

Appendix 1

Unit Cards

Appendix 1

Unit Cards

Introduction

Unit and Road Cards are used to explain site-specific proposed activities and any resource concerns and responses. These activities include timber harvest units and proposed and existing roads needed for timber harvest. Both narratives and maps showing site-specific information are provided.

The introduction to this appendix is followed by a narrative card and a map for each harvest unit in the Selected Alternative. The maps show all adjacent units. The Selected Alternative map (Figure R-2) shows all the units as they lie in the project area.

Unit Card Header Information

Each unit card has a header block with information used to generally describe the stand's size, location, and volume proposed for harvest. Each header block contains the following information:

- **Unit Number:** The number assigned to the unit block during the Logging Systems and Transportation Analysis development.
- **Unit Acres:** An estimate of total acres within the unit using aerial photos and GIS information.
- **Alternatives:** Identifies the alternative(s) in which the unit is proposed.
- **Land Use Designation (LUD):** Land Use Designation is a defined area of land, identified by the Forest Plan, to which specific management direction is applied.
- **Net Timber Volume: Estimated** volume (sawtimber only) in thousand board feet to be harvested. This was derived from field estimates and the stand exam program. **A cruise will be done** during implementation to determine an accurate volume before the timber is sold.
- **Existing Stand Condition:** The developmental stage of the physical and temporal distribution of trees and other plants in a forested area.
- **Silvicultural Prescription:** Provides information about the methods, techniques, timing, and monitoring of vegetative treatments. The detailed silvicultural prescription is in the project record.
- **Logging Method/Transportation:** Identifies the method of logging in the unit and the transportation used. All units will be yarded using ground based methods (cable or shovel).

Harvest Treatments

Silvicultural prescriptions include these unit cards plus the sale layout and marking guidelines that would be completed for each of the timber harvest units that are included in the Central Kupreanof Timber Harvest Area. Minor changes can be expected during implementation to better meet on-site resource management and protection objectives. Minor adjustments to unit boundaries are also likely during final layout for the purpose of improving logging system efficiency or for site conditions.

Even-aged Management/Clearcut

All merchantable trees will be harvested. The objectives of this system are to create a fast-growing stand of trees to maximize wood fiber production, favorable timber sale harvest economics and logging feasibility. These stands will regenerate into a mostly single-aged stand.

Two-aged Management

This system regenerates and maintains a stand with two age classes by removing trees in clumps or as individual trees. Reserves or clumps will be distributed somewhat evenly across the harvest unit or stand, and away from the unit boundary. The resulting stand may be two-aged or trend toward the uneven-aged condition as a consequence of both an extended period of regeneration establishment and retention of reserve trees that may represent one or more age classes. Two-aged management regimes can produce stands of greater structural diversity than even-aged management. These stands will not be reentered for harvest until the next rotation in approximately 100 years.

Uneven-aged Management

This system regenerates and maintains a multi-aged structure by removing some trees in all size classes either individually, in small groups, or in strips. Uneven-aged management maintains or creates a stand with trees of three or more distinct age (size) classes, either intimately mixed or in small groups. This remaining structure provides wildlife habitat and reduces visual impacts. The next entry into these stands will be in approximately 75 years, when approximately 25 percent of the stand's pre-harvest basal area will be removed in patches or in single trees.

Resource Concerns and Responses

In the Central Kupreanof Timber Harvest Area, most of the economic, wildlife, and watershed concerns are mitigated with the silvicultural system. Other resource concerns, such as soils, scenery, and fisheries, are mitigated by unit design and adherence to Forest Plan Standards and Guidelines and best management practices (BMPs).

Riparian Management Areas

Forest Plan Standards and Guidelines and BMP 12.6 direct the design of Riparian Management Areas (RMAs) associated with each stream in the project area. The standards and guidelines prohibit programmed commercial timber harvest in RMAs associated with all Class I, Class II, and most Class III streams, except for right-of-way clearing for road construction.

RMAs vary in width from the edge of the stream channel according to process group (Table A1-1) and stream value class (Table A1-2). All Class I and Class

II streams are protected from commercial timber harvest within a minimum horizontal distance of 100 feet from the bankfull margins. Depending on the channel type, RMA widths can be up to 140 feet wide on either side of some Class I, Class II, and Class III streams. RMAs adjacent to Class III streams are protected from commercial timber harvest, except along palustrine channel types. RMA widths on Class III streams are extended to the side-slope break (top of the V-notch).

Unit card maps show the location of all streams within the unit, numbered for reference, and the associated RMAs. RMA widths for each Class I, Class II, and Class III stream are described in the unit card narratives. Streams were field mapped inside the unit and just outside the unit. The rest of the stream was mapped using aerial photos and contour lines to estimate the placement of the stream from the units to known streams. These sections are labeled as unknown connectors and are not shown as buffered.

Log yarding practices are based on slope stability, soil disturbance, channel type, and stream class. Additional measures are taken to protect RMAs from possible disturbance associated with tree felling and yarding. Harvest activities near Class I, Class II, and Class III streams require that trees be felled away from the stream and that trees yarded across or along stream courses be fully suspended to minimize the exposure of mineral soil. Trees near Class IV streams are felled away from the stream whenever feasible and logging debris introduced into Class IV streams is removed. Class IV streams are treated as part of the hillside, under slope stability standards and guidelines. The objective is to minimize soil erosion, mass movement, and formation of new channels.

Stream Protection Categories

The following stream protection measures are required in all units with streams. See individual unit cards for stream categories.

Category A

Class I streams and Class II streams are marked with blue and white striped flagging, and will be protected by no-cut buffers designated by process group in Forest Plan Riparian Standards and Guidelines. No commercial timber will be removed from these buffers. Trees identified for harvest will be felled to avoid no-cut buffers. Prior to any operations within a buffer, a Stream Course Protection Plan will be developed for that buffer (BMP 13.16).

Category B

Class III streams are marked with orange and white striped flagging. These stream courses will be protected by no-cut buffers within the v-notch. Class IV streams with unstable side-slopes may also be assigned Category B protection without buffers. The following are Category B protections:

Split yard and directionally fall trees away from Class III and IV streams without buffers (RIP2-II). Felled trees that inadvertently enter or cross stream courses shall not be bucked or limbed until clear of stream courses, unless limbing or bucking would reduce damage to the

riparian vegetation or stream banks. Debris in stream courses resulting from falling or yarding shall be removed immediately to a stable location above high water mark. Existing natural stable debris will be left undisturbed. When ground skidding systems are employed, logs will be end-lined out of riparian areas. Fully suspend logs where yarding is to be done across streams or the full length of a stream or drainage (BMP 13.16, RIP2-II).

Category C

Class IV streams and all other intermittent, ephemeral, and small perennial channels and V-notches designated for soil and water quality protection are marked with green and white striped flagging and will be protected in the following manner:

Where practicable, trees will be felled and yarded away from stream courses. The trees that cannot be felled away from stream courses will be felled to bridge the stream providing these trees will be yarded during the same operating season. Trees felled to bridge stream courses will be bucked, limbed, and topped clear of stream course and its banks. Debris which restrict natural water flow, adversely affect water quality or have potential for debris flow will be removed to a stable location above high water mark before the yarder leaves the unit or upon completion of seasonal logging activities in the unit, whichever comes first (BMP 13.16).

Best Management Practices

The following best management practices (BMPs) will be applied in order to protect water quality in the project area as specified in the Forest Plan (pages C-1 to C-3). The BMPs are cited on the unit cards and road cards where appropriate. Not all BMPs apply to every situation.

BMP 12.5 (Wetland Identification, Evaluation and Protection) – To identify wetland functions and value, and provide appropriate protection measures designed to avoid adverse hydrologic impacts.

BMP 12.6 (Riparian Area Designation and Protection) – To identify riparian areas and their associated management activities.

BMP 12.6a (Buffer Design and Layout) – To design streamside buffers to meet objectives defined during the implementation of BMP 12.6.

BMP 12.17 (Revegetation of Disturbed Areas) – To provide ground cover to minimize soil erosion.

