition): SV-004 should need minimal if any mitigation. It connects two routes providing more choices and routes for riders.

SV-004 should be closed to motorized access.

Response: This route was included in the Preferred Alternative since it was specifically recommended by the public during scoping on the Notice of Intent and had no significant resource concerns which could not be mitigated

Commenters: 06430, 06598

Addition SV-005 (support and opposition): The Forest Service should add SV-005 to the NFTS since it has mitigation measures that could easily be completed.

There are concerns with this route being open to motorized use because the presence of a watchlist species.

Response: SV-005 is Maintenance Level 1 system road. It is being re-opened in the Preferred Alternative since it was site specifically recommended by the public during scoping on the Notice of Intent and no significant resource concerns were identified which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information).

The route was surveyed in FY 2007. No rare plants, other watchlist plant communities or weed occurrences were detected.

Commenters: 06454, 06721

Addition SV-007 (support): Please add SV-007 to the NFTS since it provides an alternate to highway travel for OHV's.

Response: This route was not included in the Preferred Alternative since it would have created safety concerns by encouraging non-street-legal vehicles to use a road open to highway legal vehicles only.

Commenter: 06595

Addition SV-P5 (opposition): This unauthorized route has a moderately high erosion risk in the EMDS model. There is a 40 ft. segment with rill erosion and sediment deposits. On the second watercourse crossing there is evidence of route widening.

Response: This trail is located in Haypress Valley. It goes to a dispersed campsite at Churches Camp. It is a popular route for hunting and exploration. This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

Mitigations for this route include diverting the intermittent channel off route at the first crossing and placing gravel on both approaches at the second crossing to reduce the channel widening and sedimentation into this tributary to Haypress Creek.

Commenter: 06716

Addition SV-P6 (support): SV-P6 should be added to the NFTS.

Response: SV-P6 provides access to dispersed campsites. This route is included in the Preferred Alternative since was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition SV-P7e and SV-P7w (support): These routes should be designated for motorized use.

Response: SV-P7e was excluded from all alternatives since the road is isolated behind the 5-50 road previously decommissioned in the Treasure project and the 5-35-40-10 road previously closed in the Phoenix Project.

SV-P7w was excluded from all alternatives since the road is isolated behind the 5-35-20 road closed in the Phoenix Project.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition SV-P8 (support and opposition): SV-P8 should be added to the NFTS.

There are aspen present near SV-P8, a watchlist species.

Response: This trail provides access to the Sierra Valley Water Company diversion dam. It is used for day use and fishing access. It is included in the Preferred Alternative since is site specifically recommended by the public during collaboration meetings prior to the NOI and there were no significant resource concerns which could not be mitigated.

The route was surveyed in FY 2008. No aspen were detected.

Commenters: 06704, 06716, 06721, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition SV-P12 (support): SV-P12 should be added to the NFTS.

Response: This route is excluded from all alternatives since the western portion of the road was decommissioned by the Cottonwood Project NEPA decision and the eastern portion was closed by the Scraps Project NEPA decision.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition SV-P13 (support and opposition): This trail should be added to the NFTS since it gives us the ability to get away from the city and see the wonders of the forest.

There are erosion concerns along the steeper parts of this route.

Response: This route is included all alternatives since it was determined to be an existing Maintenance Level 2 NFTS road number 560-40 per the Scraps Project NEPA decision. Closure of existing NFTS roads is outside of the scope of this decision.

Commenters: 06594, 06704, 06716, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition SV-P14 and P14B (support and opposition): This route should be designated as open for motorized use.

Aspen are present, a watchlist species. Cheatgrass and musk thistle are within 100 feet of the trail. Both [of] these are noxious invasive weeds.

Response: This trail is a short spur off the Babbit Lookout Road to a dispersed campsite. The route is included in Preferred Alternative since it was site specifically recommended by the public during

collaboration meetings prior to the NOI. And no significant resource concerns were identified which could not be mitigated.

The route was surveyed in 2007. The route passes through an aspen clone about ½ way down the route. No rare plants, other watchlist plant communities or weeds were detected. However, there are occurrences of musk thistle known to occur along connecting routes.

Mitigation measures specified in Appendix A (Site Specific Road, Trail and Open Area Information) include placing boulders or other barriers on both sides of the route where it passes through the aspen clone to reduce impacts to the aspen.

Commenters: 06704, 06716, 06721, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition SV-P15 (support): Please add this trail to your system. This trail provides hunting opportunities and a more difficult terrain for more skilled drivers and/or better built rigs.

Response: This route was excluded from all action alternatives since is isolated behind private land with no valid right-of-way as well as being isolated behind a closed National Forest Transportation System route from a recent NEPA decision.

Commenter: 06592

Addition SV-P18 (support): SV-P18 should be added to the NFTS.

Response: This route was excluded from all action alternatives since it is isolated behind a road closed by the recent Crystal Project NEPA decision.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition TKN-001 (support): This spur route connects to an existing OHV trail to create a loop trail, and road. Please consider Route TKN-001 to be added to the NFTS in your final decision.

Response: This route was excluded from all alternatives since it is isolated behind roads closed in recent project level NEPA decisions.

Commenter: 06454

Addition TKN-003: TKN-003 has mitigation measures that could easily be completed and should be included in the Forest Service final decision.

Response: This route is included in all alternatives since it was determined to be an existing NFTS trail open to ATV's and motorcycles per the Truckee Wheel Track Project NEPA decision.

Commenters: 06454, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition TKN-J2 (Support): TKN-J2 should be designated.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). The mitigation measures include: 1) Instruct maintenance workers in weed identification – especially cheatgrass and musk thistle - so weed spread into new areas can be detected early and weed eradication can occur while the weed occurrences are small and 2) Place barriers around the vernal pool/seasonal wetland so that damage from motorized use is reduced/eliminated.

Commenter: FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition TKN-J2 (opposition): This route leads to a vernal pool that is being entered by off roaders. There is the likelihood that vehicles have and will introduce invasive annual grasses to this pool.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). The mitigation measures include: 1) Instruct maintenance workers in weed identification – especially cheatgrass and musk thistle - so weed spread into new areas can be detected early and weed eradication can occur while the weed occurrences are small and 2) Place barriers around the vernal pool/seasonal wetland so that damage from motorized use is reduced/eliminated.

Commenters: 02968, 06454, 06704, 06716, 06721, 06773, 06797, 06806.

Addition TKN-J3 and TKN-J3n (support): This trail accesses a view point. This is one of the main reasons we drive OHVs, to get to view points otherwise not accessible.

Response: These routes were excluded from all alternatives since the beginning of the route is a road closed in the recent Worn Mill NEPA decision.

Commenters: 02968, 06590, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition TKN-J9: This route should be designated for public motorized use.

Response: This route was included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information).

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition TKN-J10: This route should be designated for public motorized use.

Response: This route was included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information).

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition TKN-J11: This route should be designated for public motorized use.

Response: This route was included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information).

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition TKN-J12 (support): This route should be designated for public motorized use.

Response: This route is included in all alternatives since it was determined to be an existing NFTS Maintenance Level 2 road number 860-15-5 in the Truckee Wheel Track NEPA Decision.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition TKN-J13 (support): This route designated for public motorized use.

Response: The Preferred Alternative includes the first .08 miles of this route since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

The remaining 1 mile of the route was not included in the Preferred Alternative due to potential water quality impacts in a 303d listed watershed which can not be mitigated in a cost efficient manner, and impacts to heritage sites.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition TKN-M1 (opposition): To open TKN-M1 to motorcycles will do irreparable damage to the trails and soils. By the end of summer, these trails are so dry that motorcycles will tear them up.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). These mitigation measures include those for protection of soils.

Commenters: 00007, 04562, 06388, 06692, 06695, 06704, 06750, 06773, 06784, 06790, 06797, 06806.

Addition TKN-M1 (Support): TKN-M1 should be designated.

Response:

Response: This route is included in the preferred alternative as motorized trail open to motorcycles only. Mitigations measures such as water bar installation will be implemented before this route is open for public motorized use.

Commenter: FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition TKN-M2 (Support): TKN-M2 should be designated.

Response: This route is included in the preferred alternative as motorized trail open to motorcycles only. Mitigations measures specified in Appendix A include boulder installation to keep users on the designated and water crossing repair. These mitigation measures will be implemented prior to the trail being open to public motorized use.

Commenter: FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition TKN-M2 (opposition): On this route, TKN-M2 there are direct impacts occurring to Plumas Ivesia, the route directly injures at least 10 plants.

Response: This route is included in the Preferred Alternative since was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated. Mitigation measures are included in Appendix A (Site Specific Road, Trail and Open Area Information) to protect the plant occurrences.

Commenters: 06704, 06721, 06773, 06797, 06806.

Addition TKN-M3 (opposition): There are already enough OHV trails in this region of the TNF, and TKN-M3 poses serious and significant social and environmental implications that should deny its inclusion in the final OHV Travel Plan.

Response: This route was excluded from all alternatives since it was approved for decommissioning in a previous NEPA decision.

Commenters: 04550, 04555, 04561, 04562, 04564, 06388, 06692, 06695, 06750, 06751, 06813, 06873, FD, S0071

Addition TKN-M9 (opposition): To open TKN-M9 to motorcycles will do irreparable damage to the trails and soils. By the end of summer, these trails are so dry that motorcycles will tear them up.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). These mitigation measures include those for protection of soils.

Commenters: 00007, 04562, 06388, 06692, 06695, 06704, 06750, 06773, 06784, 06790, 06797, 06806.

Addition TKN-Q1 (support): This route should be designated for public motorized use.

Response: This route was included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

Commenters: 02968, 06590, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Addition TKN-J2 (Support): TKN-J2 should be designated.

Response: This route was included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated. Mitigation measures include 1) Instruct maintenance workers in weed identification – especially cheatgrass and musk thistle - so weed spread into new areas can be detected early and weed eradication can occur while the weed occurrences are small. 2) Place barriers around the vernal pool/seasonal wetland so that damage from motorized use is reduced/eliminated and 3) remove log at eastern segment of route. These mitigation measures will be implemented prior to opening the trail to public motorized use.

Commenter: FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition TKS-M9 (support):

Response: This route is located near the Sawtooth mountain bike trail (non-motorized). The lower section of the trail follows a powerline and the north end ties into a subdivision. This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

Commenter: FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition TKS-11: If TKS-11 is a piece of the Rubicon Trail, then it is part of a Placer County Road under RS 2477. Placer Co. reinforced that position a few years ago.

This trail provides an opportunity for large groups of vehicles to camp together without having to park along the side of the Rubicon Trail and should added to the NFTS

There are concerns about impacts to watchlist species in the vicinity of this trail.

Request to extend route beyond outhouse for dispersed camping.

Response: TKS-11 is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant

resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information).

Mitigation measures are specified in Appendix A for botanical resources including watchlist species.

TKS-11 is not part of the Rubicon Trail even though it is accessed by the Rubicon Trail. It is not a Placer County Road and Placer County has not expressed an interest in managing it. To date, Eldorado County has not asserted RS2477 rights for this specific route.

This route was not extended past the outhouse to prevent additional route proliferation along the Rubicon River.

Commenters: 02968, 06382, 06454, 06600, 06609, 06704, 06716, 06721, 06773, 06797, 06806, S0029, S0032, S0033, S0061, S0066, S0068.

Addition - Troy under crossing road just west of Kingvale (support): The road to the west following the crossing of the Railroad tracks on the Troy under crossing just west of Kingvale needs to be kept open for hunting access.

Response: This route is excluded from all alternatives. Although the under crossing is on NFS lands, it provides access to private lands for which the Forest Service has no valid right-of-way

Commenter: 06694

Addition - William Tell Mine (off of Wild Plum Rd): The road to the William Tell Mine just outside of Sierra City off of Wild Plum Road should be designated for use by OHVs.

Response: No such route was identified on the ground during the inventory of unauthorized routes.

Commenter: 00580

Addition YRN-001 (opposition): The YRN-001 on the East Yuba roadless map shows as a through OHV road to Sunnyside meadow, Red Oak OHV trail intersection. USFS failed to secure an important easement with the landowner. The Roadless area map does not reflect that this is not a through route. YRN-001 should be closed as it only provides access to a private landowner who is not cooperative in correcting the error, providing legal right-of-way.

There are existing resource concerns, as depicted in the DEIS Appendix A (Road Cards), Appendix J (Biological Evaluation for Sensitive Plants and Fungi), Appendix K (Management Indicator Species Report), Appendix L (Biological Evaluation for Birds, Mammals, Amphibians, Reptiles, Fish and Invertebrates), Appendix M (Weed Risk Assessment), Appendix N (Watchlist Plant and Plant Community Report) for this route.

Response: YRN-001 is not located within the West or East Yuba Inventoried Roadless Area. YRN-001 is more than ¼ mile away from private land. The existing NFTS route which accesses it does not go through private land. This route is included in the Preferred Alternative since it was site specifically recommended by the public during the scoping period on the Notice of Intent and has no

significant resource concerns which could not be mitigated. Mitigation measures for this route are specified in Appendix A, Site Specific Road, Trail and Open Area Information.

Commenters: 06430, 06593, 06716, 06721, 06752

Addition YRN-008 (opposition): There are existing resource concerns, as depicted in the DEIS Appendix A (Road Cards), Appendix J (Biological Evaluation for Sensitive Plants and Fungi), Appendix K (Management Indicator Species Report), Appendix L (Biological Evaluation for Birds, Mammals, Amphibians, Reptiles, Fish and Invertebrates), Appendix M (Weed Risk Assessment), Appendix N (Watchlist Plant and Plant Community Report) for this route.

Response: This route was included in the Preferred Alternative since it was site specifically recommended by the public in scoping comments on Notice of Intent and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information).

Commenters: 06430, 06716, 06721

Addition YRN-1 (support): The Forest Service should designate this route as shown in Preferred Alternative 6.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns.

Commenters: 06443, 06704, 06773, 06784, 06790, 06797, 06806, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition YRN-1 (opposition): YRN-1 should not be added to the system. These proposed changes are in, or nearly in an old RARE II area. By expanding the routes, the RARE II area is compromised in its ability to ever have permanent protection.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). This route has no significant impact on the Inventoried Roadless Area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

Route YRN-1 is included as a motorized trail open to high clearance trail vehicles in the Preferred Alternative. This trail, which is accessed from the Sierra Buttes four-wheel drive trail, is a historic mining route. The trail provides access to a scenic vista overlooking the North Yuba River canyon. Designating this route would have no effect on the roadless character because it is located over two miles away from the East Yuba RARE II Inventoried Roadless Area.

Commenters: S0060

Addition YRN-2 (support): The Forest Service should designate this route as shown in Preferred Alternative 6.

> **Response**: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns, including *Lewisia kelloggii*, which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information).
>
> **Commenters**: 06443, 06704, 06773, 06784, 06790, 06797, 06806, S0015, S0018, S0062, S0063, S0064, S0067, S0069, S0060

Addition YRN-2 (opposition): This unauthorized route passes through a spotted owl PAC (S1060.1), is in west slope chaparral CWHR MIS habitat (fox sparrow), is in open seral CWHR MIS habitat (blue grouse), in Tahoe National Forest Carnivore Network, intersects early and mid seral coniferous CWHR MIS habitat (mountain quail), and intersects late seral closed canopy coniferous CWHR MIS habitat (American marten, spotted owl, northern flying squirrel). The DEIS road card claims that the route was surveyed for rare plants and none were detected, yet it is not disclosed that the TES plant surveyor noted that the rocky outcrop has potential for *Lewisia kelloggii* that could not be surveyed due to the lateness of the season. Also, it is indicated in the TES Plant Survey Field Form that motorcycles are making trails through the rocks and creating erosive conditions. There are 3 APE heritage sites (05175300499, 05175300545, 05175300546). The route has the potential to increase fugitive dust.

> **Response**: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information).
>
> **Commenters**: 06243, 06430, 06691, 06716, 06721, 06752

Addition YRN-6 Sailor Ravine Road to Saddleback Road (support): YRN-6 should be designated as indicated on the NOI map. This road allows OHVs to loop back up to Saddleback road and the Fir Cap OHV trails to complete loop and return to Chimney Rock, Poker Flat or Halls Ranch. Without this link OHVs must ride into Downieville. This important link should be designated.

> **Response**: This route was excluded from all alternatives since the road is scheduled to be decommissioned as part of the Red Ant Project NEPA decision.
>
> **Commenters**: 00033, 02552, 02936, 05632, 05633, 06237, 06393, 06443, 06624, 06646, 06680, 06699, 06704, 06744, 06767, 06773, 06784, 06790, 06797, 06806, 06808, 06931, FI, S0005, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition YRN-7 (opposition): There are existing resource concerns, as depicted in the DEIS Appendix A (Road Cards), Appendix J (Biological Evaluation for Sensitive Plants and Fungi), Appendix K (Management Indicator Species Report), Appendix L (Biological Evaluation for Birds, Mammals, Amphibians, Reptiles, Fish and Invertebrates), Appendix M (Weed Risk Assessment), Appendix N (Watchlist Plant and Plant Community Report) for the following routes:

Response: This route was not included in the Preferred Alternative due to mitigation measures which could not be implemented in a cost efficient manner.

Commenters: 06430, 06716, 06721, S0060

Addition YRN-509 Downieville TV Antenna Road (support): Specific trails of concern to be included on the Forest Service's designated trails are the road to the Downieville TV antennas. Please designate YRN-509, as shown in Preferred Alt. 6.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during the scoping period on the NOI and has no significant resource concerns which could not be mitigated at this time (see Appendix A, Site Specific Road, Trail and Open Area Information).

Commenters: 00033, 06452, 06704, 06773, 06784, 06790, 06797, 06806, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition YRN-509 Downieville TV Antenna Road (opposition): There are existing resource concerns, as depicted in the DEIS Appendix A (Road Cards), Appendix J (Biological Evaluation for Sensitive Plants and Fungi), Appendix K (Management Indicator Species Report), Appendix L (Biological Evaluation for Birds, Mammals, Amphibians, Reptiles, Fish and Invertebrates), Appendix M (Weed Risk Assessment), Appendix N (Watchlist Plant and Plant Community Report) for this route.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during the scoping period on the NOI and has no significant resource concerns which could not be mitigated at this time (see Appendix A, Site Specific Road, Trail and Open Area Information).

Commenters: 00580, 06430, 06716, 06721, S0060.

Addition YRS-AD Red Mountain Switchback (Rattlesnake Road to Signal Peak): Keeping this trail would be crucial for OHV users and the Cisco Grove Campground. It provides a way in and out of the trail system without having to take the freeway. CGC calls this the Breakfast run and is and has been part of the successful operation of their business. This is a great trail, provides an intermediate challenge for all OHV users, and has great vistas.

Response: This route was excluded from all alternatives since it is located on private land for which the Forest Service has no valid right-of-way.

Commenters: 00026, 00114, 00622, 00661, 00678, 00699, 00703, 00752, 00779, 00782, 01111, 02527, 02533, 05306, 05710, 06253, 06563, 06571, 06650, 06718, S0068

Addition YRS-AF Rocky Pond Campsite: YRS-AF is a spur off the mossy pond system trail that accesses a campsite by Rocky Pond. Currently motorized use is more than 110 feet from the high-water mark and 100 feet from riparian vegetation at the routes closest point to Rocky Pond… The topography at the loop at the end of the trail by the pond and campsite is so extreme it prevents off-

route travel and further encroachment towards Rocky Pond… My club, 4x4 Play, has adopted Mossy Pond OHV trail and will adopt YRS-AF.

Response: The Preferred Alternative includes YRS-AF since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

Commenter: 06616

Addition YRS-B5 Deer Creek Forebay Loop (support): This is a well designed system of trails that are already in use and should be added to the open list. Technically it is not in the official trail system, but it has been use for at least 20 years that I have been riding up there. The area is fairly flat (no erosion problems) and a great trail for a less experienced riders.

Response: This trail connects to the Burlington Ridge area. Motorized use of the trail requires intermediate skill level. The width of the trail is narrow due to brush. This route is included in the Preferred Alternative since it was recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

Commenters: 00824, 01368, 02519, 02545, 02552, 04542, 05264, 06237, 06431, 06555, 06646, 06698, 06704, 06744, 06767, 06773, 06784, 06789, 06797, FC

Addition YRS-B5 Deer Creek Forebay Loop (wildlife impacts): The Forest Service should state in its wildlife effects analysis the fact that routes being considered are an existing condition and such disturbance is not being introduced, it continues.

Response: While we recognize that use of motorized trails unauthorized for public use, such as Deer Creek Forebay loop trail, is an existing use, public motorized use of the trail was never authorized nor was it ever part of the National Forest Transportation System. The purpose of the FEIS is to disclose the impacts of adding these trails to the NFTS motorized recreational opportunities on the harassment of wildlife and significant disruption of wildlife habitat as required by NEPA.

The Preferred Alternative includes YRS-B5 as an addition to the NFTS to improve motorized recreation opportunities since it was recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated.

Commenter: 06752, FI, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition YRS-B7 - Towle Mill (support): This trail is recommended for designation on the NOI map. It is included in the Preferred Alternative and I support designation of this trail.

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns.

Commenters: 02552, 05632, 06237, 06704, 06744, 06773, 06789, 06790, 06797, FI, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition YRS-SF5 Diamond Springs Loop (habitat fragmentation): The proposed route YRS SF5, north of Hwy 20, and in the vicinity of a meadow and riparian corridor (Bear Valley) risks further fragmenting habitat along Highway 20, that should be carefully considered. It would provide an approximate 6-minute motorcycle ride that switches through a potential movement opportunity for late-successional-associated species (especially for fisher) that may be the only lower-elevation opportunity across the Tahoe National Forest. Figures in Zielinski et al. (2005) should be considered in identifying these areas.

Response: Chapter 3.03 (Terrestrial and Aquatic Species) analyzed the potential impacts of additions to the NFTS motorized recreational opportunities and fragmentation to late-successional forest species across the TNF. The Preferred Alternative reduces the overall impacts of fragmentation to late-successional species from motorized routes, since cross country motorized travel is prohibited. On a landscape scale, YRS-SF5 is a single track motorized trail and presents a small and relatively insignificant issue to overall connectivity, since this area is located within an already highly fragmented landscape both in terms of existing system motorized route density, adjacent to Highway 20, and a highly managed forest landscape. Inclusion of a single track motorcycle should not preclude movement opportunity for late-successional associated species, including the fisher (which is not known to occur on the TNF).

YRS-SF5 was included in the Preferred Alternative since it was recommended by the public during collaboration meetings prior to the NOI. And no significant resource concerns were identified which can not be mitigated at this time.

Commenter: 06691

Addition YRS-SF5 Diamond Springs Loop (opposition): The space around YRS-SF5 is cluttered with existing route mileage (estimated 14 miles/square mile). This addition would allow a rather intense concentration of high-impact disturbance in a critical area, foreclosing future options for management to resolve connectivity issues and setting fragmentation of the carnivore network. Some of the mileage in this area shows potential rutting and erosion.

Response: YRS-SF5 is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which can not be mitigated at this time.

The required mitigation measures for this route in Appendix A (Site Specific Road, Trail and Open Area Information) include actions to address the erosion potential. The effects on habitat fragmentation are addressed in Chapter 3.03 (Terrestrial and Aquatic Species).

Commenters: 00684, 02552, 06237, 06430, 06555, 06691, 06704, 06705, 06716, 06721

Addition YRS-SF5 Diamond Springs Loop (support): Please designate YRS-SF5 as this loop is shown as proposed on the NOI map and the DEIS Preferred Alternative 6.

Response: YRS-SF5 is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which can not be mitigated at this time.

The required mitigation measures for this route in Appendix A (Site Specific Road, Trail and Open Area Information) include actions to address the erosion potential. The effects on habitat fragmentation are addressed in Chapter 3.03 (Terrestrial and Aquatic Species).

Commenters: FI, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition YRS-SF6b (support): YRS-SF6b should be designated: It provides a loop opportunity which enhances recreational value between NFS Road 29 and YRS-SF6.

Response: This route was not included in the Preferred Alternative due to watershed impacts which could not be implemented in a cost effective manner (see Appendix A, Site Specific Road, Trail and Open Area Information). This route has two stream crossings near the Omega Road. The lower of the two crossings has rill erosion entering into its culvert, and a headcut at the lower end of the crossing is eroding the road base into the stream. Below this crossing, the route picks up gradient (5-10%) and shows continuous rill erosion, approximately 3 feet wide and 1,000 feet long.

Commenters: 02552, 06431, 06646, 06698, 06767, 06784, 06789, 06798, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Addition YRS-F1 Dispersed sites along Fordyce Jeep Trail (support): The several dispersed camp sites along the Fordyce Trail should all remain open to motorized access. I understand that several of the historic, dispersed camp sites were not inventoried because they were less than 150 feet in length. If that was the Forest Service's guidelines for inventories, then many of these existing dispersed camp sites have not been included. Please consider all of the historic, existing motorized trails, and all of existing dispersed camp sites to remain open to motorized access, and include on the NFTS and on your final decision.

Response: In the DEIS the TNF did consider and propose trails (spurs) that lead to dispersed camping opportunities along the Fordyce 4x4 Trail and in the Rattlesnake area. The number of spurs proposed for addition to NFTS motorized recreation opportunities differs by alternative. The initial inventory contract had a minimum route length requirement of 150 feet. However, the TNF accepted public information on spurs to dispersed camp sites off of system roads and trails. The Preferred Alternative includes these routes that were site specifically recommended by the public and have no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). None of these routes have a significant impact on Inventoried Roadless Area character (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

Commenters: 00114, 00568, 00642, 00646, 00661, 00670, 00681, 00699, 00709, 00769, 00778, 00782, 02533, 02538, 04543, 06400, 06445, 06480, 06645, 06687, FC

Addition YRS-F1 Dispersed sites along Fordyce Jeep Trail (opposition): Sensitive plants are on the Fordyce Trail. At a dispersed campground there is a foot trail to the stream on which the starved daisy (*Erigeron miser*) grows. Closing the dispersed campground may discourage use of this foot trail and protect the sensitive plants in the area.

> **Response**: The Preferred Alternative includes those routes that were site specifically recommended by the public and have no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). None of these routes have a significant impact on Inventoried Roadless Area character (see Chapter 3.09, Inventoried Roadless Areas & Special Areas), wildlife (see Chapter 3.03, Terrestrial and Aquatic Species), or plants (see Chapter 3.06, Plant Communities).
>
> **Commenters**: 06430, 06716, 06721

Addition YRS-F1 (Fordyce Trail Bypasses): Nowhere in your plans have you allowed for the existing bypasses on the Fordyce Trail. The trail is a vital link for our recreation.

> **Response**: The existing bypasses on the Fordyce trail were considered in the alternatives as part of a group of short segments identified as YRS-F1. The Preferred Alternative includes all of these routes that were site specifically recommended by the public and have no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). None of these routes have a significant impact on Inventoried Roadless Area character (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).
>
> **Commenters**: 00013, 06480, 06687

Addition YRS-F1c (right-of-way status): This proposed route runs from the Fordyce creek trail east going just south of Hartley Butte back to the dam at Meadow Lake. The problem here is there is no easement for the public to use this area that crosses my property. The easement clearly defines a 20-foot path directly on the Fordyce Creek trail only.

> **Response**: This route is excluded from all alternatives since it is located on private land for which the Forest Service has no valid right-of-way.
>
> **Commenter**: 00054

Addition YRS-G3 and YRS-G3w: YRS-G3 and YRS-G3w East of Baltimore Lake should not be open to motorized traffic. There are existing resource concerns, as depicted in the DEIS Appendix A (Road Cards), Appendix J (Biological Evaluation for Sensitive Plants and Fungi), Appendix K (Management Indicator Species Report), Appendix L (Biological Evaluation for Birds, Mammals, Amphibians, Reptiles, Fish and Invertebrates), Appendix M (Weed Risk Assessment), Appendix N (Watchlist Plant and Plant Community Report) for these routes.

The southern most section of Route YRS-G3 southwest of Meadow Lake, and south of the Baltimore lake trailhead could easily be closed. There are two spurs to some scenic points. The scenic points are the most easily accessed by the westerly route. Just beyond the last split there is a narrow point

in the road caused by a mining pit on the east side of the road. Continued traffic will worsen there as well as the steep grade at the end of the spur.

Response: The Preferred Alternative includes the addition of YRS-G3w and the portion of YRS-G3 that connects YRS-G3w to the existing 4x4 system trail. The Preferred Alternative does not propose the addition of the remainder of YRS-G3 located past the intersection with YRS-G3w, because it dead ends in an area with little evidence of camping or other uses.

These routes are included in the Preferred Alternative since they were recommended by the public during collaboration meetings prior to the NOI and have no significant resource concerns which can not be mitigated at this time (see Appendix A, Site Specific Road, Trail and Open Area Information). None of these routes have a significant impact on Inventoried Roadless Area character (see Chapter 3.09, Inventoried Roadless Areas & Special Areas), wildlife (see Chapter 3.03, Terrestrial and Aquatic Species), or plants (see Chapter 3.06, Plant Communities).

Commenters: 06266, 06273, 06430, 06435, 06455, 06461, 06533, 06593, 06668, 06716, 06721, 06749

Appendix A (Legend): The legend at the beginning of Appendix A indicates the letters designated for the Class of Vehicle and Season of Use. The legend includes an 'M' Class Vehicle which is not used in the Table A-1; Table A-1 includes many 'W' and several 'V' designations which are not listed in the Legend. Please correct these typographical errors in the Final EIS.

Response: The Legend in Appendix A (Site Specific Road, Trail and Open Area Information) was corrected in the FEIS.

Commenters: 00797, 06704, 06725

Appendix A (mitigation and monitoring requirements): The Forest Service should provide justification for the site-specific mitigation and monitoring requirements in Appendix A.

The Forest Service has a duty under the executive orders and TMR to monitor ORV use and close trails if they find resource damage.

Response: The mitigation measures and monitoring requirements in Appendix A (Site Specific Road, Trail and Open Area Information) are specifically tied to the concerns identified for each resource.

Closure of existing NFTS motorized trails is outside of the scope of this FEIS. Any serious and adverse environmental impacts which were identified on NFTS roads and trails through this process were documented in the project record and are prioritized for restoration and rehabilitation as funding permits.

Any specific monitoring needs tied to resource concerns were identified in Appendix A (Site Specific Road, Trail and Open Area Information)

Commenters: 06558, 06762, S0023

Burlington Motorcycle Trail Area (previous decisions): The Forest Service should revisit the addition of those trails in the Burlington area that were allowed under the Burlington EIS that would not have been permitted under the current motorized travel management plan.

Response: Closure of existing NFTS roads and trails is outside of the scope of this decision.

Commenter: 06554

Burlington Motorcycle Trail Area (support trail additions): OHV riders need more mileage in this area. If there are too many users in too small an area, there will be too much negative impact on the trail, and for the non-motorized users, using these trails. I'm very interested in helping to keep these fantastic trails that we have open. All of these trails have improved a great deal over the past four years, and I would like to see more of the same continue in the future.

Response: The Preferred Alternative includes an additional 8 trails in the Burlington area totaling 12.1 miles. These trails include YRS-SF4, YRS-SF5, YRS-SF6, YRS-B12, YRS-066W, YRS-B5 AND YRS-B7. These trails were included since they were site specifically recommended by the public and do not have any significant resource concerns which could not be mitigated. These additional trails bring the total riding opportunities to 44 miles of motorized single-track trails in the Burlington network.

In addition, 4 roads totaling 9.1 miles will be changed from open to highway legal vehicles only to open to all vehicles to provide connectivity between the trail systems. This includes road 20-12, 20-12-03, 32 and 29-002. This change in class of vehicle will provide trail connectivity between the Town of Washington (food and drinks) and the Burlington trail system, via the YRS-066W YRS-066, and YRS-SF6 additions.

The combination of trail additions and approval of mixed use on NFTS roads results in an additional 21.2 miles of OHV opportunities in the Burlington area. The additions, plus the existing system trails would provide the following:

- A full day of riding for the average rider;
- Two additional loop opportunities;
- Connectivity to the town of Washington via the 29-2 Road (Alpha Road); and,
- Reduction of motorcyclists trespassing onto the non-motorized Pioneer Trail (trying to get on the main motorized trail system from the Alpha Road).

Commenters: 00051, 05632, 06237, 06393, 06452, 06698, 06704, 06744, 06752, 06789, FC

Campgrounds – Lincoln Creek (support): The Lincoln Creek Campground should be open.

Response: Management of campgrounds is outside of the scope of this decision.

Commenter: 06779

Cross Country Travel (Bowman Lake): Cross country travel should be allowed in the Bowman Lake areas. The hunters/fisherman/campers seem to use those areas more in that way up there.

Response: The need to regulate unmanaged motor vehicle traffic on National Forests is one of the identified needs that stimulated this Travel Management project. The benefits and impacts of continued allowance of cross country motorized travel on the TNF have been analyzed in the No Action Alternative (Alternative 1).

Commenter: 00047

Highway 20 vicinity (access for permitted activities): PG&E needs year-round access to roads north and south of Highway 20 to maintain their water conveyance infrastructure.

Response: Utility companies with special access needs can obtain a road use permit that will authorize their continued access.

Commenters: 00021, 05634, 06252, S0038

Lake Valley Reservoir Road Status: The road south of the reservoir is indicated as Other Public Roads & Highways (no action) and should be deleted from the map because a portion of the road is a County road and a portion is owned by PG&E.

Response: Only the first segment of the road up to the private land boundary is a county road. The remainder of the road is a private road and will be removed from all alternatives.

Commenters: 00021, 05634, S0038

Off-forest locations (Lake Richardson): The Forest Service should retain access to the trail near Lake Richardson. OHV users are willing to work with the Forest Service to mitigate any concerns to this historic stretch of trail that connects to the Rubicon Trail.

Response: This location is outside the TNF boundary, and therefore, is outside the scope of the TNF Travel Management Project.

Commenter: 06762

Off-forest locations (Johnson Valley): The Forest Service should not close Johnson Valley.

Response: This location is outside the TNF boundary, and therefore, is outside the scope of the TNF Travel Management Project.

Commenter: 00630

Open Area - Boca, Prosser Stampede Reservoir: The Motorized Travel Management Plan presents travel below the high water mark as a proposal for “Open OHV Use” and does so through an “all or nothing” approach to motorized traffic below the high water mark of Boca, Stampede, and Prosser Reservoirs. The alternatives do not explore the potential for having specific corridors for access to the water.

Response: The Preferred Alternative was modified to include specific “Open Areas” to provide corridors for access to the shoreline during periods of drawdown at these reservoirs. These “Open

Areas" were designated in association with existing NFTS roads and trails which already access the reservoirs when full.

Boca, Prosser and Stampede Reservoirs have been and currently are managed to allow access to the shoreline below the high water line by motor vehicles when the soils are dry. Speeds are generally slow and since this access is allowed on dry soils only any additional sediment generated by vehicles accessing the shoreline is minimal. Some fugitive dust could be created by the vehicles on the dry soils and possible drift into the reservoir, but the amount is also felt to be minimal. These reservoirs are designated as "Open Areas" for shoreline access by motor vehicles in Alternative 2 (2,549 acres). In Alternative 6, 244 acres of the most stable, highly used areas are proposed as "Open Areas." This is a 90 percent reduction in shoreline use compared to existing condition. The use of these dry lake beds by motor vehicles is prohibited in Alternatives 3, 4, 5,and 7. Use is not prohibited at these reservoirs in Alternative 1 (2,549 acres).

The "Open Areas" were reduced from 2,589 acres in Alternative 2 to 244 acres in the Preferred Alternative to avoid any impacts to heritage sites and wet soils areas which could cause sedimentation in the reservoirs. Vehicle access would also be limited to "highway legal vehicles only" to further minimize sediment delivery.

Mitigation measures are specified for these "Open Areas" in Appendix A (Site Specific Road, Trail and Open Area Information).

Commenters: 00085, 02968, 06237, 06270, 06388, 06480, 06382, 06650, 06692, 06695, 06704, 06721, 06724, 06744, 06750, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069, S0066, S0070, S0071

Open Area "Big Dawg Cove" Monitoring: Big Dawg Cove will have waterbars installed to help correct a gully in the access route. Please ensure this area will be monitored for effectiveness.

Response: Monitoring for Big Dawg Cove was recommended by the IDT to the Forest Supervisor for inclusion in the Record of Decision and the Selected Alternative.

Commenter: S0070

Open Area – Eureka Diggings YRN-A1 (support): The Forest Service should keep/designate Eureka Diggings as an "Open Area" as shown in the Notice of Intent. The NOI Alternative 7 has been altered and this is one of many omissions.

Response: Eureka Diggings was removed as an "Open Area" from all alternatives due to impacts to Cultural Resources (see Chapter 3.05, Cultural Resources).

Commenter: 00007, 05633, 05692, 06457, 06237, 06704, 06731, 06744, 06773, 06784, 06790, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Open Area – Greenhorn: The Forest Service should not designate Greenhorn as an "Open Area" for the following reasons:

- Impacts to adjacent private landowners
- Law enforcement issues (litter, firearms, trespass…)
- Damage to public and private roads
- Lack of Signage

The Forest Service should designate Greenhorn as an "Open Area" for the following reasons:

- Due to its low elevation it is available for year-round use.
- There are many volunteers available to assist in its operation and maintenance.
- Nevada County Sheriffs has an OHV division funded by green sticker dollars for enforcement.
- It is used by all types of vehicles Motorcycles, ATV's, 4 wheel drives, and the new utility vehicles.
- Due to the historic hydraulic mining area much of the soils have been washed away downstream leaving a very large wide open creek bed consisting mostly of river rock.

Response: The Greenhorn area is not designated as an Open Area in the Preferred Alternative. The FS does not have an easement across privately owned lands that provide access to a 40-acre portion of Greenhorn north of Buckeye Road. In addition, the adjoining southern half of the Greenhorn area is private land, and that land owner has closed off access to the public. Also, the adjacent BLM portion has been closed to OHV use by BLM. The numerous past litter/dumping problems, illegal fires, resource damage, trespass issues, impacts to adjacent landowners (stemming from use extending out from the Greenhorn area), and the lack of sufficient funds to properly manage the area, also contributed to the decision to not recommend this area in the Preferred Alternative. The Forest Service acknowledges the impacts from dust, noise and road damage resulting from OHVs accessing the Greenhorn area to private landowners along Buckeye Road. The Forest Service also acknowledges that the private landowners along the Buckeye Road provide cleanup of the litter left along the road. These landowners maintain a one-mile stretch of private road without reimbursement.

There will still be access to the area, but there is a right-of-way issue on a small portion of private land. There will be no reason for OHV users to go out Buckeye Road if the "Open Area" is not available except to get access to Greenhorn Creek. Once there, vehicles will not be allowed to drive off of the road that crosses gravel-bottom area. There will be vehicular access to Greenhorn Creek from NFS land from Buckeye Road on the east side of the Greenhorn area; however, there will not be an "Open Area" designated and OHV use off the road that crosses the Greenhorn area will not be allowed.

The TNF also acknowledges that this is a popular low-elevation place for OHV use. The TNF is open to continue discussions with users groups concerning the future use of the Greenhorn area for managed OHV use subsequent to this Travel Management process, given some specific criteria:

- The user groups bring the other affected parties into a collaborative process to consider area management (southern private land owner, northern private land owner, BLM, Nevada County, other adjacent private land owners, and the Forest Service);
- Develop a volunteer-based plan that would address the means to manage past problems and abuses in the area. Show that there is a significant volunteer base that is willing and able to support and implement the plan. This plan would need to include appropriate signage along Buckeye Road and Red Dog Road to keep the OHV users on the road.