BMP 13.5 (Identification and Avoidance of Unstable Areas) – To avoid triggering mass movements and resultant erosion and sedimentation by excluding unstable areas from timber harvest.

BMP 13.9 (Determining Guidelines for Yarding Operations) – To select appropriate yarding systems and guidelines for protecting soil and water resources.

BMP 13.16 (Stream Channel Protection – Implementation and Enforcement) – To provide the site-specific stream protection prescriptions consistent with objectives identified under BMPs 12.6 and 12.6a.

Objectives may include the following:

- Maintain the natural flow regime.
- Provide for unobstructed passage of storm flows.
- Maintain integrity of the riparian buffer to filter sediment and other pollutants.
- Restore the natural course of any stream that has been diverted as soon as practicable.
- Maintain natural channel integrity to protect aquatic habitat and other beneficial uses.
- Prevent adverse changes to the natural stream temperature regime.

BMP 14.1 (Transportation Planning) – To ensure soil and water resources are considered in transportation planning activities.

BMP 14.2 (Location of Transportation Facilities) – To ensure water resources protection measures are considered when locating roads and trails.

BMP 14.3 (Design of Transportation Facilities) – To incorporate site-specific soil and water resource protection measures into the design of roads and trails.

BMP 14.5 (Road and Trail Erosion Control Plan) – Develop erosion control plans for road or trail projects to minimize or mitigate erosion sedimentation and resulting water quality degradation prior to the initiation of construction and maintenance activities. Ensure compliance through effective contract administration and timely implementation of erosion control measures.

BMP 14.6 (Timing Restrictions for Construction Activities) – Minimize erosion potential by restricting the operating schedule and conducting operations during lower risk periods.

BMP 14.7 (Measures to Minimize Mass Failures) – Minimize the chance and extent of road-related mass failures, including landslides and embankment slumps.

BMP 14.8 (Measures to Minimize Surface Erosion) – Minimize the erosion from cutslopes, fillslopes, and the road surface, and consequently reduce the risk of sediment production.

BMP 14.9 (Drainage Control to Minimize Erosion and Sedimentation) – Minimize the erosive effects of concentrated water flows from transportation facilities and the resulting degradation of water quality through proper design and construction of drainage control systems.

BMP 14.10 (Pioneer Road Construction) – Minimize sediment production associated with pioneer road construction.

BMP 14.11 (Timely Erosion Control Measures for Incomplete Projects) – Minimize erosion of and sedimentation from disturbed ground on incomplete projects by completing erosion control work prior to seasonal or extended shutdowns.

BMP 14.12 (Control of Excavation and Sidecast Material) – Minimize sedimentation from unconsolidated excavated and sidecast material caused by road construction, reconstruction, or maintenance.

BMP 14.14 (Control of In-channel Operations) – Minimize stream channel disturbances and related sediment production.

BMP 14.15 (Diversion of Flows Around Construction Sites) – Identify and implement diversion and de-watering requirements at construction sites to protect water quality and downstream uses.

BMP 14.17 (Bridge and Culvert Design and Installation) – Minimize adverse impacts on water quality, stream courses, and fisheries resources from the installation of bridges, culverts, or other stream crossings.

BMP 14.20 (Road Maintenance) – Maintain all roads in a manner which provides for soil and water resources protection by minimizing rutting, road prism failures, sidecasting, and blockage of drainage facilities.

BMP 14.22 (Access and Travel Management) – Control access and manage road use to reduce the risk of erosion and sedimentation from road surface disturbance especially during the higher risk periods associated with high runoff and spring thaw conditions.

Process Groups and Channel Types

The Tongass National Forest defines stream channel types according to the Channel Type User Guide (USDA Forest Service 1992), the foundation upon which aquatic habitat management prescriptions are developed. Channel types are defined within the context of fluvial process groups that describe the interrelationship between watershed runoff, landform relief, geology, and glacial or tidal influences on fluvial erosion and deposition processes. Individual channel type classifications are defined by physical attributes such as channel gradient, channel width, channel pattern, stream bank incision and containment. Table A1-1 shows the Forest Plan process group abbreviations used on the unit card narratives. See the Forest Plan, Figure D-1 (page D-4) for a visual representation of the typical distribution of channel process groups. Each unit card summarizes the protection for a particular unit. Only the channel types found in proposed timber harvest units are listed.

Table A1-1
Channel Types In or Adjacent to Proposed Harvest Units

Process Group	Process Group Abbreviation	Description
Alluvial Fan	AF	Channels occurring on alluvial fan landforms
Floodplain	FP	Low-gradient channels on broad flood plains
High-gradient Contained	HC	High-gradient channels contained by steep valley walls
Moderate-gradient Contained	MC	Moderate-gradient channels contained by steep valley walls
Moderate-gradient, Mixed-control	MM	Moderate-gradient channels with some flood plain development
Large Contained	LC	Low-gradient channels contained by steep valley walls
Palustrine	PA	Very low-gradient, placid channels draining wetlands

Table A1-2
Stream Value Classes

Stream Value Class	Criteria
Class I	Streams and lakes with anadromous or adfluvial fish or fish habitat; or high quality resident fish waters, or habitat above fish migration barriers known to be reasonable enhancement opportunities for anadromous fish.
Class II	Streams and lakes with resident fish or fish habitat and generally steep (6-25 percent or higher) gradient (can also include streams with a 0-6 percent gradient) where no anadromous fish occur, and otherwise not meeting Class I criteria.
Class III	Streams are perennial and intermittent streams that have no fish populations or fish habitat, but have sufficient flow or sediment and debris transport to directly influence downstream water quality or fish habitat capability. For streams less than 30 percent gradient, special care is needed to determine if resident fish are present.
Class IV	Other intermittent, ephemeral, and small perennial channels with insufficient flow or sediment transport capabilities to have immediate influence on downstream water quality or fish habitat capability. Class IV streams do not have the characteristics of Class I, II or III streams and have a bankfull width of at least 0.3 meter (1 foot).

Table A1-3
Units in Selected Alternative

Unit # in Selected Alt	Acres¹	Volume (MBF)	Prescription
1	77	1806	even-aged
2	16	171	30% retention
3	22	468	even-aged
5	13	320	even-aged
6	22	541	even-aged
203	43	1082	even-aged
204	47	1082	even-aged
205	78	1650	30% retention
206	84	1773	even-aged
207	75	1384	30% retention
208	43	966	even-aged
209	39	744	15% retention
214	7	158	even-aged
304	28	593	even-aged
305	41	603	30% retention
306	14	185	30% retention
307	22	593	even-aged
309	25	523	even-aged
310	22	271	30% retention
312	14	308	even-aged
313	39	559	30% retention
314	120	1876	30% retention
315	33	706	even-aged
316	14	296	even-aged
317	10	198	even-aged
318	47	1021	even-aged
320	27	281	30% retention
501	44	756	30% retention
502	66	1256	30% retention
900	33	791	even-aged
901	39	858	even-aged
903	36	544	30% retention
904	12	300	even-aged
905	77	1668	even-aged
	1329	26,331	

¹Due to rounding total acres may differ from individual acres when added.

Table A1-4
Road Construction in Selected Alternative

New Construction			
Road Number	Beginning Mile Post (BMP)	Ending Mile Post (EMP)	Selected Alt (miles)
6326	8.10	8.58	0.48
45885	0	0.09	0.09
45886	0	0.29	0.29
45887	0	0.31	0.31
45888	0	0.36	0.36
45889	0	0.11	0.11
45891	0	0.20	0.20
			1.83

Table A1-5
Road Reconstruction in Selected Alternative

Road Reconstruction	Beginning Mile Post (BMP)	Ending Mile Post (EMP)	Selected Alt (miles)
6330	0.2	0.86	0.86
45807	0.20	0.31	0.11
			0.97

Central Kupreanof Unit Card Narrative

Unit # 1	Unit Size (acres): 77	Alternative: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 1,806
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / temporary road construction, existing NFS road

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Streams 1 and 2 are Class II HC2.
Stream 3 is Class I and II MM1.
Stream 4 is Class I MM1.
Stream 5 is Class III HC2.
Stream 6 is Class IV HC2.