- **Commenters**: 00114, 00601, 00618, 00620, 00642, 00654, 00661, 00667, 00677, 00694, 00704, 00709, 00726, 00741, 00773, 00774, 00777, 01866, 02537, 02552, 04557, 05632, 06237, 06250, 06253, 06337, 06378, 06358, 06368, 06373, 06378, 06462, 06471, 06472, 06473, 06480, 06481, 06509, 06512, 06514, 06525, 06527, 06548, 06549, 06566, 06567, 06569, 06570, 06572, 06573, 06601, 06621, 06623, 06628, 06640, 06643, 06644, 06645, 06648, 06650, 06670, 06672, 06687, 06698, 06704, 06710, 06718, 06744, 06773, 06784, 06790, 06797, FC, FF, FI, FJ, S0001, S0002, S0014, S0015, S0018, S0035, S0039, S0041, S0043, S0044, S0045, S0046, S0047, S0048, S0049, S0050, S0051, S0052, S0053, S0062, S0063, S0064, S0066, S0067, S0069.

Open Area - Prosser Pits: We strongly support the continued use of the Prosser Pits. This is an excellent example of cooperation between riders and neighbors, and provides a much needed recreation facility for local riders.

Response: Prosser Pits is already a designated "Open Area". Therefore motorized use at this "Open Area" continues in all of the alternatives.

Commenters: 06237, 06270, 06744.

Over snow use (Bowman Lake Area): Our club was founded in February of 1967 and has held a snow run to the Bowman Lake area of the Tahoe National Forest every year since 1976. Our Founders run takes place each year on the second weekend of February. It is a long standing tradition of our club that we would hate to loose.

During the winter season, PG&E stores a snow-cat at the PG&E construction yard. The snow-cat is used to access the Spaulding 3 Header Box and the Lang's crossing stream gage. However, PG&E must have continued year-round access to its dams, reservoirs, canals, gauging stations and other facilities located in the vicinity, using whatever means of transportation are necessary for the situation.

Response: The Preferred Alternative does not designate the Bowman Road (FS Road 18) for wheeled over-the-snow travel because it is a designated snowmobile route.

Uses authorized under special use permits, such as those by PG&E and irrigation districts, are exempted from the MVUM.

Commenters: 05634, 06252, S0038

Pliocene Ridge Area (motorized access): The Pliocene Ridge area, including Pike City, Forest, and Henness Pass to Jackson Meadows reservoir, is heavily used by hunters, OHV recreationists, and many others. Failure to include identified roads and trails in the area would substantially reduce the recreational enjoyment of Sierra County by most Californians

Response: The main access routes in the Pliocene Ridge area to Jackson Meadows reservoir are Sierra County roads. The Forest Service has no jurisdiction over use of county roads, which are outside the scope of this process.

There are two Forest Service roads (34 and 98) that are short loops connecting to Sierra County roads along the Pliocene Road and ridge areas that were considered for mixed use. Road 34 was not approved for mixed use due to a moderate crash probability with a high crash severity. Road 98 was not approved for mixed use due to a low crash probability with a moderate crash severity.

Commenters: 00033, 04440

Road 001 (motorized mixed use): The Forest Service should change road 001 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 001-04-02 (motorized mixed use): The Forest Service should change Road 001-04-02 from open to highway legal vehicles only to open to all vehicles.

Response: We have no record of any NFTS road with this number. Motorized mixed use is allowed on all roads coming off of the 001 road in all alternatives.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 5 Treasure Mountain (motorized mixed use): The Forest Service should change road 5, Treasure Mountain, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06704, 06718, 06737, 06748, 06784, 06789, 06790, 06797, 06804, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0003 (motorized mixed use): The Forest Service should change road 0003 from open to highway legal vehicles only to open to all vehicles. If this entire road is given mixed use status, an exciting and challenging loop trail will be allowed to persist by allowing contact with the designated route that following Barker Creek to the 03-04 road.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished in the Preferred Alternative on the portion of this road that is needed to provide loop opportunities by changing from Maintenance Level 3 to Maintenance Level 2.

Commenters: 02968, 06480, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0003-04 (motorized mixed use): The Forest Service should change road 0003-4 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Motorized mixed use in the Preferred Alternative is accomplished on this road by changing from Maintenance Level 3 to Maintenance Level 2.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 07-30-20 (decommission): The Forest Service should decommission existing OHV trail (off 7-030) that continues past the road entering SPI Section 35 near Perazzo Canyon Creek.

Response: The 07-30-20 road is currently a Maintenance Level 1 NFTS road closed to public motorized use. Decommissioning of Maintenance Level 1 roads is outside of the scope of this decision.

Commenter: 06248

Road 007-004 (motorized mixed use): The Forest Service should change road 0007-004 from open to highway legal vehicles only to open to all vehicles.

Response: The Forest Service has no record of any road with this number. The response to 007-40 road is shown below.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 007-40 (motorized mixed use): The Forest Service should change road 07-40 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished in the Preferred Alternative on the portion this road important to non-highway legal vehicles by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenter: 02968

Road 08 (motorized mixed use): The Forest Service should change road 08 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is approved for this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 09 Haskell Peak (motorized mixed use): The Forest Service should change road 09, Haskell Peak, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is approved for this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00033, 00580, 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 09-15 (motorized mixed use): The Forest Service should change road 09-15 from open to highway legal vehicles only to open to all vehicles leading north from Hwy 49 at Yuba Pass to Plumas National Forest border.

Response: This road is already a Maintenance Level 2 NFTS road open to all vehicles.

Commenter: 06565

Road 10-06 (motorized mixed use): The Forest Service should change road 10-06 from open to highway legal vehicles only to open to all vehicles.

Response: This road is already a Maintenance Level 2 NFTS road open to all vehicles.

Commenters: 06704, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0011 (motorized mixed use): The Forest Service should change road 0011 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 0011-04 (motorized mixed use): The Forest Service should change road 0011-04 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur.

These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 12 Yuba Webber (motorized mixed use): The Forest Service should change road 12, Yuba Webber, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is approved for this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 0012-99 (motorized mixed use): The Forest Service should change road 0012-99 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 14 Grouse Ridge (motorized mixed use): The Forest Service should change road 14, Grouse Ridge, from open to highway legal vehicles only to open to all vehicles.

I am especially concerned about the Grouse Ridge access roads. DO NOT CHANGE the road classification. Regular vehicles need these roads to remain usable to access trail heads. If they are allowed to become OHV roads, the quality of the roads will rapidly decline making them unusable for regular vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

This road was limited to highway legal vehicles only in the Preferred Alternative to protect non-motorized recreation opportunities in the Grouse Lakes non-motorized area.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00005, 00024, 00078, 00081, 00479, 00584, 00619, 00623, 02522, 02936, 02968, 05634, 06237, 06248, 06250, 06252, 06266, 06271, 06273, 06277, 06383, 06393, 06438, 06461, 06533, 06565, 06593, 06595, 06629, 06642, 06675, 06668, 06675, 06696, 06698, 06701, 06716, 06718, 06737, 06748, 06749, 06755, 06784, 06789, 06790, 06804, FA, S0038, S0055

Road 14-01 (motorized mixed use): I am especially concerned about the Grouse Ridge access roads. Do not change the road classification. Regular vehicles need these roads to remain usable to access trailheads. If they are allowed to become OHV roads, the quality of the roads will rapidly decline making them unusable for regular vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is not approved on this road in the Preferred Alternative to prevent non-highway legal vehicles from incursions into the Grouse Lakes non-motorized area. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00005, 00024, 00078, 00081, 00479, 00584, 05634, 06248, 06250, 06252, 06273, 06438, 06461, 06533, 06593, 06595, 06642, 06668, 06675, 06696, 06716, 06737, 06749, 06755, FA, S0038, S0055

Road 14-4 (NFTS status): These trails are poorly accessible from the Grouse ridge trail and could be used to access the Beyers Lake trail by ORV users illegally. It should not be open for ORV use.

Response: This is existing NFTS Maintenance Level 2 road open to the public. Closure of existing NFTS road is outside of the scope decision.

Commenter: 00024

Road 15 Nichols Mill (motorized mixed use): The Forest Service should change road 15, Nichols Mill, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

This road will be maintained for passenger car access in the Preferred Alternative.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 16 (motorized mixed use): The Forest Service should change road 16 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is approved for this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash severity.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 06704, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 17 Carr Lindsey (motorized mixed use): The Forest Service should change road 17, Carr Lindsey, from open to highway legal vehicles only to open to all vehicles.

I object to the reclassification of the routes in the Bowman Lake/Grouse Ridge areas between Bowman Lake and Lake Spaulding, including but not limited to route numbers 0018-006, 0014, 0014-001, and 0017, shown on the map as red and black lines. The current status of these trails should be retained.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

This road was limited to highway legal vehicles only in the Preferred Alternative to protect non-motorized recreation opportunities in the Grouse Lakes non-motorized area.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00005, 00024, 00078, 00081, 00479, 00584, 00619, 00623, 02522, 02936, 02968, 05634, 06237, 06248, 06250, 06252, 06266, 06271, 06273, 06277, 06383, 06393, 06438, 06461, 06533, 06565, 06593, 06595, 06629, 06642, 06668, 06675, 06696, 06698, 06701, 06716, 06718, 06737, 06748, 06749, 06755, 06784, 06789, 06790, 06804, FA, S0038, S0055

Road 17-6 Feely Lake (motorized mixed use): The Forest Service should change road 17-6, Feely Lake, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

This road was limited to highway legal vehicles only in the Preferred Alternative to protect non-motorized recreation opportunities in the Grouse Lakes non-motorized area.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804, FA, S0055

Road 17-6-2 (NFTS Status): This is a steep, erosion-prone road on private property that does not connect to any loop and should not be available for ORV use. There is already a maintained access to Lindsey Lake.

Response: This road was determined to be on private land for which the Forest Service does not have a valid right-of-way. This road was removed from all alternatives

Commenter: 00024

Road 17-12 (NFTS status): The road from the north end of Lower Lindsey Lake to Culbertson should not be designated as a route at all. It is open only to the private property owners in the area. It is not for public use. The gated area should be better maintained.

Response: Road 17-12 is a closed NFTS road. It is not re-opened to the public in any of the action alternatives.

Commenter: 00024

Road 18 - Bowman Road (motorized mixed use): The very narrow, difficult to maintain and dangerous native material portion of the Bowman road (USFS 18), which SPI acquires a commercial hauling permit to use, has been designated to add OHV use.

Response: The Preferred Alternative does not change the allowable use on this segment of the Bowman Road.

Commenter: 06424

Road 18-6 (NFTS status): This road is impassible for motorized use and should not be designated as other than a hiking trail.

Response: After about ½ mile beyond Rucker Lake the 18-6 Road extends north of Blue Lake, this section of the road is a Maintenance Level 1 NFTS road closed to public motorized use in all alternatives. A road on PG&E land, and controlled by PG&E, connects to the 18-6 Road and accesses the bottom of Blue Lake Dam where a couple of PG&E dispersed campsites exist.

Commenter: 00024, S0055

Road 18-6 Blue Lake (motorized mixed use/NFTS status): Tracks from quad runners are rampant in this area. The “hiking trail” to Grouse Ridge Trail has been overrun by motor vehicles, significantly diminishing hiker enjoyment and causing large sections of trail to severely erode. Route 0018-006 should end at Blue Lake to avoid the poaching of this trail with historic relevance. The 1.25 miles beyond Blue Lake should be removed from the Travel Plan all together.

Response: Mixed use is not approved on this road in the Preferred Alternative to prevent non-highway legal vehicles from incursions into the Grouse Lakes non-motorized area.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low

mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

The 18-6 road has been corrected to stop at the section line prior to Blue Lake since the remainder of route is on private land for which the Forest Service does not have a valid right-of-way

Commenters: 00061, 05305, 05634, 06252, 06273, 06696, 06716, 06749, S0038, S0055

Road 18-12 Camp 19 Road (impacts to private land): The *Existing System Roads* designation shown through PG&E property located in Section 1, T17N-R11E will encourage an increase in unauthorized use of PG&E property. Additional signage, patrol and enforcement will be required to address these issues. This road includes a bridge crossing of NID's Bowman-Spaulding Canal. It appears that NID controls the gate at this location

Response: This route is excluded from all alternatives since it is a NFTS non-motorized trail.

Commenters: 05634, 06252, S0038

Road 18-16 (NFTS status): This is a road has been closed for at least 12 years. There is a sensitive meadow area at the top, north end of the road. It should be closed to ORV use and the closure should be improved.

Response: This is an existing NFTS Maintenance Level 2 road open to the public. Closure of existing NFTS roads is outside of the scope of this decision.

Commenter: 00024

Road 18-16 (motorized mixed use): I object to the reclassification of the routes in the Bowman Lake/Grouse Ridge areas between Bowman Lake and Lake Spaulding, including but not limited to route numbers 0018-016, 0014, 0014-001, and 0017, shown on the map as red and black lines. The current status of these trails should be retained.

Response: This road is already a Maintenance Level 2 NFTS road open to all vehicles.

Commenters: 00005, 00024, 00078, 00081, 00479, 00584, 05634, 06248, 06250, 06252, 06273, 06438, 06461, 06533, 06593, 06595, 06642, 06668, 06675, 06696, 06716, 06737, 06749, 06755, FA, S0038

Road 18-18-1 (NFTS Status): This road that has not been in existence for 12 years but shows on the Alternative 1 map. This portion of the road is a remaining skid road and landing on private property. The ridge is above our property and the sound of motor vehicles is very disturbing in the creek valley below. Travel should be restricted to the existing road heading toward Canyon Creek.

Response: This is an existing Maintenance Level 2 NFTS road open to all vehicles. Closure of NFTS is outside of the scope of this decision.

Commenter: 00024

Road 19 (motorized mixed use): The Forest Service should change road 19 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 19-16 (motorized mixed use): The Forest Service should change road 19-16 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 06704, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 20-12 Burlington Road (motorized mixed use): The Forest Service should change road 20-12 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished in the Preferred Alternative on the portion this road important to non-highway legal vehicles by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenter: 04540

Road 20-16 - Steep Hollow Cross Country Ski Area (winter use): Every year the gate access at Blue Diamond Road and Highway 20 is left open and some idiot drives in and destroys the first mile or so of skiing for everyone, so they have a 10 minute joy ride. Please lock the gate before the first snowfall and respect the skiers

Response: the 20-16 road is closed to public wheeled motorized access during the winter. This closure remains in effect in all of the alternatives. The Preferred Alternative does not allow wheeled over-the-snow use in the Steep Hollow cross country ski area.

Commenters: 00061, 05305, 06478

Road 20-16 Diamond Creek (motorized mixed use): The Forest Service should change road 20-16, Diamond Creek, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5. Mixed use is approved on the portion of this road important to non-highway legal vehicles since it is less than 3 miles in length combined with a low mixed use crash probability and low mixed use crash severity.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 21 - Gaston Grade (motorized mixed use): The Forest Service should change road 21, Gaston Grade, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07 (Recreation and Visual Resources) and in Chapter 3.11 (Society, Culture, & Economy).

This road will be maintained for passenger car access in the Preferred Alternative. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00793, 01366, 01766, 03567, 04540, 04557, 06326, 06378, 06480, 06632, 06633, 06645, 06718, 06748, S0028

Road 24 (motorized mixed use): The Forest Service should change road 24 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished in the Preferred Alternative on the portion this road important to non-highway legal vehicles by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 06704, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 25 Eureka (motorized mixed use): The Forest Service should change road 25, Eureka, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished in the Preferred Alternative on a portion of this road by changing from a Maintenance Level 3 to a Maintenance Level 2.

Mixed use is approved for the remainder of this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00027, 00033, 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06680, 06698, 06701, 06704, 06718, 06737, 06748, 06773, 06784, 06789, 06790, 06797, 06804

Road 25-4-6 & 25-08-08 Halls Ranch Trail connections: A connection between the Halls Ranch OHV trail and the Saddleback Road and on to Chimney Rock Trail and Poker Flat should be added to the system.

Response: These routes are not included in the Preferred Alternative since the road needed to provide a loop opportunity would have mixed use approved only during the deer hunting season. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenter: 06784, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 25-08-08 - Halls Ranch Trail connections: A connection between the Halls Ranch OHV trail and the Saddleback Road and on to Chimney Rock Trail and Poker Flat should be added to the system.

Response: The two road segments mentioned above are system roads (25-08-08 and 25-4-6) that have been closed through recent NEPA decisions. Additionally, the Preferred Alternative approves mixed use on a portion of the 27 road only during deer hunting season. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenter: 06784, S0005, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 27 Fiddle Eureka (motorized mixed use): The Forest Service should change road 27, Fiddle Eureka, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is approved for this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00033, 00619, 00623, 02522, 02552, 02936, 02968, 05632, 05633, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06680, 06698, 06701, 06704, 06718, 06737, 06744, 06748, 06773, 06784, 06789, 06790, 06797, 06804, 06806

Road 28 (motorized mixed use): The Forest Service should change road 28 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is approved for this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-

highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 29 Omega (motorized mixed use): The Forest Service should change road 29, Omega, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

This road will be maintained for passenger car access in the Preferred Alternative. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 29-2 Alpha (motorized mixed use): The Forest Service should change road 29-2, Alpha, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished in the Preferred Alternative on a portion this road by changing from a Maintenance Level 3 to a Maintenance Level 2. The remainder of the road is already Maintenance Level 2 NFTS road open to vehicles.

Commenters: 00619, 00623, 02522, 02936, 02968, 04540, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06773, 06784, 06789, 06790, 06797, 06804

Road 32 Chalk Bluff (motorized mixed use): The Forest Service should change road 32, Chalk Bluff, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur.

These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished in the Preferred Alternative on a portion this by changing from a Maintenance Level 3 to a Maintenance Level 2. The remainder of the road is already a Maintenance Level 2 NFTS road open to all vehicles.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 32-12 Buckeye Ridge Road (Seasonal Closure): Closing the Buckeye Road for the Winter Deer herd is not prudent. It is one of many roads available to the public in a condensed area, and has never been closed for this purpose before. There are several studies that prove the deer are not affected by OHV's, and in fact their numbers are increasing and show no evidence of their habitat being degraded

Response: The Buckeye Ridge Road (032-12) deer winter range seasonal restriction was specified in Forest Plan. This seasonal restriction applies to all of the alternatives.

Commenters: 00571, 00671, 00676, 06710, FF

Road 33 (motorized mixed use): The Forest Service should change road 33 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is approved for this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 06704, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 35 Cal Ida (motorized mixed use): The Forest Service should change road 35, Cal Ida, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur.

These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is approved for the portion of this road important to non-highway legal vehicle users during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00027, 00033, 00619, 00623, 02522, 02552, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06680, 06698, 06701, 06704, 06718, 06737, 06748, 06773, 06784, 06789, 06790, 06797, 06804

Road 36 Relief Hill (motorized mixed use): The Forest Service should change road 36, Relief Hill, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07 (Recreation and Visual Resources) and in Chapter 3.11 (Society, Culture, & Economy).

This road will be maintained for passenger car access in the Preferred Alternative. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00619, 00623, 00793, 02522, 02936, 02968, 04540, 04557, 06237, 06266, 06271, 06277, 06326, 06378, 06383, 06393, 06480, 06533, 06565, 06629, 06632, 06642, 06645, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804, S0028

Road 41 (motorized mixed use): The Forest Service should change road 41 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low

mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5. Mixed use is approved for this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity.

Commenters: 01366, 01766, 03567, 04540, 06480, 06632, 06633, 06645, 06718

Road 43 Robinson Flat (motorized mixed use): The Forest Service should change road 43, Robinson Flat, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

This road will be maintained for passenger car access in the Preferred Alternative. The northern part of Robinson's Flat 43 Road would be approved for mixed use in the Preferred Alternative. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06704, 06718, 06737, 06748, 06784, 06789, 06790, 06797, 06804, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0043- unknown spur (motorized mixed use): The road from N39.416 W120 32.429 to the intersection with the 0043 road is not maintained and should be shown to be open to mixed use. Please correct the map error.

Response: No such road could be located based on the coordinates given.

Road 44 Cavanah Deep (motorized mixed use): The Forest Service should change road 44, Cavanah Deep, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

This road will be maintained for passenger car access in the Preferred Alternative. The Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use

crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 44-2 Motorway (motorized mixed use): The Forest Service should change road 44-2, Motorway, from open to highway legal vehicles only to open to all vehicles.

Response: This road is already a Maintenance Level 2 NFTS road open to all vehicles.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 44-22 Last Chance (motorized mixed use): The Forest Service should change road 44-22, Last Chance, from open to highway legal vehicles only to open to all vehicles.

Response: This road is already a Maintenance Level 2 NFTS road open to all vehicles.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 45 (motorized mixed use): The Forest Service should change road 45 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 06704, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 49-47 Union Flat Campground (motorized mixed use): The Forest Service should change road 49-47, Union Flat Campground, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5. Mixed use is approved on the portion of this road important to non-highway legal vehicles since it is less than 3 miles in length combined with a low mixed use crash probability and low mixed use crash severity.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0050 (motorized mixed use): The Forest Service should change road 0050 from open to highway legal vehicles only to open to all vehicles.

Response: This road is already a Maintenance Level 2 NFTS road open to all vehicles.

Commenters: 01366, 01766, 03567, 04540, 06480, 06632, 06633, 06645, 06718

Road 0052 (motorized mixed use): The Forest Service should change road 0052 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 02968, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 0054 (motorized mixed use): The Forest Service should change road 0054 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is approved for this road during deer hunting season in the Preferred Alternative. By approving mixed use only during deer hunting season the mixed use crash probability is low and the mixed use crash severity is low. Approving year-round mixed use on this road would have resulted in a moderate mixed use crash probability and a high mixed use crash severity. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use

crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 00033, 00580, 02968, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 0054-002 (motorized mixed use): The Forest Service should change road 0054-002 from open to highway legal vehicles only to open to all vehicles.

Response: This road is already a Maintenance Level 2 NFTS road open to all vehicles.

Commenters: 02968, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 57 Last Chance (motorized mixed use): The Forest Service should change road 57, Red Star Ridge, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06704, 06718, 06737, 06748, 06784, 06789, 06790, 06797, 06804, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 57-16 (NFTS status): The map does not show that the 0057 road continues down to the Middle Fork of the American River. Please correct the map to show the road down to the river.

Response: Road number 57-16 is no longer part of the NFTS and is currently an unauthorized route. This unauthorized route was excluded from all alternatives due to excessive slopes.

Commenter: 06804

Road 0068 (motorized mixed use): The Forest Service should change road 0068 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent

with the California Vehicle Code Division 16.5. Mixed use is not approved on this road in the Preferred Alternative due its high mixed use crash severity.

Commenters: 06704, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0070 (motorized mixed use): The Forest Service should change road 0070 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished in the Preferred Alternative on the portion this road important to non-highway legal vehicles by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 02968, 06430, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0071 (motorized mixed use): The Forest Service should change road 0071 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished in the Preferred Alternative on the portion this road important to non-highway legal vehicles by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 02968, 06430, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0072 (motorized mixed use): The Forest Service should change road 0072 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5. Mixed use is accomplished on the majority of this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Mixed use is approved on the remaining portion of this road since it is less than 3 miles in length combined with a low mixed use crash probability and low mixed use crash severity.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 0072-002 (motorized mixed use): The Forest Service should change road 0072 from open to highway legal vehicles only to open to all vehicles.

Response: A portion of this road is already a Maintenance Level 2 NFTS road open to all vehicles.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5. Mixed use is approved on the remaining portion of this road important to non-highway legal vehicles since it is less than 3 miles in length combined with a low mixed use crash probability and low mixed use crash severity.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 73 - Boca Dam Road (NFTS Status): In accordance with our security plan for Boca Dam, Reclamation may need to close the road across Boca Dam for extended periods to provide for protection of the public and lands downstream.

Response: We recognize that the Bureau of Reclamation controls access within the reclamation zones on the dams and will continue to define allowable public use in those areas.

Commenter: 06519

Road 0076 (motorized mixed use): The Forest Service should change road 0076 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 02968, 06806, 06797, 06773, 06704, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 85 Rattlesnake (motorized mixed use): The Forest Service should change road 85, Rattlesnake, from open to highway legal vehicles only to open to all vehicles. Rattlesnake Road stretching into the Fordyce Lake area is a vital access point for off-road vehicles which are not street legal. There are very few staging, if any true staging, areas for off-road vehicles should the road be

designated as highway legal only. It is one of the only areas in the entire state which has a RV park with easy access to the trail system. This in turn allows off road enthusiasts to camp outside of sensitive habitat and still have easy access to many trails.

Some commenters expressed concerns regarding user safety and the potential lack of future access for passenger and utility vehicles with the Preferred Alternative's proposal to allow OHV use on a portion of the 85 Road by changing its classification from Maintenance Level 3 to Maintenance Level 2.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2 for the segment of the 85 Road from Nevada County Road 9140 to the intersection with the 85-2 Road. Though this segment of the 85 Road is currently classified as a Maintenance Level 3 road, it has persistently been, and currently is, characterized as rough with large boulders protruding into the road surface often throughout its length, which is characteristic of Maintenance Level 2 roads. The speeds of passenger and utility vehicles (highway legal vehicles) tend to remain low along this segment of the 85 Road due to the rough road surface characteristics. The Forest Service will erect signs intended for OHVs to maintain safe speeds while on this road segment. Maintenance will continue on this segment of the 85 Road to protect natural resources and to ensure utility vehicles can still access the two organizational camps.

The segment of the 85 Road east of the 85-2 Road intersection to the 85-2-2 intersection will remain a Maintenance Level 3 road. This segment of the 85 Road is generally characterized as a wide and relatively smooth gravel road, typical of Maintenance Level 3 roads. Along this segment of the 85 Road all vehicle types are able to attain higher rates of speed. Thus, crash probability and severity are higher on this segment of the 85 Road. Only highway legal vehicles would be allowed to travel this segment of the 85 Road.

The segment of the 85 Road east of the 85-2-2 Road is classified as a Maintenance Level 2 road due to its roughly graded road characteristics. Non-highway legal vehicles would still be able to travel to the Lola Montez OHV Trail coming from the 85-2-2 Road (Sterling and Fordyce Lakes direction) by traveling on a ¼ mile segment of the 85 Road (Maintenance Level 2) and then taking the 85-8 Road.

Commenters: 00021, 00026, 00036, 00083, 00114, 00473, 00560, 00562, 00607, 00617, 00619, 00621, 00622, 00623, 00634, 00638, 00642, 00644, 00649, 00661, 00669, 00679, 00694, 00699, 00700, 00712, 00741, 00764, 00778, 00782, 00785, 00788, 00799, 01361, 01364, 01365, 01369, 01370, 01373, 01375, 01858, 01860, 01861, 02522, 02532, 02533, 02534, 02538, 02539, 02542, 02551, 02936, 04559, 04565, 05306, 05636, 06036, 06237, 06244, 06253, 06266, 06271, 06277, 06371, 06381, 06383, 06393, 06438, 06480, 06481, 06533, 06565, 06584, 06625, 06629, 06642,

06645, 06650, 06675, 06698, 06700, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804, FE, S0055

Road 0086 (motorized mixed use): The Forest Service should change road 0086 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 02968, 06430, 06704, 06773, 06797, 06806

Road 88 (motorized mixed use): The Forest Service should change road 0088 from open to highway legal vehicles only to open to all vehicles.

Response: This is a county road. The Forest Service has no authority to designate it for mixed use.

Commenters: 02968, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0088-011 (motorized mixed use): The Forest Service should change road 0088-11 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5. Mixed use is not approved on this road in the Preferred Alternative due its high mixed use crash severity.

Commenters: 02968, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0088-30 (motorized mixed use): The Forest Service should change road 0088-30 from open to highway legal vehicles only to open to all vehicles.

Response: This road was removed from the NFTS since it was scheduled for decommissioning in a previous NEPA decision.

Commenters: 02968, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 89-36-10 (access to private land): Failure to include USFS Road #89-36-10 on future transportation plan maps, we feel, unfairly restricts access to the above described user groups, and **does not maintain valid existing rights of use and access (rights-of-way), meeting our private property access needs…**the Beine family would like to go on record as stating that we are not opposed to granting easements or reciprocal right-of-ways or permission to the USFS and/or to other private landowners…so long as sufficient maintenance, fire protection, and off-road enforcement controls occur on a regular, on-going basis.

Response: The portion of the road accessing the private property from the east is Maintenance Level 2 NFTS road open to all vehicles.

The portion of the road on private land is a private road for which the Forest Service does not have a valid right-of-way.

The portion of the road to the west is a closed NFTS road by a recent NEPA decision.

Commenters: 00032, 00044

Road 0089-055 (motorized mixed use): The Forest Service should change road 0089-055 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 06704, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 93 Union Flat Road (motorized mixed use): The Forest Service should designate the 93 Road out of Union Flat Campground for mixed use.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low

mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

The Preferred Alternative proposes mixed use on the section of the 93 road between Packer Saddle (popular OHV staging area) and the 93-3 road intersection. Signs will be posted advising drivers and OHV riders of the mixed traffic. This connects Packer Saddle and OHV opportunities at Sierra Buttes, Butch Ranch, and Gold Valley. The Preferred Alternative also proposes that this section of the 93 road be open to ATV use during the deer rifle hunting season.

Commenters: 00033, 02936, 05632, 06237, 06704, 06744, 06773, 06784, 06790, 06797, 06806

Road 93-2 Monarch (motorized mixed use): The Forest Service should change road 93-2, Monarch, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

A portion of this road is already a Maintenance Level 2 NFTS road open to all vehicles.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Mixed use is approved on the portion of this road important to non-highway legal vehicles since it is less than 3 miles in length combined with a low mixed use crash probability and low mixed use crash severity. This provides connectivity between Packer Saddle (staging area), Sierra Buttes OHV Trail, YRN-1, YRN-2 and Butcher Ranch OHV Trail.

Commenters: 00033, 00580, 00619, 00623, 02522, 02936, 02968, 05632, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06704, 06718, 06737, 06744, 06748, 06773, 06784, 06789, 06790, 06797, 06804, 06806, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 93-3 Pauley Creek (motorized mixed use): The Forest Service should change road 93-3, Pauley Creek, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on a portion of this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5. Mixed use is approved on the remaining portion of this road important to non-highway legal vehicles since it is less than 3 miles in length combined with a low mixed use crash probability and low mixed use crash severity. This would allow connectivity for OHV use from Packer Saddle (a portion of the 93 Road would also be made available to OHV use), to Butcher Ranch, to Gold Valley, to Little Deer Lake, to Summit Lake, to Lots-A-Lakes OHV trails.

Commenters: 00033, 00619, 00623, 02522, 02936, 02968, 05632, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06704, 06718, 06737, 06744, 06748, 06773, 06784, 06789, 06790, 06797, 06804, 06806, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 96 (motorized mixed use): The Forest Service should change road 96 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

A portion of this road is already a Maintenance Level 2 NFTS road open to all vehicles.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 96-91 (motorized mixed use): The Forest Service should change road 96-91 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent

with the California Vehicle Code Division 16.5. This road will be maintained for passenger car access in the Preferred Alternative.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Road 0261-004 (motorized mixed use): The Forest Service should change road 0261-004 from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

This road will be maintained for passenger car access in the Preferred Alternative. In the Preferred Alternative year-round motorized mixed use (highway-legal vehicles sharing roads with non-highway legal vehicles) was limited to roads less than 3 miles in length that have a low mixed use crash probability combined with a low mixed use crash severity, or that are consistent with the California Vehicle Code Division 16.5.

Commenters: 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Road 401-2-3 (NFTS Status): A respondent commented that the road to the William Tell Mine should be designated for use by OHVs.

Response: Though the road (401-2-3) has a number under a Road Use Permit, it is not a Forest Service System road according to TNF records.

The Forest Service does not currently hold a valid right-of-way through all pieces of the private land that this route crosses. If the Forest Service can obtain the necessary easement, then the route can be made open to public use and included in the Motor Vehicle Use Map. If the Forest Service can not obtain the necessary easement, then the route will not be made included in the Motor Vehicle Use Map, and would not be open to public motorized use.

Commenter: 06794

Road 738-6 (NFTS status): The old Artic Mine Trail is very steep, erosion prone and in the drainage of Canyon Creek used by Town of Washington for their municipal water source. It should not be an ORV route.

Response: This is an existing Maintenance Level 1 NFTS road closed to motorized public access in all of the action alternatives.

Commenter: 00024

Road 843-18 Fordyce Road (NFTS status): The road shown heading north towards Meadow Lake from Fordyce is inappropriate as it is severed by PG&E's Fordyce dam which is not a road. PG&E is opposed to designation of the portion of this road on its property due to continued damaged to its roads, facilities and the environment by unauthorized OHV use and camping. See east half of Section 3, T17N-R13E and SE quarter of section 34, T18n-R13E. At a minimum, significant increase and law enforcement would be required in this area.

Response: The mapping was adjusted to exclude any portion of private road on PG&E lands north of the Fordyce Dam for which the Forest Service does not have a valid right-of-way.

Commenters: 05634, 06252, S0038

Road 514-10 - A-Tree (closure): The road from the A-Tree is not used much by the public and should be closed.

Response: The 514-10 road is currently dual designated as a motorized NFTS trail open to all vehicles. Closure of existing NFTS motorized trails is outside of the scope of this decision.

Commenter: 06593

Road 843-37 French Lake (motorized mixed use): The Forest Service should change road 843-37, French Lake, from open to highway legal vehicles only to open to all vehicles.

We ask that Route 00843-037 not be extended for ATV travel. Faucherie Lake is totally within the boundary of the Grouse Lakes vehicle Control area.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

This road was limited to highway legal vehicles only in the Preferred Alternative to protect non-motorized recreation opportunities in the Grouse Lakes non-motorized area.

Commenters: 00005, 00024, 00078, 00081, 00479, 00584, 00619, 00623, 02522, 02936, 02968, 05634, 06237, 06250, 06252, 06266, 06271, 06273, 06277, 06383, 06393, 06438, 06461, 06533, 06565, 06593, 06595, 06629, 06642, 06668, 06675, 06696, 06698, 06701, 06716, 06718, 06737, 06748, 06749, 06755, 06784, 06789, 06790, 06804, S0038

Road 5688 Bald Ridge Loop (motorized mixed use): The Forest Service should change road 5688, Bald Ridge Loop, from open to highway legal vehicles only to open to all vehicles.

Response: Appendix J (Roads Analyzed for Motorized Mixed Use) describes the probability of vehicle crashes occurring on a particular road and the severity of such crashes should they occur. These assessments form the basis of mixed use designations. The effects analysis on motorized and non-motorized recreation can be found in Chapter 3.07, Recreation and Visual Resources.

Mixed use is accomplished on this road in the Preferred Alternative by changing from a Maintenance Level 3 to a Maintenance Level 2.

Commenters: 00619, 00623, 02522, 02936, 02968, 06237, 06266, 06271, 06277, 06383, 06393, 06533, 06565, 06629, 06642, 06675, 06698, 06701, 06718, 06737, 06748, 06784, 06789, 06790, 06804

Road 5708 Pole Creek Road (change in maintenance level): The change in class of vehicles on approximately 0.5 miles of the Pole Creek Road (Road# 5708) is located within the Riparian Conservation Area of Pole Creek, which is occupied Lahontan cutthroat trout habitat, and therefore may have adverse effects from potential increased sedimentation from changed maintenance standards, where the route changes from smooth surfaced to native surfaced**.**

The Forest Service should reclassify entire 08 Road as "Open to All Vehicles".

Response: Per the FEIS, the 0.5 miles of the Pole Creek that is located within the RCA will be managed at its current Maintenance Level 3 standard, thereby minimizing the potential for sediment delivery. Therefore, there will not be route changes from smooth surfaced to native surface, and will not result in increased risk from potential increased sediment delivery. This has been clarified and corrected in the FEIS in the Lahontan cutthroat trout section of Chapter 3.03 (Terrestrial and Aquatic Species). The 0.5 miles of road that has been proposed for a change in class of vehicles, is not in the RCA and is not projected to have any effects on Pole Creek or the Lahontan cutthroat trout.

Commenter: 06704, 06721, 06797, 06806

Road 6001-80 - Serene Lakes (environmental impacts): OHV damage to trails on national forest land adjacent to the community of Serene Lakes has been occurring.

Response: The majority of the land around Serene Lakes is private. Many of the roads in this vicinity are also private, for which the Forest Service does not have a valid right-of-way. There are no proposed additions to the NFTS in the vicinity of Serene Lakes. All of the action alternatives prohibit cross country travel off of designated roads and trails which will reduce damage from motor vehicles.

Commenter: 06702

TKN-PP: This route provides access from the Prosser OHV Staging Area to the Prosser Pits designated Open Area.

Response: This road open to all vehicles was added to Preferred Alternative based on site specific DEIS public comments to provide access for non-highway legal vehicles from the Prosser OHV staging Area to the designated Prosser Pits "Open Area" while avoiding roads designated as highway legal vehicles only. The route has no significant resource concerns which could not be mitigated at this time.

Commenter: S0020

Road TKN-??1: There is a route on the western side of the river approximately halfway between Stampede and Boca Reservoirs that looks to be an island apart from the rest of the proposed additions around it. There is no access to this route and after speaking with David Arrasmith about this route last year, he said that it was an error and would be removed from the next set of maps. We want to make sure that this route is not included as it will provide motorized access to the meadow area and lead to future problems.

> **Response:** This route was not included in the Preferred Alternative since it was previously decommissioned.
>
> **Commenter:** S0071

Road 270-10 Directly below Stampede Dam on the eastern side of the river and directly to the west of Stampede Dam Rd. is a FS managed parking lot. This parking lot is the primary access point for anglers fishing the Little Truckee River. There is a road that continues down to the dam and a facility managed by the Bureau of Reclamation. Alternative 6 shows all of this correctly, however it also shows another route that continues to the south from the parking lot and accesses the eastern banks of the Little Truckee River. From my knowledge and communication with the Truckee Ranger District, this route has been decommissioned for some years now. I believe there was a citation issued on this route last year and there is even a non-motorized FS sign from the parking lot as you look down this route. It is very important that this route be removed from the FEIS. If not, we will certainly see reckless motorized use along the eastern side of the Little Truckee River.

> **Response**: The route heading south from the parking lot is an existing NFTS maintenance level 2 road number 270-10. Closure of existing NFTS is outside of the scope of this decision.
>
> **Commenter:** S0071

Road 261-5-2 Is this an addition, trail, or a road?.**:** This route is most likely the motorized access that Bureau of Reclamation uses to check the facilities and transmission lines on the western side of the river below the dam. However, on the map it shows up to provide complete access the river, which the aforementioned road does not do. This area is considered the next and last step for restoration and road removal in the Little Truckee meadow, second in priority only to the area we were able to remove last October. The utility access ends about 100-150 yards from the river and veers directly north to the various facilities. There is a route that continues to the river from this cut-off, which then turns south along the river. This is a user created trail and this small but critical section should be left out of the FEIS and be clarified on maps to show users it is no longer an option.

With the considerations to the amendments listed above, this collaborative feels strongly that the now famous Little Truckee River and meadow will be protected and enjoyed by a variety of people for a very long time. We thank you for working with us and allowing our vision for the area to come to fruition – it is a special place.

> **Response**: This route is an existing NFTS maintenance level 2 road number 261-5-2 (starting from the Stampede dump station). The road is seasonally closed with a gate from May 15th to October 1st at the dump station per the "Warren Mill" NEPA work, signed in August 1996. People have been

driving around this gate, even though numerous boulders/logs/posts/signs have been placed to prevent summer access. Closure of existing NFTS roads is outside of the scope of this decision.

Commenter: S0071

Road 301-75?.: Upper Prosser/Upper Little Truckee/Cold Stream: There is another "island-like" route that looks like it is on private property (most likely the two parcels purchased by the Truckee Donner Land Trust) on Cold Stream. Otherwise, there is no ingress or egress to it and this route seems out of place, which is most likely an omission that needs correction.

Response: This route is an existing NFTS maintenance level 2 road number 301-75. The only right of way the Forest Service has for this road is for the portion (below the footbridge) which overlaps with the Mount Lola hiking trail (14E08) for a short distance. Closure of existing NFTS roads is outside of the scope of this decision.