Response: Streams 1 and 2: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 12.6a).
Streams 3 and 4: No timber harvest within the RMA (greatest of the 100-year flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet of channel) (BMPs 12.6, 12.6a, 13.9, 13.16).
Stream 5: “B” protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris (BMP 13.9, 13.16).
Stream 4: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 12.6a).
Stream 6: “C” protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).

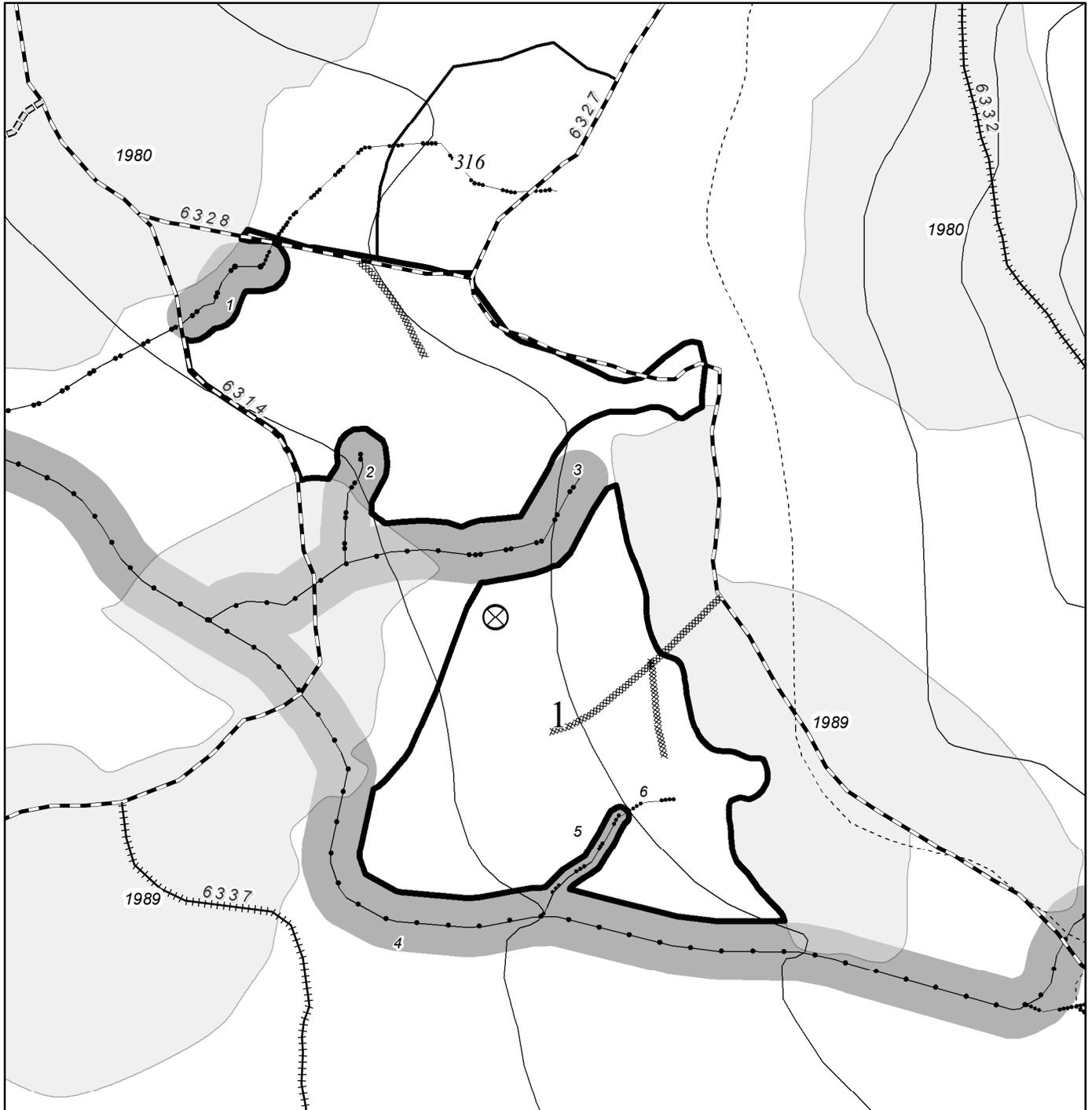
Resource Sensitive/Rare Plants

Concern: Found sensitive plant in unit – Wright filmy fern (*Hymenophyllum wrightii*). *This species was removed from the Sensitive Species List in February 2009.*

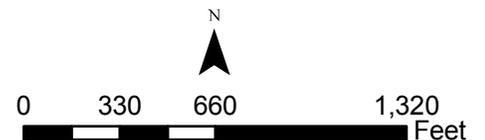
Response: No protection measures proposed.

No Concerns: Scenery, Recreation, Soils, Karst, Wildlife, Vegetation, Heritage, Wetlands

Central Kupreanof Selected Alternative - Unit 1



- | | |
|--------------------------------|-------------------------|
| Proposed Unit | Proposed NFS Roads |
| Adjacent Proposed Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 2	Unit Size (acres): 16	Alternative: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 171
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30% area retention

Logging Method/Transportation: Shovel / existing NFS road

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Stream 1 is Class I MM1 and Class II HC2.

Stream 2 is Class IV MM1.

Stream 3 is Class IV HC1.

Stream 4 is Class II MM1.

Stream 5 is Class IV HC0.

Stream 6 is Class II HC2 below the road and Class IV HC2 above the road.

Response: Streams 1 (MM1 section) and 4: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel) (BMPs 12.6, 12.6a, 13.9, 13.16).
Streams 2, 3, 5, and 6 (above the road): "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream. (BMPs 13.9, 13.16).
Streams 1 (HC2) and 6: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 12.6a).