Commenter: S0071

Road 514-8 (Condor's gate): The location of Condor's gate is in error on the maps.

Response: We acknowledge the continuation of the error from the DEIS maps to the SDEIS maps. Future maps, including the Motor Vehicle Use Map, will be adjusted to reflect the proper location of the gate.

Commenter: S0010

Road YRN-85 Extension: The section of road on the map that is inaccurately marked as open to public use is at the end of the Road 85 extension. The private egress and ingress road that crosses Section 29 from east to west has never been opened to the public and is not maintained at the public's expense. This section of road serves access to no defining landmarks not water, not views and no outstanding natural features. Allowing the public to use this road would lead to the degradation of the Burnt Flat Meadows, this small open land would most surely attract motorize vehicle abuse and illegal campsite abuse.

Response: Forest Service files do not indicate that we have formal public road easements in Sections 29 and 27. Therefore, no public access roads or trails are shown in Sections 29 and 27, nor are any proposed to be added to the NFTS in this travel management planning process. Forest Service does hold an easement across the corner of the NW ¼ of Section 33. This provides public road access into the public land in section 28. The road that goes east to west in Section 28 (not Section 29 as stated in the comment) is part of the current transportation system and is open for public use. Closing existing system roads is outside the scope of this FEIS. The dispersed camping occurring on Section 28 is allowed since it is on National Forest System land. Because Burnt Flat Meadows is on private land, the 85 road on private land would need to be blocked by the landowner.

Commenter: S0024

Road Fiberboard Road between Meadow Lake Road and westward ¾ miles: Designate the Fiberboard road between the Meadow Lake Road and the old County Road a Level 2 designation. This would allow access to Jackson Meadows and Pass Creek Loop area.

Response: The Fiberboard Road is a maintenance level 5 Forest Highway. Downgrading this road to a maintenance level 2 would not be consistent with the level of investment already made in this road.

Commenter: S0031

Roadless Area - Bald Mountain: A small portion of the Bald Mountain area is privately owned. There is approximately 1,061 acres designated as a Research Natural Area (RNA), which already eliminates motorized access.

Response: The Preferred Alternative would improve the roadless characteristics within Bald Mountain IRA by prohibiting motorized cross country travel on all 5,834 acres and reducing the amount of motorized access on the existing network of motorized routes. The Preferred Alternative would reduce the miles available for motorized use from 9.2 miles to 4.6 miles. Overall, roadless area characteristics would improve over time as unauthorized routes passively restore to natural conditions

Commenter: 06446

Roadless Area – Castle Peak (no additions): Respondents commented that they do not want to add new OHV routes in the Castle Peak Inventoried Roadless Area due to the engine noise, impacts to wildlife, and impacts to water quality.

Response: The Preferred Alternative adds 5 motorized trails (D_14E08, D_TKN-004, TKN-J4, TKN-J5 and TKN-J6) totaling 1.02 miles to the NFTS in the Castle Peak Inventoried Roadless Area. These trails were included in the Preferred Alternative since they were site specifically recommended by the public and did not have any significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). These trail additions do not have any significant impact to the roadless area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

The Preferred Alternative would improve the overall roadless character of the Castle Peak IRA by prohibiting cross country motorized travel on 15,738 acres and thereby reducing the mileage of routes available for motorized use by approximately 60 percent. The Preferred Alternative reduces the number miles open for motor vehicles from 18.7 to 9.6 in the Castle Peak IRA. Overall, roadless area characteristics would improve over time as unauthorized routes passively restore to natural conditions.

Commenter: 00005, 00077, 06568, 06705, 06716, 06750, S0071

Roadless Area – Castle Peak (access to livestock staging): Travel Management Plan will restrict access to livestock staging (horses and llamas) on the edge of Castle Meadow.

Response: Five additional routes accessing dispersed recreation sites were added to the Preferred Alternative near Castle Meadow. On of these routes (D_14E08 and D_TKN-004) are located within the Inventoried Roadless Area boundary. These routes were added to Preferred Alternative since they were site specifically recommended by the public during the comment period on the DEIS, did not have any resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information), and did not have any significant impact on the Castle Peak Inventoried Roadless Are characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

Commenters: 06688, 06742

Roadless Area – Castle Peak (Addition D_14E08 and D_TKN-004 White Rock Lake dispersed site support): We drive to White Rock Lake, park the jeep, and hike the trail to Mt. Lola just about every Fourth of July after the Truckee parade. Please keep open all the camping on the north side of White Rock Lake.

Response: These routes are included in the Preferred Alternative since they were site specifically recommended by the public during the comment period on the DEIS and have no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). These routes have no significant effect on Inventoried Roadless Area Characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas)

Commenters: 06382, 06743, S0061

Roadless Area – Castle Peak (addition TKN-J4): Route TKN-J4 should be closed to benefit roadless area conservation.

Please keep TKN-J4 open for the motorized Forest visitors like us who want solitude, beauty, remoteness, and a chance to enjoy the environment while still being relatively close to home!

Response: TKN-J4 is included in the Preferred Alternative since it was site specifically recommended by the public during the collaboration process prior to the NOI and does not have any resource concerns which could not mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). The route has no significant impact on roadless area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

TKN-J4 is located west of Andesite Peak with approximately 0.6 miles located in the IRA. This route accesses existing dispersed recreation sites. The route enters the edges of Castle Peak IRA, and is close enough to Interstate 80 that traffic noise from the freeway is still noticeable. This route would have a minor impact on solitude because the noise of motor vehicles would not be louder than the background noise from the freeway in the immediate vicinity.

By adding this preexisting route to the NFTS, there would continue to be minor effects to the high scenic quality landscape of the IRA due to vegetative disturbance and compaction at turnaround points. The majority of the Castle Peak IRA would remain a good candidate as a reference landscape because proposed changes to the NFTS are on the periphery of the IRA.

Commenters: 00005, 00081, 01363, 02968, 04562, 06248, 06266, 06273, 06382, 06388, 06418, 06430, 06438, 06449, 06454, 06461, 06478, 06533, 06593, 06613, 06642, 06692, 06695, 06704, 06716, 06721, 06722, 06743, 06749, 06773, 06797, 06806, S0061, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Roadless Area – Castle Peak (addition TKN-J5): Please do not include any more roads in the Castle Peak area. Specifically route TKN-J5, which crosses a meadow, the Pacific Crest Trail and leads to a view, should not be open to vehicles.

Please keep TKN-J5 open for the motorized Forest visitors like us who want solitude, beauty, remoteness, and a chance to enjoy the environment while still being relatively close to home!

Change Botany resource mitigation measures to: Place natural barriers on Slab Rock to reduce impacts to *Erigeron miser*, while still allowing motored vehicle access on most of Slab Rock.

Response: TKN-J5 is included in the Preferred Alternative since it was site specifically recommended by the public during the collaboration process prior to the NOI and does not have any resource concerns which could not mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). The route has no significant impact on roadless area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

TKN-J5 (0.3 mi.) is a route located in Castle Valley that terminates at “Slab Rock”. This route accesses an existing dispersed recreation site. The route enters the edges of Castle Peak IRA, and is close enough to Interstate 80 that traffic noise from the freeway is still noticeable. This route will have a minor impact on solitude because the noise of motor vehicles would not be louder than the background noise from the freeway in the immediate vicinity.

By adding this preexisting trail to the NFTS, there would continue to be minor effects to the high scenic quality landscape of the IRA due to vegetative disturbance and compaction at the turnaround point. The majority of the Castle Peak IRA will remain a good candidate as a reference landscape because proposed changes to the NFTS are on the periphery of the IRA.

In the Preferred Alternative of the FEIS, TKN-J5 ends in a flat area adjacent to the trees and before the granite outcrop. The terminus of the trail is 300 feet distance from the *Erigeron miser* occurrence located on Slab Rock to minimize the risk of impact to this sensitive plant from motor vehicles.

Commenter: 00005, 00081, 01363, 02968, 04562, 06248, 06266, 06273, 06382, 06388, 06418, 06430, 06438, 06449, 06454, 06461, 06478, 06533, 06593, 06613, 06642, 06692, 06695, 06704, 06716, 06721, 06722, 06743, 06749, 06773, 06797, 06806, S0061, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0068, S0069.

Roadless Area – Castle Peak (Addition TKN-J6): TKN-6 should be designated for motorized use. Placing barriers 60’ back from the lake would mitigate the resource concerns.

Response: This route is a short extension to Summit Lake, which has several popular dispersed campsites. This route was included in the Preferred Alternative since it was site specifically

recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). Mitigations include shortening the length of the route to protect the aquatic values at the lake. The route has no significant impact on Inventoried Roadless Area character (see Chapter 3.09, Inventoried Roadless Areas & Special Areas)

TKN-J6 enters the eastern side of the IRA for approximately 0.1 miles, and provides access to the eastside of Summit Lake. The route enters the edge of Castle Peak IRA, and is close enough to Interstate 80 that traffic noise from the freeway is still noticeable. This route would have a minor impact on solitude because the noise of motor vehicles would not be louder than the background noise from the freeway in the immediate vicinity.

By adding this preexisting trail to the NFTS, there would continue to be minor effects to the high scenic quality landscape of the IRA due to vegetative disturbance and compaction at turnaround points. The majority of the Castle Peak IRA would remain a good candidate as a reference landscape because proposed changes to the NFTS are on the periphery of the IRA.

Commenters: 06449, 06642, 06716, 06806, 06797, 06773, 06704, S0061, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Roadless Area – Castle Peak (close system roads): The roads in the Castle Peak area are already showing a high rate of erosion from OHV use and should be closed.

Response: Closure of existing NFTS roads and trails is outside of the scope of this decision. All of the action alternatives would improve the overall roadless character of the Castle Peak IRA by prohibiting cross country motorized travel on 15,738 acres and thereby reducing the mileage of routes available for motorized use by approximately 60 percent. Alternatives 2, 5, 6, and 7 reduce the number miles open for motor vehicles from 18.7 to 9.6. Alternatives 3 and 4 would close all of the trails unauthorized for motorized use in this IRA. Overall, roadless area characteristics would improve over time as unauthorized routes passively restore to natural conditions.

Commenter: 00081

Roadless Areas – Castle Peak (land ownership): The DEIS incorrectly states that nearly one-half of the area is in private ownership.

Response: The land ownership figures were corrected in the FEIS.

Commenter: 06716

Roadless Area – Duncan Canyon (close Western States Trail): The Western States Trail through Duncan Canyon in a roadless area was designed and built for horses and runners/hikers. It crosses a year-round stream. The Forest Service should not legitimize OHV use on it and deter those who prefer quieter and less polluting activities.

Response: The Western States Trail through the Duncan Canyon Inventoried Roadless Area is an existing NFTS motorized trail. Closure of existing NFTS trails is outside of the scope of this decision.

Although the trail may have been originally designed for equestrians and hikers it is currently being managed and maintained for motorized use.

The Preferred Alternative improves the roadless character of the Duncan Canyon IRA by prohibiting cross country motorized travel on 9,253 acres and thereby reducing the mileage of routes available for motorized use by approximately 40 percent. The Preferred Alternatives reduces the number miles open for motor vehicles from 20.9 to 12.0 miles in Duncan Canyon IRA. Overall, roadless area characteristics would improve over time as unauthorized routes passively restore to natural conditions.

Commenter: 00034, 00059, 00066**,** 02507, 05271, 05568, 05639, 06248, 06276, 06441, 06447, 06475, 06599, 06629, 06681, 06693, 06742, 06745, 06753

Roadless Area – East Yuba (no additions to NFTS): Respondents commented that they do not want to add new OHV routes in the East Yuba Inventoried Roadless Area due to the engine noise, impacts to wildlife, and impacts to water quality.

Response: The Preferred Alternative adds 18 unauthorized motorized trails to the NFTS totaling 1.8 miles and one 124-foot-long road. The average length of these routes is 420 feet. 16 of these routes provide access to dispersed recreation sites from existing NFTS roads and trails. These routes were included in the Preferred Alternative since they were site specifically recommended by the public and have no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). These additions to the NFTS do not have a significant effect on the roadless area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

The Preferred Alternative improves the overall roadless character of the East Yuba IRA by prohibiting cross country motorized travel on 10,805 acres and reducing the number of trails with motorized use. The addition of motorized trails to the NFTS would continue to have minimal effects on roadless character because they are short segments of motorized trails that stay relatively close to an existing NFTS route. None of the motorized trails added to the NFTS in the Preferred Alternative has substantial effects, but in a cumulative fashion they would contribute to a reduction in roadless character in the IRA. Overall, roadless area characteristics within this IRA would improve over time as unauthorized routes passively restore to natural conditions

The East Yuba Inventoried Roadless Area (IRA) has had some motorized use associated with mining since the Gold Rush. The existing motorized NFTS network in this Inventoried Roadless Area has been designated motorized from the beginning of TNF trail management. This area was first designated as a roadless area in the 70s. OHV enthusiasts (especially motorcyclists) value the

narrow, rough, and technical nature of these motorized trails. They also value the scenic beauty, remote character, and the rareness of these combined qualities and opportunities. The East Yuba IRA was identified as old forest refugia during the Sierra Nevada Ecosystem Project, and later in the Sierra Nevada Framework. The area was mapped during the Framework as a large, valuable, mostly contiguous and intact old forest ecosystem, which has high value for wildlife.

The Preferred Alternative attempts to strike a balance between providing motorized recreation opportunities within a remote setting, (including loop opportunities, access to popular dispersed sites, and providing opportunities for remote and peaceful recreational experiences) and the protection of resource values. The routes selected for addition to the NFTS in the Preferred Alternative provide access needed to reach heavily used dispersed camping areas and a vista point.

Other routes recommended by the public are not in the Preferred Alternative. Although they would have provided loop connections to other trails, these same trails pass through valuable wildlife habitat, including a California Spotted Owl PAC, and the loops generated concern for cumulative effects for increased use within the roadless area, with risk to the high quality habitat and intact ecosystems. Others were not selected since they were dead end trails that did not have an important destination, like a vista point or popular dispersed camping site.

Commenter: 00005, 00077, 06568, 06705, 06716, 06750

Roadless Area – East Yuba (addition Oakland Pond to Spencer Lakes): The route shown on the TNF internet map, *Tahoe National Forest Motorized Travel Management Project Proposed Action Plan April 2007*, between Oakland Pond and Spencer Lakes should be designated as a system motorized trail.

Response: The trail that shows on the April 2007 inventory map that connects Oakland Pond to Spenser Lakes is an error. This route was excluded from all alternatives since on the ground surveys verified that this trail does not exist. It has been errantly shown on quadrangle maps for a long time. On-the-ground surveys detected faint evidence of the old PCT alignment that did follow the eastern portion of the line that is shown on the April 2007 map. However, this alignment crosses over into the Plumas National Forest's non-motorized area halfway along that route. In addition the faint portion that existed on the TNF did not meet the criteria of evidence of recent and consistent use to be included in the inventory of routes to be considered in the travel management analysis.

Commenters: 00033, 06568, 06767

Roadless Area – East Yuba (addition Spencer Lakes Trail): The Spencer lakes trail should be designated. It provides a unique scenic experience. Use would be limited, due to the high skill, required to ride this trail. Sound is minimal as bikes idle and or remains at low RPM to negotiate this trail.

The trail from Spencer Lakes down to Lavezzola Creek trail is extremely steep, yet there were motorbikes using it. The result is extreme erosion and runoff into the many springs and creeks that cross the trail.

Response: The trail from Spencer Lakes to the Lavezzola system OHV Trail is not proposed for addition to the NFTS motorized recreation opportunities in any of the action alternatives. The trail was excluded from all alternatives since it has excessive grades and traverses through several riparian areas with extremely rich botanical diversity. This trail needs major rerouting to be considered environmentally acceptable. TNF has no record of this trail being a NFTS motorized trail.

Commenters: 00033, 00050, 02552, 02936, 05265, 05632, 05633, 06237, 06243**,** 06249, 06393, 06431, 06433, 06443, 06568, 06624, 06646, 06680, 06690, 06698, 06704, 06744, 06767, 06773, 06784, 06789, 06797, 06806, 06808, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Roadless Area – East Yuba (addition H11E10): H11E10 appears to be in Gold Valley. Since there is already a vehicle trail in the valley, I don't see the need for any additional open vehicular trails. This area has fairly pristine, undeveloped and undisturbed landscape qualities that don't need to be compromised by any additional roads. It's a quiet area that needs to have that quality preserved by limiting the travel routes.

Response: H11E10 was not included in the Preferred Alternative since it was not site specifically recommended by the public.

Commenters: 06243, 06443, 06704, 06773, 06784, 06790, 06797, 06806

Roadless Area – East Yuba (addition YRN-007): Please designate YRN-007, as shown in Preferred Alternative 6.

Do not designate YRN-007: This unauthorized route is at high risk for erosion in the EMDS model. No botany surveys have been completed. The route passes through West Yuba IRA. The route is in the Tahoe National Forest Carnivore Network, intersects early and mid seral coniferous CWHR MIS habitat (American marten, spotted owl, and northern flying squirrel).

Response: YRN-007 is not proposed for addition to the NFTS motorized recreation opportunities in the Preferred Alternative. Although YRN-007 only skirts the edge of the East Yuba Inventoried Roadless Area, it was determined that this trail did not provide highly valued motorized recreation qualities, it is a dead end trail with no important destination (such as a vista point or popular dispersed camping site), and is infrequently used.

Commenters: 06443, 06704, 06773, 06784, 06790, 06797, 06806, S0015, S0018, S0060, S0062, S0063, S0064, S0067, S0069

Roadless Area – East Yuba (addition YRN-4): The Forest Service should designate this route as shown in Preferred Alternative 6.

This unauthorized route has a high erosion risk in the EMDS model. The route passes through an agency-inventoried roadless area (East Yuba). The route is potential habitat for *Lewisia kelloggii,* yet has not been surveyed. The route intersects early and mid seral coniferous CWHR MIS habitat (mountain quail), and intersects late seral closed canopy coniferous CWHR MIS habitat (American marten, spotted owl, northern flying squirrel). There is one APE heritage sites (05175300386)

Response: This route is included in the Preferred Alternative since it was site specifically recommended by the public during collaboration meetings prior to the NOI and has no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). This route has no significant impact on the Inventoried Roadless Area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

Route YRN-4 would be added as motorized trail open to high clearance trail vehicles in the Preferred Alternative. This trail, which is accessed from the Big Boulder four-wheel drive trail, is a historic mining route. The trail provides access to a scenic vista and has historically received heavy motorcycle use. Designating this route would have a slight effect on the roadless character because it is a short segment that stays relatively close to an existing NFTS route.

Commenters: 06243, 06430, 06443, 06691, 06704, 06716, 06752, 06773, 06784, 06790, 06797, 06806, S0015, S0018, S0060, S0062, S0063, S0064, S0067, S0069

Roadless Area – East Yuba (addition YRN-5a and YRN-5c Gold Valley Dispersed Site Access): Both YRS-5a and YRN-5c are spur trails leading to existing, well defined, popular camping spots off the existing Gold Valley Four-wheel drive trail. Both of these routes should be considered for addition to the NFTS, and your final decision.

There should be no additional areas open to vehicular travel and all of the following sections of trails need to be closed - YRN-5a, YRN-5c, YRN 9. There needs to be no other trail sections to draw anymore vehicle abuse to that area. The terrain is steep and subject to erosion and runoff into the nearby lakes and creeks.

There are existing resource concerns, as depicted in the DEIS Appendix A (Road Cards), Appendix J (Biological Evaluation for Sensitive Plants and Fungi), Appendix K (Management Indicator Species Report), Appendix L (Biological Evaluation for Birds, Mammals, Amphibians, Reptiles, Fish and Invertebrates), Appendix M (Weed Risk Assessment), Appendix N (Watchlist Plant and Plant Community Report) for this route.

Response: YRN-5a and YRN-5c are included in the Preferred Alternative since they were site specifically recommended by the public during the collaboration process prior to the NOI and there are no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information). These routes have no significant impact on Inventoried Roadless Area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

Routes YRN-5a and YRN-5c would be added as motorized trails open to high clearance trail vehicles in the Preferred Alternative. These routes provide access to remote, well-defined dispersed camping spots off the Gold Valley four-wheel drive trail. Vehicle access tends to be by motorcycles and jeeps used by anglers, jeepers, and hunters. Eliminating motor vehicle access to this dispersed site would force individuals to utilize less desirable locations along the trail in the event they want to camp. The addition of these routes to the NFTS would have slight effects on roadless character because they are relatively short segments which access dispersed camping sites.

Commenters: 00568, 06243, 06430, 06443, 06704, 06716, 06721, 06773, 06784, 06790, 06797, 06806, S0015, S0018, S0060, S0062, S0063, S0064, S0067, S0069

Roadless Area – East Yuba (addition YRN- 9): Designate YRN-9, as shown in the Preferred Alternative 6.

There should be no additional areas open to vehicular travel and all of the following sections of trails need to be closed - YRN-5a, YRN-5c, and YRN-9. There needs to be no other trail sections to draw anymore vehicle abuse to that area. The terrain is steep and subject to erosion and runoff into the nearby lakes and creeks.

Response: YRN-9 was dropped from the Preferred Alternative since it does not provide a high quality OHV experience. It is a dead end trail that does not have an important destination (such as a vista point or popular dispersed camping site) and is infrequently used.

This trail is very faint on the ground. This trail is longer and has more effect on roadless character because it is in the heart of the IRA and ventures farther from existing motorized system routes. It reduces the opportunities for solitude in a band along the trail because of the noise from the motor vehicles. It would also retain a band of semi-primitive motorized character in that part of the IRA.

Commenters: 06243, 06443

Roadless Area – East Yuba (addition YRN-11): Route YRN-11 is 0.2 mile and leads to dispersed camping near Spencer Lake. This is an existing spur route of 0.2 mile, to an existing dispersed camping site. Please consider this existing route in the final decision.

There are existing resource concerns, as depicted in the DEIS Appendix A (Road Cards), Appendix J (Biological Evaluation for Sensitive Plants and Fungi), Appendix K (Management Indicator Species Report), Appendix L (Biological Evaluation for Birds, Mammals, Amphibians, Reptiles, Fish and Invertebrates), Appendix M (Weed Risk Assessment), Appendix N (Watchlist Plant and Plant Community Report) for this route.

Response: This route is included in the Preferred Alternative since it was recommended by the public during collaboration meetings prior to the NOI and has o significant resource concerns which cannot be mitigated at this time (see Appendix A, Site Specific Road, Trail and Open Area Information). It has no significant impact on Inventoried Roadless Area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

Route YRN-11 would be added as a motorized trail open to high clearance trail vehicles in the Preferred Alternative. This trail provides access to a dispersed camping site near Spencer Lake. This trail would have a slight effect on roadless character within the IRA because it is a short segment (0.2 mi.) that closely parallels and existing NFTS route.

Commenters: 06430, 06443, 06704, 06716, 06721 06773, 06784, 06790, 06797, 06806, S0015, S0018, S0060, S0062, S0063, S0064, S0067, S0069

Roadless Area – East Yuba (Downieville Trail portion of Old Gold Valley 4x4 Trail, NFTS Status): The Old Gold Valley Trail, also known as the Downieville Trail, historically serviced the Southern Iron Mine near Hawley Lake. The trail pre-dates NEPA, but is not specifically addressed in any of the action alternatives. Closing this unclassified historic trail, as indicated by omission in all of the action alternatives, does not meet the spirit of NEPA or the Travel Management Rule.

Response: This trail was previously a part of the Old Gold Valley System Trail. The section identified has steep grades that could not be stabilized over the long-term. Therefore, given anticipated increased OHV use; it was re-aligned/rerouted over a decade ago. At that time the Old Gold Valley Trail section referred to as Downieville Trail was decommissioned by barricading the two ends and relying on nature to reclaim the road. Because users breeched the barriers and continued to use the decommissioned route, natural reclamation has not been successful to date.

The Forest Service records for the *Gold Valley Planning Area Restoration Projects* Decision Memo do not show the Downieville Trail as a system or legal OHV trail. It is not subject to consideration in this analysis because the Downieville Trail was no longer a part of the trail system, and because it was already administratively and physically closed.

Commenters: 00035, 00042, 02552, 02555, 02936, 02956, 05632, 05633, 06237, 06561, 06704, 06744, 06767, 06773, 06784, 06790, 06797, 06806, 06808, 06809, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0068, S0069

Roadless Area – East Yuba (Trail 12E67 Snake Lake, NFTS status): Please confirm that the East side of Snake Lake OHV Route R.11E., T.21N., sections 13 & 24 at the Tahoe/Plumas border is not intended to be omitted from designated route status for 4WD vehicles."

Response: Trail 12E67 is an existing NFTS motorized trail. Closure of existing NFTS routes is outside of the scope of this decision.

Commenter: 06752

Roadless Area – Granite Chief (land status): The Sierra Pacific Industries lands in the Granite Chief Inventoried Roadless Area were acquired about 1994.

Response: The land ownership status for the Granite Chief Wilderness and Inventoried Roadless Area were corrected in the FEIS.

Commenter: 06642

Roadless Area - Grouse Lake (no additions): Respondents commented that they do not want to add new OHV routes in the Grouse Lake Inventoried Roadless Area due to the engine noise, impacts to wildlife, and impacts to water quality.

Response: In the Preferred Alternative there are six unauthorized trails totaling 1.0 miles which would be added to NFTS in the Grouse Lakes Inventoried Roadless Area. The average length of these routes is 880 feet. Three of these routes are to provide access to dispersed recreation sites. These routes were included in the Preferred Alternative since they were site specifically

recommended by the public and have no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information) and have no significant effect of roadless area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

The Preferred Alternative would improve roadless characteristics within Grouse Lakes IRA through the prohibition of cross country travel across 19,271 acres and by reducing the mileage of roads and trails available for motorized use. Overall, roadless area characteristics within this IRA would improve over time as unauthorized routes passively restore to natural conditions.

Commenter: 00005, 00077, 06568, 06705, 06716, 06750

Roadless Area - Lakes Basin: Keep all existing motorized trails and add 0.7 miles of unauthorized trails.

Response: Closure of existing NFTS roads and motorized trails is outside of the scope of this decision. There are no unauthorized routes in the Lakes Basin Inventoried Roadless Area added to the NFTS in any alternative since none were site specifically recommended by the public.

The Preferred Alternative would improve the roadless characteristics of the Lakes Basin IRA by prohibiting cross country travel on 557 acres and reducing the amount of roads and trails available for motorized use.

Commenter: 06450

Roadless Area - North Fork American River (table discrepancies): There appears to be inexplicable discrepancies between Table 3.09-3 and Table 3.09-22.

Response: The tables were corrected in the FEIS.

Commenter: 06642

Roadless Area – North Fork of the Middle Fork American River (support for additions): The TNF should add these motorized trails into the North Fork of the Middle Fork American River.

Response: These trails are duplicates of others that go to the same scenic overlooks. Because of our concern for cumulative impacts to roadless area characteristics, we do not want duplicate trails going to the same locations.

Commenter: 06448

Roadless Area – West Yuba (no additions to NFTS): Respondents commented that they do not want to add new OHV routes in the West Yuba Inventoried Roadless Area due to the engine noise, impacts to wildlife, and impacts to water quality.

Response: The Preferred Alternative includes adding 4 motorized trails to the NFTS totaling 300 feet in the West Yuba Inventoried Roadless Area (IRA). These routes average 75 feet in length. All of these additions are short spurs off of existing NFTS roads and motorized trails to access dispersed

recreation sites. These routes were included in the Preferred Alternative since they were site specifically recommended by the public, have no significant resource concerns which could not be mitigated (see Appendix A, Site Specific Road, Trail and Open Area Information) and have no significant effect on roadless area characteristics (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

The Preferred Alternative would improve the roadless character of the Middle Yuba IRA by prohibiting cross country travel on 7,884 acres and reducing the amount of roads and trails available for motorized use.

The West Yuba Inventoried Roadless Area (IRA) has had some motorized use associated with mining since the Gold Rush. The existing motorized NFTS network in this IRA has been designated motorized from the beginning of TNF trail management. This area was first designated as a roadless area in the 70s. OHV enthusiasts (especially motorcyclists) value the narrow, rough, and technical nature of these motorized trails. They also value the scenic beauty, remote character, and the rareness of these combined qualities and opportunities. The West Yuba IRA was identified as old forest refugia during the Sierra Nevada Ecosystem Project, and later in the Sierra Nevada Framework. The area was mapped during the Framework as a large, valuable, mostly contiguous and intact old forest ecosystem, which has high value for wildlife.

The Preferred Alternative attempts to strike a balance between providing motorized recreation opportunities within a remote setting, (including loop opportunities, access to popular dispersed sites, and providing opportunities for remote and peaceful recreational experiences) and the protection of resource values. The routes selected for addition to the NFTS in the Preferred Alternative provide access needed to reach heavily used dispersed camping areas and a vista point.

Other routes recommended by the public are not in the Preferred Alternative. Although they would have provided loop connections to other trails, these same trails pass through valuable wildlife habitat, including a Spotted Owl PAC, and the loops generated concern for cumulative effects for increased use within the roadless area, with risk to the high quality habitat and intact ecosystems. Others were not selected since they were dead end trails that did not have an important destination, like a vista point or popular dispersed camping site.

Commenter: 00005, 00077, 06568, 06705, 06716, 06750

Roadless Areas – West Yuba (addition YRN-M2): This is now a complete trail that allows the user to make a full loop. Also this is one of the most technical trails in California, there are very few trails that expert level riders can have their skills tested. This trail has very few trail issues and only needs work in a few spots.

Motorized use presents an unknown risk to late-successional forest function. Incorporating new routes within the East-West Yuba RARE II area are inappropriate to consider, because of the high value that this area contributes to late-successional forest function, and the potential for increased motorized use to degrade these areas. In particular, YRN-M2 would create motorized loops in the

northern portion of the East-West Yuba, and these connect with the Downie River Trail, especially over time. This will result in cumulatively adverse impacts throughout a large portion of this high-quality late-successional habitat that has Sierra Nevada-wide significance.

Response: YRN-M2 is not part of the existing NFTS currently, nor does it show up on the Recreational Opportunity Guide maps. It is true that many trails on the Yuba River Ranger District (including YRN-M2) have showed up in various time periods on a variety of maps for a variety of reasons including gold mining in the Gold Rush days. However, the purpose of this analysis is to determine which unauthorized routes to add to the NFTS motorized recreation opportunities on the TNF.

Route YRN-M2 would be added to the NFTS as a motorized trail open to motorcycles in Alternatives 2 and 5. Use of the motorized trail would be seasonally prohibited for wet weather in Alternative 5. This motorized trail connects the Downieville single track trail to a difficult four-wheel drive trail. This motorized trail creates a loop to Chimney Rock and Poker Flat. It provides very challenging double black diamond riding (limited opportunities), requiring slower travel (less noise). The motorized trail parallels the Downie River for a short distance and connects challenging four-wheel drive and motorcycle trails along the river. Opening this trail to motorcycle use may have a negative effect on solitude because of motorcycle noise. Due to the low numbers of users this effect would occur primarily on weekends. Impacts to roadless area character would be mitigated because riders would not be forced to travel back and forth on existing NFTS trails. Due to the extreme technical difficulty of this route, motorcycle travel is limited to one direction so users would move through the area. In addition, the difficulty of the route would keep the level of use low. Low use, combined with the slower travel speeds necessary to navigate this difficult segment, would minimize noise from motorcycles. The motorized use of this trail is consistent with semi-primitive motorized standards in the Forest Plan.

This route was not included in the Preferred Alternative, due to the minor negative effect on the overall natural appearing landscape and high scenic quality of the area (see Chapter 3.09, Inventoried Roadless Areas & Special Areas).

Commenter: 00005, 00033, 00801, 02519, 02552, 02936, 05632, 05633, 06237, 06393, 06423, 06431, 06433, 06440, 06443, 06568, 06624, 06646, 06680, 06691, 06698, 06699, 06704, 06705, 06717, 06734, 06750, 06752, 06767, 06773, 06784, 06789, 06790, 06797, 06806, 06808, FI, S0014, S0015, S0018, S0023, S0062, S0063, S0064, S0067, S0069

Roadless Area – West Yuba (addition YRN-M3a Grizzly Trail): This is an expert level trail that is rare in California. If the Forest Service closes these black diamond trails, where will the expert riders go to get the trail experiences we desire? It makes a loop with the existing system trails: Chimney Rock, Poker Flat and Gibraltar single track.

Response: This route was excluded from all alternatives due to impacts to watershed and heritage resources that could not be mitigated without a major re-routing. Existing moderate to high difficulty

motorized trails already exist in the general area including the following OHV Trails: Downie River, Craycroft Ridge, Fir Cap, Poker Flat, Chimney Rock, Deer Lake, Gold Valley, and Sierra Buttes.

Commenter: 02552, 02936, 05632, 05633, 06237, 06393, 06431, 06433, 06443, 06568, 06624, 06680, 06698, 06699, 06704, 06744, 06767, 06773, 06784, 06789, 06790, 06797, 06806,FE, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Roadless Areas – West Yuba (addition YRN-M3b): This is a black diamond trail that was created by miners back in the gold rush days and there are very little impacts. The use of the trail is existing and not new trail construction with new impacts. Volunteers maintain the trail, so it does not cost the Forest Service to keep the trail. This trail creates a loop with Empire Creek trail, to Chimney Rock, to rattlesnake to Herkimer, to Grizzly, to Gibraltar Mine trail, to Craycroft Ridge trail, with the option to ride Downie River trail to Fir Cap OHV trail. Motorcycles are not loud on this trail because the trail does not lend itself to heavy throttle use. It should be open and outside this analysis since it was created prior to NEPA, used legally continuously and was not closed through the NEPA process. It makes a loop connection with Downie River and Chimney Rock system trails. OHV trails are legal in RARE II areas.

Motorized use presents an unknown risk to late-successional forest function. Incorporating new routes within the East-West Yuba RARE II area are inappropriate to consider, because of the high value that this area contributes to late-successional forest function, and the potential for increased motorized use to degrade these areas. In particular, YRN-M3b would create motorized loops in the northern portion of the East-West Yuba, and these connect with the Downie River Trail, especially over time. This will result in cumulative adverse impacts throughout a large portion of this high-quality late-successional habitat that has Sierra Nevada-wide significance.

Response: YRN-M3b is not part of the existing NFTS. It is true that many trails on the TNF (including YRN-M3b) have showed up in various time periods on a variety of maps for a variety of reasons including gold mining in the Gold Rush days. Part of the purpose of this project is to determine which unauthorized routes to add to the NFTS motorized recreation opportunities on the TNF. YRN-M3b could form a loop for advanced riders, but it also impacts various natural resources adding to cumulative effects.

YRN-M3b is not included in the Preferred Alternative due to impacts to Inventoried Roadless Area characteristics. It provides loop connection from Downie River to the Castle Rock trails system. Opening this trail to motorcycle use would have a negative effect on solitude because of motorcycle noise. Due to the low numbers of users, this effect would occur primarily on weekends. The addition of this route would have an effect on the overall natural appearing landscape and high scenic quality of the area.

Existing moderate to high difficulty motorized trails already exist in the general area including the following OHV Trails: Downie River, Craycroft Ridge, Fir Cap, Poker Flat, Chimney Rock, Deer Lake, Gold Valley, and Sierra Buttes.

In addition, the East/West Yuba IRAs contain unique attributes of old forest that were identified in the Sierra Nevada Ecosystem Project. These IRAs currently exhibit some impacts from mining, but in general, offer a high quality, intact ecosystem. Since other existing moderate to high difficulty trails are nearby, and due to the concern of increasing cumulative impacts by increasing use, especially by increasing loop opportunities, and because of the important old forest characteristics within the East/West Yuba IRAs, this trail is not included the Preferred Alternative.

Commenters: 00005, 00033, 00801, 02519, 02552, 02936, 05632, 05633, 06237, 06393, 06423, 06430, 06431, 06433, 06440, 06443, 06568, 06624, 06646, 06680, 06691, 06698, 06699, 06704, 06705, 06716, 06717, 06721, 06734, 06744, 06767, 06750, 06752, 06767, 06773, 06784, 06789, 06790, 06797, 06806, 06808, FE, FI, S0014, S0015, S0018, S0054, S0060, S0062, S0063, S0064, S0067, S0069

Roadless Area – West Yuba (Gibraltar Trail, East Fork of Canyon Creek): It appears portions of the East Fork of Canyon Creek in Section 12, specifically permits motorcycle and excludes Four Wheel drive recreation travel. Is this an intended change? If so, I respectfully disagree with the classification, as it unreasonably interrupts loop route opportunity for Four Wheel drive vehicle use. The route is coded as not maintained in sections 11 & 7 on either side of section 12. The segment can be maintained in accordance with Forest Service maintenance standards for Maintenance Level 1 by willing volunteers.

Response: The Gibraltar Trail that shows on the DEIS and FEIS maps in this area is correctly designated. The beginning portion of the trail is wide enough for jeeps, but then narrows down to a segment only wide enough for motorcycles. This segment is only 12 to 18 inches wide with steep side slopes (55%). It has never been, nor can it be, a 4x4 trail. This motorcycle portion is a single track NFTS trail (11E21), which is connected to system 4x4 trails.

Commenter: 06732

State Game Refuge: Another area of concern is the French Meadows vicinity. There is a State Game Refuge there and I feel that all roads in that area need to be limited. The wildlife needs all of the uninterrupted area available. To invite anymore vehicle travel in the area will act to further along the fracturing of and destruction of habitat. Since the area is fairly rich in archaeological sites, I wouldn't like to have anything additional that could compromise the resources.

Response: There are additions to the NFTS in the vicinity of the State Game Refuge. Those seasonal restrictions currently in place will be continued to protect deer during the migration period in the fall.

Commenter: 06243

Stream Crossings (Fordyce Creek): The Forest Service should not permit any OHV river, tributary, or stream crossings of Fordyce Creek.

Response: The Preferred Alternative does not propose any additional motorized recreation opportunities that cross Fordyce Creek. Closure of existing NFTS roads and trails are outside of the scope of this decision.

Commenters: 06668, 06716

Stream Crossings (South Yuba River): The Forest Service should not permit any OHV river, tributary, or stream crossings of the South Yuba River. The South Fork of the Yuba is a water supply and should be protected from direct assaults on its water quality."

Response: The Preferred Alternative does not propose any additional motorized recreation opportunities that cross the South Yuba River. Closure of existing NFTS roads and trails are outside of the scope of this decision.

Commenters: 06668, 06716

Trail 9E11 - Pioneer Trail: Dirt bikes and occasionally snowmobiles are now beginning to use this area where cross country skiers have a long history of non-damaging, quiet usage. A local cyclist was actually run over by a dirt bike on the Pioneer Trail. Also, after every snowstorm there is always a group of off road types who seem to delight in tearing up sections of the Pioneer Trail.

Response: The single-track mountain bike portions of the Pioneer Trail are not open to motor vehicles. Some sections of the Pioneer Trail are located on existing roads (in the area east of the observation point at Omega and Diamond Springs road area) and are open to motor vehicles. The Yuba River Ranger District is currently in the process of constructing a reroute of the Pioneer Trail so that it will no longer use these road segments, and thus will be a non-motorized from beginning to end. The Preferred Alternative does not allow wheeled over-the-snow use in areas near the Pioneer Trail, or in the Steep Hollow cross country ski area.

Commenters: 00061, 05305, 06478

Trail 11E36 Eldorado Creek (motorized access): The Eldorado creek jeep trail out of Michigan Bluff has been off the maps for quite some time. The last time I was down it I was able to get a key to the gate from the Foresthill ranger station. The Jeep trail allowed access to the pristine canyon for those who cannot hike or ride the Last Chance trail.

Response: Trail 11E36 is a NFTS non-motorized trail. Access for motorized use can only be obtained through a Special Use Permit, Road Use Permit or other similar authorization.