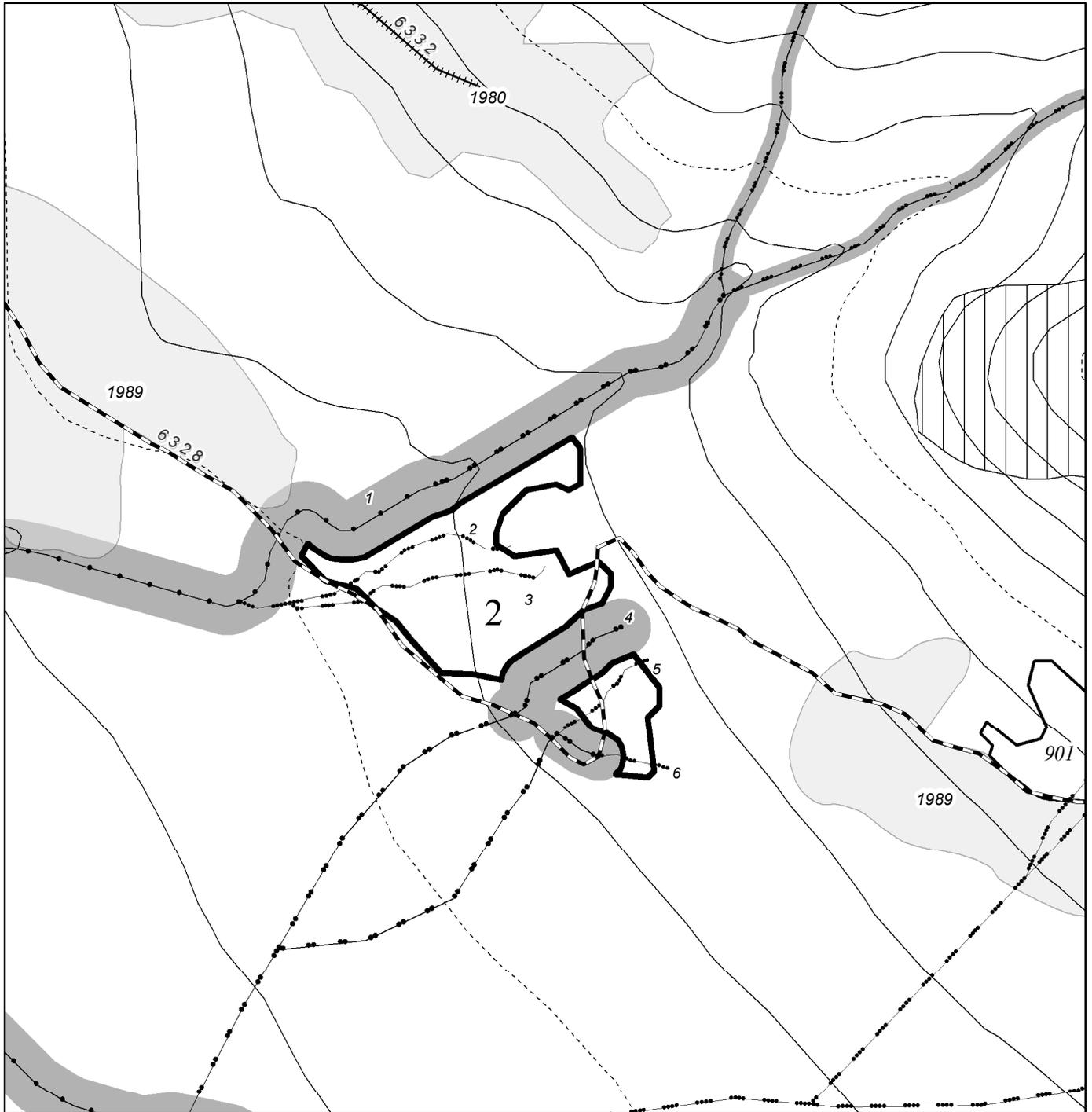
Resource Wetlands

Concern: Approximately 16 acres of harvest is proposed on forested wetland (BMP 12.5). Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

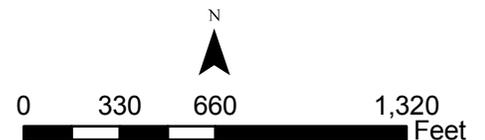
Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit (BMP 13.2, 13.9).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Soils, Karst, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 2



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 3	Unit Size (acres): 22	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 468
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road, and proposed temporary and NFS road construction

Resource Concerns & Responses

Resource **Watershed/Fisheries**

Concern: Stream 1 is Class I MM1.
 Stream 2 is Class IV HC0.
 Stream 3 is Class II MM0.
 Streams 4 and 5 are Class II HC2.
 Stream 6 is Class IV HC1.
 Stream 7 is Class IV HC2.
 Stream 8 is Class IV HC5.
 Stream 9 is Class IV MM0.
 Stream 10 is Class I MM2.

Response: Streams 1, 3, and 10: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel) (BMPs 12.6, 12.6a, 13.9, 13.16).
 Streams 2 and 6-9: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).
 Streams 4 and 5: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 12.6a).

Resource **Sensitive/Rare Plants**

Concern: Found sensitive plant in unit – Wright filmy fern (*Hymenophyllum wrightii*). *This species was removed from the Sensitive Species List in February 2009.*

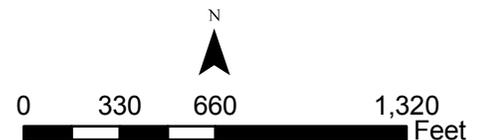
Response: May be partially protected with timber falling away from the riparian buffer.

No Concerns: Scenery, Recreation, Soils, Wetlands, Karst, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 3



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| Rare Plants | |



Central Kupreanof Unit Card Narrative		
Unit # 5	Unit Size (acres): 13	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 320
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Cable

Resource Concerns & Responses

Resource **Watershed/Fisheries**

Concern:

Stream 9 is Class IV HC5

Stream 8 is Class III HC5

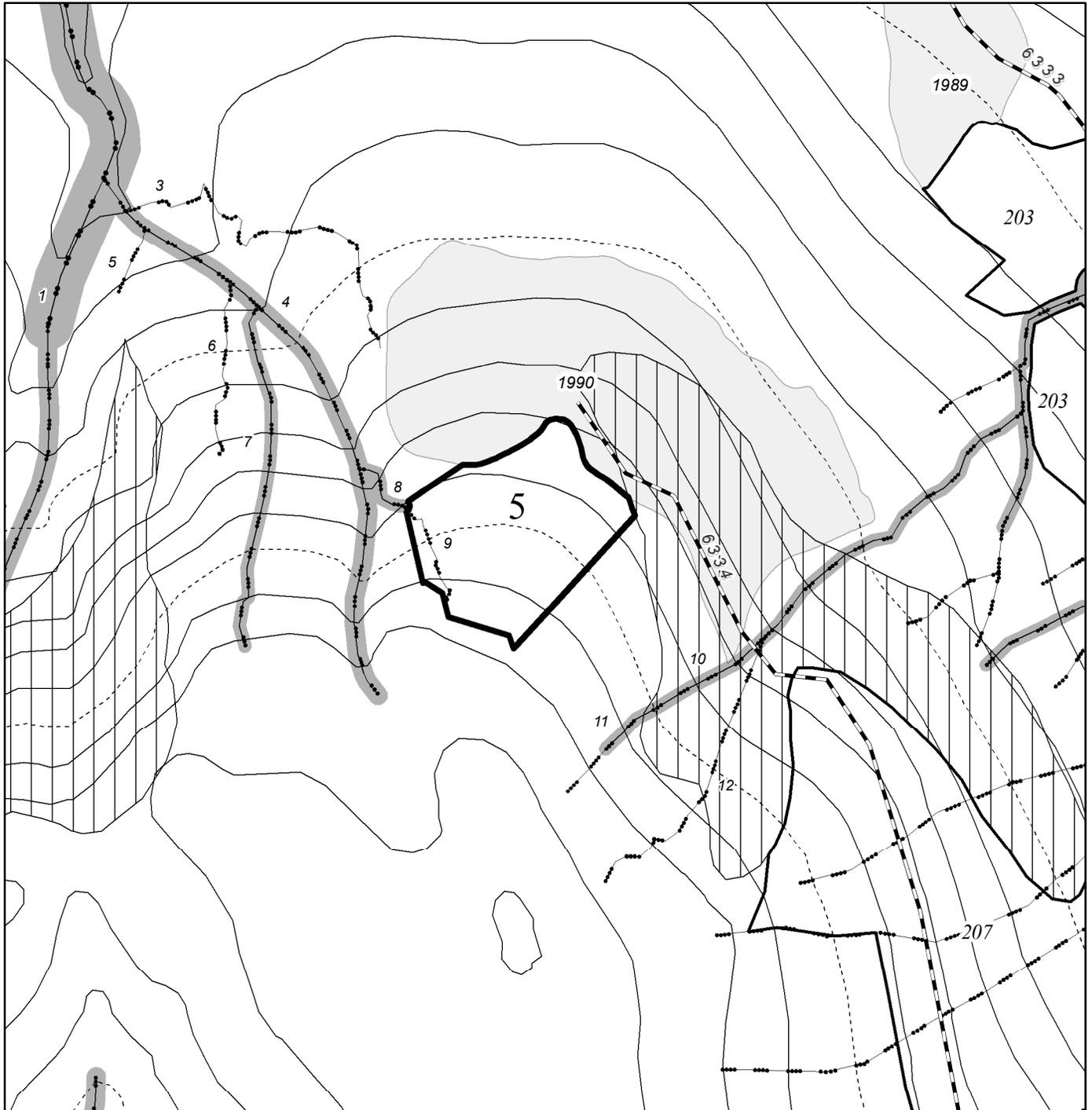
Response:

Stream 8 and 10: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris. (BMPs 13.9, 13.16).

Stream 9 "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Wetlands, Karst, Wildlife, Heritage, Vegetation, Soils

Central Kupreanof Selected Alternative - Unit 5



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 6	Unit Size (acres): 22	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 541
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Cable / existing NFS road

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: All streams within the unit are Class IV HC5.

Response: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMP 13.9, 13.16).

Resource Soils

Concern: Southwestern portion of the originally proposed unit was on MMI-4 soils.