Commenter: 06650

Trail 11E76 Robinson Cow Camp Trail (NFTS status): DEIS maps do not show the Robinson Cow Camp Trail, on the top of Butcher Ranch. This is an omission that should be corrected. The trail is even signed on the ground as a Forest Service trail. This error should be corrected outside this NEPA process.

Response: This is an existing NFTS motorized trail open to high clearance trail vehicles. Closure of existing NFTS trails is outside of the scope of this decision.

Commenters: 02936, 05632, 06237, 06704, 06806, 06808

Trail 12E45 - Pierce 4x4 Trails (environmental impacts): Over the years, I have been witness to the constant degradation upstream perpetrated on the river, its riverbanks and the surrounding forest lands by Off Road Vehicles. I have witnessed the Forest Service's almost annual efforts to correct the problems associated with allowing OHVs in and around the river and the associated streams of the Pierce Meadows Areas.

Response: The TNF will continue efforts to address the impacts associated with this trail. Closure of existing NFTS trails is outside of the scope of this project. Cumulative impacts from the existing NFTS motorized roads/trails and the proposed additions were considered in the analysis.

Commenters: 06677, 06696, 06716, 06723, 06749, S0055

Trail 13E16: (Western States Trail at Robinsons Flat): The WST trail is signed closed to OHV, at Robinson Flat. The map shows the WST trail to be Open to OHV. The signs on the ground need to be corrected to allow OHV use on the WST. This trail is not signed from the West end.

Response: Trail 13E16 is a NFTS non-motorized trail. There are "closed to OHV" signs at Robinson's Flat because the Little Bald Mountain Trail and the relocated portion (2004) of the Western States Trail that ties into Little Bald are non-motorized trails.

Commenters: 06804

Trail 13E18 - Robinson's Flat-meadow trail: The Western States Trail at Robinson Meadow is shown as a designated OHV trail, but it is signed closed on the ground. The DEIS map is in error or the sign on the ground is not supported by a valid NEPA document and must be removed and correctly signed as OPEN.

Response: The Western States Trail follows the road through the campground. The meadow loop trail is a separate trail that is non-motorized.

Commenters: 05632, 05633, 06231, 06740, 06773, 06784, 06797, 06806

Trail 14E08 - Meadow Lake and White Rock Lake areas (NFTS Status): The FS blocked the road shown as "Existing System Routes (no change): Open to High Clearance Trail Vehicles" shown adjacent and east of White Rock Lake. There is a creek that runs into the lake and the vehicles were creating resource damage at this location."

Response: The trail on the east side of Meadow Lake (14E08) is a NFTS motorized trail open to high clearance trail vehicles. The TNF has an easement for this trail, which allows public use and access. Public use of the portion of the Meadow Lake road that travels through private property is restricted to the trail prism. A portion of the trail adjacent to and east of White Rock Lake will remain open to access a dispersed campsite. However, the route that crosses the inlet directly east of White Rock Lake will remain closed.

Commenters: 00021, 06252

Trail 15E05 - Motorcycle route connecting Pole Creek Road with Coldstream Canyon: This is an old jeep trail and I would like to still use it, but my days of motorcycle riding are over, let's make it a Jeep trail so all of us can use it.

Response: This trail is an existing NFTS motorcycle trail and is currently suitable for only single track vehicles. Changing this designation would require major reconstruction and as such is outside of the scope of this decision. The section of this trail where in connects to the road in Coldstream Canyon does not appear in the FEIS since it is located on private land for which the Forest Service does not have a valid right-of-way.

Commenter: 06382

Trail 16E04 – Tevis Cup Trail: The Tevis Cup Trail was omitted

Response: The Tevis Cup Trail is non-motorized, non-mechanized NFTS trail. Opening these trails to motorized use is outside of the scope of this decision.

Commenter: 06704, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Trail 16E10 - Western States Trail (location): There is a segment of the Western States Trail between the Last Chance Mine west to what is commonly known as Dusty Corners that has been omitted. The Western States Trail segment from Robinson Flat down into Duncan Canyon and back up to Red Star Ridge, as well as the Red Star Ridge Trail, is shown as a High Clearance Vehicle route, while in reality it is a single track trail. This is another section in the highly prized Western States Trail.

Response: These map errors have been corrected. These portions of the Western States Trail consist of the Maintenance Level 2 NFTS road number 44-22 which is open to all vehicles and the 16E10 NFTS motorcycle trail.

Commenters: 05632, 05633, 06144, 06231, 06698, 06773, 06784, 06790, 06797, 06804, 06806

Trail 16E50 - Prosser Hill Motorcycle Trail (NFTS status): One aspect of the DEIS that I'm guessing is an error is the addition of the nine mile trail at Prosser Hill as user created. It has FS staging area and trail markers; I was under the assumption it was already an official OHV trail. Designate 16E50 as shown in the Preferred Alternative 6

Response: Trail 16E50 is an existing NFTS motorcycle trail and remains open in all alternatives.

Commenters: 06393, 06680, 06704, 06773, 06797, 06806, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069.

Trails – Bake Oven Trail: The Bake Oven Trail was omitted.

Seasonal closure dates are incorrect on the Bake Oven trail. The dates need to be changed from May 1 to November 1 to May 1 to December 31 to reflect the open period.

Response: These map errors have been corrected. The dates for this trail are May to November 1 since the trail is in deer winter range seasonal restriction area specified in the Forest Plan.

Commenters: 05632, 05633, 06144, 06231, 06698, 06704, 06773, 06784, 06790, 06797, 06804, 06806.

Trails – Downieville Downhill (closure): The Forest Service should keep the main Downieville downhill route for mountain bikes and hikers only.

Response: This is an existing NFTS motorized trail. Closure to motorized use is outside of the scope of this decision.

Commenters: 00001, 00098

Trails – Near NFTS road 10-14 (impacting mining claim): The roads and trails that I am concerned about are forest road 10-14 and those trails that are adjacent or a continuation of it. Road 10-14 is shown in green with brown dots. The OHV trails that are shown in yellow and illegal trails are shown in pink. These trails cut across my mining claims.

Response: None of the unauthorized routes in this vicinity are proposed for addition to the NFTS and will have motorized use prohibited on them in all of the action alternatives. The existing NFTS motorized trails in this vicinity have been in place since the mid 1980's and have a supporting NEPA decision. Closure of existing NFTS trails is outside of the scope this decision. Public access could be restricted further through an approved Plan of Operation for your mining claim if such use can be demonstrated to be interfering with your mining operation.

Commenter: 00037, 00370.

Trails – Big Tunnel or Big Pipe Trail (NFTS Status): The Big Pipe trail is incorrectly identified as an unauthorized trail on the DEIS map. It is a legal trail and part of the NFTS.

Response: These routes appear in the FEIS as Maintenance Level 2 NFTS roads open to all vehicles. The road numbers are 32-4, 32-4-2, 32-5 and 32-7.

Commenters: 02956, 06237, 06431, 06568, 06646, 06698, 06704, 06744, 06767, 06773, 06784, 06789, 06790, 06797, FI, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Trails – Canyon Creek OHV Trail (NFTS status): Designation of the trail from Cherokee Creek to the confluence of Canyon Creek and the North Fork as an existing motorcycle-accessible route (green dotted line) is in error. Downstream from Brummell Ravine where the trail begins its descent to the confluence is a historic sign indicating that motorcycles are, and have been for a considerable time, forbidden beyond that point. Add to that that much of the trail between Cherokee Creeks is simply unsafe for motorcycle use.

Response: The Canyon Creek Trail is a NFTS motorcycle trail in all alternatives in the FEIS from Shenanigan Flat Road to the confluence of North Yuba River and Canyon Creek. The definition of what is unsafe to one person is considered a desirable challenge to another.

Commenter: 00479

Trails – Duncan Trail: The Duncan Trail was omitted.

Response: The Duncan Trail is an existing NFTS motorcycle trail. Its location has been corrected in all alternatives.

Commenter: 06704, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Trails – Loch Leven and Big Granite Trails (environmental concerns): Tracks from quad runners are visible on hiking trails leaving torn up landscape and erosion problems. Trailhead (damaged by logging) to Four Horse Flat connecting to the Cherry Point Trail is the specific area. Recently I hiked the Big Granite Trail and, much to my dismay, I found motorcycle tracks in an area that is clearly signed non-motor vehicles.

Response: Both the Loch Leven and Big Granite Trails are non-motorized NFTS trails and are managed as such. Use of motor vehicles on these trails is illegal. Continued illegal activity on these trails could result in the placement of barriers at the entrance to the trails or other structures to prohibit motor vehicle access.

Commenters: 00061, 06679

Trails – Red Star Trail: The Red Star Trail was omitted.

Response: The Red Star Trail is an existing NFTS motorcycle trail. Its location has been corrected in all alternatives.

Commenter: 06704

Trails – Signal Peak (seasonal restrictions): Signal Peak trail's naturally rocky road bed is not adversely impacted by use during the wet season and it naturally becomes impassible in the snowy season. As such, it is self-regulating and does not need the increased regulation of seasonal restrictions by the Forest Service.

Response: Erosion on the Signal Peak Trail has been noted in the past. The Preferred Alternative includes the wet season restriction on all native surface roads and motorized trails to minimize damage and negative resource impacts from wet season use across the entire Forest.

Commenter: 06586

Trails – Western States Trail (NFTS status): The Flume section of the Western States Trail was omitted.

Response: Corrections were made to reflect the location of the Western States Trail in the SDEIS and carried forward to the FEIS. We are not sure where the flume section being referred to is located.

Commenter: 06704, FI, S0014, S0015, S0018, S0062, S0063, S0064, S0067, S0069

Trail – Western States Trail (NFTS Status): Correct the omission of a segment of the Western States Trail from N39 05.918 W120 35.033 to N39 06.798 W120 37.160.

Response: This correction was made in the SDEIS and carried forward to the FEIS.

Commenter: 06804

Modeling

B-1. Modeling Limitations: Concerns were expressed regarding the modeling limitations such as:

The Tahoe National Forest is not using Travel Analysis to inform motor vehicle route and area designations in the Tahoe National Forest; there is no comprehensive, broad-scale, science-based analysis of system roads and motorized trails to determine whether the transportation system designed for motor vehicle use meets resource and other management objectives adopted in the Forest Plan, meets applicable statutory and regulatory requirements, reflects long-term funding expectations, minimizes conflicts among forest visitors, and minimizes adverse environmental impacts. Due to this deficiency, cumulative environmental impacts of the designated motor vehicle route system are not fully addressed.

There is no traceable connection between resource attributes and type and level of permitted use…. One cannot easily determine why a segment (or more importantly a meaningful length of trail or road) is included or excluded. This leaves the public (and project designers) with no way to evaluate the effectiveness of the proposal or to identify and mitigate specific issues with, for example, specific route allocations, or with specific spatial areas of concern.

Response: The Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) describes how Federal agencies must handle instances where information relevant to evaluating reasonably foreseeable adverse impacts of the alternatives is incomplete or unavailable. Federal agencies must make clear that such information is lacking, and decide whether this incomplete or unavailable information is "essential to a reasoned choice among alternatives" (Title 40 of the Code of Federal Regulations, 40 CFR, Part 1502.22). If the information is deemed essential to a reasoned choice among the alternatives, it must be included or addressed in the environmental impact statement.

Knowledge about the biological, physical, and social aspects of ecosystems is, and always will be, incomplete. The ecology, inventory, and management of large landscapes are complex and constantly changing. For example, analysis of the impacts of alternatives on specific plant or animal species prompts questions about population dynamics and habitat relationships. Key relationships and basic data are well established for only a few TNF ecosystems and species. The alternatives were analyzed using the best available information. As data gaps were encountered during analysis, the interdisciplinary team posed the question of whether the missing information was "essential to a reasoned choice among alternatives." The team concluded that while new information could add precision to estimates or better specify relationships; it would be unlikely to significantly change our understanding of the basic relationships that were used to analyze the effects of the alternatives. New information is always welcome, but no missing information was deemed essential to making a reasoned choice among the alternatives being considered in this FEIS. In some instances,

information was unavailable to confidently estimate environmental effects; the text indicates that this information is incomplete or unavailable. In such situations, the FEIS summarizes existing credible scientific evidence relative to the significant effects and makes estimates of effects on theoretical approaches or research methods generally accepted in the scientific community.

Commenters: 00028, 06701, 06716, 06788, S0008

Off-Highway Vehicle Monitoring

G. Tier 1 and Tier 2 Monitoring: The Forest Service should clarify the rationale for the distinction being made between Tier 1 and Tier 2 monitoring as described in DEIS Appendix G.

Response: The distinction between Tier 1 and Tier 2 monitoring has been removed in Appendix M, Off-Highway Vehicle Monitoring, in the FEIS.

Commenter: 06725

G. Monitoring and Enforcement: The Forest Service should include a detailed Travel Management Plan Monitoring and Enforcement Strategy. Such a strategy should include specific information on the monitoring and enforcement program priorities focus areas (e.g., issues, specific locations), personnel needs, costs, and funding sources.

Response: The monitoring plan is included in Appendix M of the FEIS. The Law Enforcement Strategy is described in Appendix K.

Commenter: 06729

Agency Comment Letters Received on the Draft EIS

The following is a reproduction of the letters received during the public comment periods from tribes, federal and state agencies, county and municipal governments and from elected officials.

SIERRA COUNTY

County Auditor
P.O. Box 425
Downieville, California 95936
530-289-3273

SIERRA COUNTY CALIFORNIA 1852

Van A. Maddox
Auditor/Risk Manager

~~Mark W. Stevenson~~
Senior Auditor/Controller

00027

To: Tahoe National Forest

Attn: Tom Quinn

Re: Tahoe National Forest Travel Management Draft
Environmental Impact Statement (DEIS) Fall, 2008

Mr. Quinn,

00027/3.07 As reported to the Board on 7/1/2008, 1400 miles of unofficial OHV trails were identified by the Forest Service in the Tahoe National Forest. The preferred plane in the DEIS only saves 70 miles of these trails. This severe reduction in OHV riding trails will cause OHV users to be crowded onto a few miles of trail causing adverse impact to the Forest, dangerous conditions for riders, and eventually pressure to shut down the remaining, too few, trails.

Since the use of these approved trails will cause significant erosion and other impacts will the trails be shut down at times so the land can repair itself? If so will other comparable areas then be opened for OHV use? This has been the pattern in the state run OHV parks.

00027/AY Currently, family motorcycle clubs use the Indian Valley camping area and ride up to Cal Ida and then ride from there all the way up to Downieville and over to La Port. This area on your map, retrieved from the internet and labeled "Tahoe National Forest Motorized Travel Management Project Proposed Action Plan April 2007", has many trails slated for closure. It seems absurd to close trails in what is obviously one of the most used trail riding areas in Sierra County. These riders pay TOT taxes when they use the camp grounds, eat at the local restaurants and often return at other times of the year, providing needed revenue to Sierra County's economy.

00027/AT The Stampede Reservoir has been another high use area for OHV enthusiasts for decades. The trails, identified on the above mentioned map, slated for closure between Stamped, Boca, and Prosser Reservoirs is the next most concentrated area of trails on your map. Closing these trails is a historic loss of easily accessed trails and camping areas in Sierra County. If this area is too compact and needs a rest then keep open the trails from Stamped north to the Sierra Valley. This would spread out the impact of the OHV use and still allow the historic use by OHV enthusiasts of the Stamped area.

00027/2.0 The instruction given at the 7/1/2008 Board of Supervisors meeting was that we had to provide the name of the trail. This is impossible to do since the map provided on the internet does not list the names of the trails identified for closure, nor are there signs posted out in the forest to aid in this process. I have had several talks with the Blue Ribbon Coalition and was informed that the legislation does not require specific trails to be named but allows for areas to be left open. The request of this letter is that all of the trails in the two areas mentioned above be left open.

Sincerely,

Van Maddox
10/7/2008

SIERRA COUNTY

Board of Supervisors
P.O. Drawer D
Downieville, California 95936
Telephone (530) 289-3295
Fax (530) 289-2830

Patricia Whitley
Chairman

00033

To: Tahoe National Forest

Attn: Tom Quinn

Re: Tahoe National Forest Travel Management Draft
Environmental Impact Statement (DEIS) Fall, 2008

From Sierra County Board of Supervisors

Mr. Quinn,

00033 3.07

00033 3.11

As reported to the Sierra County Board of Supervisors on 10/7/2008, 1400 miles of unofficial OHV trails were identified by the Forest Service in the Tahoe National Forest. The preferred plan in the DEIS saves only 70 miles of these trails. This severe reduction in OHV riding trails will cause OHV users to be crowded onto a few miles of trail causing adverse impact to the forest, dangerous conditions for riders and eventually pressure to shut down the remaining, too few, trails. The Board fears the impact to the economy of Sierra County will be adversely affected by the failure to include these trails into the Forest Service's official off-road trail system. Further it will diminish the utility of the forest to Sierra County residents.

00033 AT

00033 3.11

Currently, family motorcycle clubs use the Indian Valley camping area and ride up to Cal Ida and then ride from there all the way up to Downieville and over to LaPorte. The road leading from the Union Flat Campground should be mixed use since this campground is used by many as a staging area. This area on your map, retrieved from the internet and labeled "Tahoe National Forest Motorized Travel Management Project Proposed Action Plan April 2007", has many trails slated for non-inclusion in the official Forest Service trail system. It will have a detrimental effect on Sierra County's tourist economy to close trails in what is obviously one of the most used trail riding areas in Sierra County. These riders pay TOT taxes when they use the campgrounds and motels, eat at the local restaurants and after experiencing Sierra County often return at other times of the year, providing needed revenue to Sierra County's economy.

00033 AT

The Stampede Reservoir area has been another high use area for OHV enthusiasts for decades. The trails, identified on the above mentioned map, slated for closure between Stampede, Boca, and Prosser reservoirs is the next most concentrated area of trails on your map. Closing these trails is a historic loss of easily accessed trails and with camping areas in Sierra County. If this area is too compact and needs a rest, then keep open the trails from Stamped north to the Sierra Valley. This would spread out the impact of the OHV use and still allow the historic use by OHV enthusiasts of the Stampede area.

The Pliocene Ridge area, including Pike City, Forest, and Henness Pass to Jackson Meadows reservoir, is heavily used by hunters, OHV recreationalists, and many others. Failure to include identified roads and trails in this area would substantially reduce the recreational enjoyment of Sierra County by most Californians. This, too, will be an adverse impact to the economy of Sierra County.

As instructed by you at the Sierra County Board meeting of 10/7/2008, a map of the identified trails in Sierra County has been attached with the areas marked that the Board requests to be included in the Forest Service's official trails within the Tahoe National Forest.

The Board also requests that as many of the Forest Service's road systems as possible be open to mixed vehicle use. In particular, but not limited to: 93 Road, 93-2 Road, 93-3 Road, 54 Road and the Green Acres Road up to the 12 Road, the 12 Road from Highway 49 to the Fiberboard Road, and the Haskell Peak Road.

Specific trails of concern to be included on the Forest Service's designated trails are: YRN_M2, YRN-6, the trail from Oakland Pond to Spencer Lakes, Spencer Lakes to A Tree, Downie River Trail past Sailor Ravine to Chimney Rock, Sailor Ravine, and the road to the Downieville TV antennas in Section 27.

Additionally the County is concerned that the seasonal closings of any trail or road be limited to the shortest time period possible and impact the smallest number of trails and roads. Again the Board is concerned with the impact such closures will have on the economy of the County and the restrictions this will impose on the citizens of Sierra County and their use of the forest. Trails and roads should only be closed to repair or minimize damage, not for fiscal or staffing issues.

The Board would like to thank the Tahoe National Forest for its time in presenting this subject to the Board and the Citizens of Sierra County.

Sincerely,

Patricia Whitley

Pat Whitley, Board Chairman
10/21/2008

Arnold "Arnie" Gutman
District No. 1
P.O. Box 484
Downieville, CA 95936

Peter W. Huebner
District No. 2
P.O. Box 349
Sierra City, CA 96125

Bill Nunes
District No. 3
P.O. Box 118
Calpine, CA 96124

Brooks Mitchell
District No. 4
P.O. Box 95
Loyalton, CA 96118

Patricia "Pat" Whitley
District No. 5
P.O. Box 702
Loyalton, CA 96118

01857

JIM GIBBONS
Governor

STATE OF NEVADA

ANDREW K. CLINGER
Director

DEPARTMENT OF ADMINISTRATION
209 E. Musser Street, Room 200
Carson City, Nevada 89701-4298
(775) 684-0222
Fax (775) 684-0260
http://www.budget.state.nv.us/

November 25, 2008

Tom Quinn
US Department of Agriculture
US Forest Service
Tahoe National Forest
631 Coyote Street
Nevada City, CA 95959-2250

Re: SAI NV # **E2009-121** Reference:

Project: **Tahoe NF motorized travel management DEIS**

Dear Tom Quinn:

01857 1.0

The State Clearinghouse has processed the proposal and has no comment.

This constitutes the State Clearinghouse review of this proposal as per Executive Order 12372. If you have questions, please contact me at (775) 684-0213.

Sincerely,

R. Tietje
Nevada State Clearinghouse

04549

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Pacific Southwest Region
1111 Jackson Street, Suite 520
Oakland, California 94607

IN REPLY REFER TO:
ER# 08/1049

Filed by Hardcopy

26 November 2008

David Arrasmith
Tahoe National Forest
Travel Management Team
631 Coyote Street
Nevada City, CA. 95959

Subject: Review of the Draft Environmental Impact Statement (EIS) for Motorized Travel Management, Tahoe National Forest, Nevada, Placer, Plumas, Sierra, and Yuba Counties, California (ER 08/1049)

Dear Mr. Arrasmith,

The Department of the Interior has received and reviewed the subject document and has no comments to offer.

Thank you for the opportunity to review this project.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

cc:
Director, OEPC

THERN SIERRA AIR QUALITY MANAGEMENT DISTRICT **GRETCHEN BENNITT, APCO**

CT HEADQUARTERS
tton Drive, Suite 320
Box 2509, Grass Valley, CA 95945
30) 274-9360 / FAX: (530) 274-7546
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TRUCKEE FIELD OFFICE
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(530) 550-7872 / FAX: (530) 587-2623
ryan@myairdistrict.com

QUINCY FIELD OFFICE
264 Hospital Rd.
P.O. Box 3981, Quincy, CA 95971
(530) 283-4654 / FAX: (530) 283-0699
george@myairdistrict.com

December 8, 2008

Travel Management Team
631 Coyote Street
Nevada City, CA. 95959

Dear Travel Management Team:

Re: Draft Environmental Impact Statement (DEIS) for Motorized Travel Management on the Tahoe National Forest

3.01 The NSAQMD has reviewed the DEIS for Motorized Travel Management on the Tahoe National Forest and has the following comments. The NSAQMD applauds the extensive work and consideration that has gone into the preparation of this document.

05296 3.01 Table 3.01-3 on page 38 of Chapter 3 lists the 2006 emission inventory (as calculated by the Air Resources Board, which has jurisdiction over motor vehicles) for affected counties. This is useful information, but does not include a unit of measurement. The unit is Tons Per Day.

Table 3.01-1 (page 35 of Chapter 3) lists the Ambient Air Quality Standards attainment status for areas affected by the proposed rulemaking. This table contains several errors. Most notably, Nevada County is listed as Attainment for federal ozone standards. However, Western Nevada County (west of a line that runs north/south in R14E between sections 23 and 24 in T17N northward to between sections 11 and 12 in T18N) was designated Non-attainment for the 1997 federal 8-hour ozone standard in 2004. Thus, the Ozone discussion on Page 38 of Chapter 3 should apply to Nevada County as well as to Placer County. For Nevada County, emissions from off-road motor vehicles constitute 10.8% of total anthropogenic ROG emissions and 0.2% of total anthropogenic NOX emissions (5.2% of total ozone precursor emissions), based on the 2006 emission inventory, so the statement on page 38 of Chapter 3, "[Off-road] Motorized vehicle use does not generate significant amounts of ozone precursors…." is incorrect for Nevada County in the context of the total anthropogenic emission inventory. If the emission of ozone precursors in Western Nevada County is reduced by the proposed rule, this will assist the area in meeting federally required Reasonable Further Progress milestones. While Western Nevada County is currently developing its federal attainment plan and the required reductions have not been solidly defined, it is anticipated that the area will have to reduce emissions of ozone precursors by approximately 3% per year between 2008 and the year Attainment is reached. Reductions in off-road vehicle emissions would ease the burden on other pollution sources such as businesses and residential development projects to reduce emissions, and would lessen the chance of federal sanctions being implemented against the area, and would also assist in the protection of public health. Therefore, **the NSAQMD supports reductions in off-road recreational motor vehicle use (especially reductions in 2-stroke engine use) in Western Nevada County.**

Other errors in Table 3.01-1 are that Eastern Nevada county, Sierra County and Plumas County are technically Unclassified/Attainment for the federal 8-hour ozone standard, rather than Attainment. It is anticipated that all federal ozone classifications in the 3-county area will also

SERVING THE COUNTIES OF NEVADA, PLUMAS AND SIERRA

hold for the 2008 8-hour ozone standard when EPA classifies areas in 2010. Also, Nevada, Sierra and Plumas counties are Unclassified for the federal PM-10 standard, but are listed as Attainment. Attainment for PM 2.5 standards is not discussed, but it is relevant to note that all affected areas in Nevada, Sierra and Plumas counties are Attainment for the federal PM-2.5 standard. Regarding the State PM-2.5 standard, only the Portola Valley area (an area surrounding Portola in Plumas County) within these counties is Non-attainment.

The NSAQMD concurs with statements in the Naturally Occurring Asbestos discussion section in Chapter 3 regarding potential health risk from off-road motor vehicle use in areas with serpentine soils. Particularly at risk are riders who are immediately following other riders during dry conditions and breathing airborne dust. Inhalation of asbestos fibers by children is of greatest concern because the human body is unable to process asbestos fibers and the lifetime risk is cumulative. Also, children's lungs are still developing, their breathing ratio is higher, and they tend to be closer to the ground where the concentration of airborne fibers is highest.

Please call me at (530) 274-9360 or e-mail me at sam@myairdistrict.com with any questions regarding this letter.

Sincerely,

Samuel F. Longmire,
Air Pollution Control Specialist

County of Placer
Board of Supervisors
175 FULWEILER AVENUE
AUBURN, CALIFORNIA 95603
530/889-4010 • FAX: 530/889-4009
PLACER CO. TOLL FREE # 800-488-4308

F.C. "ROCKY" ROCKHOLM
District 1
ROBERT WEYGANDT
District 2
JIM HOLMES
District 3
KIRK UHLER
District 4
BRUCE KRANZ
District 5

05636

December 9, 2008

USDA Forest Service,
Travel Management Team
631 Coyote Street
Nevada City, CA 95959

RE: Route Designation - DEIS

Dear Travel Management Team:

05636 2.0

As a member of the Placer County Board of Supervisors, and a former California State Parks Superintendent of many state recreation areas, I support efforts to keep long established roads and trails open for OHV enthusiasts, other recreational users, fire protection and local commerce. Recreation is vital to local economies of mountain and foothill communities in the Sierras and in the Tahoe region. Roads and trails are vital to protection of life and property from the ever-present dangers of catastrophic wildfires.

Before there was a Forest Service, there were dirt roads supporting community infrastructures such as water, fire protection, and railroads as well as the agriculture, mining and timber industries. Halting the harvesting of the products of sustainable forestry has already decimated local communities. Even clean up after wildfires has been made uneconomical by restrictions upon firefighter accessibility and prohibitions upon use of mechanical equipment in environmental stream zones and within watersheds.

05636 3.1

Unlike many other stakeholders, the OHV community has demonstrated that they are willing to "tax" themselves through user fees and to provide volunteer labor for the maintenance of roads of benefit to everyone. OHV users buy goods and services in the community without the public subsidies many other stakeholders so often demand. OHV organizations have been responsible stewards of environmental resources and critics of irresponsible users. OHV users have contributed to recreation and the economic vitality of Placer County.

05636 2.0

Seasonal closures to recreational users are an additional economic blow upon depressed rural economies already a burden to local, state and federal taxpayers for social and educational services. In times such as these, every effort should be made to unnecessarily avoid harming small local economies. In this case, the existing method for dealing with wet weather closure is temporary forest orders. This has proven to be an appropriate, measured response that is highly superior to mandatory seasons of use (Seasonal Closure) and allows flexibility on the local level, where decisions can be made based on actual circumstances.

E-mail: bos@placer.ca.gov — Web: www.placer.ca.gov/bos

USDA Forest Service,
Travel Management Team Letter
December 2, 2008
Page 2

The following changes should be made to the DEIS in order to remove errors, correct biases and more accurately reflect the current situation:

1. 1. Remove Seasonal Closure from the DEIS Alternatives and discussions, unless in the context of the flexibility of existing forest orders.
2. 2. Add over the snow travel for OHV use. This is a relevant and important use in high elevations where there is adequate snow coverage. Select trails to maximize existing over the snow uses, like the Fordyce Trail or Rubicon Trail. Care should be taken to avoid allowing over snow travel where cross county skiing or snowmobiling occurs.
3. 3. Designate OHV use on Rattlesnake Road – This is an important connector-corridor that provides OHV access in the Cisco Grove area.
4. 4. Revise the economic section to include impact to local economies and micro-economies specific to county and to local area. Also review "burns report" for the Foresthill area in Placer County, which focused the area heavily in the recreation including OHV uses. Coordinate with Placer County plans for the Foresthill Divide Community plan, which indicates growth in recreation jobs and jobs created by the Federal programs.
5. 5. Add routes missing on maps to the No Action Alternative. Many existing routes are not shown on the DEIS maps. Additionally, add route numbers so that they may be identified and discussed in an accurate manner. It is nearly impossible to comment on which specific trails and roads are missing without such identifiers and an accurate No Action map is critical to the entire EIS/NEPA process.
6. 6. Addition/retention of routes allowing mixed use should be encouraged in this environmental document.
7. 7. In making your decision on the preferred alternative for the route designation process, I request that as many of the Forest Service's road systems as possible be open to mixed vehicle use. This will provide a long reaching vision that will allow for the most interconnectivity and flexibility possible to deal with the many possible futures.

Sustainable local economies and cultures depend on continued use of roads and trails, which are long established networks woven into the fabric of local life. Many of the routes proposed to be closed have long been in use, some representing historical values as well being an integral part of daily life of forest communities. Once the issues above are appropriately dealt with this document will be greatly improved.

Sincerely,

Bruce Kranz, Supervisor 5th District

cc: Tom Quinn
State Senator Dave Cox
Congressman Elect Tom McClintock
Congressman Dan Lungren
Placer County Board of Supervisors
El Dorado County Board of Supervisors

068419

Chad_Mellison@fws .gov
12/19/2008 01:29 PM

To tnf_rte_desig@fs.fed.us
cc jroubique@fs.fed.us, durich@fs.fed.us, Kathleen_Erwin@fws.gov, Selena_Werdon@fws.gov
bcc
Subject Lahontan cutthroat trout language in DEIS

068419
3.03

Tahoe National Forest, Travel Management Team- I have reviewed the DEIS and found an error in the Lahontan cutthroat trout section. On page 266 of the DEIS it says that introduced LCT in the Truckee River and Sagehen Creek are not covered under the Endangered Species Act (ESA). This is not true. All exisiting populations on the Tahoe NF are covered under the ESA including, Independence Creek, Independence Lake, Sagehen Creek, Truckee River, Pole Creek, East Fork Creek, Macklin Creek, and an unnamed tributary to East Fork Creek. All occupied waters should be considered in your analysis. In future projects, please consider all occupied waters in your analysis. If you have any questions please contact me. Thanks.

Chad Mellison
USFWS
Reno, NV
775-861-6327
chad_mellison@fws.gov

06462

"Hay, Michael"
<mhay@spike.dor.state.co.us
>
12/23/2008 11:53 AM

To tnf_rte_desig@fs.fed.us
cc
bcc
Subject letter for Greenhorn area

Attn: Tom Quinn
Tahoe National Forest
Route Designation Comments
Draft Environmental Impact Statement

Dear Forest Supervisor Tom Quinn,

06462 2.0 AY

I have been a responsible off-road enthusiast for many years. I have been a member of a number of off-road organization who promote responsible wheeling and education. I would like to ask that you leave the Greenhorn area open all year round. Being a resident of Colorado, I have only made the trip to Tahoe National Forest and the Greenhorn area once, but look forward to many return trips. To me, the Greenhorn area provides a safe and enjoyable environment to experience the outdoors and be with friends and family. I am also looking forward to visiting this area during the Winter some day, as the area seems ideal for snow trips. Please leave Greenhorn open for recreational use.
Sincerely,

Gantt Hay
7291 S. Colorado Ct.
Centennial, CO 80122

Revenue Agent
CO. Department of Revenue
Field Audit Section

(303)355-0400 x4620
mhay@spike.dor.state.co.us

06519

"Jane Schmidt"
<jcschmidt@mp .usbr.gov>
12/24/2008 08:48 AM

To <tnf_rte_desig@fs.fed.us>
cc
bcc
Subject Bureau of Reclamation comments on draft EIS/travel mgmt.

To: Tahoe N.F.
From: Bureau of Reclamation, Carson City, NV
RE: Comments on draft EIS - Travel Mgmt. Program

06519

AT

(1) Road across Boca Dam: In accordance with our security plan for Boca Dam, Reclamation may need to close the road across Boca Dam for extended periods to provide for protection of the public and lands downstream. The Boca Dam Road closure was last implemented during 2006 and the security plan will remain in effect for the foreseeable future. The 7 alternatives considered in the travel management program draft EIS either show the Boca Dam Road as open year-round or open between April 1 and December 31 each year. However, the Boca Dam Road could be closed for significant periods during any year, contrary to what is currently shown for any of the alternatives.

(2) There are defined Reclamation Zones at each of the dams at Prosser, Boca, and Stampede Reservoirs. These zones include chain-link fenced areas. Vehicle access within the Reclamation Zones is restricted to official authorized use only, and public vehicle access is permitted only on the roads crossing the dams, unless road control restrictions are imposed on the roads crossing the dams. Reclamation requests that the Forest Service address the restrictions on vehicle use within the Reclamation Zones in the selected alternative either by not displaying the roads reserved for official use within the Zones, or by informing the public of restricted access within these Zones. Reclamation provided the Forest Service with a map of these 3 Reclamation Zones in an April 3, 2008 letter addressed to Mr. Tom Quinn, Forest Supervisor. If the Forest Service requires additional information on the location of these Zones, please do not hesitate to contact me at 775-884-8372.

Thank you for the opportunity to comment on the Tahoe N.F. Travel Management Program Draft EIS. In order to meet the December 26, 2008 comment deadline we are providing these comments via e-mail. Reclamation staff is available to provide further information on these comments, or to discuss these issues with Forest Service staff as needed. Please contact Jane Schmidt, Natural Resource Specialist at 775-884-8372 for more information. Thank you.

06639

"Allen, Jonathan S "
<jallen@dot.state.nv.us>
12/26/2008 09:00 AM

To <tnf_rte_desig@fs.fed.us>, <fotfa@fotfa.com>
cc
bcc
Subject DEIS plan

I do not agree with the plan to implement the "Wet weather seasonal closures of approximately 2,400 miles of native surface (dirt) roads and trails would be imposed. These additional wet weather seasonal restrictions are imposed to minimize erosion and protect water quality" as proposed in the Tahoe Forest DEIS.

There are indications that this is a shorthand easy solution for the Forest Service instead of the managing of the Forest for which our tax and registration dollars are supposed to be funding.

The Forest needs to be managed not closed for 4 months out of the year regardless of actual rainfall.

There are several working examples of "Rainfall Based Wet Weather" closures for a 48 hour "Dry Out Period" to protect the Trail Systems. Georgetown, Rock Creek, Stonyford, Mendocino National Forest are just a few areas that have a successful temporary wet weather closure policy. This type of plan allows the Managed use of the Forests with community of cooperation with the Forest Management and the OHV enthusiasts. Implementing a similar plan in the Foresthill (Sugar Pine - Parker Flat – China Wall) OHV Area would enhance the shared responsibility of both the Forest Service and the OHV Community. There are also many other OHV recreation areas that are historically useable during the proposed closure period and this needs to be reconsidered.

06639 2.0

In simple words, OHV Recreationists currently care about and volunteer to assist in maintaining the Forest Trail Systems that we use. The Forest Service benefits from this shared sense of "community" with greater care and responsibility among the OHV trail users.

Let's do this through a managed plan; not a calendar closure.

Do Not Pass the "wet weather seasonal closure" because it will create more problems and expenses if it passes and it will alienate the good people within the OHV community.

Sincerely,

Jon Allen
Assistant Program Coordinator
NDOT Safety/Traffic Engineering
775-888-7377
jallen@dot.state.nv.us

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NID Nevada Irrigation District

1036 W Main St • Grass Valley, CA 95945 • (530) 273-6185
From Auburn & Lincoln: 1-800-222-4102 FAX: 477-2646 www.nid.dst.ca.us

06697

December 19, 2008

United States Department of Agriculture
Forest Service
Tom Quinn Forest Supervisor
631 Coyote Street
Nevada City, CA 95959

Re: Draft Environmental Impact Statement (DEIS) for Motorized Travel Management on the Tahoe National Forest

Dear Mr. Quinn:

Please accept this document as a formal written comment on the DEIS.

The Nevada Irrigation District (District) supports the objective of the Motorized Travel Management Plan. However, the District does have a concern that the DEIS does not make it clear that the plan is directed at public users of roads and trails.

06697
3.10

The District owns, operates, and maintains the Yuba-Bear River Project (F.E.R.C. Project 2266). This project is mainly located in the Tahoe National Forest (TNF). Facilities within the TNF include: Jackson Meadows Reservoir, Milton Diversion Dam, Milton-Bowman Conduit, Jackson Lake, French Lake, Faucherie Lake, Sawmill Lake, Bowman Lake, Bowman-Spaulding Conduit, and the Bowman 60 KV Transmission Line.

The District has a concern that the DEIS does not address the District's need to access District facilities on a year-round basis. Several of the Alternative maps indicate seasonal road closures. Without continued authorization it will be nearly impossible for the District to operate and maintain project facilities in a safe dependable manner and stay in compliance with existing FERC License conditions.

Representatives of the District and Pacific Gas and Electric Company have met with TNF staff and were assured the intent was not to exclude authorized users. The District has drafted language that addresses our concern and request that

the below language be included in the Record of Decision. The suggested language for inclusion is as follows:

"This alternative would prohibit motorized vehicle travel off the designated National Forest Transportation System (NFTS) roads, NFTS trails and designated "Open Areas" by the public except as allowed by permit or other authorization. Permits and other authorizations include road use permits for private land owners, special use permits and Federal Energy Regulatory Commission (FERC) licenses, permits for utility companies, irrigation districts and their representatives including all travel necessary in the performance of utility facility operations and maintenance, mining plans of operation, timber sale contractors, and grazing permits. All motorized vehicle travel necessary for utility operations that is not currently addressed by permit or other authorization is exempt under this Plan until such time as the permit/authorization process for those situations can be addressed."

06697
3.10

The District agrees to work with the Forest Service to address any outstanding permit/authorization requirements in a timely manner.

The District appreciates the Forest Service's consideration in this matter. Please feel free to contact Bill Morrow, a member of my staff, at 530-273-8571 ext 13, or via e-mail at morrow@nid.dst.ca.us

Thank you,

Ron Nelson
General Manager
Nevada Irrigation District

06703

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

December 24, 2008

Tom Quinn
Forest Supervisor
Attn: Travel Management Team
631 Coyote Street
Nevada City, CA. 95959

Subject: Draft Environmental Impact Statement for Tahoe National Forest Motorized Travel Management Plan, Nevada, Placer, Plumas, Sierra and Yuba Counties, CA (CEQ# 20080380)

Dear Mr. Quinn:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

EPA commends the Forest Service for their efforts to address the many challenges inherent in developing a balanced Motorized Travel Management Plan that responds to recreational and resource management demands. We acknowledge that the Travel Management Plan process is a positive step in addressing resource impacts from motorized uses. The permanent prohibition of cross country travel off designated routes, the switch from unmanaged to managed motorized recreational use, implementation of seasonal and wet weather closures, and elimination of motorized access below the high water line (when dry) of Prosser, Boca and Stampede Reservoirs will result in significant environmental benefits.

06703
20

While we acknowledge the benefits of the Preferred Alternative (Alternative 6), we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*") due to our concerns regarding the scope of the travel management planning process, timely achievement of the Lake Tahoe and Squaw Creek Total Maximum Daily Load requirements, the continued use of roads and trails in areas containing Naturally Occurring Asbestos, and potential impacts to water quality, meadows, and riparian areas. Additional information is also necessary to fully describe monitoring and enforcement commitments.

EPA is aware of the decision by the Pacific Southwest Region of the Forest Service to limit the scope of the travel management planning process to prohibition of motorized vehicle travel off designated routes, addition of unauthorized roads and trails to the National Forest Transportation System (NFTS) so they may be designated for motor vehicle use, and changes in vehicle class and season of use. The rationale for the limited scope of this process is schedule constraints and limited funding and resources.

06703
1.0

We acknowledge the constraints of funding and resources; nevertheless, we had hoped the Forest Service would take this opportunity to review and rationalize the NFTS, pursuant to Travel Management Rule direction to identify the minimum road system needed (36 CFR Part 212 Subpart A), and to address known road-related resource impairments and use conflicts of both the existing NFTS and unauthorized user-created system, and align the transportation system with maintenance and enforcement capabilities.

Route designations are only part of what is needed to reduce the ongoing adverse impacts to water quality and other resources from the NFTS. We continue to believe a more holistic approach to travel management planning, whereby route designations are guided by travel analysis, known locations of resource impairment, and prior determination of the minimum road system needed, would better serve the long-term interests of the public, Forest Service, and National Forest resources.

06703
4.0

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send two (2) hard copies to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Laura Fujii, the lead reviewer for this project. Laura can be reached at (415) 972-3852 or fujii.laura@epa.gov.

Sincerely,

Laura Fujii for

Kathleen M. Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosure: Detailed Comments
Summary of Rating Definitions

cc: David Arrasmith, Forest Planner, Tahoe National Forest
Steve Thompson, California Operations, US Fish and Wildlife Service
Carolyn Suer and Carl Brown, California Air Resources Board

EPA DETAILED DEIS COMMENTS RE: TAHOE NATIONAL FOREST MOTORIZED TRAVEL MANAGEMENT PLAN, NEVADA, PLACER, PLUMAS, SIERRA, AND YUBA COUNTIES, CA., DECEMBER 24, 2008

Alternative Analysis

06703

Provide information on the minimum Forest road system needed and how this information was used to formulate the alternatives. The scope of this action includes prohibition of motorized vehicle travel off designated routes, the addition of unauthorized user-created roads and trails to the National Forest Transportation System (NFTS) so they may be designated for motor vehicle use, and changes to vehicle class and season of use. We believe a more holistic approach to travel management planning, whereby route designations are guided by travel analysis, known locations of resource impairment, and prior determination of the minimum road system needed, would better serve the long-term interests of the public, Forest Service, and National Forest resources.

3.08

Recommendations:
The FEIS should describe the minimum Forest road system needed and how this information was used to formulate the motorized travel management alternatives. If the minimum road system needed has not been identified, the FEIS should describe how the optimal road system will be identified pursuant to the requirements of the Travel Management Rule (36 CFR Part 212 Subpart A).

Expand the scope of the action to include current roads and trails with known impacts. The DEIS states that the Forest is addressing impacts associated with the current NFTS through the Forest's road maintenance program (p. 3, Volume I: Summary). The current estimate of deferred road maintenance is $115,000,000.00 (p. 601, Volume III: Chapter 3). It is likely that the Forest will experience declining budgets. EPA is concerned with the Forest Service's ability to adequately address known road-related resource impairments given the acknowledged lack of maintenance funds and this proposal to add additional miles of roads and trails to the NFTS.

Recommendation:
We recommend the Forest expand the scope of this action to consider, for seasonal or permanent closure to public motorized use, current NFTS roads and trails with known resource impacts or conflicts with other recreational users and experiences. For example, consider closure of impaired maintenance level 2 native surface roads until adverse impacts of these roads are addressed.

Water Quality

06703
AT

Demonstrate that the Preferred Alternative will help meet TMDL requirements. Squaw Creek and the Truckee River between Lake Tahoe and the California/Nevada Stateline are subject to Total Maximum Daily Loads (TMDL) for sediment. Both of these TMDLs require specific, quantified sediment load reductions over the next 20 years: 25% for Squaw Creek and 20% for the Middle Truckee River. Both contain load allocations that require approximately 55% sediment load reductions from dirt roads from existing conditions. The Middle Truckee River Sediment TMDL specifically states that the Tahoe

cont'd on next

National Forest Motorized Travel Management Plan will be a key component to meeting the load reductions required from dirt roads.[1]

06703
3.08

Recommendation:
The FEIS should include data that demonstrate that Alternative 6 - Preferred Alternative (Preferred Alternative) will help meet the required sediment load reductions from dirt roads from existing conditions. If such load reductions will not be achieved, than additional Best Management Practices (BMPs) and mitigation measures should be adopted and incorporated into the Preferred Alternative to meet TMDL requirements.

Naturally Occurring Asbestos

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Do not add roads or trails on land "most likely" to contain naturally occurring asbestos. The action alternatives increase the miles of roads and trails officially open to motorized use on land "most likely" to contain naturally occurring asbestos (NOA) (p. 28, Volume I: Summary). Disturbance of rocks and soils that contain naturally occurring asbestos (NOA) can result in the release of asbestos fibers to the air and exposure to the public. Asbestos is a known human carcinogen and represents a potential human health risk for those exposed while using roads or trails where it occurs. Of specific concern are the three miles open to All Terrain Vehicles (ATVs) and motorcycles on land "most likely" to contain NOA. ATV and motorcycle users may be at higher risk of exposure to asbestos fibers since they are lower to the ground and open to the air. Even with the prohibition of travel cross country and on un-authorized routes, the Preferred Alternative would continue to allow motorized use on 43-miles of existing NFTS roads and trails on lands "most likely" to contain NOA (p. 47, Volume III: Chapter 3).

Recommendations:
Additional miles of native surface roads or trails on land "most likely" to contain naturally occurring asbestos (NOA) should not be added to the NFTS or designated for motorized vehicle use. If such miles are added to the NFTS, the FEIS should provide the rationale for their addition and include data to demonstrate that these additional miles would not significantly increase the risk of adverse health effects.

For heavily used existing roads and trails on land "most likely" to contain NOA, we recommend assessing the potential for exposure to elevated levels of NOA. This information should be provided in the FEIS. We recommend prohibition of public motorized use and closure of roads and trails where monitoring indicates the potential for significant NOA exposure. The Forest should post signs informing visitors that NOA is present, what the risks are, and how visitors can avoid exposure. These measures should be incorporated into the Preferred Alternative and committed to in the Record of Decision (ROD).

[1] http://www.swrcb.ca.gov/rwqcb6/water_issues/programs/tmdl/truckee/docs; pps. 10-10 to 10-11.

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Water and Riparian Resources

Provide a rigorous evaluation of the effects of the change of hardened surface roads to high clearance roads and their use by all vehicles. All the action alternatives, except Alternative 3: Cross-Country Travel Prohibition Only, allow hardened surface roads to be "open to all vehicles" through either: 1) a reduction of maintenance until they meet high clearance conditions (e.g., degrade to ungraded, rough surface, pot holes, wash boarding) that allow for safe mixed-use, or 2) by a decision of a qualified road engineer that the assessed road condition is poor enough to allow safe mixed-use (p. 10, Volume I: Summary). The Preferred Alternative would change 276 miles of smooth surface roads to high clearance roads (p. 584, Volume III: Chapter 3).

EPA acknowledges that this action may better align road maintenance requirements with available funds and resources. However, roads and trails are primary contributors of excess sediment and water quality contaminants, many as a result of limited maintenance. We are concerned with the potential adverse water quality effects of a reduction of maintenance on roads that may already be affecting resources.

> ***Recommendation:***
> The FEIS should provide a more rigorous evaluation and description of the effects of the proposed redesignation of hardened surface roads to high clearance roads and their availability to all vehicles. We recommend additional BMPs be included in the Preferred Alternative to ensure the change from hardened surface roads to high clearance roads do not result in additional adverse water quality or sediment effects.

Evaluate the effects of alternatives on route proliferation at dispersed campsites near streams, lakes, springs and meadows. Route proliferation from public wheeled motor vehicle use often occurs around dispersed campsites that are along sensitive riparian areas. Although the evaluation of effects on water and riparian resources considers many other indicator measurements, it does not appear to evaluate the effect of alternatives on route proliferation in sensitive resource areas. While the Preferred Alternative would eliminate unauthorized use on 78 wet meadows, it would continue to allow motorized use through 5 wet meadows and a high density of routes within Riparian Conservation Areas in 16% of watersheds (p. 293 and p. 109, Volume III: Chapter 3).

> ***Recommendation:***
> We recommend the FEIS evaluate the effect of the alternatives on route proliferation at dispersed campsites near streams, lakes, springs, and meadows, and the related impacts to water and riparian resources.

Include the rationale for each specific road or trail added to the NFTS for motorized use. The Preferred Alternative would allow motorized travel to continue within or adjacent to sensitive habitats and resources such as wet meadows, springs/seeps, vernal pools, high elevation openings and rock areas, and inventoried roadless areas (pps. 301, 515, 548, 560, Volume III: Chapter 3).

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Recommendations:
For each road or trail added to the NFTS, the FEIS should provide the specific rationale that supports the decision that continued motorized use outweighs the negative effects of continuing this use. We recommend the rationale be included in Appendix A as part of the Road Cards which provide site-specific mitigation and monitoring requirements for each proposed route addition.

We recommend modification of the Preferred Alternative to further reduce effects on wet meadows, vernal pools, springs/seeps, and other sensitive resources by eliminating or reducing additions to the NFTS in these areas.

Monitoring and Enforcement

Develop, describe, and implement a Travel Management Plan Monitoring and Enforcement Strategy. It is important that wildlife protection, vegetation management, and erosion control goals be achieved to minimize the potential adverse effects of the Motorized Travel Management Plan. We believe the public and decision makers would benefit if a strategy is developed that includes specific information on funding, monitoring and enforcement criteria, thresholds, and priorities.

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Recommendations:
We recommend development of a detailed Travel Management Plan Monitoring and Enforcement Strategy. Such a Strategy should include specific information on the monitoring and enforcement program priorities, focus areas (e.g., issues, specific locations), personnel needs, costs, and funding sources. We recommend the FEIS demonstrate that the proposed monitoring and enforcement strategy is adequate to assure that motorized vehicle use will not violate access restrictions or exacerbate already identified road-related resource problems. We recommend the Monitoring and Enforcement Strategy be periodically updated (e.g., annually or biennially).

Exclude routes on the Motor Vehicle Use Map not yet open for use due to mitigation measure implementation delays. Table 2-5: Mitigation Measures Required for Implementation lists mitigation measures which will be implemented prior to opening the specific route to public motorized use (p. 56 – 68, Volume II: Chapter 2). Many of these mitigation measures require drainage improvements, barriers, and fencing which may call for significant funds and resources. Given the substantial level of deferred road maintenance and expected decline in budgets, EPA is concerned with the Forest Service's ability to quickly implement the identified mitigation measures and the potential for continued un-authorized motorized use of these designated routes.

Recommendation:
The FEIS should state whether the Motor Vehicle Use Map (MVUM) would include the designated routes that are not yet available for use due to required mitigation measures. If these routes will be included on the MVUM, describe how use would be restricted until identified mitigation measures are implemented. If these routes are not included on the MVUM, described how and when the Forest

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would open and designate these routes for use. We recommend routes not yet open due to required mitigation measure be excluded from the MVUM in order to reduce the unintentional un-authorized use of these routes.

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Procedural

Commit to route-specific environmental analysis for user-created route additions. On some National Forest System lands, repeated use by motor vehicle travel has resulted in unplanned motorized trails un-authorized for motorized use. These trails were generally developed without environmental analysis or public involvement and may be poorly located and cause unacceptable impacts (p. 2, Volume I: Summary). EPA is concerned with the addition of un-authorized user-created trails to the NFTS which may not have undergone site-specific environmental analysis or public involvement.

Recommendation:
The FEIS should state how the Forest will ensure specific user-created routes are adequately evaluated pursuant to NEPA requirements. Where prior environmental analysis has not occurred, we recommend a commitment in the FEIS and ROD to route-specific environmental analysis prior to the route's addition to the NFTS or its designation for public motorized use.

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

California Regional Water Quality Control Board
Lahontan Region

Linda S. Adams
Secretary for Environmental Protection

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Arnold Schwarzenegger
Governor

December 26, 2008

Tahoe National Forest
Travel Management Team
631 Coyote Street
Nevada City, CA 95959

COMMENTS ON THE TAHOE NATIONAL FOREST MOTORIZED TRAVEL MANAGEMENT DRAFT ENVIRONMENTAL IMPACT STATEMENT

Staff of the California Regional Water Quality Control Board, Lahontan Region (Water Board) has reviewed the above-referenced Draft Environmental Impact Statement (DEIS). The DEIS discloses the environmental impacts associated with alternatives for managing motor vehicle use on the Tahoe National Forest. DEIS Chapter 3 describes the potential environmental impacts of the proposed action and alternatives. DEIS Appendix A includes site-specific resource information and required mitigation measures for all of the motorized trails proposed as additions to the NFTS. The DEIS anticipates that the final motor vehicle use map will be implemented in June 2009.

The preferred alternative (Alternative 6) includes the following key elements:

1. Cross country motorized travel off designated roads, trails, and "Open Areas" would be prohibited. (*The Notice of Intent (NOI) assumed the prohibition of wheeled motorized vehicle travel off designated NFS roads, NFS trails and areas by the public except as allowed by permit or other authorization*).
2. The Forest Plan would be amended to remove the seasonal closure on 18,000 acres in the Sugar Pine area to improve motorized recreation opportunities. (*The NOI assumed the addition of one 60 acre area, where use of wheeled motorized vehicles by the public would be allowed anywhere within that area*).
3. Wet weather seasonal closures of approximately 2,400 miles of dirt roads and trails would be imposed.
4. Existing, hardened surface roads would be changed from *"Open to Highway Legal Vehicles Only"* to *"Open to All Vehicles"* on 276 miles of roads. (*The NOI assumed non-street legal vehicle use would be allowed on approximately three miles of an existing NFS road where such use is currently prohibited*).
5. 70.3 miles of motorized trails would be added to the National Forest Transportation System (NFTS), resulting in more than 2,900 miles of roads and trails available for motorized vehicle use. (*The NOI assumed the addition of approximately 50 miles of existing unauthorized routes to the current system of National Forest System (NFS) trails currently open to the public for wheeled motorized vehicle use*).

General comments

The NOI, which specifically dealt with the preparation of the Environmental Impact Statement (EIS), indicated that the proposed EIS would discuss the impacts of transforming unauthorized areas and trails currently in use by the public into NFS roads and trails. It was unclear whether this EIS would also address the impacts associated with decommissioning or abandoning currently unauthorized use areas and trails, or restoring sensitive areas already impacted by unauthorized OHV use on Forest Service lands. Water Board staff previously commented on the NOI for this project, and also provided a letter to the Tahoe National Forest regarding our expectations on Total Maximum Daily Load (TMDL) implementation activities to control sediment on your Forest lands within the middle Truckee River. Copies of both of these documents are enclosed. As stated in our NOI comments, our current scientific knowledge indicates that roads are the greatest human-caused contributor of sediment to watercourses in forested ecosystems. Roads also intercept groundwater, increase peak flows, and obstruct fish passage. Therefore, the same concerns we had in our previous correspondence remain applicable, but for the most part, will not be reiterated in this letter.

Specific comments

1. The Truckee River is a 303(d) listed hydrological unit listed with sedimentation/ siltation as a stressor. Water Board staff considers any increase in sediment loading to the Truckee River and its tributaries to be a significant adverse environmental impact and is to be avoided. Further, the Water Quality Control Plan for the Lahontan Region (Basin Plan), Section 4.1, Waste Discharge Prohibitions, pages 4.1-6 and 4.1-7, contains prohibitions against the discharge and threatened discharge of wastes to lands within the 100-year floodplain of the Truckee River or any tributary to the Truckee River. This section also prohibits the discharge of waste materials to surface waters of the Truckee River Hydrologic Unit. Waste is defined to include any waste or deleterious materials including, but not limited to, waste earthen materials (such as soil, silt, sand, clay, rock, or other organic or mineral material and any other waste as defined in the California Water Code 13050(d)).

   The DEIS included maps for each of the alternatives. Water Board staff had requested that the Tahoe National Forest provide topographic maps of the project areas illustrating soil characteristics and the location and type of surface waters (ephemeral, intermediate, or perennial), 100-year flood plains and riparian areas (including meadows and springs) to be found within the proposed project areas, but these were not included in the DEIS. Other requests made in our comment letter for detailed information on resources, avoidance or mitigations, and enforcement were similarly lacking in the DEIS. As noted below, the DEIS lacks specific detail on resource locations and how these resources will be protected. Please ensure that the final EIS provides specific information to illustrate how potential impacts will be avoided or mitigated.

2. The legend at the beginning of Appendix A indicates the letters designated for the Class of Vehicle and Season of use. The legend includes an 'M' Class Vehicle which is not used in the Table A-1; Table A-1 includes many 'W' and several 'V' designations which are not listed in the Legend. Please correct these typographical errors in the Final EIS.

3. As stated in our comments to the NOI, Water Board staff understands the purpose of this project, as well as the magnitude of the operation and the different factions that the Forest Service must appease. Potential impact rankings were understandably based on percentages and densities rather than each and every individual hydrologic connectivity location. However, as illustrated by the following priorities and issues stated within the DEIS, staff remains concerned over the lack of commitment to address potential water quality impacts associated with adding routes to an already-stressed NFTS operations and maintenance budget.

   a. The unlabeled tables in Appendix A provide a brief description of the resource information regarding watershed, etc. issues, a sentence or two on mitigation measures where deemed to be required, and a sentence on the monitoring requirements for each proposed NFTS motorized trail. Although a number of these routes note high erosion risks and moderately high or high water quality risks, many indicate that no mitigation measures are required, and most have no monitoring requirements. Waterbars appear to be required mostly where risk to the trail is imminent.

   b. Although Chapter 3 acknowledges that "(t)he greatest risk of sediment moving into streams occurs where routes cross streams," Appendix A includes few trail descriptions regarding the number, type, or condition of the existing crossings. One example, on page A-105 (Trail YRS-SF6b) states that there are "(n)o stream crossings," then notes that "(t)his route has two stream crossings near the Omega Road." Despite noting rill erosion into its culvert, a headcut eroding the base of the route, and additional continuous rilling below the route, this description not only lacks the erosion risk and water quality risk factors noted on other trails, it also has "no monitoring requirements."

   c. DEIS Volume 1: Summary, as well as in other locations throughout the DEIS, indicate that any changes to NFS roads, motorized trails, and areas should achieve a number of specific purposes. These purposes include avoiding impacts to cultural resources, providing for public safety, providing for a diversity of recreational opportunities, etc. Administering and maintaining roads, trails, and areas <u>based on availability of resources</u> (emphasis added) and minimizing damage to soil, vegetation, and "other forest resources" (water quality?) are listed fifth and sixth in the list.

   d. Eight sites are identified in Chapter 3 as requiring mitigation measures to protect groundwater resources. Chapter 3 also indicates that Squaw Creek and East Martis Creek are the only watersheds within the Lahontan region with higher potential erosion risk to soil and watershed resources from motorized travel, and adds that "(t)he potential erosion risks in the Truckee and Feather River basins are the lowest on the (Tahoe National Forest)." It does acknowledge, however, that the Truckee River Basin has the second highest existing "Higher Risk Route" density. Although, as re-stated above, current scientific knowledge indicates that roads are the greatest human-caused contributor of sediment to watercourses in forested ecosystems, the DEIS states that "(t)he prohibition on cross country travel and wet season closures are the two most important actions proposed in this project."

   e. Appendix G notes the Tier 1 and Tier 2 monitoring efforts which will occur. Under the preferred alternative, twenty routes throughout the entire Forest have been targeted for Tier 1 watershed monitoring, which includes annually surveying these routes for the specific concern identified noted in Appendix A. Tier 2 monitoring

consists of a random sampling of the remaining roads and trails, based on available funding (emphasis added), conducted using the Region 5 BMPEP protocol.

f. Appendix R provides information on mitigation measures specified for 86 Riparian Conservation Areas throughout the Forest. Without extensive cross-referencing, it is impossible to note which of these routes are in the Lahontan region. However, this appendix does include a paragraph which states that this project is consistent with the Truckee River TMDLs and TMDL Implementation Plan.

Our past comments, letters and dialogue during meetings voiced concerns that the Forest Service does not have sufficient resources for long-term operation and maintenance of the previously-existing roads and trails without adding additional routes to the system. It would appear, based on the lack of specificity placed on addressing all currently existing problems, the lack of sufficient monitoring, and the emphasized wording noted above, that this concern continues to be valid.

4. Water Board staff requests that the Tahoe National Forest provide annual updates on route operations and maintenance, and remaining or unaddressed maintenance/repair needs to protect water quality.

Please forward copies of your decision documents to me at the letterhead address. If you have any questions regarding this letter, please call me at (530) 542-5426.

George Cella
Engineering Geologist

Enclosures:
1) Implementation Actions for the Middle Truckee River Watershed Total Maximum Daily Load (TMDL) for Sediment, dated July 10, 2008
2) Comments on the Notice of Intent to Prepare the Tahoe National Forest Motorized Travel Management Environmental Impact Statement, dated May 15, 2007

cc: Steven T. Eubanks, Forest Supervisor, Tahoe National Forest
Jacques Landy, USEPA Lake Tahoe Basin Coordinator, c/o TRPA

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[US Forest Service/Tahoe National Forest/Roads/Motorized Travel Management]

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California Regional Water Quality Control Board
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July 10, 2008

Tom Quinn
Forest Supervisor
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IMPLEMENTATION ACTIONS FOR THE MIDDLE TRUCKEE RIVER WATERSHED TOTAL MAXIMUM DAILY LOAD (TMDL) FOR SEDIMENT

This letter outlines Lahontan Water Board staff's expectations regarding TMDL implementation activities to control sediment on US Forest Service-Tahoe National Forest (TNF) lands within the middle Truckee River watershed.

Background

On May 14, 2008, the Lahontan Water Board adopted a TMDL for sediment in the middle Truckee River watershed. The TMDL estimates that sediment loading should be reduced by 20 percent to protect aquatic life beneficial uses. The time frame for meeting this load reduction is estimated to be 20 years. Progress toward meeting the TMDL will be assessed through the existing monthly monitoring of suspended sediment concentrations in the river at Farad (USGS site), and by tracking progress of erosion control actions by land owners and managers in the watershed.

The TNF manages approximately 50 percent of the land in the TMDL project area, which consists of 428 square miles of land draining into the reach of the Truckee River from the outflow of Lake Tahoe to the California/Nevada state line. Dirt roads, areas disturbed from legacy land use activities, and in-stream erosion are the primary sediment-generating land uses under the TNF's jurisdiction. Very generally, implementation actions needed to control sediment from these sources could include dirt road rehabilitation or decommissioning, stream or meadow restoration, or revegetation of disturbed areas.

I recognize that the US Forest Service has numerous priorities to fulfill its management objectives, including watershed management, fuels management, fire suppression, and recreation. Additionally, I am aware that Water Boards throughout the state have adopted TMDLs specifying pollutant load reductions from US Forest Service lands. Due to these demands, funding availability for sediment control actions on the TNF in the TMDL project area may be limited, at least in the short term. However, by identifying

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and prioritizing erosion control projects in the TNF, the Forest Service can demonstrate the need for additional funding, and be poised to take advantage of opportunities as they arise.

TMDL Implementation Expectations

The TMDL implementation plan summarizes the approach the Water Board and the TNF should take to reduce sediment loading in the middle Truckee River watershed. Specifically, the TMDL relies on the Management Agency Agreement between the State Water Board and USFS, which requires the USFS to implement the practices and procedures outlined in the *Water Quality Management for National Forest System Land in California*. This document describes how the US Forest Service will identify, implement, maintain, and monitor best management practices (BMPs) to protect water quality. The TMDL recommends that Water Board staff work with the TNF to develop a strategy to identify problem areas (related to sedimentation and erosion) on TNF lands and to track and report progress on TMDL targets for dirt road maintenance and legacy site restoration over the next 20 year period.

Therefore, we request you propose a strategy to identify and prioritize projects to control sediment delivery from USFS lands in the middle Truckee River watershed, and a method to report progress on erosion control project implementation and effectiveness. In your proposal, please describe the reporting format, report contents, and annual submittal date for reports.

The middle Truckee River sediment TMDL must still be approved by the State Water Board, the Office of Administrative Law, and the US EPA; therefore, it likely will not be in effect until 2009. We anticipate requiring annual reports beginning in late 2009 or early 2010. We look forward to working with the TNF to protect water quality in the middle Truckee River watershed. Please contact Anne Holden at 530-542-5450 or aholden@waterboards.ca.gov with any questions.

Lauri Kemper, P.E.
Supervising Water Resources Control Engineer

cc: Barry Hill, USFS-Regional Hydrologist
Carol Kennedy, TNF
Joanne Roubique, District Ranger
Jack Landy, US EPA

ALH/dhT: TNF TMDL implementation.doc
File under: Truckee TMDL

California Environmental Protection Agency

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California Regional Water Quality Control Board
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Arnold Schwarzenegger
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May 15, 2007

Route Designation Team
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COMMENTS ON THE NOTICE OF INTENT TO PREPARE THE TAHOE NATIONAL FOREST MOTORIZED TRAVEL MANAGEMENT ENVIRONMENTAL IMPACT STATEMENT

Staff of the California Regional Water Quality Control Board, Lahontan Region (Water Board) has reviewed the above-referenced Notice of Intent (NOI), published in the Federal Register on April 11, 2007. The NOI notes that the Tahoe National Forest has completed mapping and evaluating existing unclassified roads, OHV trails (both National Forest "system" and "non-system" routes), and off-route use areas. The NOI specifically deals with the preparation of the Environmental Impact Statement (EIS) designating all trails and specifically defined areas for wheeled OHV use, which will be available for public comment in September 2007. The Tahoe National Forest plans to issue orders to prohibit motor vehicle use off roads, designated trails, and specifically defined areas by September 2008.

The proposed EIS will specifically disclose impacts associated with the following proposed actions:

1. The addition of approximately 50 miles of existing unauthorized routes to the current system of National Forest System (NFS) trails currently open to the public for wheeled motorized vehicle use;
2. The addition of one 60 acre area, where use of wheeled motorized vehicles by the public would be allowed anywhere within that area;
3. Allowing non-street legal vehicle use on approximately three miles of an existing NFS road where such use is currently prohibited; and
4. The prohibition of wheeled motorized vehicle travel off designated NFS roads, NFS trails and areas by the public except as allowed by permit or other authorization.

General comments

The NOI indicates that the proposed EIS will discuss the impacts of transforming unauthorized areas and trails currently in use by the public into NFS roads and trails. It is unclear whether this EIS will also address the impacts associated with

decommissioning or abandoning currently unauthorized use areas and trails, or restoring sensitive areas already impacted by unauthorized OHV use on Forest Service lands. Our current scientific knowledge indicates that roads are the greatest human-caused contributor of sediment to watercourses in forested ecosystems. Roads also intercept groundwater, increase peak flows, and obstruct fish passage. Water Board staff agrees with Tahoe National Forest's decision to evaluate and mitigate the impacts caused by the current network of unauthorized trails and use areas. In order to restore watershed functions and to protect water quality, unneeded routes should be decommissioned and restored, and essential routes should be reconstructed and/or retrofitted with appropriate best management practices (BMPs) to control nonpoint source pollution. We urge the Forest Service to identify likely resources for long-term operation and maintenance of roads and trails (including maintaining closures) and only designate official routes where retrofits and maintenance can be accomplished on a regular basis.

As indicated in the NOI, "Unmanaged OHV use has resulted in unplanned roads and trails, erosion, watershed and habitat degradation, and impacts to cultural resource sites. Compaction and erosion are the primary effects of OHV use on soils. Riparian areas and aquatic dependent species are particularly vulnerable to OHV use. The Forest Service has stated that unmanaged recreation, including impacts from OHVs, is one of "Four Key Threats Facing the Nation's Forests and Grasslands." The Tahoe National Forest should not be constructing additional roads or new OHV areas before dealing with these existing impacts.

Specific comments

1. The NOI is not meant to provide details on exactly how or where existing and construction impacts are to be mitigated. However, please ensure that the draft EIS includes sufficient project level detail for the reviewers to understand exactly how sensitive areas are to be protected and restored.

2. The detail provided on the maps included with the NOI is insufficient to determine whether the proposed NFS road additions currently cross existing ephemeral or intermittent watercourses, or whether private roads/trails off Forest Service lands, which must be used to access the NFS roads and trails currently have low-water crossings which contribute sediment to the watercourses. The Truckee River is a 303(d) listed hydrological unit listed with sedimentation/siltation as a stressor. Water Board staff considers any increase in sediment loading to the Truckee River and its tributaries to be a significant adverse environmental impact and is to be avoided. Further, the Water Quality Control Plan for the Lahontan Region (Basin Plan), Section 4.1, Waste Discharge Prohibitions, pages 4.1-6 and 4.1-7, contains prohibitions against the discharge and threatened discharge of wastes to lands within the 100-year floodplain of the Truckee River or any tributary to the Truckee River. This section also prohibits the discharge of waste materials to surface waters of the Truckee River Hydrologic Unit. Waste is defined to include any waste or deleterious materials including, but not limited to, waste earthen materials (such as

soil, silt, sand, clay, rock, or other organic or mineral material and any other waste as defined in the California Water Code 13050(d)). Please ensure that your environmental document addresses these issues when considering constructing, improving, restoring, and maintaining any crossing leading to or within the NFS road and trail network associated with this EIS.

3. Water Board staff recommends that the Tahoe National Forest consider conversion of all existing wet crossings on the associated project roads and trails to 100-year flood plain-spanning bridges in order to protect the environment and avoid potential project delays associated with obtaining Basin Plan prohibition exemptions.

4. The EIS should consider alternatives that include re-routing of roads and trails to avoid impacts to aquatic resources, including meadows, riparian areas, etc.

5. Please provide topographic maps of the project areas illustrating soil characteristics and the location and type of surface waters (ephemeral, intermediate, or perennial), 100-year flood plains and riparian areas (including meadows and springs) to be found within the proposed project areas.

6. The maps provided with the NOI indicate areas which will be seasonally closed to OHV use. Please ensure that your EIS details how these closures will be implemented and enforced.

7. The NOI indicates that "access to water edge / dry soil only" areas will be posted. Please ensure that the EIS described how these areas will be designated and the restrictions will be enforced.

8. Water Board staff recommends that the Tahoe National Forest consider placing educational signs in locations where unauthorized trails are to be closed off, and where previous unauthorized OHV usage has impacted sensitive environments.

Please forward copies of your planning and decision documents to me at the letterhead address. Please call me at (530) 542-5426 if you have any questions regarding this letter.

George Cella
Engineering Geologist

cc: Travel Management Team, Tahoe National Forest
Steven T. Eubanks, Forest Supervisor, Tahoe National Forest

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[File Under: USFS/Tahoe National Forest/Roads]

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12/27/2008 09:52 AM
Please respond to
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To tnf_rte_desig@fs.fed.us
cc
bcc
Subject RDP Travel Management Plan

Mr. Quinn,

After careful review of the Tahoe draft I have the following comments.

Chief Bosworth had four areas of critical concern. The number one area of concern was wild fires.

The issue of "cross country" travel was number four.

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After reading your draft it appears that concern number one was completely ignored. The system routes and trails provide access for fire crews that help fight wild fires. By removing roads and trails from the current system / route inventory, your office is decreasing the accessability to the forest.

The trails provide excellent foot paths for fire fighters. Level one and level two roads make it possible to get supplies and personel in and out of remote areas.

By closing such a large amount trails and roads, your district is limiting access to remote locations in the forest. By doing so you are putting the Forest and the lives of the fire fighters at risk.

I am asking that your staff completely scrap the current draft and rethink the system routes with fire prevention and fire fighting in mind.

Steve Koretoff
BLM Central California Resource Advisory Council

06770

Steve Koretoff
<skoretoff@sbcglobal .net>
12/27/2008 10:18 AM
Please respond to
skoretoff@sbcglobal.net

To tnf_rte_desig@fs.fed.us
cc
bcc
Subject TNF Draft

Mr. Quinn,

06770 1.0

After careful review of the TNF draft I believe that your district has gone beyond the scope and intent of the original plan.

It appears that your staff has used the "template" provided by Region 5. It is my opinion that this "template" has gone outside of the original intent and scope to address issues other than that of Chief Bosworth's areas of concern.

By using these templates it is my opinion that the TNF may very well have put itself in a position for potential litigation by going outside of the original scope and intent.

Each district is unique and I believe that a template cannot used properly to achieve the original intent of the rule. Each ditrict is given final authority in the plan according to verbage set forth by the Forest Service. Region 5 has undermined the ability of your district develop a plan according to the original intent and scope.

06770 1.0

I am requesting that your staff review all routes that are being proposed for closure without the hindrence of the Region 5 templates. Mr. Quinn, it is my understanding that it is your authority as district head to have the final say in the plan and final rule, not Region 5 headquarters. Your staff and yourself have the intimate knowlegde of the Tahoe National Forest that Region 5 does not. Please excercise your authority in this matter and keep most of the current routes open.

Steve Koretoff
BLM Central California Resource Advisory Council

USDA FOREST SERVIC 12:59:36 p.m. 12-31-2008 5/6
2008 1:08PM SENATOR FEINSTEIN NO. 356 P. 2

FEINSTEIN
ALIFORNIA

COMMITTEE ON APPROPRIATIONS
COMMITTEE ON THE JUDICIARY
COMMITTEE ON RULES AND ADMINISTRATION - CHAIRMAN
SELECT COMMITTEE ON INTELLIGENCE

United States Senate
WASHINGTON, DC 20510-0504
http://feinstein.senate.gov

December 18, 2008

Randy Moore, Regional Forester
Pacific Southwest Region
USDA Forest Service
1323 Club Drive
Vallejo, CA 94592

Dear Regional Forester Moore:

I am writing regarding the Forest Service's current efforts to implement the Travel Management Rule and designate routes in California's National Forests that are accessible to motorized traffic, including off-highway vehicles.

06802 2.0 It is my understanding that the Tahoe National Forest plans to add roads to the existing motorized route system and publish a route system map cataloguing the roads open for public motor vehicle use.

I am concerned, however, that as part of the effort for designating the route system the Forest Service did not consider a process for removing existing system roads that may be unneeded or damaging to the environment. I believe that adding routes to the system without a science-based analysis of existing roads or plan to de-designate unneeded roads is misguided, particularly given the $169 million road maintenance backlog in the Tahoe National Forest.

06802 4.0 I am also concerned that the Tahoe National Forest plans to publish a route system map, which may leave the public with the impression that all roads present on the map will be permanently open to motorized vehicle access -- unless the public is simultaneously notified of a process to identify and remove unneeded roads. Without a caution that system maps may be subject to further review, it could be difficult for the Forest Service to remove roads that are found to threaten public safety, cause environmental damage or conflict with other forest uses in the future.

06802 2.0 As the Forest Service continues with travel management plans in California, I request that the Agency to complete comprehensive analyses of existing system roads in each National Forest and develop a process for identifying and removing unneeded

Cont'd on next pg

Received 31-Dec-2008 02:21pm From-7075629047 To- Page 005

USDA FOREST SERVIC 12:59:52 p.m. 12-31-2008

.9. 2008 1:08PM SENATOR FEINSTEIN NO. 356 P. 3

06802
200

roads prior to publishing route system maps. This level of analysis will help ensure that the Forest Service can afford to maintain a National Forest system that provides public access for motorized recreation while minimizing environmental impacts.

I look forward to being updated on your progress toward designating motorized travel systems in California's National Forests. Best regards.

Sincerely,

Dianne Feinstein
United States Senator

DF:jw:db

068 18

"George Cella"
<GCella@waterboards .ca.gov>
01/09/2009 11:20 AM

To <darrasmith@fs.fed.us>
cc <tquinn@fs.fed.us>, "Douglas Cushman" <DCushman@waterboards.ca.gov>, "Lauri Kemper" <LKemper@waterboards.ca.gov>
bcc
Subject Addendum to the Water Board's comments on the Tahoe NF Motorized Travel Management DEIR

David -

It has recently come to my attention that one of my comments in our December 26, 2008 *Comments on the Tahoe National Forest Motorized Travel Management Draft Environmental Impact Statement* letter might be misconstrued to imply a lack of support for two of the intended management actions. Please accept this e-mail as an addendum to my letter to clarify this issue.

068 18 At, 3.09

Page 3, Comment 3d of our letter currently states ** (a)lthough * current scientific knowledge indicates that roads are the greatest human-caused contributor of sediment to watercourses in forested ecosystems, the DEIS states that *(t)he prohibition on cross country travel and wet season closures are the two most important actions proposed in this project.*

The subject of that paragraph was that the DEIS indicates that the Truckee River Basin has the second-highest existing *Higher Risk Route* density in the Tahoe National Forest, yet the proposed *most important action* was not to obliterate as many of these sediment-contributing roads as possible. I was making a point regarding priorities and level of importance.

068 18 2.0, 3.02

Please let me be clear that my intent is not to slight the importance of the two actions which are proposed in the DEIS. In areas where roads cannot be obliterated, I heartily agree that prohibiting cross-country travel and wet season closures are extremely important and necessary actions to help ensure that delivery of sediments to watercourses is minimized. Cross-country travel in itself creates new soil disturbances where none existed before, and has the potential of being nearly unlimited spatially throughout the Forest and stream corridors, if not within the watercourses themselves. Allowing vehicle use on native-surface roads which generally become, and remain, consistently wet throughout the winter period not only creates additional maintenance burdens due to heavy rutting and road widening (as drivers attempt to avoid the newly-created deep ruts), it also has the very real potential for dislodging and transporting a large volume of sediment into the watercourses.

As you know, the US Forest Service, Lake Tahoe Basin Management Unit (LTBMU), which obviously also manages lands within a sensitive watershed area, already employs these tactics within their Forest, with excellent results in keeping additional sediment out of the watercourses. The Lahontan Regional Water Quality Control Board (Water Board) supports the LTBMU for using these two important management tools.

068 18 2.0

Therefore, while I stand behind the intent of our original letter, I would like to add to the record that the Water Board heartily supports and encourages the Tahoe National Forest in a decision which employs prohibitions on cross country travel, and includes wet season road

cont.

Cont.

closures as a part of this project.

One last clarifying point: while the Water Board supports the elimination of non-system roads from use (even if only on maps), the prohibition on cross country travel, and the seasonal closure of native-surfaced roads, without adequate funding to be able to enforce these provisions there is a potential for this action to function as a paper exercise with no on the ground changes or improvements that provide for forest resource or water quality improvement. The Water Board therefore strongly encourages the Tahoe National Forest to aggressively seek funding for additional enforcement capacity and to prioritize such enforcement in forest plan implementation.

- George

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
George E. Cella
Engineering Geologist
Lahontan Regional Water Quality Control Board
phone: (530) 542-5426
fax: (530) 544-2271

GCella@waterboards.ca.gov
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Listing of Individual Letters Received on the Draft EIS

Table N-9 contains the alphabetical list all persons who submitted individual letters during the public comment period on the Draft EIS. The first column of the table shows the unique number assigned the commenter used previously in the Responses to Comments.