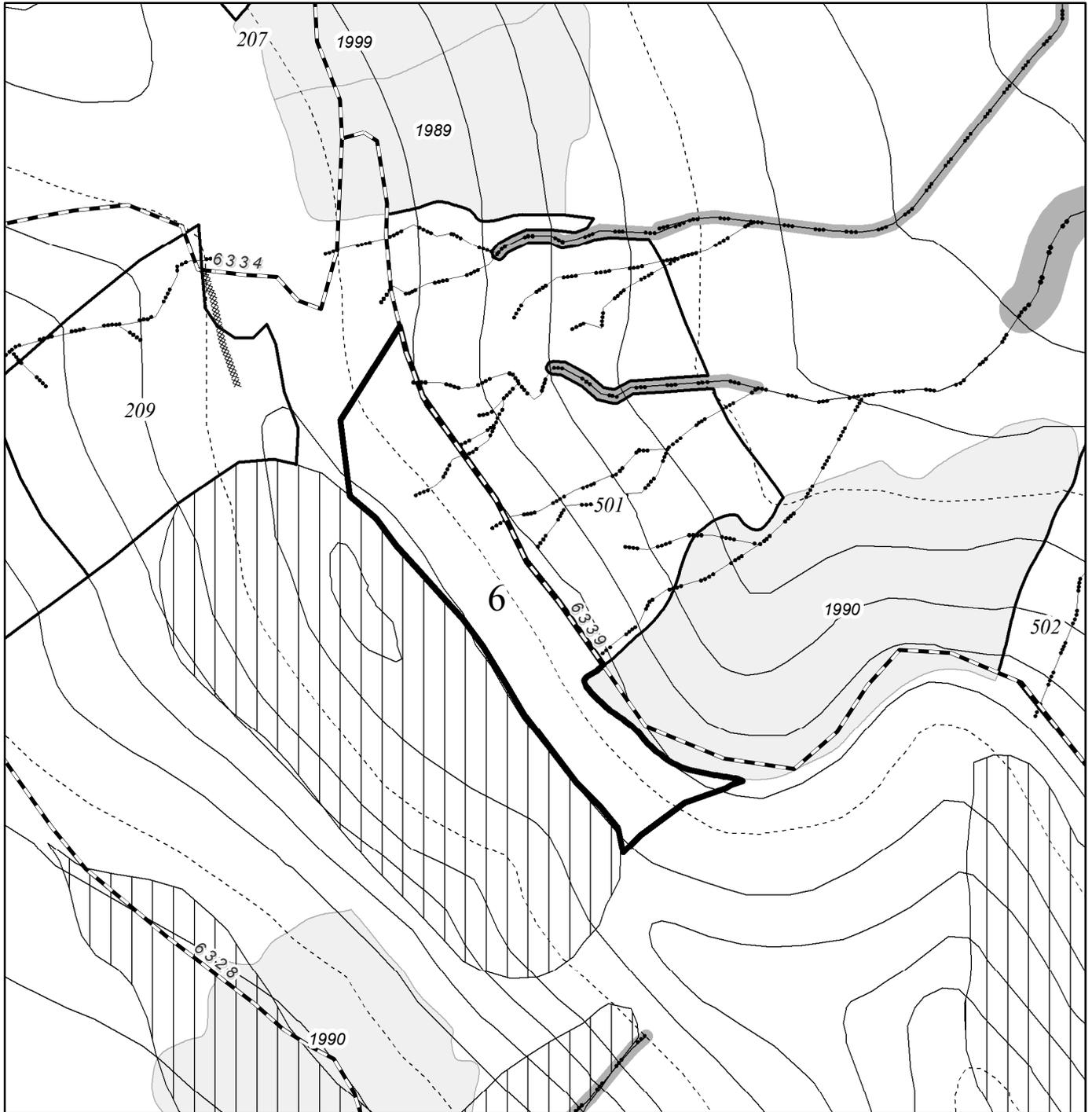
Response: Unit boundary modified to address stability concerns (BMP 13.5).

Concern: Southeastern portion of originally proposed unit was on poorly drained soils with slopes between 60 and 80 percent.

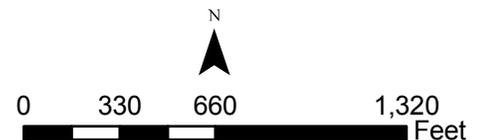
Response: Unit boundary was modified to address stability concerns (BMP 13.5).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Karst, Wetlands, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 6



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 203	Unit Size (acres): 43	Alternative: Selected
Aerial Photo: 1098-185	VCU: 4260	Volume (mbf): 1,082
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel and cable / existing NFS road

Resource Concerns & Responses

Resource Fisheries/Watershed

Concern: Streams 1 and 4 are Class II, Channel Type HC2 and HC5.
Streams 2 and 5 are Class III, Channel Type HC5.
Stream 3 is Class IV, Channel Type HC0.
Stream 6 is Class I, Channel Type MM2.

Response: Streams 1 and 4: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater. (BMP 12.6, 13.9, 13.16).
Streams 2 and 5: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris. (BMP 13.9, 13.16).
Stream 3: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMP 13.9, 13.16).
Stream 6: No timber harvest within the greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel. (BMPs 12.6, 12.6a, 13.9, 13.16).