Table N-9. Commenter numbers for persons who submitted individual letters on the DEIS

Number	Last Name	First Name	Organization
00809	Ackerman	Gregory	
05401	Ackerman	Gregory	
06561	Acton	Aero	
06562	Acton	Aero	
06563	Acton	Aero	
06613	Acton	Aero	
06615	Acton	Aero	
06616	Acton	Aero	
06617	Acton	Aero	
00792	Adams	Andrew	
00820	Adams	Carl	
06582	Adams	Lance	
06463	Alafouzos	John	
00774	Albright	Del	
05754	Albright	Stacie	
05755	Alderson	George & Frances	
06639	Allen	Jon	NDOT
06216	Alling	Thomas E.	
06700	Amador	Don	Blue Ribbon Coalition
06569	Angell	Andy	
00805	Aniello	Pete	
02536	Apple	Ryan	
06774	Armstrong	Mike	
00795	Arnett	Kenneth R.	
00695	Arter	Don	
00769	Ashton	Zach	
00770	Ashton	Zach	
06816	Athorp	Jesse	
00031	Atkins	Paul	
00591	Atkins	Paul	
00599	Atkins	Paul	
06662	Atkins	Paul	
00015	Autrey-Schell	Yovonne	
01867	Averett	AJ	
06699	Backhaus	Curt	Polka Dots Motorcycle Club

Number	Last Name	First Name	Organization
01554	Baez	Ken	
00571	Baker	Shawn	
06686	Ball	C.	BCHC Mother Load Unit
05644	Barnes	Gary & Elaine	Vice Principal John Barrett M.S.
04565	Barnes	Greg & Elaine	
00765	Barr	Doug	Lake Tahoe Hi-Lo's 4WD Club President
06587	Barr	Doug	
06588	Barr	Doug	
06590	Barr	Doug	
06591	Barr	Doug	
06592	Barr	Doug	
06594	Barr	Doug	
06595	Barr	Doug	
06596	Barr	Doug	
06597	Barr	Doug	
06598	Barr	Doug	
06600	Barr	Doug	
06602	Barr	Doug	
06603	Barr	Doug	
06604	Barr	Doug	
06606	Barr	Doug	
06607	Barr	Doug	
06608	Barr	Doug	
06609	Barr	Doug	
06610	Barr	Doug	
06611	Barr	Doug	
00564	Barriger	Dave	
00647	Bastnagel	Marc	
06390	Batchelder	Adam	
01747	Bauer	Richard	
04541	Bechta	Sean	EDAW, Senior Project Manager
06476	Beck	Joan	Bullhead 4 Wheelers, Inc.
00763	Beckstead	Todd	
00561	Behr	Doug	
00044	Beine	Dave	
00032	Beine	Dave & Kay	
00476	Bell and Pearson	Ryan & Shaylen	
00439	Bellino	Joan	
01724	Bender	Daryl	
00614	Benjamin	Gross	
00028	Benner	Stephen	Forest Issues Group
00472	Benner	Stephen	Forest Issues Group

Number	Last Name	First Name	Organization
06705	Benner	Stephen	Forest Issues Group
01862	Bennett	Bryan	NAXJA Sierra Chapter Vice President
00766	Benson	Brett	
00729	Bentley	Christopher	
06581	Bibelheimer	Erik	
06584	Bibelheimer	Erik	
06586	Bibelheimer	Erik	
06589	Bibelheimer	Erik	
06601	Bibelheimer	Erik	
06554	Bloom	Jerry	
01109	Boell	Ken	
06418	Bolinger	Charlotte	
05759	Bolstad	Eric	
06797	Borovicka	Cory	
00825	Bosso	Anthony J.	
02955	Bosso	Tony	
01108	Bottoms	Alicia	
01683	Boudier	Eric	
02103	Boutin	Dolores	
00018	Bower	Ben	
00062	Bower	Ben	
06410	Bower	Ben, Deanna	
00718	Boyd	Tom	
00686	Boyle	Michael	
00759	Boyle	Michael	
00087	Braden	Bill	
05733	Brazieal	Lisa	
05693	Brazil	Bruce	
06279	Brazil	Bruce	
06281	Brazil	Bruce	
06291	Brazil	Bruce	
06397	Brazil	Bruce	
06398	Brazil	Bruce	
01858	Brightenstine	John	
00071	Briley	Brian	
00073	Brinkman	Tyler	
00601	Britts	Michael	
02526	Brock	Eric	
00664	Brodie	Andrew	
00713	Brooks	Todd	
01817	Brown	Mark	
06552	Brown	Phillip	

Number	Last Name	First Name	Organization
01099	Brown	Kevin	
05680	Brundige	Carol & Bruce	
00634	Bruno	Nick	
06567	Buland	James	
00636	Buland	James	
05658	Bunting	Bryan	
06511	Bunting	Bryan	
06670	Bunting	Bryan	
06685	Bunting	Bryan, Hillarie, Drew, Cole	
02948	Bunting	Bryan, Hillary, Drew, Cole	
06776	Burgard	Faith	
00624	Burgard	Matt	
00642	Burgard	Rob	
05762	Burgard	Rob	
00017	Burleson	Randy	President, Rubicon Trail Foundation
01380	Burleson	Randy	
06651	Burleson	Randy	
06756	Burleson	Randy	
06757	Burleson	Randy	
06758	Burleson	Randy	
06759	Burleson	Randy	
06760	Burleson	Randy	
06761	Burleson	Randy	
06762	Burleson	Randy	
06763	Burleson	Randy	
06781	Burleson	Randy	
02525	Burnes	Rodney	
00066	Burroughs	Jeanne	
00068	Burroughs	Steve	
00768	Bush	Christopher	
00569	Butler	Michael	
06719	Cacy	Tim	
06720	Cacy	Tim	
06420	Cacy	Tim	
00692	Calvert	Charlotte	
00725	Calvert	Steven	
00653	Cannon	Chad	
06337	Cardenas	Andres	
00026	Cardenas	Andy	
05306	Cardenas	Andy	
00733	Carey	Kevin	
06464	Carlson	David	

Number	Last Name	First Name	Organization
05282	Carlson	Michael	
02826	Carney	Diane	
00696	Carpenter	Travis	
06556	Carr	Robert	
00727	Carr	Robert	
00645	Carreon	Ben	
00700	Carter	Kenneth	
02604	Carter	Marian	
01411	Case	Steve	
00481	Cassidy	Pete	
00630	Ceeko	Chance	
00662	Ceeko	Shawn	
00717	Ceeko	Shawn	
06725	Cella	George	Lahontan Regional Water Quality Control Board
06818	Cella	George	
00096	Chaplin	Daniel	
01511	Chaplin	Mike	
00445	Chaulberg	Gary	
00685	Cheek	Lawrence & Bernadette	
06382	Chilcote	John	
06599	Childs	Brad	President, The Wilderness Institute
00819	Christensen	Todd	
02532	Christiansen	David	
00722	Christiansen	Klaus	
01632	Ciappa	Hank	
02523	Clark	Alejandro	
00706	Clark	Gary	
00757	Clark	Gary	
02520	Clark	James	
02521	Clark	Jennifer	
02524	Clark	Jim	
01459	Clark	Justin	
02522	Clark	Paloma	
05682	Clark	Robert	
01379	Cochran	Joseph	
02940	Cochran	Joseph	
06555	Cochran	Joseph	
06746	Cohen	Janet	The Yuba River Land and Water Conservancy
06747	Cohen	Janet	Community Action Partners
01470	Coiner	Charlie	
01523	Collins	Troy	

Number	Last Name	First Name	Organization
05320	Conner	Ben	
05638	Conner	Ben	
06735	Conner	Narvell	
00606	Connolly	Justin	
03824	Conover	Celia	
01370	Cooley	Shari	
00575	Cooper	Richard	
01510	Coplen	Sean	
02539	Coppedge	Michael	
00698	Corbett	Wade	
00699	Corbett	Wade	
01861	Cordingley	Paul & Florence	
00041	Courter	Paul	
06553	Cox	Karen	
06817	Cox	Karen	
00077	Crean	Dennis Jr.	
03155	Cree	Ian	
01738	Crim	Matthew	
05757	Cross	Diane	
04558	Croxton	Valinda	
01364	Curry	Richard & Sherri	
00084	Cutler	Carina	
04564	Cutter	Ralph and Lisa	Owners, California School of Fly Fishing
02805	Dal Pino	Ida Jane	
01769	Damaso	Michael	President, Merced Dirt Riders Inc.
02949	Damaso	Michael	
02950	Damaso	Michael	
06790	Damaso	Michael	
01105	Danfield	Thomas	
00767	Daniel	Arlan	
05711	Daniel	Arlan	
05712	Daniel	Arlan	
05713	Daniel	Arlan	
01416	Daniels	Gregg	
06744	Dart	Bill	Off Road Business Association
00604	Davis	Dion	
06583	Davis	Heather	
01371	Davis	Kent	
06743	Davison	Pat	
06696	Day	Kenneth L.	
00749	Day	Travis	
06386	De La Briandais	Larry	

Number	Last Name	First Name	Organization
00052	De La Riva	Jim	
01864	Dear	Elizabeth	
00821	DeBisschop	George E.	
00813	DeChristopher	Dave	
00646	Degnan	Jeff	
00785	Degnan	Jeff	
06380	DeLaBriandais	Gary	
05280	delCampo	Aurora	
00625	Delgadillo	Richard	
01441	DeLoney	Anthony	
02967	DeRodeff	Morgan	
06570	DeRodeff	Morgan	
06571	DeRodeff	Morgan	
06572	DeRodeff	Morgan	
06573	DeRodeff	Morgan	
06576	DeRodeff	Morgan	
06358	Dever	Douglas L.	
06461	Diaz and Malamud	Olivia & Dr. Ernest	
02947	Dickens	Thomas	
02509	Diddy	Mark	
02528	Dierksen	Brian	
05722	Dierksen	Brian	
05721	Dierksen	Robin	
05724	Dierksen	Robin	
05720	Dierksen	Sierra	
05723	Dierksen	Sierra	
05670	DiMattia	Robert	
02241	Doherty	Pat	
00651	Donley	Rob	
06469	Douglas	Peter	
00095	Doyon	Aurora	
05285	Dragon	George	
06303	DuBray	Jason	
01373	Duncan	Andrew	
00581	Dunivant	Terre	
00784	Dunn	Jason	Colfax Area Chamber of Commerce, Vice President
00755	Dunn	Jason	
00592	Dunn	Ken	
00720	Dunster	Kevan	
01390	DuPrey	Brandon	
00779	Duran	Ed	

Number	Last Name	First Name	Organization
00076	Dworaczyk	Debra	
06632	Dye	Ken	
06633	Dye	Ken	
06388	Eagan	Kathleen	
06695	Eagan	Kathleen	
04569	Ebright	Bret	
00689	Eickerman	Scott	
04562	Eisele	John H. Jr.	
00719	Ellinger	Scott	
02185	Elliot	Cynthia	
04543	Elliot	Mark	
06254	Elliot	Mark	
05697	Ellis	Bret	
00644	Ellison	Jason	
00002	Ellsworth	Tony	Ellsworth Bikes, President/Founder
00029	Encarnacion	Maila	
00590	Encarnacion	Maila	
01233	Erickson	Eleanor	
00745	Ervin	Craig	
00817	Estes	Sean	
00661	Evans	Paul	
05747	Ewing	Mike	
02701	Fairman	Robert	
00815	Falkner	Mike	
00790	Falxa	Gary	
00583	Fanselau	Erik	
00009	Fanselau	Jason	
06789	Farley	Damion	
00629	Farrell	Jeremy	
00775	Farrell	Jeremy	
00618	Farrell	Vinny	
06794	Federking	Rick	Ruby Development Company
06802	Feinstein	Dianne	U.S. Senator
00632	Ferdon	Rick	
06533	Ferdon	Rick	
06723	Ferdon	Rick	
01580	Fernandez	Anna & Miek	
04561	Ferrill	Husley E.	
01375	Feusi	Jim	
01621	Figg	Angie	
02812	Filipelli	Deborah	
05628	Filippi	John A.	

Number	Last Name	First Name	Organization
05643	Filippi	John A.	
00701	Finstad	Jason	
06383	Fistolera	Bob	
06734	Fites-Kaufman	Jo Ann	
00580	Flatter	Mark	
06566	Flowers	Eric	
00694	Folena	Rusty	
00657	Foli	John	
00093	Foote	Donna & Jerry	
00764	Foottit	John	
00806	Forberg	Eric	
03014	Forgey	Chavaleh	
05726	Fowlkes	John	
02234	Franco	Victor	
02541	Freas	Robert	
06593	Frederking	Rick	Condor Exploration Company
00019	French Sterling	Carolyn	
02793	Fronce and Hall	Linnea & Thomas	
00008	Frounfelter	Earl	
06703	Fuji	Laura	US EPA, Environmental Review Office
06729	Fujii	Laura	EPA
00812	Fuller	Randy	
06417	Fulling	Jim	
01654	Furrer	David	
00478	Gachesa	Ellen	
00782	Gage	Kyle	
00012	Gallen	Tim	
03103	Galvan	Corrie	
01409	Garcia	Dan	
00114	Gardiner	Steven	
00607	Gardiner	Steven	
00610	Gardiner	Steven	
00611	Gardiner	Steven	
00778	Gardiner	Steven	
02527	Gardiner	Steven	
01102	Gardner	Elyse	
00743	Gariano	Anthony	
00638	Gerber	Donald	
06782	Gibbs	Patricia	Opposing one Vehicle Length on Our Forests
02943	Gillmore	John & Sara	Directors, Friends of Foresthill OHV Trails
02944	Gillmore	John & Sara	Directors, Friends of Foresthill OHV Trails

Number	Last Name	First Name	Organization
06798	Gillmore/Lowery	John, Sarah, Leif	Friends of Forest Hill OHV Trails
06799	Gillmore/Lowery	John, Sarah, Leif	Friends of Forest Hill OHV Trails
06800	Gillmore/Lowery	John, Sarah, Leif	Friends of Forest Hill OHV Trails
06801	Gillmore/Lowery	John, Sarah, Leif	Friends of Forest Hill OHV Trails
00098	Gish	Robert	
00608	Glaser	Nick	
01374	Gleim	Ray & Julie	
00783	Goodell	Paul	
00479	Gorman	Richard	
00822	Gotham	Rorie	
01383	Gotham	Rorie	
02159	Gotham	Rorie	
06668	Gotham	Rorie	
06474	Gould	Ronald	North Fork American River Alliance
00557	Graf	Susan	
06438	Graf	Susan	
02954	Graham	Candace	
00602	Graham	Jonathan	
00603	Graham	Jonathan	
02946	Graham	Jonathan	
02958	Graham	Jonathan	
05766	Graham	Jonathan	
06557	Graham	Jonathan	President, Capital City Mtn. Goat 4WD Club
06558	Graham	Jonathan	Capital City Mtn. Goat 4WD Club
06559	Graham	Jonathan	
06560	Graham	Jonathan	
06612	Graham	Jonathan	
06614	Graham	Jonathan	
06624	Graham	Jonathan	
02938	Granat	Amy	CORVA
06738	Granat	Amy	CORVA
06740	Granat	Amy	
02552	Grass	Chad	
01766	Graves	Mike	
00801	Greene	Kevin	
01778	Gregg	Benjamin	
06467	Guidice	Rick	CA Enduro Rider Association
06537	Guidice	Rick	
06630	Gustafson	Carl	
00086	Gustafson	Curtis	
06471	Gusto	Emerson	

Number	Last Name	First Name	Organization
06650	Habenicht	Fred	
06514	Hacker	Nick	
01677	Hale	Steven	
00563	Hallas	Melissa	
00617	Halliburton	Roy	
03560	Hallmark	Candace	
00480	Hammes	Douglas E.	
02870	Handly	Jack	
00761	Happee	Bryan	
00622	Happs	Kenneth	
00038	Harbaugh	Dianna, Bill, Kevin, Leighan	
01785	Harmon	Joshua	
00728	Harper	Stanley	
00753	Harris	Mark	
04566	Hart	Ron	
05667	Hart	Ronald W.	
00621	Hartinger	Marcus	
01730	Hartmann	Chris	
06676	Hathaway	Chad	
06247	Havlik	Frank	
06263	Hawes	Jason	
06462	Hay	Gannt	CO. Department of Revenue
00773	Hazard	Eric	
00588	Heck	Lisa Rene	
00064	Heimlich	Mildred	
00065	Heimlich	Mildred	
01622	Heinemann	Bill	
06473	Helm	Chris	
05683	Hendricks	Gary	
06692	Hendricks	Monte	
01572	Hendry	Mike	
00050	Hensley	Brian	
00051	Hensley	Chris	
00006	Hess	Donald & Susan	
00094	Hess	Donald & Susan	
00558	Hewston	Mike	
00559	Hewston	Sandra	
01396	Higgins	Jabin	
00756	Hill	Kevin	
06656	Hipkiss	Ron	
02546	Hirst	Charles	
00022	Hochendoner	Bernie	

Number	Last Name	First Name	Organization
00005	Hoffmann	Marie	
00063	Hoffmann	Marie	
01508	Holiday	Judd	
00039	Hooser	Dirk Vickie	
00705	Hoover	Micah	
00058	Hopkins	Susan	
05284	Hopp	David	
02157	Horgan	Chris	
01833	Horn	Daniel	
00684	Horton	Kathryn Ann	
00737	Houle	Jeff	
06718	Hower	Ken	
00742	Huber	Rory	
05749	Huebner	Kurt	President, Foresthill Four Wheelers
00014	Hughes	Judy	
00687	Humphrey	John	
06385	Hunt	Richard	
00615	Hutson	Daryl	
06424	Ingram	Robert	Sierra Pacific Industries
02664	Inskeep	James	
00074	Iturriaga	Claudio	
06753	Jasper	Marilyn	Protection Earth and Animals with Compassion and Education
06677	Jayne	Michael	
01866	Jennings	Rita	
00092	Jerry	Sacramento Resident	
05271	Johnson	Bill	Trails Coordinator, Western States Trail Foundation
05283	Johnson	Jim	
05756	Johnson	Jim	
01107	Johnson	Joanne	
00475	Johnson	John	
00744	Johnson	Martin	
06713	Johnson	Mary	Gold Country Trails Council
06742	Johnson	Mary	Gold Country Trails Council
06580	Johnson	Megan	
02549	Johnson	Nicole	
06277	Johnson	Scott	
00047	Johnson	Susan	
00477	Johnson	Timothy	
00067	Johnson	Wayne & Sue	Sierra Motor Sports, Owners
00781	Johnston	Scott	
02965	Johnston	Scott	

Number	Last Name	First Name	Organization
06481	Johnston	Scott	
00724	Johnston	Trevor	
06688	Jonson	Mary	Gold Country Trails Council
06733	Jordan	Larry	
06811	Jordon	Larry	
00731	Jorstad	Jared	
06565	June	Eric	
00643	Kartozian	Matt	
00730	Kaye	Steven	
05673	Keables	Steve	
00083	Keables	Kristine	
00473	Keables	Kristine	
00626	Keil	Brennan	
00035	Kell	Judy & Steve	
06267	Kelly	Bill	
06266	Kewman	Don	
00656	King	Ed	
02351	Klein	Kevin	
00013	Klein	Rich	
04568	Klein	Rich	
05760	Klusman	Don	Ca. Association of 4 wheel drive clubs
05674	Knipe	Kelly	
00747	Knull	Ken	
00800	Knull	Ken	
06478	Koerber	Randal	
01863	Koons	Howard	
06271	Kooyman	Justin	Northern CA Pacific Crest Trail Assoc., Regional Representative
06430	Kooyman	Justin	
00715	Kordasiewicz	Joshua	
01658	Koretoff	Steve	BLM Central Ca. Resource
06768	Koretoff	Steve	BLM Central Ca. Resource
06770	Koretoff	Steve	BLM Central Ca. Resource Advisory Council
06791	Koretoff	Steve	
01816	Korock	Donald	
02507	Kost-Herbert	Kandace	
06579	Kotalik	Richard	
00650	Kovacs	Miklos	
01630	Kovar	Timothy	
05636	Kranz	Bruce	Supervisor 5th District, Placer County
05752	Kranz	Bruce	Placer Co. B.O.S
06779	Krause	Rick	

Number	Last Name	First Name	Organization
00281	Krejsa	Richard	
06396	Krumbuegel	Perrin	
06259	Krusko	Claire	
00121	Kupfersberger	E.	
06715	Kyra	Kyra	CORVA
06730	Kyra	Kyra	
06749	Lackey	Lisa	
01363	Laffoon	Lary	
02542	Lai	Jason	
02802	Lane	Jana	
00751	Langford	Mark	
00568	Larsen	Erick	
01779	LaRusso	Sandra	
06813	Lass	Dave	
06750	Lass	David	Trout Unlimited
06751	Lass	David	NorCal Field Coordinator: Trout Unlimited
06516	Lasyone	Leonard	
01860	Laurrance	Robin	
01369	Laurrance	Robert J.	
01577	Leal	David	
05666	Lee	Dan	President, High Country Cruisers
02551	Lee	Daniel C.	President, High Country Cruisers
02758	Leidner and Davy	Irene & Bill	
05764	Leitzell	William	
00748	Lewis	Robert	
01587	Liberty	Ross	
06684	Libkind	Marcus	Snow Lands Network
00714	Licciardi	Philip	Owner, Silly Fab Service
00758	Licciardi	Philip	Silly Fab Service, Owner
00771	Lightfoot	Robert	
00772	Lightfoot	Robert	
06643	Lightfoot	Robert	
06644	Lightfoot	Robert	
00738	Lightfoot	Robert	
06698	Liles	Kevin	
00754	Lillund	Jen	
06777	Limov	Miriam	
00584	Limov	Miriam	
00045	Lindeman	Wayne	
05281	Lindeman	Wayne	
06620	Linden	Scott	
01837	Lindsey	Robert	

Number	Last Name	First Name	Organization
06381	Lipson	Peter	
00723	Little	Megan	
00735	Little	Sean	
05450	Livai	Jason	
05296	Longmire	Samuel F.	N. Sierra AQMD
00036	Lopez	Irene	
00628	Lopez	Kevin	
06626	Lopez; Durbin	Tom and Donna; Kevin & Brandon	
01110	Lowe	Trace	
00056	Luce	John	Director of MIS, SummerHill Homes
00040	Lyerly	Linda	
00587	Lynch	Ron	
06527	Macdonald	Janet	
00016	MacRaith	Bonnie	
00091	MacRaith	Bonnie	
02968	Maddalena	Rick	
00027	Maddox	Van	Sierra County Auditor
00078	Maia	Maia	
00824	Maier	George	
01368	Maier	George	
02545	Maier	Jim	
01574	Maloney	Dennis	
04559	Martin	Daniel F.	
06429	Martin	Elizabeth	The Sierra Fund
00070	Martin	Jim	
02566	Martinez	Jorge	Membership Executive, The Ritz-Carlton Club, Lake Tahoe
00710	Mathews	Robin	
02136	Matthews	Mary Ann	
06775	Maxine		
06741	May	Brent	
04571	McAlister	Melinda	
01696	McCaskey	Ray	
00135	McClinton	Ben & Karen	
00562	McCready	Carrie	
00024	McDermott	Brent & Helen	
01797	McDowell	Curt	
00574	McGavren	Steve	
05641	McGavren	Steve	
06702	McGuire	William	
00762	McKenzie	Chris	
06544	McKenzie	Justin	

Number	Last Name	First Name	Organization
00702	Mckinzie	John	
00020	McLane	Dave & Bonnie	
00079	McLaughlin	Michael	
01685	McManus	Dan	
06472	McMurray	Nick	
01481	McNamara	Terry	
00596	McNew	Brad	
06253	McNicol	Randy	
00808	McRoberts	Mike	
01112	Mead	Rick	
06689	Meals	Hank	
00677	Mears	Shannon	
00681	Mears	Shannon	
00669	Mears	Robbie	
00670	Mears	Robbie	
00671	Mears	Robbie	
00672	Mears	Robbie	
00673	Mears	Robbie	
00666	Mears	Shannon	
00667	Mears	Shannon	
00668	Mears	Shannon	
00674	Mears	Shannon	
00675	Mears	Shannon	
00676	Mears	Shannon	
00678	Mears	Shannon	
00679	Mears	Shannon	
00680	Mears	Shannon	
06317	Mellenthin	Joel	
06419	Mellison	Chad	USFWS, Reno, NV
00655	Mello	Marty	
00649	Mellor	Leslie	
01661	Mesarchik	Dana	
01834	Meyner	Gus	
06258	Michaelis	James	
05702	Milazzo	David	
00060	Miller	Cassie	
04563	Miller	Erik D.	
00652	Miller	Jerome	
00691	Miller	Jerome	
06268	Miller	Murray	
06270	Milligan	Sylvia	Chair, Recreation Outdoors Coalition
04539	Mills	Jack	

Number	Last Name	First Name	Organization
00043	Mills	Scott	
06480	Minor	Sean	
01450	Mitchell	Dave	
00807	Mittelstadt	John	
01720	Moffit	Jason	
00741	Moles	Dale	
06568	Monnin	Douglas	
06767	Monnin	Jonathan	
00816	Montgomery	Richard	
01623	Moore	Dave	
06787	Moore	Iris	
06642	Moore	John	
00136	Morgan	Lori	
00776	Morgan	Ryan	
00199	Morris	Alexis	
00703	Mourgos	Reanna	
00740	Mourgos	Reanna	
00711	Mross	James	
01735	Muhlenberg	Todd	
00641	Mullins	Heath	
05758	Musto	Daryl	
06509	Myer	Jacob	
04547	Myer	William	
00088	Myers	Joel	
00055	Myrah	Don	
06773	N.	Mike	
00053	Nag	Nitish	Sponsorship Director, Cal Cycling Race Team
06697	Nelson	Ron	NID
02109	Nelson	Sally	
01670	Nesheim	Mike	
00739	Newman	Gregory	
02607	Newton	Carol	
00682	Nichols	Jason	
01382	Nichols	Jason	
02952	Nichols	Jason	
05671	Nichols	Jason	
05672	Nichols	Jason	
05751	Nichols	Jason	
01672	Nichols	Melanie	
00001	Nickell	Jesse, Christine, Oliver & Jesse	
02092	Norrington	Linda	

Number	Last Name	First Name	Organization
06625	Norton	Doug	
06724	Norton	Elizabeth	
06636	Nosala	Wayne	
05289	Obrien	Michael	
00620	Ockert	Todd	
06732	Odell	Glenn	Quincy Wheelers
00665	Ogren	Brody	
06640	Ogren	Brody	
05429	O'Growney	Jas	
00609	Oliva	Tim	
00726	Oliva	Tim	
06679	O'Riley	Catherine	Secretary, North Fork American River Alliance
04546	O'Rourke	Jesse	
06348	Ostwald	Brent	
01636	Paik	Wesley	
04135	Palmer	Robert	
06433	Parriott	Brian	
06764	Parsons	Chris	
06578	Paton	Chris	
01849	Patterson	John	
01605	Pautsch	Doug	
00586	Pautsch	Douglas A.	
01763	Pave	Lars	
06693	Peach	Eric	Protect American River Canyon
06745	Peach	Eric	Protect American River Canyon
06242	Peachay	Ernie	
00793	Pearce	Brian	
05329	Pearce	Brian	
06477	Pearson	Clark	Northern Office of Public Lands for the People
01663	Pederson	Terry	President, Timekeepers Motorcycle Club
04550	Penniman	Arthur B.	
01058	Penniman	Dick	Adjunct Professor of Forestry, Sierra College
06548	Penniman	Starr	
06546	Perrella	Marco	
02535	Peters	Todd	
05457	Peterson	Kirk	
00579	Petzak	Jamaka N.	
06575	Pfile	Ryan	
06577	Pfile	Ryan	
06387	Pickering	Joe	

Number	Last Name	First Name	Organization
05591	Pickett	Dave	
06766	Pickett	Dave	
06812	Pickett	David	
00460	Plante	Marie	
06635	Plasse	Edward	
06437	Platt	Nancy	
06648	Playle	Kevin	
06431	Plunkett	Wesley	
02156	Podraza	Steve	
04549	Port	Patricia Sanderson	Regional Environmental Officer of OEPC, US DOI
00746	Porter	David	
06682	Porter	Stuart	El Dorado Equestrian Trails Foundation
06728	Porter	Stuart	El Dorado Equestrian Trails Foundation
06435	Powers	Bridgette	
03077	Powers	Pamy	
01781	Pratt	Geoff	
01755	Pratt	Richard	
00619	Preble	Bret	President, Friends of Fordyce
00688	Preble	Traci	Director, Friends of Fordyce
05684	Pritchard	Ryan	
05717	Pritchard	Ryan	
05718	Pritchard	Ryan	
00635	Pumphrey	Matt	
02531	Quitevis	Ron	
05632	Rabeneau	Scott	Rabeneau Construction
05633	Rabeneau	Tony	Rabeneau Construction
05270	Raco	Claudia	
01575	Ramsay	Drew	
02540	Ransom	Michael	
02580	Ranz	Gary	
00054	Rassuchine	Jeff	
00003	Ratcliff	Philip	
00648	Ratzburg	Alan	President, Four Dice 4WDC
00797	Ratzburg	Keith	Friends of Fordyce, Board of Directors
00798	Ratzburg	Keith	
00799	Ratzburg	Keith	
02953	Ray-Leal	Melba	
06792	Ray-Leal	Melba J.	Grassroots Chairperson: Opposing the One Vehicle Length on our Forest
06796	Ray-Leal	Melba J.	
02547	Reams	Chris	
02548	Reams	Chris	

Number	Last Name	First Name	Organization
02553	Reams	Chris	
00042	Redmond	Gary	
01381	Redmond	Gary	
06326	Redmond	Gary	
00589	Reed	Colleen	
05640	Reed	Marshall & Catherine	
03161	Rehm-Lorber	Jora	
02530	Reneau	Landon	
00627	Renstrom	John	
06765	Renstrom	John	
06810	Renstrom	John	
02942	Reynolds	Glenn	
05761	Reynolds	Glenn	
06274	Reynolds	Glenn	President, Sacramento Valley Top Gun Jeep Club
01776	Rhodes	Robert	
00010	Richard		
06475	Ricker	Jim	North Fork American River Alliance
00612	Riley	Brent	
00707	Ritchie	Matt	
06248	Rivenes	Don	
01362	Rives	David	
00089	Rix	Maxine	
01412	Rixen	Allan	
01367	Roberts	John	
01859	Robinson	Jim & Liz	
03030	Robinson	Terry Ellen	
01637	Rodgers	Mark	
00030	Rogers	Scott	
00605	Rognlin	David	
00734	Ronning	Dustin	
00786	Root	Brian	
06672	Root	Brian	
06694	Roper	Harvey	
01716	Rosenbach	Jordan	
06629	Rossman	Antonio	
00069	Rouse	Brian G.	
00802	Rovane	Sandy	
05568	Rovane	Sandy	
00750	Royston	Heather	
01570	Rubick	Karyn	
00923	Rubio	Gail	

Number	Last Name	First Name	Organization
03541	Ruble	Lucy	
00059	Ruggiero	Sandra	
01361	Rumburger	Mrs.	
06243	Russell	Gayle	
00709	Russell	Jake	
00023	Ryder	Steve	Grassroots Programs Director, Winter Wildlands Alliance
00565	Sackman	Tom & Kathy	
01650	Salsbury	Lynn	
02966	Salveson	Sean	
00011	Sanchez	Tom	
06780	Sand	Joe	Specialized 4wd Drive Club
06783	Sand	Joe	President, Specialized 4Wheel Drive Inc.
01067	Saretsky	Richard	
00075	Sassoon	Joy	
01563	Schade	Dennis	
06721	Schambach	Karen	Center for Sierra Nevada Conservation
06722	Schambach	Karen	
00736	Scharffenberg	Ryan, Kim, Jacob & Katelyn	
01839	Scheitlin	Lloyd	
06519	Schmidt	Jane	Bureau of Rec. Carson City
00048	Schneider	Kurt	Pirate 4X4 Land use Editor
00049	Schneider	Kurt	Pirate 4X4 and CRAWL Land use Editor
02941	Schneider	Kurt	Pirate 4X4.com and CRAWL Magazine Land use Editor
02970	Schneider	Kurt	Pirate4X4.com and CRAWL Magazine Land use Editor
00660	Schram	P.T.	P.T. Schram Rover Repair
00616	Schuit	Nathan	
00752	Schultz	William	
00777	Schultz	William	
00780	Schultz	William	
00716	Scott	Tyler	
06276	Scribner	Jerry	Western Trails Foundation, President
06278	Scribner	Jerry	
06681	Scribner	Jerry	
04572	Shade	Betsy	
02537	Shafer	Danielle	
00804	Shannon	Dick	
00459	Shannon	Nancy	
06393	Sharp	Timothy	
06680	Sharp	Timothy	
06645	Sheets	Eric	

Number	Last Name	First Name	Organization
06687	Sheets	Eric	
00613	Sheffield	Alastair	
06373	Sheffield	Rex	
06426	Shelton	Lois	
06234	Shelton	Theodore R.	
06448	Sherry	Stortroen	
06711	Shilling	Fraser	UC Davis
04540	Shipley	Donald & Deborah	Owners/General Managers, River Rest Resort
02533	Shores	Radley	
01652	Shuck	Michael	
01274	Shupe	Peter	
00818	Simmons	Mike	
05423	Smith	Chelsea	
01868	Smith	Lawrence	
05750	Smith	Paul	
06367	Socha	Jim	
06510	Socha	Jim	
06574	Socha	Jim	
05290	Soldano	Donna	
00582	Solomon	Claudia & Al	
01818	Sorum	Donald	
00623	Sparkman	Jerry	
00732	Sparkman	Jerry	
02267	Sparks	Emily	
01100	Spencer	Robert	
00760	Standley	Jordan	
04542	Stanton	Stan	
06564	Starbuck	John A.	
06748	Stark	John	
05634	Steigmeyer	Robert	Land Planner, PG&E
05753	Steigmeyer	Robert	
06252	Steigmeyer	Robert	
00697	Stewart	Joel	
01680	Stewart	John	
00570	Steyding	James	
00637	Steyding	James	
05725	Stickelmaier	Mark	
02719	Stokes	John	
06450	Stortroen	Ole & Sherry	
06451	Stortroen	Ole & Sherry	
06452	Stortroen	Ole & Sherry	

Number	Last Name	First Name	Organization
06439	Stortroen	Ole, Sherry	
06440	Stortroen	Ole, Sherry	
06441	Stortroen	Ole, Sherry	
06442	Stortroen	Ole, Sherry	
06443	Stortroen	Ole, Sherry	
06444	Stortroen	Ole, Sherry	
06445	Stortroen	Ole, Sherry	
02939	Stortroen	Sherry	
05525	Stortroen	Sherry	
06446	Stortroen	Sherry	
06447	Stortroen	Sherry	
06449	Stortroen	Sherry	
06453	Stortroen	Sherry	
06454	Stortroen	Sherry	
06455	Stortroen	Sherry	
06456	Stortroen	Sherry	
06457	Stortroen	Sherry	
06458	Stortroen	Sherry	
06459	Stortroen	Sherry	
06460	Stortroen	Sherry	
05651	Straub	Caroyln	
00474	Straub and McHenry	Carolyn & Steve	
01744	Stuckey	Joel	
02538	Sundberg	Erik	
00034	Suter	Robert T.	
01825	Sutton	Philip	
02326	Svoboda	Laurence	
01251	Swaim	Steven M.	
00654	Swartz	Corey	
00046	Syndergaard	Todd	
00631	Tamney	David	
00593	Taxpayer	Resident of Tahoe Vista	
02550	Taylor	Mark	
06551	Terhune	Jonathan	
02519	Terwilliger	Bob	
00072	Thayer	Diana	
01869	Theberge	Michele	
00025	Theisen	Jacqueline	
06710	Theisen	Jacquelyn	Friends of Greenhorn
00787	Theisen	Jacquelyne	
00788	Theisen	Jacquelyne	
00789	Theisen	Jacquelyne	

Number	Last Name	First Name	Organization
02937	Theisen	Jacquelyne	
02801	Thomas	J	
00090	Thomas	Paul	
06737	Thomas	Richard	
00567	Thomas	Robert E.	
02534	Thomason	Ryan and Kim	
00708	Thompson	James	
00811	Thorndyke	Jim	
06691	Tierney	Marilyn	
01857	Tietje	R.	Nevada State Clearing House
06273	Timmer	John	
00037	Titmus	Keni	
00566	Titmus	Keni	
00803	Tomlinson	Bob	
00683	Toner	Sheila	
00823	Toner	Sheila	
01732	Toomsen	Justin	
01366	Trager	Steve & Annamarie	
01774	Tralongo	Joseph	
01565	Trolan	Patrick	
05719	Troth	Rockwell	
01594	Trumbly	Terry	
01365	Tucker	Tim	
06605	Tudesko	Mark	
00598	Tuggey	Terry	
06731	Turcke	Paul A.	Moore Smith Buxton & Turke
01840	Tussing	Wes	
06549	Twiddy	Anthony	
00663	Van Valzah	Matthew	
06716	Van Velsor	Stan	ORV Campaign Coordinator, Wilderness Society
06755	Van Zant	Peter	SYRCL
00081	Vance	Melony	
00021	Vandell	Joy	PG&E Representitive
02508	VanderMeeden	Richard	
04567	VanOmmen	Paul & Cheryl	
00658	Varnum	Jon	
02626	Vega	Pete	
01113	Verdier	Joshua	
06671	Vieira	Joey	
02158	Vierra	Wayne	
00659	Vogh	Barbara	

Number	Last Name	First Name	Organization
00573	Volkman	Greg	
06628	Volkman	Greg	
01603	Volle	Ron	
06739	von Seggern	David	Great Basin Group Sierra Club
02529	Wade	Jim	
06683	Waldrop	Duncan	
06754	Waldrop	Duncan	
04560	Walker	Ken	
00693	Wallis	Alec	
00007	Wangsgard	Neil E.	
06736	Ward	Jenny	Diablo 4 Wheelers
02556	Ward	Martin	
02557	Ward	Martin	
02558	Ward	Martin	
02559	Ward	Martin	
02560	Ward	Martin	
02561	Ward	Martin	
02562	Ward	Martin	
02565	Ward	Martin	
02554	Ward	Martin J.	
02555	Ward	Martin J.	
02563	Ward	Martin J.	
02564	Ward	Martin J.	
05295	Ward	Tom	Policy Advisor, IBMA California
01517	Wasden	David	
05714	Waynick	Samantha	
05715	Waynick	Samantha	
05716	Waynick	Samantha	
01436	Wears	Jacob	
01668	Weaver	Mark	
00595	Wedge	Gene	
00578	Wellman Stelle	Dawn	
02413	Wenger	Holly	
03057	Wesley	Jo	
04556	West	Roy	
00057	Westbrook	Kirk	
00810	Westerbeck	Brad	
03386	Westling	Ann	
00594	Whalley	Chris	
06701	Whitcher	Bruce	CORVA
06788	Whitcher	Bruce	CORVA Lawyers
00712	White	Richard	

Number	Last Name	First Name	Organization
06368	White	Richard	Vice President, Welbilt 4WD Club
06523	White	Richard	
06525	White	Richard	
06621	White	Richard	
06623	White	Richard	
01111	White	Rick	Vice President, Welbilt 4WD Club
00572	Whitford	Brian	
00033	Whitley	Patricia	Board Chairman, Sierra County Board of Supervisors
01372	Wigley	Warren & D'Nette	
01865	Wilbourn	Jack	Grass Valley 4 Wheelers
02959	Wilbourn	Jack B.	
05735	Wilbourn	Jack B.	
05739	Wilbourn	Jack B.	
06405	Wilbourn	Jack B.	
00794	Wilburn	Diana and Ves	
06795	Wilder	Robert, Pat	Sierra Nevada Mining & Industry
01823	Williams	Michael	
05639	Williams	Stephanie	
00085	Willoughby	Ellie & Don	
00690	Wilson	Greg	
06245	Wilson	Rich	
00721	Wilson	Richard	President, Swamp Stompers 4X4 Club
00004	Winberry	Andrew	
01583	Winston	Kenny	
00704	Witherow	Michael	
00289	Witt	Rose Ann	
02936	Wood	Dave	
05264	Wood	Dave	
05265	Wood	Dave	
05775	Wood	Dave	
06249	Wood	Dave	
06421	Wood	Dave	
06422	Wood	Dave	
06752	Wood	Dave	
06803	Wood	Dave	
06804	Wood	Dave	
06809	Wood	Dave	
06805	Wood	Dave & Vernon	
06806	Wood	David	
06807	Wood	David	
06808	Wood	David	

Number	Last Name	First Name	Organization
02956	Wood	David C.	
06423	Wood	David C.	
01402	Wray	David	
00597	Wren	Carrie	
00061	Wright	Andrew	
05305	Wright	Andrew	
02945	Wubbels	Mike	Executive Director, Stewards of the SNF
02951	Wubbels	Mike	Executive Director, Stewards of the SNF
06704	Wubbels	Mike	Executive Director, Stewards of the SNF
06675	Wyeth	Karen & Harry	
04545	Young	Howard	
00633	Zeber	Jeff	
00560	Zukowski	John & Sandy	

Form Letter Comments

The following section of Appendix N displays the various form letters received during the public comment period on the Draft EIS. To reduce the size of the FEIS, it was decided to not include the listing of names. The names of the commenters are in the project planning record located at the Tahoe National Forest Supervisors Office, 631 Coyote Street, Nevada City California 95959.

4,519 comment letters were received of **Form Letter A**. These commenters were all assigned **'FA.'**

01300

RAAZK@KIRKARAN.COM
11/05/2008 06:33 PM

To tnf_rte_desig@fs.fed.us
cc
bcc
Subject Protect Tahoe National Forest Wildlands

Forest Supervisor Tom Quinn
Tahoe National Forest
631 Coyote Street
Nevada City, CA 95959

Dear Forest Supervisor Quinn,

FA

In the preferred alternative of the Draft Environmental Impact Statement (EIS) for Motorized Travel on the Tahoe National Forest, you have proposed adding 70.3 miles of unauthorized roads and motorized trails to your current transportation system. Additionally, you are proposing to convert 276 miles of hardened surface existing National Forest Transportation System (NFTS) roads from "Highway Legal Vehicles Only" to "All Vehicles," allowing passenger car access roads to highly valued non-motorized recreation areas like Grouse Lakes to deteriorate into eroded routes passable by ORVs only. This action is irresponsible given the Forest's inability to provide for the ecological and economic sustainability of the existing 2,800 miles of roads and motorized trails on the Tahoe National Forest.

Your preferred alternative focuses on the potential impacts of designating new user-created routes instead of following the Travel Management Rule, which requires you to first "identify the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of National Forest System lands 36 CFR 212.5 b." The designation of motorized vehicle travel on the forest provides an excellent opportunity to develop a system of roads and motorized trails appropriate to the carrying capacity of the land that will preserve large areas of the landscape for quiet forms of recreation; prevent damage to soil, watershed, and vegetation; and minimize harassment of wildlife and the disruption of wildlife habitats.

I urge you to identify the "minimum road system" under 36 CFR 212.5, maintain access roads for passenger cars to nonmotorized areas of the forest, and adopt the road closure recommendations put forth by The Wilderness Society in their comments on the Notice of Intent to conduct an EIS dated April 11, 2007.

Sincerely,
Renee Kirkpatrick
12113 Metric Blvd
austin, TX 78758

669 comment letters were received of **Form Letter B**. These commenters were all assigned **'FB.'**

01386-FB

clemrone@gmail.com
11/15/2008 03:46 PM

To "David Arasmith" <darrasmith@fs.fed.us>
cc clemrone@gmail.com
bcc
Subject Tahoe Route Designation EIS Comment

Date: 11/15/2008Tahoe National Forest Mr. David ArasmithRoute Designation Team631 Coyote StreetNevada City CA, 95959Dear Mr.David Arasmith,
All 2400+ miles of roads & trails proposed for closure are valuable and currently provide access to desired resources; they lead to vistas, scenic byways, secluded lakes, creeks and primitive camping. These routes have not been proven to affect water quality, habitats, or plants; they should be analyzed individually for their value, and included into the Forest System until this has been accomplished. Closure is not management, it?s denial that people recreate in the Forest.

The action alternatives increase the number of users on designated routes by restricting OHV users to a limited system; increasing impacts & maintenance costs. The DEIS fails to discuss trail carrying capacity and the fact many trails on the Tahoe NF are already exceeding trail carrying capacity. The document must be amended to reflect the need to minimize impact by disbursing use, not concentrating use, thru more OHV routes.

Some of these routes are old mining roads which have been used uninterrupted by the public for 130 years, predating the existence of the Forest Service; OHV'ers have adopted and prescriptively used as destination trails along with many other routes which were built by the Forest Service and have been used by the public continuously for 30 or more years. Actions to close these routes would not be ?maintaining valid existing right of use and access? as identified in the purpose and need of the DEIS.

The Tahoe DEIS has page after page of statements about motorized recreation without any factual evidence to them. All such unsupported statements must be removed from the document.

The DEIS is repetitive and verbose which is in violation of CEQ regulations. It is stuffed with quasi-relevant and irrelevant Forest Service-jargon.

The change in classification of routes from "unclassified" to "unauthorized" is a gross misrepresentation, to achieve a pre-determined outcome, of closing the currently legal routes within the OPEN areas (717,900 acres). The public stays on existing trails. This document doesn?t support the assumptions of a ?proliferation of unplanned, non-sustainable roads, trails and areas adversely [impacting] the environment?. All routes in the "Open" areas of the Tahoe NF must be included as a legal route in the document unless closed thru a prior NEPA process.

The OHV public have contributed over $12 million dollars to the USFS Travel Management process in California, yet the USFS complains that they are unable to complete the legally required analysis and site specific scoping due to funding and time shortages. It can be concluded that the Forest does not have the time or money to properly close, sign and restore the

routes. The document should discuss the time and funding needed to decommission, sign closed the routes or the restoration of these routes. The Forests reliance on cryptic maps for regulation and management while the existing routes exist on the ground entraps the public in fines and imprisonment for visiting public lands.

The action Alternatives represent drastic decreases in opportunity, miles, diversity and experiences available to OHV; implementation will increase environmental impacts, which is against the purpose and need of the Travel Management Rule. There is no alternative that seeks to best manage OHV recreation, which is the largest form of recreation on Forest Lands. OHV recreation supports managed recreation and protection of the Environment and Resources and this DEIS doesn?t support any of these aims.

New and existing public seeking to visit the Forest, combined with statewide proposed closures in other forests will quickly overwhelm the trail system, highlighting the flawed analysis and assumptions in the document.

The strict adherence to a deadline once it has been made clear that more time is necessary for due process is in violation of the Travel Managent Rule. There is a clearly stated mandate that does not allow artificial/arbitrary deadlines to interfere with doing the job correctly.

Identified routes found in the Inventory and NOI have no identification number. The failure to conduct analysis and make the information public, in order for the public to make informed comments is a violation of NEPA. Please correct the omissions of existing routes to the DEIS map and analysis to include all inventoried routes with identification numbers.

The No-Action Alternative Map in the DEIS does not reflect the condition on the ground. Over 1,400 miles of ?Unauthorized? routes have been removed from Alternative 1 (no-action), plus 900 more miles have been removed from the Inventory maps. Alternative 1 must be corrected to reflect the current condition as prescribed by law.
Sincerely,Dave Clemons2670 Royal Park DriveCameron Park CA 95682

142 comment letters were received of **Form Letter C**. These commenters were all assigned '**FC**.'

FC

Roy Nash
<roybeth@gmail .com>
12/03/2008 04:03 PM
Please respond to
roybeth@gmail.com

To tnf_rte_desig@fs.fed.us
cc
bcc
Subject Tahoe National Forest - PUBLIC COMMENT

Travel Management Team ,
Tahoe National Forest
631 Coyote St.
Nevada City,CA 95959
US

Dear Travel Management Team,

The Tahoe National Forest is home to some of the most scenic & challenging OHV trails in America. These trails provide an opportunity for thousands of OHV enthusiasts, from across the United States to access one of our nations most valuable assets; our national forests.

Not only do these trails provide recreation opportunities to the public, they are a "center of commerce" for hundreds of local businesses. These businesses support countless jobs and are tremendously important to the stability of our local and state economy.

OHV trails within the Tahoe National Forest cover a very small portion of the entire Tahoe National Forest, about .08%. With such a small portion of the Tahoe National Forest being used for OHV activities, I feel it would be unfair to close any of the OHV trails that are currently being utilized for these recreational activities.

After taking the opportunity to carefully review the Draft Environmental Impact Statement for the Tahoe National Forest, I would like to make the following comments:

SEASONAL CLOSURE:

I respectfully request that the Tahoe National Forest does not adopt a blanket seasonal trail closure focused upon the OHV community during the months of January, February, March, and April. I would like to ask that a seasonal trail closure option be removed from any Alternative that you select.

If the elimination of a seasonal closure is not an option, I ask that you reduce the four month closure time to two months (March and April). These months more effectively represent the time of year for snow melt.

Water quality is not affected by winter OHV usage.

In the absence of an entire or partial seasonal trail closure I respectfully request that the following trails/areas remain open 12 months of the year:

1. Greater Fordyce area
2. Washington / Graniteville area
3. Greenhorn OHV area
4. Yuba Gap Road 19

ALTERNATIVE #1 - NO ACTION ALTERNATIVE:

All trails traversing on private property should be designated up to the

property line on both sides. These miles should then be added back into Alternative #1 - No Action Alternative in order to provide accurate and true mileage. Trail mileage in the original Notice of Intent should match Alternative #1 - No Action Alterative.

DISPERSED CAMPING:

According to the Tahoe National Forest - Travel Management Rule and verbal confirmation at the Public Meeting in Auburn, CA; all routes to dispersed camping sites have yet to be identified. I request that the Tahoe National Forest allow for ample time (minimum of 2 years) to properly designate all existing routes to dispersed camping areas within the Tahoe National Forest.

There's a sub-culture of OHV enthusiasts that enjoy winter usage on the Tahoe National Forest. I once again respectfully ask that you revisit the decision involving any seasonal trail closures on existing routes within the Tahoe National Forest.

In my humble opinion, national forest lands were designed to be utilized by the public for recreational purposes. Please do not discriminate against a user group that uses only .08% of the Tahoe National Forest.

Thank you for taking the time to consider my comments that I have outlined in this letter.

Sincerely,

Roy Nash
3498 Loma Farm Rd
Tallahassee, FL 32309

15 comment letters were received of **Form Letter D**. These commenters were all assigned '**FD**.'

00577

FD

Steve Schramm
<reelsafari@yahoo .com>
12/03/2008 11:18 AM
Please respond to
reelsafari@yahoo.com

To tnf_rte_desig@fs.fed.us
cc
bcc
Subject Re: Tahoe National Forest OHV Route Designation - Little Truckee Trail TKN-M3

December 3rd, 2008

United States Forest Service
Route Designation Team
Tahoe National Forest, Region
5631 Coyote Street
Nevada City, CA 95959

Re: Tahoe National Forest OHV Route Designation – Little Truckee Trail TKN-M3

Dear Supervisor Quinn,

00577
AT

The change that we find the most in conflict with our mission and the Travel Management Rule in the TNF Proposed Action is the 2.83 mile segment of route TKN-M3 that parallels the west side of the Little Truckee River from Stampede Reservoir to Boca Reservoir. This trail is slated for motorcycle use and yearlong access with no seasonal closures.

The Little Truckee River Watershed is an invaluable resource to all users of the Tahoe National Forest. The biotic communities the Little Truckee River watershed supports, both aquatic and terrestrial, are arguably unrivaled by any other watershed in the Tahoe National Forest. The Little Truckee River is one of the premier trout fishing destinations in the State of California. Specifically, the tailwater trout fishery that exists below Stampede Reservoir is among the best in the United States, and anglers from all over the world come to the Truckee Area to recreate here. This fishery has gained a reputation among fisherman nationwide, not just California, as being one of the best places to catch large wild trout on a dry fly. The reputation and quality of this unique fishing experience needs to be protected.

Trail TKN-M3 will undoubtedly increase the frequency of inter-user group conflicts between anglers and OHV users along the Little Truckee River. Anglers seek solitude and escape among a myriad of other values when recreating outside. These characteristics are especially true for fly fishermen/women, which are the prevailing constituency represented on the Little Truckee River between Stampede and Boca Reservoirs throughout the season. Inclusion of trail TKN-M3 will significantly increase noise pollution along this premier section of the Little Truckee River, invariably changing the fishing experience on this destination river. There is also a potential for

collision and serious injury, as many anglers use the area of the proposed trail to walk from spot to spot. This will lead to inter-user group conflicts between anglers and OHV users, as well as cause inter-site displacement among local anglers adding to increased pressure on other resources in the TNF, causing future management issues/concerns. Anglers from all over have been enjoying this wonderful resource for decades, and the executive orders and travel rules specifically state that OHV use cannot conflict with existing neighboring recreation values.

AT 00577

Trail TKN-M3 will increase resource impacts to the riparian zone along the Little Truckee River. The Little Truckee River has been recognized as an area of high ecological significance and boasts a "high biotic integrity" rating and an "especially pristine watershed." Trail TKN-M3 crosses eight ephemeral tributaries to the Little Truckee River and 5 out of 23 trail segments are located in riparian areas. Although these tributary drainages and riparian areas might not support any trout species perennially, they do provide the Little Truckee River with supplemental flows of cold water at times throughout the year which is important for creating and maintaining critical spawning habitat for trout. This proposed trail is specifically in conflict with the stipulations listed under the execute orders and travel regulations that govern the protection of resource and watershed values on public lands.
The area located between Prosser, Stampede and Boca Reservoirs has a route density of greater than eight miles of roads/trails per one square mile. This is already the highest route density area within the Tahoe National Forest. Trail TKN-M3 will connect the myriad of existing OHV trails and roads to the west side of the Little Truckee River. Trout Unlimited feels that the Interdisciplinary Team did not take into consideration the amount of potential use trail TKN-M3 will receive and what resource impacts that might comprise for the fragile meadow the Little Truckee River flows through, as users are inevitably likely to illegally venture off trail. We are aware that this trail is designated for motorcycle use only, but we feel it is unreasonable to assume that it will be used exclusively by motorcyclists if included. It can be accessed far too easily, and OHV enforcement has been a long time issue for the Forest Service. It is the opinion of Trout Unlimited that there are already enough OHV trails in this region of the TNF, and this additional trail poses serious and significant social and environmental implications that should deny its inclusion in the final OHV Travel Plan.

00577 3.07

We look forward to working closely with the Forest on implementation and enforcement of its provisions and infrastructure. Having attended several of the public meetings hosted by the TNF to solicit public feedback, we are aware that the issue of off-highway vehicle use is divisive and emotional, and commend the Forest and its personnel for their professional conduct during these meetings. OHV enthusiasts may be justified in saying they need more areas and routes for their activity, but that does not mean that a majority of the TNF is suitable for such activity, and some resources are so sensitive, rare or ecologically important that they trump any proposed addition or existing OHV route in their proximity.

On behalf of the fish and game resources of the TNF, and of hunters and anglers who believe that hunting and fishing opportunities in the Forest are threatened by OHV use, we thank you for the opportunity to comment on the motorized travel and route designation plan for the TNF. We look forward to working closely with you to develop ecologically sustainable, manageable, and enforceable management plans in the future. Thank you.

Steve Schramm

198 Fair Street

Petaluma, CA 94952

707-762-5818

104 comment letters were received of **Form Letter E**. These commenters were all assigned '**FE**.'

"Brad Kohler"
<bkkohler@inreach .com>
12/16/2008 07:00 AM

To <tnf_rte_desig@fs.fed.us>
cc
bcc
Subject Travel Management DEIS

To Whom It May Concern:

I am writing to you in regards to the Tahoe National Forest. I currently reside on the north shore of Lake Tahoe, and grew up in the North Bay Area. The Tahoe NF has always been one of my favorite recreation areas. This also holds true for most of my family! We are avid off-road enthusiasts, and have been long time conscientious users of the National Forest lands. We are extremely concerned about the preservation of the use policy as it affects us now, and also for future generations. Please take into serious considerations, the comments following. Thank you! Brad Kohler, Carnelian Bay, California.

The off-highway vehicle community generally supports the "travel limited to designated roads, trails and areas" paradigm. What the OHV community does not support is being presented with a "range" of management alternatives, which all represent a significant reduction in OHV opportunity. Neither the letter nor spirit of the Travel Management Rule limits the Forest to an aggressive closure plan, yet the Tahoe's Alternatives offer little more than that.

I believe the Forest should develop a more access-friendly updated Alternative 5 or Alternative 6. The modified alternative should include keeping the Foresthill OHV Area open all year since it is an important key element in the statewide destination OHV area matrix.

Other topics that should be covered in a modified alternative include mixed use, dispersed camping, winter wheeled recreation, rainfall-based closures vs. forest-wide and lengthy seasonal closures, and designating more areas as open. Some lower elevation trails should be designated for use all year as well.

DESIGNATION OF USER ROUTES - At the public DEIS meetings, the agency related to the attendees that the Forest has approximately 1,400 miles of historic user routes with demonstrated easements or that do not cross private property. In Alternative 5, the agency only identifies 282.8 miles of user routes brought forth by OHV stakeholders to the Forest as important recreational opportunities. The agency has overlooked a significant number of said user routes and the number of motorized trails added to the National Forest Transportation System should be significantly higher in Alternative 5.

UPDATE AND REVISE ALTERNATIVE 5 (BRC Alternative) - I ask the Forest to update

its version of Alternative 5, since it did not fully develop a number of key tenets in BRC's original proposal. Those elements include using rainfall-based closure criteria over seasonal closures at appropriate sites, designating at least the 282.8 miles - if not more - of user routes in Alternative 5, allowing winter wheeled use on important routes, and designating more "Open" areas.

FORESTHILL OHV AREA - I encourage the Forest to designate the Foresthill OHV Area as open all year and to use the rainfall-based closure criteria at other destination OHV areas, including Georgetown, Cow Mountain, and Stonyford. Area-specific rainfall-based closures are preferable where appropriate to time-based seasonal landscape level or forest-wide closures. Rainfall-based closures are appropriate and necessary management tools for OHV areas that are part of the California statewide "OHV destination area matrix." They are also appropriate prescriptions for lower elevation routes more closely associated with dispersed OHV recreational uses.

ADDITIONAL MIXED USE DESIGNATIONS - Designate Rattlesnake Road as mixed use. This is an important connector or corridor that provides OHV access in the Cisco Grove area. It is a vital element in providing safe and legal OHV access to the Forest. Local clubs and users may bring forth additional roads that should be designated as mixed use. I urge the agency to review Rattlesnake Road and other roads identified by public comment.

DESIGNATION OF EXPERT LEVEL MOTORCYCLE OR 4WD ROUTES - The agency should again review site-specific comments submitted by local interests regarding the inclusion of historic expert level (single or double black diamond) user motorcycle or 4WD routes, or conduct a specific workshop with user groups on this topic. I believe the agency may not appreciate said routes in a regional context where the Forest currently affords the public a unique, high quality and expert-level trail experience not found elsewhere in Region 5. The agency should continue to provide for some level of winter snow 4WD recreation. Such 4WD recreation is an important and historic use feature of the Forest. Designate the Fordyce Trail as open all year. Other key winter 4WD routes should be considered and designated as well, as identified by user input.

89 comment letters were received of **Form Letter F**. These commenters were all assigned '**FF**.'

F. 01097

Tahoe National Forest
[redacted]
Route Designation Project

Tahoe National Forest
Route Designation Project
631 Coyote Street
Nevada City, CA 95959

Dear Supervisor Quinn,

Greenhorn OHV area has been used by all types of vehicles for nearly as long as vehicles have been around. Many families ride in the Greenhorn area. It provides a safe, contained, multi use day area for ATV's, 4 wheel drives, and the new utility vehicles.

This makes an ideal setting for OHV use. Traditionally local residents have used it for teaching young or new enthusiasts how to ride, drive, and have fun. It is the ONLY open OHV area that includes 4 Wheel Drive use. The majority of creek bed users are 4 Wheel Drive enthusiasts. It has many different levels of challenging terrain, and obstacles. Real Estate Agents sell Greenhorn properties touting recreational OHV use.

Because of the history of Greenhorn Creek and a Hydraulic mining area, much of the soils have been washed downstream leaving a very large wide open creek bed consisting mostly of river rock. Very little vegetation exists, and very little wildlife traverses the area.

We want Greenhorn to stay open year round. It is generally below the snow line. When most of the forest will be closed during the snow and wet season, when the deep snow makes many forest roads impassable, Greenhorn offers a safe, fun place to recreate on rainy weekends. It would be a great place to continue to offer use where little damage to trails and roadbeds can occur. It's all rock!

The Draft Environmental Impact Statement only includes a portion of the traditional/original Greenhorn OHV use area, and again only a portion of the Tahoe National Forests portion of Greenhorn OHV.

The Greenhorn OHV area as described in the Draft, highlights the creek bed from Buckeye Road and South. Users also travel from the Buckeye Road entrance North, and continue until the canyon becomes too narrow to travel. This also should also be included in the Greenhorn OHV area, as another 40+ acres of exactly the same terrain, and rock creek bed exist there as well.

This area is completely owned by the Public and managed by the Tahoe National Forest. It would not produce any private ownership conflicts. This area needs to be designated in THIS process.

Closing Buckeye Road for the Winter Deer herd is not prudent. It is one of many roads available to the public in a condensed area, and has never been closed for this purpose before. There are several studies that prove the Deer are not affected by OHV's, and in fact their numbers are increasing and show no evidence of their habitat being degraded.

Please Designate the Greenhorn OHV area in the final decision, and keep it open for year-round use.

Thank you for your time.

Sincerely,

Name: Jim Sochs
Address: 5784 River Run Cir
City, State Zip: Rocklin, CA.
email: Toyfamily@yahoo.com
phone: 916-817-0294

65 comment letters were received of **Form Letter G**. These commenters were all assigned '**FG**.'

Tahoe National Forest
[redacted]
Route Designation Project

FG 05719

Tahoe National Forest
Route Designation Project
631 Coyote Street
Nevada City, CA 95959

Dear Supervisor Quinn,

Please keep Fordyce open year-round:

Many 4 wheel drive vehicles traverse the trail during the summer months, however, year round access is very important to me. There are many people that use the trail year round.

Most only travel as far as we can get in half a day, leaving the remainder of the day for the return trip. Sometimes we organize weekend trips, in which we prepare for an overnight stay camping in the snow. This requires a fair amount of preparation and expenditure, which many of the local businesses in Nevada and Placer Counties depend on.

There are 4 wheel drive enthusiasts that spend a great deal of time and money preparing their rigs for the winter. Bead-lock wheels are the most expensive equipment used. The wheels lock the bead of the tire to the wheel, so when the tire is aired down and left with 2-3 lbs of air, the tire will stay on the wheel. The purpose of this is to create a wide footprint which greatly enhances traction in the snow by allowing the vehicle to "float" on top of the snow. It prevents the tires from "digging" into the snow, and also helps prevent tread damage to roads that may have 24-36" of snow pack. The trick to staying on top of the snow is slow steady throttle, which much like the nature of rock crawling reduces the risk of resource damage. Many purchase wider tires as well to aid in deep snow travel.

The property owner at Cisco Grove Campground will be adversely impacted financially, over 3500 OHV users will be adversely impacted by the enforcement of the current designation of Highway Legal Vehicles only.

Currently the Highway Legal Vehicle only designation is not and has not been enforced. Therefore traffic use and knowledge have governed the use of this road for many years.

It will eliminate the only secure entrance to the Fordyce Trail for Green-sticker vehicles. It is also the only secure parking area available. The Eagle Lakes OHV staging area has vehicle break in and vandalism EVERY weekend. This road is used everyday by OHV's. There is just no substitute for this road. It must be designated as multi-use.

Thank for your time.

Sincerley,

Name: Rob Mayer
Address: 10070 Summerhill Cir.
City, State Zip: Newcastle, CA 95658
email: foulbite@sbcglobal.net
phone: 916-663-2707

67 comment letters were received of **Form Letter H**. These commenters were all assigned '**FH**.'

To: Travel Management Team
631 Coyote Street
Nevada City, CA 95959

Re: "**Responsible Recreation Alternative**".

Please add my name to the list of those who support the recently proposed "**Responsible Recreation Alternative**".

This well conceived alternative would provide the Public with the needed access to the Tahoe National Forest while meeting the goal of prohibiting cross-country travel. All of the requested trails are currently in use as demonstrated by the fact that they were included in the inventory.

The Tahoe's own reports, surveys, and studies show that the Forest, its watersheds, and inhabitants are thriving. The continued use of these trails along with the prohibition on cross-country travel does not pose a threat to the forest. This alternative, by stopping cross-country travel, should help to improve the existing excellent health of the Forest.

The alternatives currently proposed in the DEIS will not meet the public's needs. The "**Responsible Recreation Alternative**" will. Please consider and adopt this alternative.

Respectively,

Martin Ward
Name, (printed)

15188 Strason Dr.
Street

Grass Valley CA 95945
City

530 392-0064 mjward@usamedia.tv
Phone (email)

Signature Date

FOTFA, Cal 4wheel, Grass Valley 4-Wheelers
Affiliations

12 comment letters were received of **Form Letter I**. These commenters were all assigned '**FI**.'

06229 FI

Travel Management Team
631 Coyote Street
Nevada City, CA 95959

Forest Supervisor Tom Quinn,

I encourage the Forest Supervisor to modify the Action Alternatives, none of the action alternatives are acceptable without significant modification.

I object to the pressure from the Regional office to restrict OHV access on ML 3 and 4 roads. The California Vehicle Code does not apply to USFS dirt or gravel roads. The DEIS failed to support liability concerns with documented incidents or statistics on the Tahoe NF or law enforcement records. R5 attempts to direct a pre-determined outcome, which is in violation of NEPA. These ML 3 & 4 roads have historically and legally provided access to NFTS trails. I support the continued legal use of OHV's on USFS system ML 1-4 roads.

I object to the reclassification of Pre NEPA roads and trails from unclassified, to unauthorized. These routes where Grand fathered in and while in some cases not part of the NFTS, public use was legally allowed in an "Open" forest.

I would like to point out that the DEIS omits a description of the use or vehicle types. A travel management plan needs to describe the use and the types of vehicles it plans to develop a travel plan for. The DEIS omits over snow travel by wheeled vehicles. The Travel plan excludes areas for the Trials rider, the lowest impact vehicle is omitted. The DEIS describes all 1400 miles of routes as open to high clearance vehicles, but omits route description and what the route is suitable for. The decision make cannot tell if the routes proposed in the action alternatives are singe track trails, ATV trails, Jeep roads, SUV roads...Correct the document to include a description of the vehicle types and uses.

Specific routes that are important to me that should be added to the NFTS;

YRN-M3B Herkimer I support the designation of the Historic Herkimer Mine trail, as found in the Preferred alternative #6. This route has been mapped and on the ground for over 100 years. OHV volunteers maintain it. Analysis has been done on this route and the conclusion of the ID team is to designate this route.

YRN-M2 Rattlesnake. This Historic mining trail should be designated. Please note above that the evidence in the Roadless area section of the DEIS indicates that this route is already a legal route. The road down to the mine is a legal road and the lower section of Rattlesnake is presently designated. OHV uses this segment to complete a loop. With Mining claims in the area, the trail may continue to see use, for miners to access mining claims.
N39 39.104 W120 49.034 To N39 40.009 W120 48.801
Rattlesnake trail should be designated to complete loop.

YRN-A1 Eureka Diggins Open area should be designated, as shown in Alternative 2. It was to be designated in the NOI. The Eureka Diggins should be designated an "Open area as shown in the NOI. The NOI alternative #7 has been altered and this is one of many omissions.

Spencer Lakes Trail to the A-Tree trail, shown in Alternative 1, with no identifying number. This historic mining trail should be designated. N39 41.957 W120 43.157 to N39 42.099

W120 44.853 It provides a unique scenic experience. Use would be limited, due to the high skill, required to ride this trail. Sound is minimal as bikes idle and or remain at low RPM to negotiate this trail. This Historic trail pre-dates NEPA. The Spencer Lakes trail should be designated. No analysis was identified in the DEIS to support closure or mitigate issues. The omission, time or money is not within the authority of the decision maker. The NEPA process requires Scoping and site specific analysis.

Downie Rd., From Hawley Lake to Gold Valley Rd. It is shown on the NOI, but omitted in the DEIS and or the NOI Alternative #7. Jim Nejedly (925-383-7058), property owner. Granted verbal permission to cross private land. This historic road should be included in the DEIS and designated. No analysis was identified in the DEIS to support closure or mitigate issues. The omission, time or money is not within the authority of the decision maker. The Gold Valley/Hawley Meadow DEIS map just released, shows the Downie Road as a OHV route, this evidence supports that this road was part of the NFTS and no legal NEPA closure decision document supports its omission. The NEPA process requires Scoping and site specific analysis.
N39 40.926 W120 42.573 To N39 40.089 W120 42.640

Grizzly Trail, from Herkimer Mine Trail, to Poker Flat. Historic trail that linked Downieville, to the mining town, of Poker Flat. It is found on Alternative 1, with no identifying number.
N39 39.994 W120 50.516 to N39 41.375 W120 50.786
This trail creates a loop with Empire Creek trail, to Chimney Rock, to Rattlesnake, to Herkimer, to Grizzly, to Gibraltor Mine Trail, to Craycroft Ridge trail. With the option to ride Downie River trail to Fir Cap OHV trail. No analysis was identified in the DEIS to support closure or mitigate issues. The omission, time or money is not within the authority of the decision maker. The NEPA process requires Scoping and site specific analysis. This is a legal Historical trail, that pre dates NEPA and has no subsequent NEPA document to be legally closed. You must include legally created routes. This trail is part of a loop that reduces the number of riders on ML 3 roads.
The road from the yellow gate to the Sierra Buttes Lookout. This is a legal route that has been omitted. This gate has been erected under a temporary forest order over a decade ago. Forest orders cannot be used to affect a permanent change, such as a road closure. The road to the from the gat up to Sierra Buttes Lookout has no supporting NEPA document, record of a public process or site specific analysis to affect a legal NEPA closure. This road segment has been omitted from the DEIS map. The closure of this legally created road is outside the scope of this process and must be shown as a legal motorized route.

0027 Road from Halls Ranch Road to The East end of Cal Ida needs to be designated "Mixed Use" or downgraded to a Class 2 road. This provides OHV access to two Expert level trails (Black Diamond). Halls Ranch Trail and Fiddle Creek trails. The present highway licensed vehicle requirement on 0027 road, a seldom-used dirt road. Mixed use designation would allow OHV riders to access these NFTS routes. Cal Ida road is a paved road that runs from Hwy. 49 to just east of the Eureka Diggins. Car Traffic is light and takes this road, not the 0027 dirt road.

Sailor Ravine Road, about 1-½ miles North of Downieville. YRN-6 Road up from Downie River Rd to TV Towers/Saddleback Road. This road was shown on the NOI, to be designated. But has been excluded from alternatives 2-7. YRN-6 road should be designated as indicated on the NOI map.
N39 35.128 W120 49.719 to N39 34.727 W120 49.871
This class 1 or 2 road allows OHV to loop back up to Saddleback road and the Fir Cap OHV trails to complete loop and return to Chimney Rock, Poker Flat or Halls Ranch. Without this link OHV must ride into Downieville. This important link should be designated.

The road described on DEIS Alt. 1, attached to these comments should be designated and proper analysis completed. From the upper part of Craycroft Ridge road to the lower portion of Craycroft Ridge Road. Great short cut to keep bikes off the road.

0093-02 Should be open to all vehicles. Provides access to the Sierra Buttes Lookout for Green sticker vehicles.

0093-003 Should be open to all vehicles, vital connection to connect OHV trails. No OHV access to Butcher Ranch Trail if this is not designated Mixed Use and open to Green Sticker vehicles.

Robinson Cow Camp road is shown in Alternative 1. This is a signed Open OHV route. N39 37.208 W120 40.991 (Butcher Ranch Rd) to N39 37.424 W120 40.776 (0093 Rd.)

0093 Please designate the 0093 road, to open to all vehicles. "Mixed Use". Provides OHV access to trailheads.

YRS-SF6 Omega Rd to Hwy. 20 overlook Trail. This Trail provides a vital connector from the town of Washington and the RV Park; to the Burlington Ridge trail system. It is included in the preferred alternative 6 and recommended for designation in the NOI. I support the designation of YRS-SF6.
N39 18.900 W120 45.177 to N39 19.197 W120 47.200 on the West end or Omega Road.

YRS-B7 Towle Mill extension. This trail is recommended for designation on the NOI map. It is included in Preferred alternative and I support designation of this trail. N39 18.143 W120 48.335 to N39 18.108 W120 48.582 on the west end.

This segment appears to have been omitted from the DEIS and NOI. This single-track segment appears to be marked as open on the west end of this trail by a trail marker. This segment should be included in the DEIS. This trail segment should be designated.
N39 18.659 W120 48.077 to N39 18.581 W120 48.374

YRS-B5 Deer Creek Forebay loop. This is a loop trail. It should be designated.
N39 17.507 W120 47.988 to N39 17.668 W120 48.527 and back to N39 17.507 W120 47.988.
It is impossible to tell if these segments of the Deer Creek Forebay loop are included on the DEIS maps or the NOI. These trail segments should be included in the DEIS. These segments should be designated.
N39 17.509 W120 47.936 to N39 17.712 W120 47.461
N39 17.712 W120 47.461 to N39 18.054 W120 47.249 Class 1 rd to N39 18.081 W120 47.120

This is a map error according to Joe Chavez, USFS. This trail segment is already designated and part of the NFTS, but not shown on the DEIS map as a "designated" trail. This map error must be corrected. N39 18.081 W120 47.120 to N39 18.090 W120 46.822 Big Pipe Rd Trail, is shown as unauthorized on NOI map in error.

YRS-SF5 Crystal Springs /Overlook Loop. This loop is shown as proposed on the NOI map and the DEIS Preferred alternative 6. I support the designation of YRS-SF5.

Greenhorn area (Tahoe NF) should be designated as an "Open" area.

Washington road map error. The Omega road is incorrectly identified on the DEIS map, as the Washington road. This map error needs to be corrected.

Bake Oven Trail May 1 to November 1, low elevation should be shorter or the same as Foresthill OHV area. Elevation is 2,133'. Access is from a low elevation point at Michigan

Bluff; at Last Chance Trail head 3,445'. The connecting trail, Last Chance, which is higher, has a "silver highlight" and open May 1 to December 31. This elevation should be open year around. This single track trail is shown in error as open to high clearance vehicles.

Spaghetti Bowl area should be designated as an open area at Foresthill. Beginner practice trails. This area was devastated by logging and all existing trails destroyed. This should be an "Open Area" to develop a play area for beginner/mini bike riders.

"No WST trail at the Flume section?" This is a map error and should be corrected. The WST is a legally designated OHV trail.
N39 06.798 W120 37.160 To N39 05.918 W120 35.033

"WST, at Robinson Meadow shown as a designated OHV trail, but signed closed?" The DEIS map is in error or the sign on the ground is not supported by a valid NEPA document and must be removed and correctly signed as OPEN.

Seasonal Closure should be changed to open year around. Snow keeps trails closed in the winter. It is impossible to predict weather and snow levels at this elevation. No daily, monthly, annual and historical weather data was included to support the need for seasonal closures. Prime, "ideal" riding conditions are in the spring and fall months, often being extended into the winter months with unseasonably warm weather. The DEIS does not provide any scientific weather data to support the arbitrary and capricious Seasonal closures found in the Alternatives. Over snow, wheeled recreation, is excluded with Seasonal closures. The exclusion of Over snow, wheeled vehicles, is outside the scope of this process.

I support, below high water, riding at Truckee area reservoirs. I support the open area designation of Boca, Stampede, Prosser and Prosser Pits.

Name Stephen Hay
Signiture
Address 3872 Harvest Dr.
City Redwood City Zip 94061 Phone (650) 366-4528
Email stevefhay@yahoo.com

Added note: I am opposed to outright winter closures. It makes no sense. Please adopt the ideaology of others areas: Close for 48 hours after 2 inches of precipitation in a 24 hour period.

4

56 comment letters were received of **Form Letter J**. These commenters were all assigned '**FJ**.'

FJ

06250

"Ted Ross"
<redoakfarm 5@bellsouth .net>

12/24/2008 11:36 AM

To <tnf_rte_desig@fs.fed.us>
cc
bcc
Subject Greenhorn Area

Dear Forest Supervisor Tom Quinn,

06250 AY

I am a long time 4 wheeler and have done so responsibly for many years. I am a member of TTORA that promote tread lightly and use every opportunity to educate people on the trail. I would like to ask that you leave the Greenhorn area open all year round. The Greenhorn area has been used by all types of vehicles for nearly as long as vehicles have been around. Many families ride in the Greenhorn area. It provides a safe, contained, multi use day area for ATV's, 4 wheel drives, and the new utility vehicles.
Please leave Greenhorn open for our use.

Sincerely,
Ted Ross Family

4409 Holly Springs Rd

Gillsville, Ga. 30543

770-536-8289

redoakfarm5@bellsouth.net

Agency Comment Letters Received on the Supplemental Draft EIS

The following is a reproduction of the letters received during the public comment period from tribes, federal and state agencies, county and muncipal governments and from elected officials.

Postmarked 4/13/10

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

S 0012

APR 14 2010

Tom Quinn
Forest Supervisor
Attn: Travel Management Team
631 Coyote Street
Nevada City, CA. 95959

Subject: Supplemental Draft Environmental Impact Statement for Tahoe National Forest Motorized Travel Management Plan, Nevada, Placer, Plumas, Sierra and Yuba Counties, CA (CEQ# 20100052)

Dear Mr. Quinn:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA provided comments on the original Draft Environmental Impact Statement (DEIS) on December 24, 2008. We rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) due to our concerns regarding the scope of the travel management planning process, timely achievement of the Lake Tahoe and Squaw Creek Total Maximum Daily Load requirements, the continued use of roads and trails in areas containing Naturally Occurring Asbestos, and potential impacts to water quality, meadows, and riparian areas. We also advised that additional information was needed to fully describe monitoring and enforcement commitments.

Based on our review of the SDEIS, we continue to have the concerns expressed in our comments on the DEIS; therefore, we are rating the SDEIS as Environmental Concerns- Insufficient Information (EC-2). For your reference, we are enclosing a copy of our DEIS comments. We have not identified any additional concerns with regard to the changes made in the SDEIS.

We appreciate the opportunity to review this SDEIS. When the FEIS is released for public review, please send one hard copy and one CD to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Stephanie Skophammer, the lead reviewer for this project. Stephanie can be reached at (415) 972-3098 or skophammer.stephanie@epa.gov.

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Sincerely,

Kathleen M. Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosed: Detailed Comments

cc: David Arrasmith, Forest Planner, Tahoe National Forest
Steve Thompson, California Operations, US Fish and Wildlife Service
Carolyn Suer and Carl Brown, California Air Resources Board

2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

December 24, 2008

Tom Quinn
Forest Supervisor
Attn: Travel Management Team
631 Coyote Street
Nevada City, CA. 95959

Subject: Draft Environmental Impact Statement for Tahoe National Forest Motorized Travel Management Plan, Nevada, Placer, Plumas, Sierra and Yuba Counties, CA (CEQ# 20080380)

Dear Mr. Quinn:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our detailed comments are enclosed.

EPA commends the Forest Service for their efforts to address the many challenges inherent in developing a balanced Motorized Travel Management Plan that responds to recreational and resource management demands. We acknowledge that the Travel Management Plan process is a positive step in addressing resource impacts from motorized uses. The permanent prohibition of cross country travel off designated routes, the switch from unmanaged to managed motorized recreational use, implementation of seasonal and wet weather closures, and elimination of motorized access below the high water line (when dry) of Prosser, Boca and Stampede Reservoirs will result in significant environmental benefits.