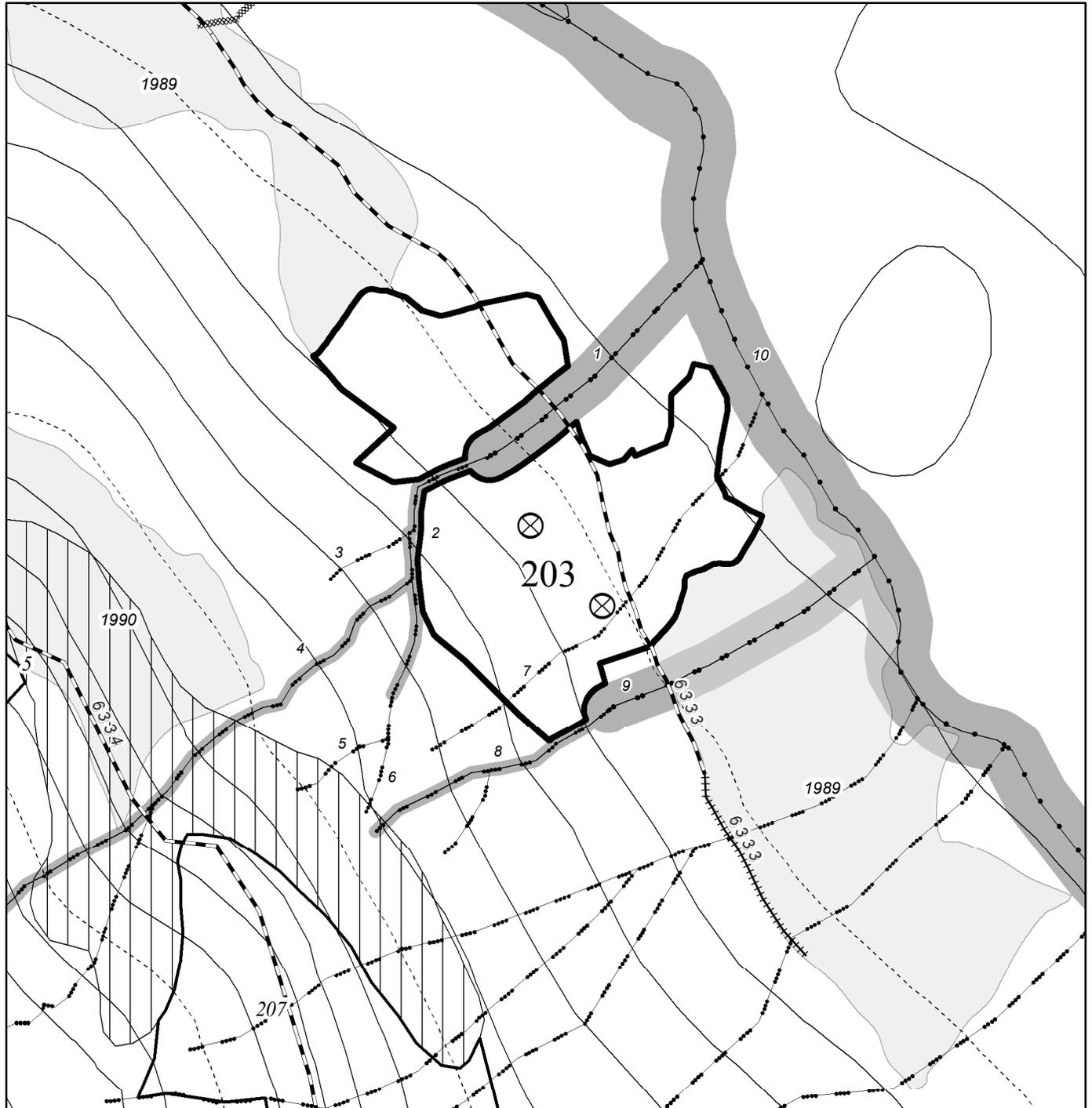
Resource Sensitive/Rare Plants

Concern: Sensitive plant, Wright filmy fern (*Hymenophyllum wrightii*), found in two places in unit. *This species was removed from the Sensitive Species List in February 2009.*

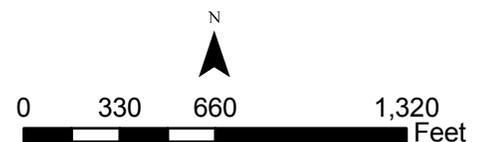
Response: One population may be partially protected by falling timber away from the Class IV stream.

No Concerns: Scenery, Soils, Karst, Wetlands, Recreation, Vegetation, Wildlife, Heritage

Central Kupreanof Selected Alternative - Unit 203



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 204

Unit Size (acres): 47

Alternative: Selected

Aerial Photo: 1598-51

VCU: 4260

Volume (mbf): 1,082

Land Use Designation: Timber Production

Existing Stand Condition: Old-growth

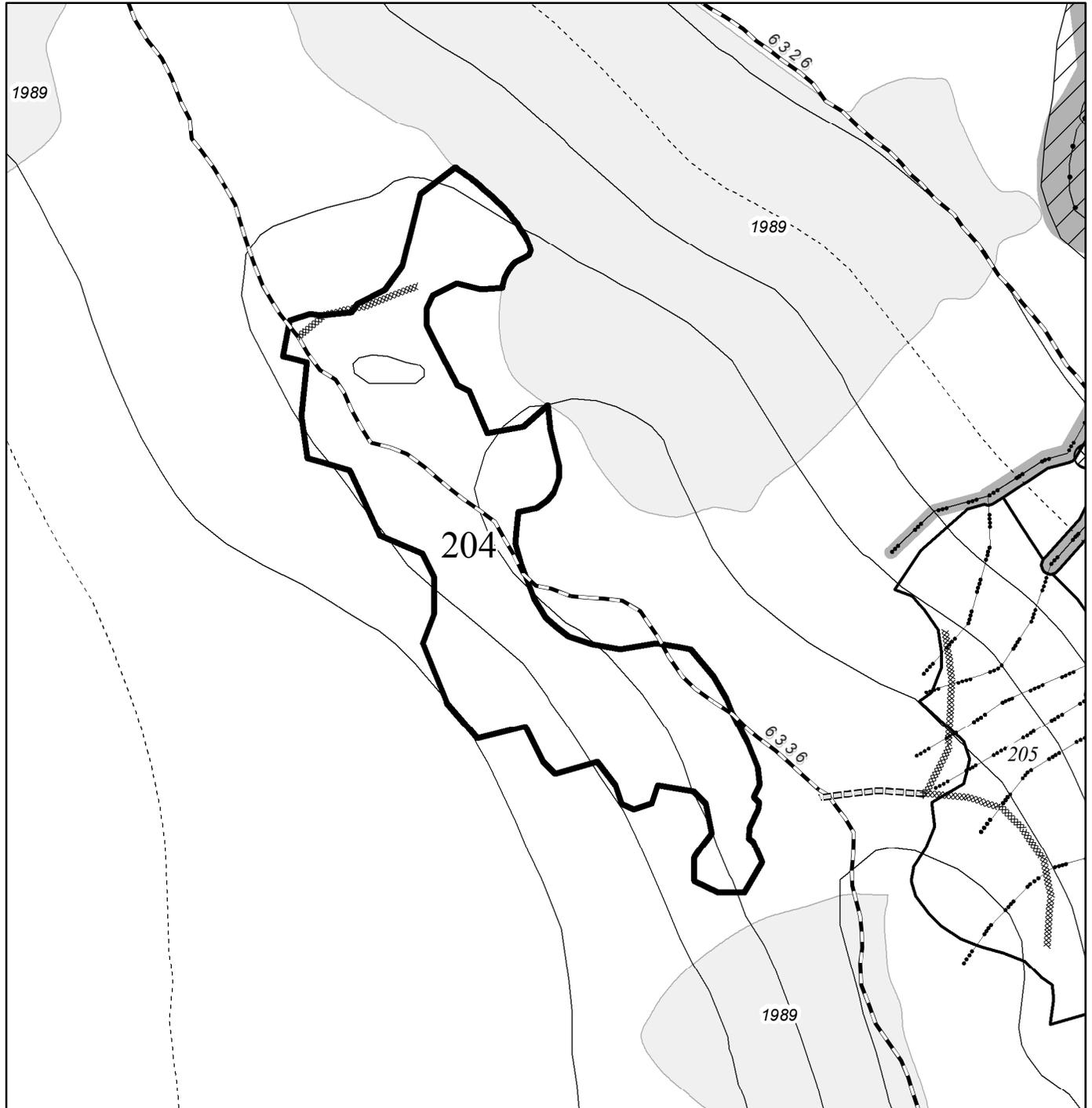
Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road, temporary road

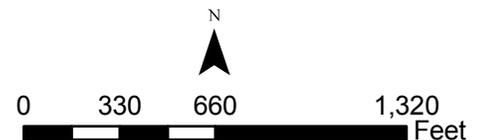
Resource Concerns & Responses

No Concerns: Fisheries, Watershed, Scenery, Soils, Karst, Wetlands, Recreation, Sensitive/Rare Plants, Vegetation, Heritage, Wildlife

Central Kupreanof Selected Alternative - Unit 204



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 205	Unit Size (acres): 78	Alternative: Selected
Aerial Photo: 1598-51	VCU: 4260	Volume (mbf): 1,650
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30% area retention

Logging Method/Transportation: Shovel and cable / existing NFS road, new NFS road construction, temporary road.

Resource Concerns & Responses

Resource Fisheries/Watershed

Concern: Stream 1 is Class I, Channel Type FP3 and MM2.
Stream 2 is Class III, MM1 in lower section, HC2 in middle section, and HC5 above the confluence with Stream 3.
Streams 3, 10, and 11 are Class IV, Channel Type HC0.
Streams 4 and 7 are Class II, Channel Type HC2.
Streams 5 and 9 are Class III, Channel Type HC2.
Streams 6, 13, and 14 are Class IV, Channel Type HC5.
Stream 8 is Class IV, Channel Type HC2.
Stream 12 is Class II, Channel Type MM1.

Response: Stream 1 (FP3): No commercial timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 130 feet of channel) (BMPs 12.6, 12.6a, 13.9, 13.16).
Streams 1(MM2), 2 (MM1), and 12: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel) (BMPs 12.6, 12.6a, 13.9, 13.16).
Streams 2 (HC) 5, and 9: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris (BMPs 13.9, 13.16).
Streams 4 and 7: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 12.6a).
Streams 3, 6, 8, 10, 11, 13, 14: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMP 13.9, 13.16).
Stream 12: No timber harvest within the RMA (greatest of the 100-year flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet of channel) (BMP 12.6, 12.6a, 13.9, 13.16).