While we acknowledge the benefits of the Preferred Alternative (Alternative 6), we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*") due to our concerns regarding the scope of the travel management planning process, timely achievement of the Lake Tahoe and Squaw Creek Total Maximum Daily Load requirements, the continued use of roads and trails in areas containing Naturally Occurring Asbestos, and potential impacts to water quality, meadows, and riparian areas. Additional information is also necessary to fully describe monitoring and enforcement commitments.

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EPA is aware of the decision by the Pacific Southwest Region of the Forest Service to limit the scope of the travel management planning process to prohibition of motorized vehicle travel off designated routes, addition of unauthorized roads and trails to the National Forest Transportation System (NFTS) so they may be designated for motor vehicle use, and changes in vehicle class and season of use. The rationale for the limited scope of this process is schedule constraints and limited funding and resources.

We acknowledge the constraints of funding and resources; nevertheless, we had hoped the Forest Service would take this opportunity to review and rationalize the NFTS, pursuant to Travel Management Rule direction to identify the minimum road system needed (36 CFR Part 212 Subpart A), and to address known road-related resource impairments and use conflicts of both the existing NFTS and unauthorized user-created system, and align the transportation system with maintenance and enforcement capabilities.

Route designations are only part of what is needed to reduce the ongoing adverse impacts to water quality and other resources from the NFTS. We continue to believe a more holistic approach to travel management planning, whereby route designations are guided by travel analysis, known locations of resource impairment, and prior determination of the minimum road system needed, would better serve the long-term interests of the public, Forest Service, and National Forest resources.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send two (2) hard copies to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Laura Fujii, the lead reviewer for this project. Laura can be reached at (415) 972-3852 or fujii.laura@epa.gov.

Sincerely,

Laura Fujii for

Kathleen M. Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosure: Detailed Comments
Summary of Rating Definitions

cc: David Arrasmith, Forest Planner, Tahoe National Forest
Steve Thompson, California Operations, US Fish and Wildlife Service
Carolyn Suer and Carl Brown, California Air Resources Board

2

EPA DETAILED DEIS COMMENTS RE: TAHOE NATIONAL FOREST MOTORIZED TRAVEL MANAGEMENT PLAN, NEVADA, PLACER, PLUMAS, SIERRA, AND YUBA COUNTIES, CA., DECEMBER 24, 2008

Alternative Analysis

Provide information on the minimum Forest road system needed and how this information was used to formulate the alternatives. The scope of this action includes prohibition of motorized vehicle travel off designated routes, the addition of unauthorized user-created roads and trails to the National Forest Transportation System (NFTS) so they may be designated for motor vehicle use, and changes to vehicle class and season of use. We believe a more holistic approach to travel management planning, whereby route designations are guided by travel analysis, known locations of resource impairment, and prior determination of the minimum road system needed, would better serve the long-term interests of the public, Forest Service, and National Forest resources.

> ***Recommendations:***
> The FEIS should describe the minimum Forest road system needed and how this information was used to formulate the motorized travel management alternatives. If the minimum road system needed has not been identified, the FEIS should describe how the optimal road system will be identified pursuant to the requirements of the Travel Management Rule (36 CFR Part 212 Subpart A).

Expand the scope of the action to include current roads and trails with known impacts. The DEIS states that the Forest is addressing impacts associated with the current NFTS through the Forest's road maintenance program (p. 3, Volume I: Summary). The current estimate of deferred road maintenance is $115,000,000.00 (p. 601, Volume III: Chapter 3). It is likely that the Forest will experience declining budgets. EPA is concerned with the Forest Service's ability to adequately address known road-related resource impairments given the acknowledged lack of maintenance funds and this proposal to add additional miles of roads and trails to the NFTS.

> ***Recommendation:***
> We recommend the Forest expand the scope of this action to consider, for seasonal or permanent closure to public motorized use, current NFTS roads and trails with known resource impacts or conflicts with other recreational users and experiences. For example, consider closure of impaired maintenance level 2 native surface roads until adverse impacts of these roads are addressed.

Water Quality

Demonstrate that the Preferred Alternative will help meet TMDL requirements. Squaw Creek and the Truckee River between Lake Tahoe and the California/Nevada Stateline are subject to Total Maximum Daily Loads (TMDL) for sediment. Both of these TMDLs require specific, quantified sediment load reductions over the next 20 years: 25% for Squaw Creek and 20% for the Middle Truckee River. Both contain load allocations that require approximately 55% sediment load reductions from dirt roads from existing conditions. The Middle Truckee River Sediment TMDL specifically states that the Tahoe

National Forest Motorized Travel Management Plan will be a key component to meeting the load reductions required from dirt roads.[1]

Recommendation:
The FEIS should include data that demonstrate that Alternative 6 - Preferred Alternative (Preferred Alternative) will help meet the required sediment load reductions from dirt roads from existing conditions. If such load reductions will not be achieved, than additional Best Management Practices (BMPs) and mitigation measures should be adopted and incorporated into the Preferred Alternative to meet TMDL requirements.

Naturally Occurring Asbestos

Do not add roads or trails on land "most likely" to contain naturally occurring asbestos. The action alternatives increase the miles of roads and trails officially open to motorized use on land "most likely" to contain naturally occurring asbestos (NOA) (p. 28, Volume I: Summary). Disturbance of rocks and soils that contain naturally occurring asbestos (NOA) can result in the release of asbestos fibers to the air and exposure to the public. Asbestos is a known human carcinogen and represents a potential human health risk for those exposed while using roads or trails where it occurs. Of specific concern are the three miles open to All Terrain Vehicles (ATVs) and motorcycles on land "most likely" to contain NOA. ATV and motorcycle users may be at higher risk of exposure to asbestos fibers since they are lower to the ground and open to the air. Even with the prohibition of travel cross country and on un-authorized routes, the Preferred Alternative would continue to allow motorized use on 43-miles of existing NFTS roads and trails on lands "most likely" to contain NOA (p. 47, Volume III: Chapter 3).

Recommendations:
Additional miles of native surface roads or trails on land "most likely" to contain naturally occurring asbestos (NOA) should not be added to the NFTS or designated for motorized vehicle use. If such miles are added to the NFTS, the FEIS should provide the rationale for their addition and include data to demonstrate that these additional miles would not significantly increase the risk of adverse health effects.

For heavily used existing roads and trails on land "most likely" to contain NOA, we recommend assessing the potential for exposure to elevated levels of NOA. This information should be provided in the FEIS. We recommend prohibition of public motorized use and closure of roads and trails where monitoring indicates the potential for significant NOA exposure. The Forest should post signs informing visitors that NOA is present, what the risks are, and how visitors can avoid exposure. These measures should be incorporated into the Preferred Alternative and committed to in the Record of Decision (ROD).

[1] http://www.swrcb.ca.gov/rwqcb6/water_issues/programs/tmdl/truckee/docs; pps. 10-10 to 10-11.

Water and Riparian Resources

Provide a rigorous evaluation of the effects of the change of hardened surface roads to high clearance roads and their use by all vehicles. All the action alternatives, except Alternative 3: Cross-Country Travel Prohibition Only, allow hardened surface roads to be "open to all vehicles" through either: 1) a reduction of maintenance until they meet high clearance conditions (e.g., degrade to ungraded, rough surface, pot holes, wash boarding) that allow for safe mixed-use, or 2) by a decision of a qualified road engineer that the assessed road condition is poor enough to allow safe mixed-use (p. 10, Volume I: Summary). The Preferred Alternative would change 276 miles of smooth surface roads to high clearance roads (p. 584, Volume III: Chapter 3).

EPA acknowledges that this action may better align road maintenance requirements with available funds and resources. However, roads and trails are primary contributors of excess sediment and water quality contaminants, many as a result of limited maintenance. We are concerned with the potential adverse water quality effects of a reduction of maintenance on roads that may already be affecting resources.

> ***Recommendation:***
> The FEIS should provide a more rigorous evaluation and description of the effects of the proposed redesignation of hardened surface roads to high clearance roads and their availability to all vehicles. We recommend additional BMPs be included in the Preferred Alternative to ensure the change from hardened surface roads to high clearance roads do not result in additional adverse water quality or sediment effects.

Evaluate the effects of alternatives on route proliferation at dispersed campsites near streams, lakes, springs and meadows. Route proliferation from public wheeled motor vehicle use often occurs around dispersed campsites that are along sensitive riparian areas. Although the evaluation of effects on water and riparian resources considers many other indicator measurements, it does not appear to evaluate the effect of alternatives on route proliferation in sensitive resource areas. While the Preferred Alternative would eliminate unauthorized use on 78 wet meadows, it would continue to allow motorized use through 5 wet meadows and a high density of routes within Riparian Conservation Areas in 16% of watersheds (p. 293 and p. 109, Volume III: Chapter 3).

> ***Recommendation:***
> We recommend the FEIS evaluate the effect of the alternatives on route proliferation at dispersed campsites near streams, lakes, springs, and meadows, and the related impacts to water and riparian resources.

Include the rationale for each specific road or trail added to the NFTS for motorized use. The Preferred Alternative would allow motorized travel to continue within or adjacent to sensitive habitats and resources such as wet meadows, springs/seeps, vernal pools, high elevation openings and rock areas, and inventoried roadless areas (pps. 301, 515, 548, 560, Volume III: Chapter 3).

Recommendations:
For each road or trail added to the NFTS, the FEIS should provide the specific rationale that supports the decision that continued motorized use outweighs the negative effects of continuing this use. We recommend the rationale be included in Appendix A as part of the Road Cards which provide site-specific mitigation and monitoring requirements for each proposed route addition.

We recommend modification of the Preferred Alternative to further reduce effects on wet meadows, vernal pools, springs/seeps, and other sensitive resources by eliminating or reducing additions to the NFTS in these areas.

Monitoring and Enforcement

Develop, describe, and implement a Travel Management Plan Monitoring and Enforcement Strategy. It is important that wildlife protection, vegetation management, and erosion control goals be achieved to minimize the potential adverse effects of the Motorized Travel Management Plan. We believe the public and decision makers would benefit if a strategy is developed that includes specific information on funding, monitoring and enforcement criteria, thresholds, and priorities.

Recommendations:
We recommend development of a detailed Travel Management Plan Monitoring and Enforcement Strategy. Such a Strategy should include specific information on the monitoring and enforcement program priorities, focus areas (e.g., issues, specific locations), personnel needs, costs, and funding sources. We recommend the FEIS demonstrate that the proposed monitoring and enforcement strategy is adequate to assure that motorized vehicle use will not violate access restrictions or exacerbate already identified road-related resource problems. We recommend the Monitoring and Enforcement Strategy be periodically updated (e.g., annually or biennially).

Exclude routes on the Motor Vehicle Use Map not yet open for use due to mitigation measure implementation delays. Table 2-5: Mitigation Measures Required for Implementation lists mitigation measures which will be implemented prior to opening the specific route to public motorized use (p. 56 – 68, Volume II: Chapter 2). Many of these mitigation measures require drainage improvements, barriers, and fencing which may call for significant funds and resources. Given the substantial level of deferred road maintenance and expected decline in budgets, EPA is concerned with the Forest Service's ability to quickly implement the identified mitigation measures and the potential for continued un-authorized motorized use of these designated routes.

Recommendation:
The FEIS should state whether the Motor Vehicle Use Map (MVUM) would include the designated routes that are not yet available for use due to required mitigation measures. If these routes will be included on the MVUM, describe how use would be restricted until identified mitigation measures are implemented. If these routes are not included on the MVUM, described how and when the Forest

would open and designate these routes for use. We recommend routes not yet open due to required mitigation measure be excluded from the MVUM in order to reduce the unintentional un-authorized use of these routes.

Procedural

Commit to route-specific environmental analysis for user-created route additions. On some National Forest System lands, repeated use by motor vehicle travel has resulted in unplanned motorized trails un-authorized for motorized use. These trails were generally developed without environmental analysis or public involvement and may be poorly located and cause unacceptable impacts (p. 2, Volume I: Summary). EPA is concerned with the addition of un-authorized user-created trails to the NFTS which may not have undergone site-specific environmental analysis or public involvement.

Recommendation:
The FEIS should state how the Forest will ensure specific user-created routes are adequately evaluated pursuant to NEPA requirements. Where prior environmental analysis has not occurred, we recommend a commitment in the FEIS and ROD to route-specific environmental analysis prior to the route's addition to the NFTS or its designation for public motorized use.

7

S0017

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846

In Reply Refer To:
81420-2010-TA-0552-1

postmark: APR 14 2010

Travel Management Team
Tahoe National Forest
631 Coyote Street
Nevada City, California 95959

Subject: Comments Regarding the Supplemental Draft Environmental Impact Statement for Motorized Travel Management on the Tahoe National Forest, California

Dear Travel Management Team:

This is in response to a February 16, 2010, letter requesting comments on the Tahoe National Forest's *Motorized Travel Management Supplemental Draft Environmental Impact Statement* (SDEIS). Since the U.S. Fish and Wildlife Service (Service) responsibilities for the Truckee and Sierraville Ranger Districts of the Tahoe National Forest are shared between Sacramento Fish and Wildlife Office and the Nevada Fish and Wildlife Office (NFWO) based on species leads, NFWO will be providing comments related to the Lahontan cutthroat trout (*Oncorhynchus clarkia henshawi*) separately. The Service's Sacramento Fish and Wildlife Office, is providing comments on the SDEIS as it relates to the threatened California red-legged frog (*Rana draytonii*) (frog). Our comments are issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) and are as follows:

1. Page 451 of the DSEIS states "No critical habitat has been designated on the Tahoe National Forest;" however, on March 17, 2010, the Service published a final rule in the Federal Register (Federal Register 75 (51): 12815-12959) redesignating critical habitat for the frog. This designation becomes effective on April 16, 2010, and includes critical habitat located on Tahoe National Forest near the Community of Michigan Bluff. As such, we recommend that this section be updated to include the designated critical habitat. We also recommend the discussion of direct and indirect effects beginning on page 453 include an analysis of the effects to critical habitat.

2. On Page 452 of the DSEIS is an account of the known frog occurrences near national forest lands, which includes a single record of a frog in "Spivey Pond on the El Dorado NF on Ralston Ridge." While there exists a known population at Spivey Pond, Spivey

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Pond is located along Weber Creek, near Placerville, California, on lands managed by the Bureau of Land Management. There is record of a known frog sighting on Ralston Ridge in an unnamed pond. As such, we recommend removing the Spivey Pond title from this reference.

3. In a December 2006 letter the Service provided concurrence that the implementation of the route designation activities as described in the Design Criteria will have no effect on or is not likely to adversely affect specific endangered or threatened species, including the frog. However, this concurrence was contingent upon the replacement of Design Criteria # 5 with: "If within California red-legged frog habitat, areas are located outside of Riparian Reserve, Riparian Conservation Areas, meadows, and wetlands." Since the effects analysis in the SDEIS relies on this programmatic consultation, the language for Design Criteria # 5 on pages 453 and 454 should be changed to include the language that the Service used for our determination.

4. The California red-legged frog utilizes various habitat types during its life cycle. While breeding habitat consists of low-gradient fresh water bodies, including natural and manmade ponds, backwaters within streams and creeks that have the capability to hold water for a minimum of 20 weeks in all but the driest of years, juvenile and dispersing frogs will utilize a wide variety of aquatic habitats that are not considered suitable for breeding. In the discussion on the potential effects of the route designation, Tahoe National Forest appears to limit the potential effects to the frog to areas of occupied breeding habitat, rather than all suitable aquatic habitat, which includes non-breeding habitat. Specifically, the criteria include:

   > In suitable California red-legged frog habitat, routes avoid Riparian Reserve and Riparian Conservation Areas except where necessary to cross streams. Crossing approaches get the riders in and out of the stream channel and riparian area in the shortest distance possible while meeting the gradient and approach length standards.
   >
   > If within California red-legged frog habitat, areas are located outside of Riparian Reserve, Riparian Conservation Areas, meadows, and wetlands.

   While comparing the proposed action to the Design Criteria for these two items, page 454, the DEIS states that "No routes…within proximity to any of the CRLF occupied habitat." Although routes may not be proposed for designation within or near known occupied habitat, it is the Service's understanding that items # 2 and # 5 of the Design Criteria were in reference to all suitable aquatic habitat for the frog, not just occupied. As such, the page 454 should be updated to include how the route designation will affect all aquatic habitats suitable for the frog.

Please address any questions or concerns regarding these comments to Jeremiah Karuzas, or Arnold Roessler, Forest and Foothills Branch Chief, at (916) 414-6600.

Sincerely,

Chris Nagano
Division Chief, Endangered Species Program

S0020

United States Department of the Interior
Pacific Southwest Region
FISH AND WILDLIFE SERVICE
Nevada Fish and Wildlife Office
1340 Financial Blvd., Suite 234
Reno, Nevada 89502
Ph: (775) 861-6300 ~ Fax: (775) 861-6301

April 9, 2010
File No. 2010-CPA-0075

Travel Management Team
Tahoe National Forest
631 Coyote Street
Nevada City, California 95959

Dear Travel Management Team:

Subject: Comments Regarding the Supplemental Draft Environmental Impact Statement for Motorized Travel Management on the Tahoe National Forest, California

We have reviewed the Supplemental Draft Environmental Impact Statement for Motorized Travel Management on the Tahoe National Forest (SDEIS) dated February 16, 2010, and received on February 25, 2010. The U.S. Forest Service has disclosed the environmental impacts associated with seven alternatives for managing motorized vehicle use on the Tahoe National Forest. As you are aware, the U.S. Fish and Wildlife Service's (Service) responsibilities on the Tahoe National Forest are shared between the Sacramento Fish and Wildlife Office (SFWO) and the Nevada Fish and Wildlife Office (NFWO) based on listed species leads. The NFWO is tasked with assisting the Tahoe National Forest on actions that relate to the recovery of the threatened Lahontan cutthroat trout (*Oncorhynchus clarkii henshawi*) (LCT). For all other federally-listed species, please contact Jeremiah Karuzas, Fish and Wildlife Biologist, in the SFWO at (916)-414-6600. The NFWO's comments and recommendations regarding LCT are provided below.

Your proposed project is located within a potential and existing metapopulation for LCT, and as such, the area is necessary for the species' recovery. The LCT Truckee River Recovery Implementation Team (TRIT) has finalized a Short-Term Action Plan (Service 2003) for the species in the Truckee River basin. This Short-Term Action Plan identifies priority areas with current or potential opportunities to support LCT or important habitats that would sustain various life history stages. Under the Endangered Species Act of 1973, as amended (Act), completed

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projects should not preclude future recovery and survival of this species. We recommend that actions be reviewed for all direct and indirect impacts that they may have on riparian and aquatic habitats as they relate to LCT, and that you consult with the Service accordingly under section 7 of the Act.

We request that you remove all references to recreational LCT populations in the Final Supplemental EIS. The Service does not recognize any such designation for LCT. All LCT present on the Tahoe National Forest are fully protected under the Act. Currently there are seven streams (Truckee River, Independence Creek, Sagehen Creek, Pole Creek, Macklin Creek, East Fork Creek (Austin Meadows), and an unnamed tributary to East Fork Creek) and one lake (Independence Lake) which are occupied by LCT on the Tahoe National Forest. Additionally, the TRIT has identified priority areas which are currently not occupied but may be important in future recovery activities.

Indicators Used to Measure Effects

One of the most significant impacts from roads is the creation of upstream fish migration barriers. The SDEIS discusses the number and density of unauthorized stream crossings within occupied LCT watersheds; however, there is no discussion on the impacts of these stream crossings. Please provide information on any culverts or headcuts associated with these stream crossings and whether or not they are a fish migration barrier.

Consistency with Project Design Criteria

As mentioned in the SDEIS, the U.S. Forest Service entered into a programmatic consultation with the Service for route designations (travel management) for motor vehicles on 14 National Forests in California in 2006. Design criteria were developed to have no effect or not likely to adversely affect determinations. The NFWO provided comments on these design criteria in a letter dated September 11, 2006 (File No. 1-5-06-TA-283). Design criteria specific to LCT include:

1. Routes and areas do not cross any stream within the occupied range of LCT. [mortality, injury]

2. Routes and areas are not located on active landslides and do not re-route surface water onto active landslides within watersheds that provide habitat for LCT. [sediment delivery by geologic type]

3. Within watersheds that provide habitat for LCT, routes within Riparian Conservation Areas do not have gullies. [surface sediment delivery proximity]

4. Within watersheds that provide habitat for LCT, the surfaces of route stream crossing approaches are stable with little evidence of erosion and approach gradients are

appropriate to site stability (using the 'green criteria' from the soil ranking system – up to 8 percent trail gradient with a maximum approach length of 150 feet). Both sides must be evaluated and each must meet the standard. [surface sediment delivery at crossing]

5. Within watersheds that provide habitat for LCT, routes or areas do not have the potential to capture surface run-off and then deliver sediment into a stream. [run-off control]

6. Within watersheds that provide habitat for LCT, routes or areas do not have the potential to capture or divert stream flow. The approaches to stream crossings are downsloped toward the stream on both sides. [stream diversion potential]

7. Areas are located outside of Riparian Conservation Areas that are within watersheds that provide habitat for LCT or PCT. [riparian habitat]

8. Within watersheds that provide habitat for LCT, routes avoid Riparian Reserves and Riparian Conservation Areas except where necessary to cross stream channels. Crossing approaches get the riders in and out of the riparian zone and stream channel in the shortest distance possible while meeting gradient and approach length standards. [riparian habitat]

The SDEIS only discusses criteria 1, 2, 5, and 8. The SDEIS should also discuss how criteria 3, 4, 6, and 7 meet the design criteria.

Site Specific Physical Impacts and Disturbance to Occupied LCT Streams

Middle Truckee River-Lower Prosser Creek: Please clarify if the two routes being proposed are upstream or downstream of Prosser Creek Dam. If the routes are downstream of the dam, sediment which enters Prosser Creek from the proposed routes will be transported downstream into the Truckee River.

East Fork Creek 7th Field Watershed: LCT occupy two separate stream reaches within the East Fork Creek watershed. The SDEIS only mentions one stream, presumably East Fork Creek in the Austin Meadows area. Please discuss any direct or indirect impacts to the LCT population in the unnamed tributary.

The Service supports the alternatives which do not designating any routes or stream crossings in the Middle Truckee River-Cabin Creek, Middle Truckee River-Silver Creek, Upper Middle Truckee River, Middle Truckee River-Pole Creek, Independence Lake 7th Field Watershed, Middle Yuba River-Milton Reservoir 7th Field Watershed, and East Fork Creek 7th Field Watershed, as described in the SDEIS.

Travel Management Team File No. 2010-CPA-0075

Cumulative Effects

According to the SDEIS, there are 48 unauthorized stream crossings within LCT occupied watersheds. While outside the scope of this SDEIS, which only analyzes if an unauthorized route should be incorporated into the National Forest Transportation System; the Service encourages the Tahoe National Forest to prioritize the decommissioning/rehabilitation of these unauthorized stream crossings as they may be causing chronic, long-term degradation of occupied or potential recovery LCT waters.

The road densities in the LCT watersheds presented in the SDEIS seem extremely high. Lee *et al.* (1997) analyzed the impacts of road densities to the aquatic environment on public lands within the interior Columbia River Basin. Their analysis indicated that increasing road densities corresponded to decreases in four non-anadromous salmonid species. Mean road densities between 0.27 and 1.5 mile/mile^2 (mi/mi^2) showed depressed populations of native salmonids, and watersheds which no longer had native salmonids had road densities between 0.6 and 1.67 (mi/mi^2). The SDEIS states that current road densities in the 11 occupied LCT watersheds range from 0.2 to 27.3 (mi/mi^2). Six watersheds have road densities between 8.9 and 27.3 (mi/mi^2), three watersheds are between 6.3 and 8.8 (mi/mi^2), one watershed has 4.3 to 6.2 (mi/mi^2), and one watershed has 0.2 to 4.2 (mi/mi^2). Therefore, the existing roads and their attendant effects are likely contributing to the current status of LCT in these watersheds.

It is not clear what data were used in Figures 3.03-9 (route density) and 3.03-10 (stream crossing density). The title and y-axis indicate the data depict route densities or stream crossing densities in "suitable" LCT habitat. In contrast, the captions describe route densities or stream crossing densities in "occupied" LCT waters. Please clarify if the route and stream crossing densities are for occupied or suitable LCT habitat. If it is suitable LCT habitat, please describe the criteria used to define suitable LCT habitat.

We appreciate the opportunity to provide comments on the SDEIS. If you have any questions, please contact me or Chad Mellison at (775) 861-6300.

Sincerely,

Robert D. Williams
State Supervisor

cc:
Fisheries Biologist, Truckee Ranger District, U.S. Forest Service, Truckee, California
Fish and Wildlife Biologist, Forest and Foothills Branch, Sacramento Fish and Wildlife Office, Sacramento, California (attn: Jeremiah Karuzas)

4

Literature Cited

Lee, D.C., J.R. Sedell, B.E. Rieman, R.F. Thurow, J.E. Williams, D. Burns, J. Clayton, L. Decker, R. Gresswell, R. House, P. Howell, K.M. Lee, K. Macdonald, J. McIntyre, S. McKinney, T. Noel, J.E. O'Connor, C.K. Overton, D. Perkinson, K. Tu, and P. Van Eimeren. 1997. Broadscale assessment of aquatic species and habitats. Pages 1057-1713 in T.M. Quigley, and S.J. Arbelbide (technical editors), An assessment of ecosystem components in the interior Columbia Basin and portions of the Klamath and Great basins. Vol. III. General Technical Report PNW-GTR-405, Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

U.S. Fish and Wildlife Service (Service). 2003. Short-term action plan for Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*) in the Truckee River basin. Nevada Fish and Wildlife Office, Reno, Nevada. August 2003. i-iv + 71 pp. (http://www.fws.gov/nevada/protected_species/fish/documents/lct/final-trit.pdf).

S0065

"DOI OEPC, Oakland"
<doioepc1478@aol.com>
04/12/2010 12:09 PM

To tnf_rte_desig@fs.fed.us
cc
bcc
Subject ER 10/201 No Comment Letter

Attached is the Department of the Interior's response to ER 10/201 Review of the Draft Supplemental Environmental Impact Statement (DSEIS) for the Tahoe National Forest Motorized Travel Management, Nevada, Placer, Plumas, Sierra and Yuba Counties, California.

Best,

Kara Quan-Montgomery
Regional Environmental Intern
Office of Environmental Policy and Compliance
U.S. Department of the Interior, Region IX
1111 Jackson Street, Suite 520
Oakland, CA 94607-4807
(510) 817 - 1477 [voice]
(510) 419 - 0177 [fax]

doioepc1478@aol.com ER 10-201 No Comment Letter.doc

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Pacific Southwest Region
1111 Jackson Street, Suite 520
Oakland, California 94607

IN REPLY REFER TO:
ER10/201

Electronically Filed

12 April 2010

Travel Management Team
Tahoe National Forest
631 Coyote Street
Nevada City, CA. 95959

Subject: Review of the Draft Supplemental Environmental Impact Statement (DSEIS) for the Tahoe National Forest Motorized Travel Management, Nevada, Placer, Plumas, Sierra and Yuba Counties, California

Dear Travel Management Team:

The Department of the Interior has received and reviewed the subject document and has no comments to offer.

Thank you for the opportunity to review this project.

Sincerely,

Patricia Sanderson Port
Regional Environmental Officer

cc:
Director, OEPC

S0070

"Taylor Farnum"
<TFarnum@waterboards.ca.gov>
04/12/2010 08:24 PM

To <tnf_rte_desig@fs.fed.us>
cc
bcc
Subject Comments Tahoe NF Supplemental Draft Environmental Impact Statement

Please see the attached comments.

Thanks,

Taylor Farnum
Environmental Scientist
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150
530 542 5449
Fax: 530 544 2271

><((((º>`·. . .·Note: Due to the Governor's Executive Order I will be out of the office the first, second, and third Friday of each month. Please consider the environment before printing this email. Thank you.`·. . .·><((((º>

TNF MTM.pdf

California Regional Water Quality Control Board
Lahontan Region

Linda S. Adams
Secretary for Environmental Protection

2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150
(530) 542-5400 • Fax (530) 544-2271
www.waterboards.ca.gov/lahontan

Arnold Schwarzenegger
Governor

April 12, 2010

Tahoe National Forest
Travel Management Team
631 Coyote St.
Nevada City, CA 95959

COMMENTS ON THE TAHOE NATIONAL FOREST MORORIZED TRAVEL MANAGEMENT SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT

Staff of the California Regional Water Quality Control Board, Lahontan Region (Water Board) has reviewed the above-referenced Supplemental Draft Environmental Impact Statement (SDEIS). The SDEIS discloses the environmental impacts associated with alternatives for managing motor vehicle use on the Tahoe National Forest.

The preferred alternative (Alternative 6) includes the following key elements:

1. **Cross Country Travel:** Cross country motorized travel off designated National Forest Transportation System (NFTS) roads, NFTS trails, and outside motorized use areas would be prohibited.
2. **Additions to the NFTS:**
   - 13.1 miles of unauthorized routes would be added to the NFTS as roads open to high clearance vehicles.
   - 48.3 miles of unauthorized routes would be added as motorized trail to the NFTS.
3. **Establishment of Motorized "Open Areas":** Three areas totaling 244 acres would be established as motorized "open areas" open to highway legal vehicles only.
4. **Changes to the NFTS:**
   - Change Vehicle Classes through Mixed Use: Change vehicle class on 130.8 miles to allow licensed operators of non-highway legal vehicles to operate on NFS roads where such use is currently prohibited.
   - Change Vehicle Classes through Maintenance Levels: Covert 122 miles of ML 3 to ML 2 to allow licensed operator of non-highway legal vehicles to operate on NFS roads.
   - Changes in Seasonal Restriction: 1,369.5 miles of road would have seasonal use restrictions to minimize erosion and protect water quality.
5. **Amendments to the Forest Plan:** The Forest Plan would be amended to remove the November 1 to May 1 seasonal closure in the Sugar Pine area on key winter deer range.

Specific Comments

1. Water Board staff finds the proposal of "open areas" to conflict with the goal of the Motorized Travel Management plan to prohibit cross country travel. A conflicting message is being sent to the public, cross-country travel is being prohibited and concurrently being allowed in a sensitive area. Please provide more information on how this "open area" will be mitigated. How will it be delineated and will the area be patrolled to ensure motorized vehicles stay within the "open area"? Page 21 of the SDEIS states that the "open areas" are to provide motor vehicle access for dispersed recreational opportunities as well as provide a diversity of motorized recreational opportunities. Confined access to the lake is acceptable if properly mitigated (i.e. gravel access roads to boat launch areas, trash receptacles, signage, etc.) but OHV recreation on a lake bottom is not an appropriate use. Please revise your document to include language limiting the purpose of the "open areas" to providing access to the lake shore in the shortest route possible.

2. The "open area" proposal increases the risk of violating the Water Quality Control Plan for the Lahontan Region. Allowing motorized vehicles access below the high water mark increases the possibility of a discharge of waste such as oil, trash, or sewage to surface waters. Additionally, the possible discharge of soil, silt, clay, or sand to lands within the 100-year floodplain of the Little Truckee and Truckee Rivers will increase with vehicle travel in these areas. Motor vehicle use is only allowed when soils are dry thereby increasing the chance of mobilizing dust particles that have the ability to further harm sediment impaired waterbodies.

   Chapter 4 (pages 4.1-4 and 4.1-7) of the Basin Plan specifies the following discharge prohibitions:

   Page 4.1-4. The discharge of wastes from boats, marinas, or other shoreline appurtenances to surface waters of the Little Truckee River HU is prohibited.

   Page 4.1-7. The discharge of wastes from boats, marinas, or other shoreline appurtenances to surface waters of the Truckee River HU is prohibited.

   Page 4.1-4. The discharge of any waste or deleterious material to surface waters of the Little Truckee River HU is prohibited.

   Page 4.1-7. The discharge of any waste or deleterious material to surface waters of the Truckee River HU is prohibited.

   Page 4.1-4 4(c). "The discharge or threatened discharge, attributable to human activities, of solid or liquid waste materials including soil, silt, clay, sand, and other organic or earthen materials to lands within the 100-year floodplain of the Little Truckee River or any tributary to the Little Truckee River is prohibited."

   Page 4.1-7 4(c). "The discharge or threatened discharge, attributable to human activities, of solid or liquid waste materials including soil, silt, clay, sand, and other organic or earthen materials to lands within the 100-year floodplain of the Truckee River or any tributary to the Truckee River is prohibited."

Travel Management Team - 3 -

3. Water Board staff is also concerned by the mitigation measures needed to ensure the proposed "open areas" will not further degrade watershed resources and suggest that follow up monitoring be conducted to ensure mitigation measures are functioning properly. Big Dawg Cove in Boca reservoir will have waterbars installed to help correct a gully in the access route, please ensure this area will be monitored for effectiveness. Also at both Boca and Prosser Reservoirs motor vehicle use in riparian areas is occurring and no mitigation measures are proposed. Please include mitigation measures, such as fencing and signage requirements, in your final document to prohibit unauthorized motor vehicle use in sensitive habitats. Please also propose effectiveness monitoring to ensure proposed mitigation measures are working.

4. Regional Water Board staff will coordinate with Tahoe National Forest personnel to assess road related watershed improvements in the interest of tracking compliance with the Truckee River TMDL.

Please forward copies of your decision documents to me at the letterhead address. If you have any questions regarding this letter, please call me at (530) 542-5417.

Douglas Cushman PE
Senior Water Resource Control Engineer

Listing of Individual Letters Received on the Supplemental Draft EIS

Table N-10 contains the alphabetical list all persons who submitted individual letters during the public comment period on the Supplemental Draft EIS. The first column of the table shows the unique number assigned the commenter used previously in the Responses to Comments.

Table N-10. Commenter numbers for persons who submitted individual letters on the SDEIS

Number	Last Name	First Name	Organization
S0068	Acton	Aero	
S0018	Alamo	Richard	
S0040	Alderson	George	
S0027	Ashby	Caleb	
S0071	Babbitt	Victor	Tahoe Fly Fishing Outfitters
S0041	Baker	Shawn	
S0053	Baker	Shawn	
S0027	Baker?	George	
S0061	Barr	Doug	
S0071	Beagle	Mike	Backcountry Hunters and Anglers
S0044	Beasley	Geoffrey	
S0026	Beecroft	Chris	
S0071	Bonham	Chuck	Trout Unlimited
S0071	Caltagirone	David	Trout Unlimited
S0011	Cappello	Brad	
S0043	Cardenas	Andy	
S0064	Carlos	Jonathan	
S0027	Carson	Daniel	
S0027	Cearley?	Rick	
S0060	Chesney	Robert	
S0027	Clark	Mary Ann	
S0070	Cushman	Douglas	California Regional Water Quality Control Board - Lahontan
S0071	Cutter	Ralph and Lisa	California School of Fly Fishing
S0062	Damaso	Michael	
S0071	Davidson	Sam	Backcountry Hunters and Anglers
S0027	Dixon	Chuck	
S0027	Doran	Kenneth	
S0031	Eckenburg	Dick	
S0021	Ewing	Mike	Blue Ribbon Coalition and American Motorcyclist Association
S0022	Feller	Timothy	Sierra Pacific Industries
S0071	Fenner	Vicki	Northern California Council Federation of Fly Fishers
S0009	Frederking	Rick	Ruby Development Company
S0010	Frederking	Rick	Condor Exploration Company
S0034	Glad	Carol	
S0012	Goforth	Kathleen	EPA - Environmental Protection Agency

S0036	Grass	Chad	
S0029	Hansen	Scot, Leticia, Nathan, Nickolas	
S0024	Harney	Ken	North Creek Property Owners - Ken Harney Plumbing
S0027	Hoff	Scott	
S0027	Holguin	Mino	
S0027	Hurles	Josh	
S0071	Irby	Drew	Trout Unlimited
S0049	Jensen	Walter	
S0071	Johns	Tom	Tahoe Truckee Fly Fishers
S0046	Johnson	Scott	
S0058	Karuzas	Jeremiah	US Dept of Interior Fish and Wildlife Service, Sacramento
S0032	Kellogg	Jason	
S0056	Kewman	Don	Tuesday Friday Hiking Group
S0025	Kilian	George	
S0008	Kyra	Kyra	CORVA - California Off-Road Vehicle Association
S0071	Lass	David	Trout Unlimited
S0027	Lee?	Kenneth?	
S0027	Lewis	Garrett	
S0030	Lindeman	Wayne	
S0048	MacArdican	William	
S0006	Marshall	Carol	Sierra Nevada Mining and Industry Council
S0033	Masters	Alan	South Lake Tahoe Hi Lo's
S0071	Mather	Kevin	Trout Unlimited
S0071	Maynard	Dick	Trout Unlimited
S0071	Mcleod	Stefan	Trout Unlimited
S0013	Medeiros	Joshua	
S0055	Moore	John	
S0028	Multiple Names	Multiple names not listed in database	Town of Washington
S0014	Murphy	Dave	
S0017	Nagano	Chris	US Dept of Interior Fish and Wildlife Service, Sacramento
S0019	Nelson	Ron	NID - Nevada Irrigation District
S0071	Noble	Cindy	Trout Unlimited
S0072	Nobles	Frank	4X4 in motion
S0027	Owsiey	James	
S0071	Page	Carl	Trout Unlimited
S0047	Ranta	Jeff	Friend of Greenhorn Creek
S0069	Reilly	Mike	
S0002	Riley	Joseph	
S0035	Riley	Joe	Holdrege & Kull consulting engineers
S0023	Rivenes	Barbara	Sierra Nevada Group/Sierra Club
S0023	Rivenes	Donald	Forest Issues Group

S0027	Royal	Richard	
S0054	Russell	Gayle	
S0065	Sanderson Port	Patricia	US Dept of Interior, Office of Environmental Policy and Compliance, Oakland
S0051	Schaefer	Chuck	Buckeye Road resident
S0052	Schaefer	Chuck	Buckeye Road resident
S0023	Schambach	Karen	Center for Sierra Conservation
S0051	Schori	Carl	Buckeye Road resident
S0052	Schori	Carl	Buckeye Road resident
S0063	Scroggins	Dennis	
S0045	Sober	Steve	Buckeye Road resident
S0051	Sober	Steve	Buckeye Road resident
S0052	Sober	Steve	Buckeye Road resident
S0071	Stanley	Dave	Reno Fly Shop
S0038	Steigmeyer	Robert	PG&E - Pacific Gas and Electric Co.
S0057	Steigmeyer	Robert	PG&E - Pacific Gas and Electric Co.
S0042	Stortroen	Sherry	
S0066	Stortroen	Sherry	
S0067	Taylor	Gary	
S0016	Trigg	Edward	
S0027	Tursich	Dusty	
S0027	Udavi	Ricardo	
S0001	Ungeheuer	Judy	
S0027	Van Fleet	Tracy	
S0023	Van Velsor	Stan	The Wilderness Society
S0027	Vigil	Fabian	
S0015	W	D	2535 Miraflores Dr. Turlock
S0023	Wakelee	Heath	Sierra Foothills Audubon Society
S0027	Walshin	Ed	
S0003	Ward	Martin	Friends of Tahoe Forest Access, Grass Valley 4-Wheelers, California Association of Four Wheel Drive Clubs, and California Off Road Vehicle Association
S0004	Ward	Martin	Friends of Tahoe Forest Access, Grass Valley 4-Wheelers, California Association of Four Wheel Drive Clubs, and California Off Road Vehicle Association
S0037	Wash	Phil	
S0050	Wayne	Mike	Buckeye Road resident
S0039	Webster	Dustin	
S0007	Wilder	Robert	Sierra Nevada Mining and Industry Council
S0020	Williams	Robert	US Dept of Interior Fish and Wildlife Service, Reno
S0005	Wood	David	