Resource Sensitive/Rare Plants

Concern: Two populations of sensitive plant, Wright filmy fern (*Hymenophyllum wrightii*), found in unit. *This species was removed from the Sensitive Species List in February 2009.*

Response: No protection measures proposed.

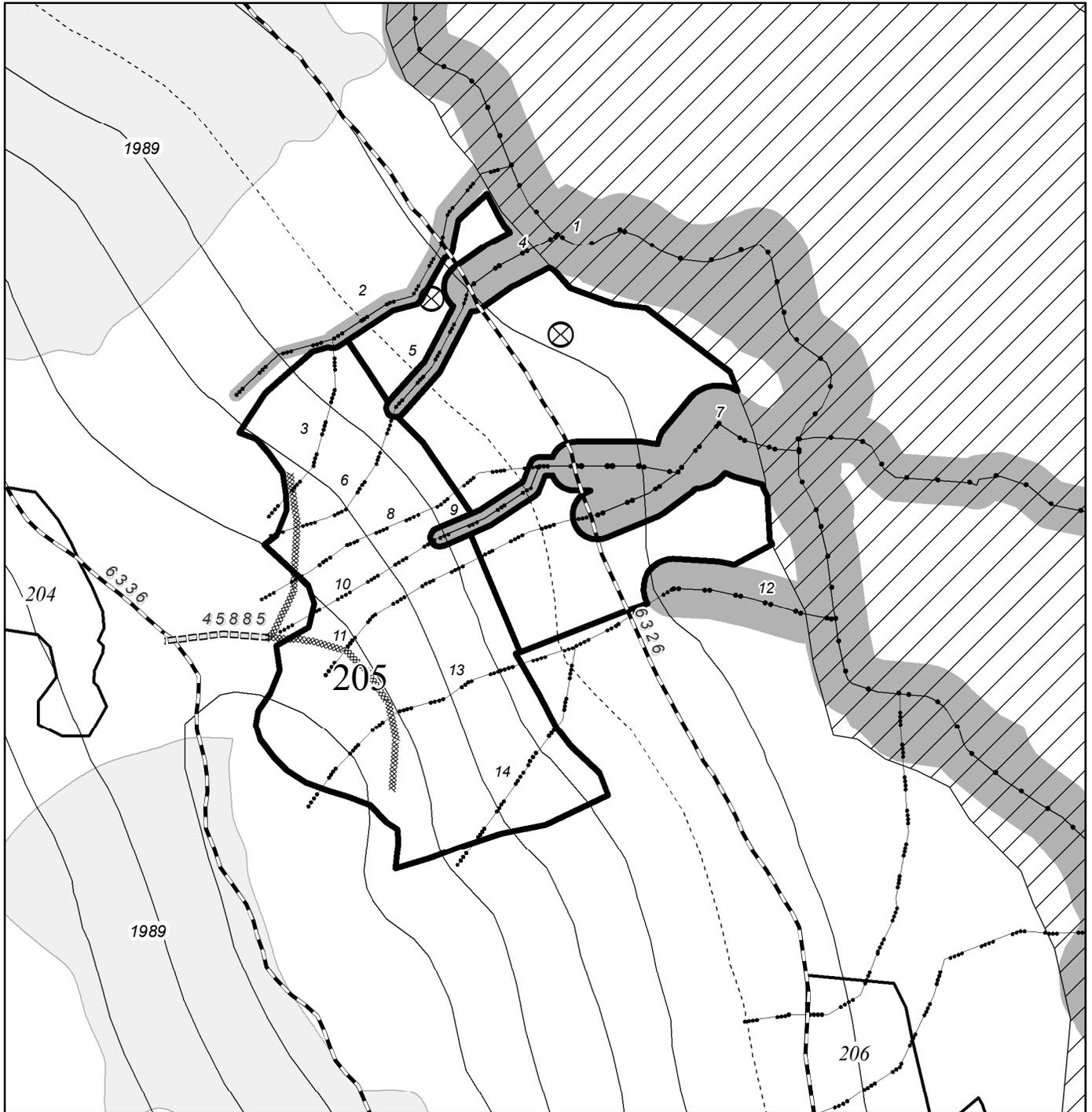
Resource Wetlands

Concern: Approximately 6 acres of harvest is proposed on forested wetland (BMP 12.5). Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

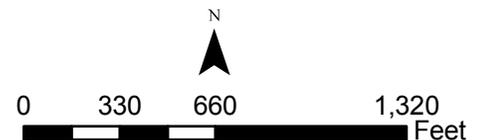
Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit (BMP 13.2, 13.9).

No Concerns: Scenery, Soils, Karst, Recreation, Heritage, Vegetation, Wildlife

Central Kupreanof Selected Alternative - Unit 205



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 206**Unit Size (acres): 84****Alternative: Selected****Aerial Photo:** 1198-96, 1198-94**VCU:** 4260**Volume (mbf): 1,773****Land Use Designation:** Timber Production**Existing Stand Condition:** Old-growth**Silvicultural Prescription:** Even-aged management, clearcut**Logging Method/Transportation:** Shovel and cable / existing NFS road and new NFS road construction

Resource Concerns & Responses

Resource Fisheries/Watershed

Concern: Streams 1-6 are Class IV HC0.

Stream 7 is Class IV HC5.

Stream 8 is Class I MM2/MC2.

Response: Streams 1-7: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required.

Remove logging debris from stream. (BMP 13.9, 13.16).

Stream 8: (MM2) No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel); (MC2) No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater. (BMPs 12.6, 12.6a, 13.9, 13.16).

Resource Sensitive/Rare PlantsConcern: Sensitive plant, Wright filmy fern (*Hymenophyllum wrightii*), found in unit. Two populations were found. *This species was removed from the Sensitive Species List in February 2009.*

Response: No protection measures proposed.

Resource Wetlands

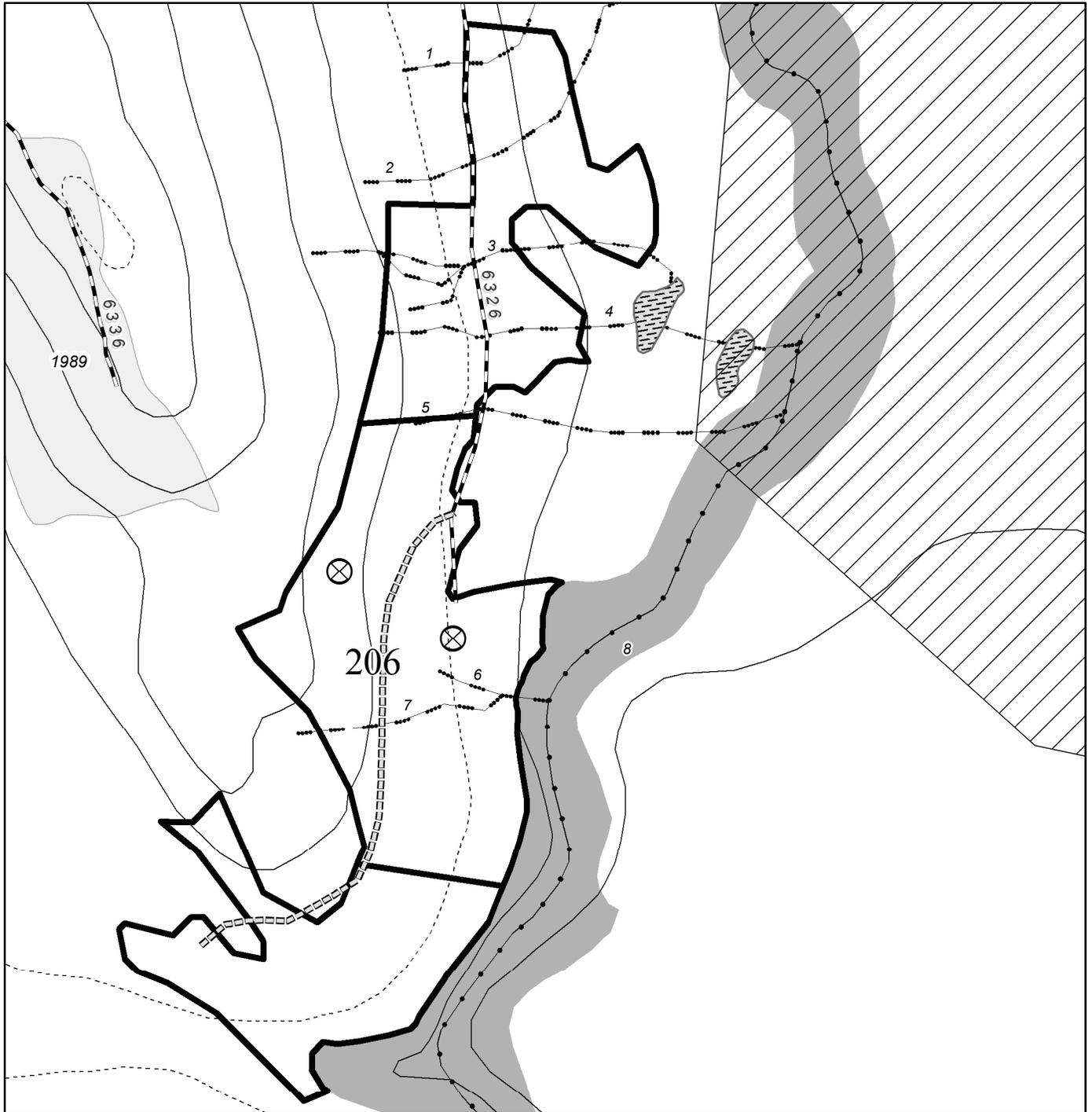
Concern: Approximately 2 acres of harvest is proposed on forested wetland (BMP 12.5).

Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

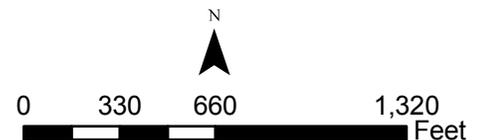
Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit (BMPs 13.2, 13.9).

No Concerns: Scenery, Soils, Karst, Recreation, Heritage, Vegetation, Wildlife

Central Kupreanof Selected Alternative - Unit 206



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 207	Unit Size (acres): 75	Alternative: Selected
Aerial Photo: 1098-185	VCU: 4260	Volume (mbf): 1,384
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30% area retention

Logging Method/Transportation: Shovel and cable / existing NFS road and new NFS road construction

Resource Concerns & Responses

Resource Fisheries/Watershed

Concern: All Streams are Class IV HC0.

Response: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).

Resource Soils

Concern: In the area surveyed slopes were between 65 percent and 75 percent.

Response: Partial suspension for area east of road to meet soil quality standards (BMP 14.8). Use timing restrictions during harvest to protect soils in this area (BMP 14.6).

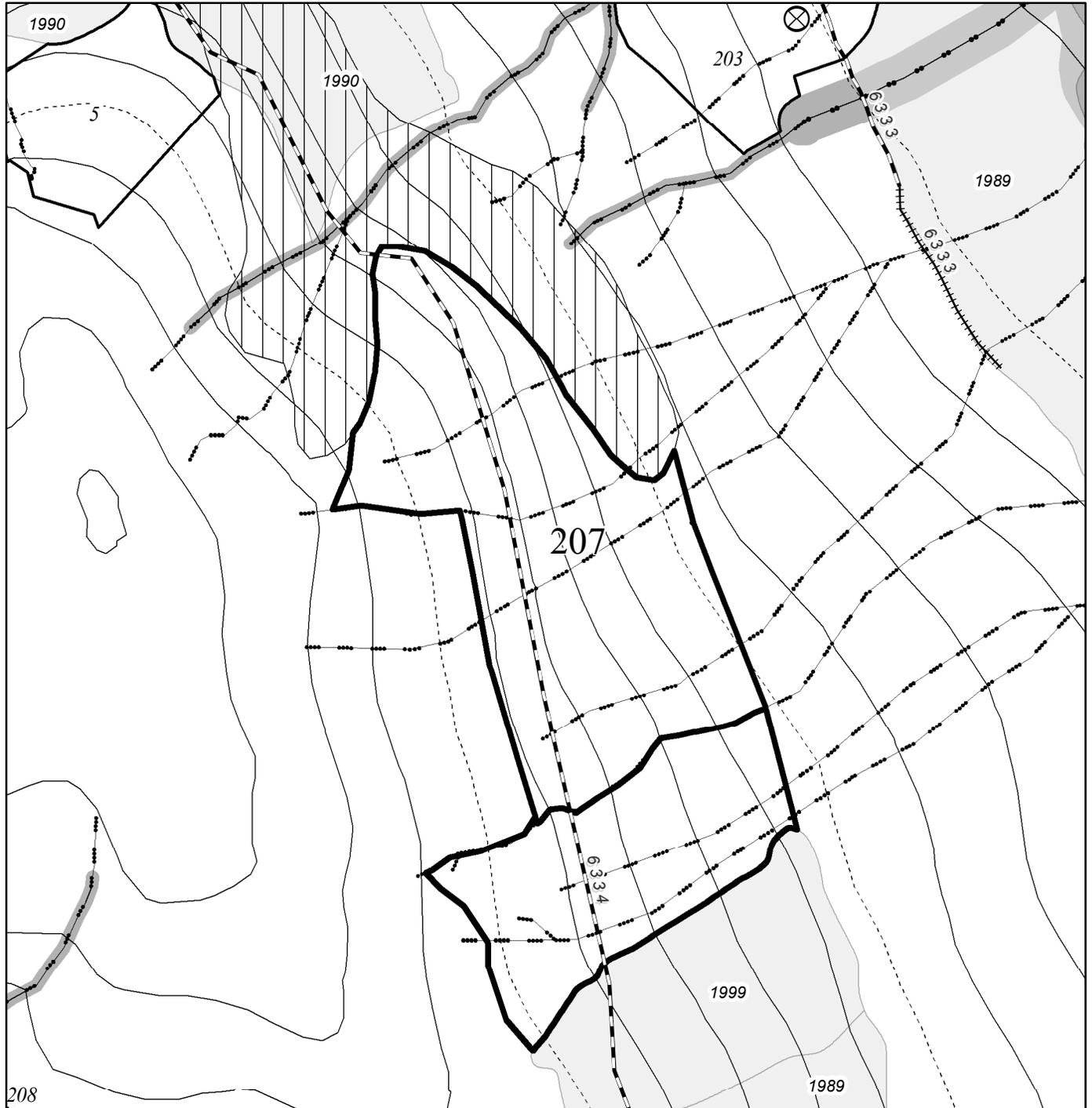
Resource Wetlands

Concern: Approximately 11 acres of harvest is proposed on forested and non-forested wetland (BMP 12.5). Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

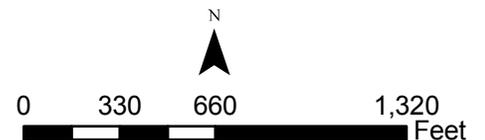
Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit. Do not operate shovel in non-forested areas (BMPs 13.2, 13.9).

No Concerns: Scenery, Recreation, Karst, Sensitive/Rare Plants, Vegetation, Wildlife, Heritage

Central Kupreanof Selected Alternative - Unit 207



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Road |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | 100-ft Contour Interval |
| Closed Roads | 500-ft Contour Interval |
| Proposed Temporary Roads | Project Area Boundary |
| Open NFS Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 208	Unit Size (acres): 43	Alternative: Selected
Aerial Photo: 1098-183, 1098-184, 1098-185	VCU: 4271	Volume (mbf): 966
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel, cable / existing NFS road

Resource Concerns & Responses

Resource Fisheries/Watershed

Concern: Stream 1 is Class III HC6.
Stream 2 is Class II HC1.
Streams 3, 4, and 7 are Class IV HC0.
Stream 5 is Class III HC5.
Stream 6 is Class II HC2.

Response: Streams 1 and 5: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris. (BMPs 13.9, 13.16).
Streams 2 and 6: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 12.6a).
Streams 3, 4, and 7: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).

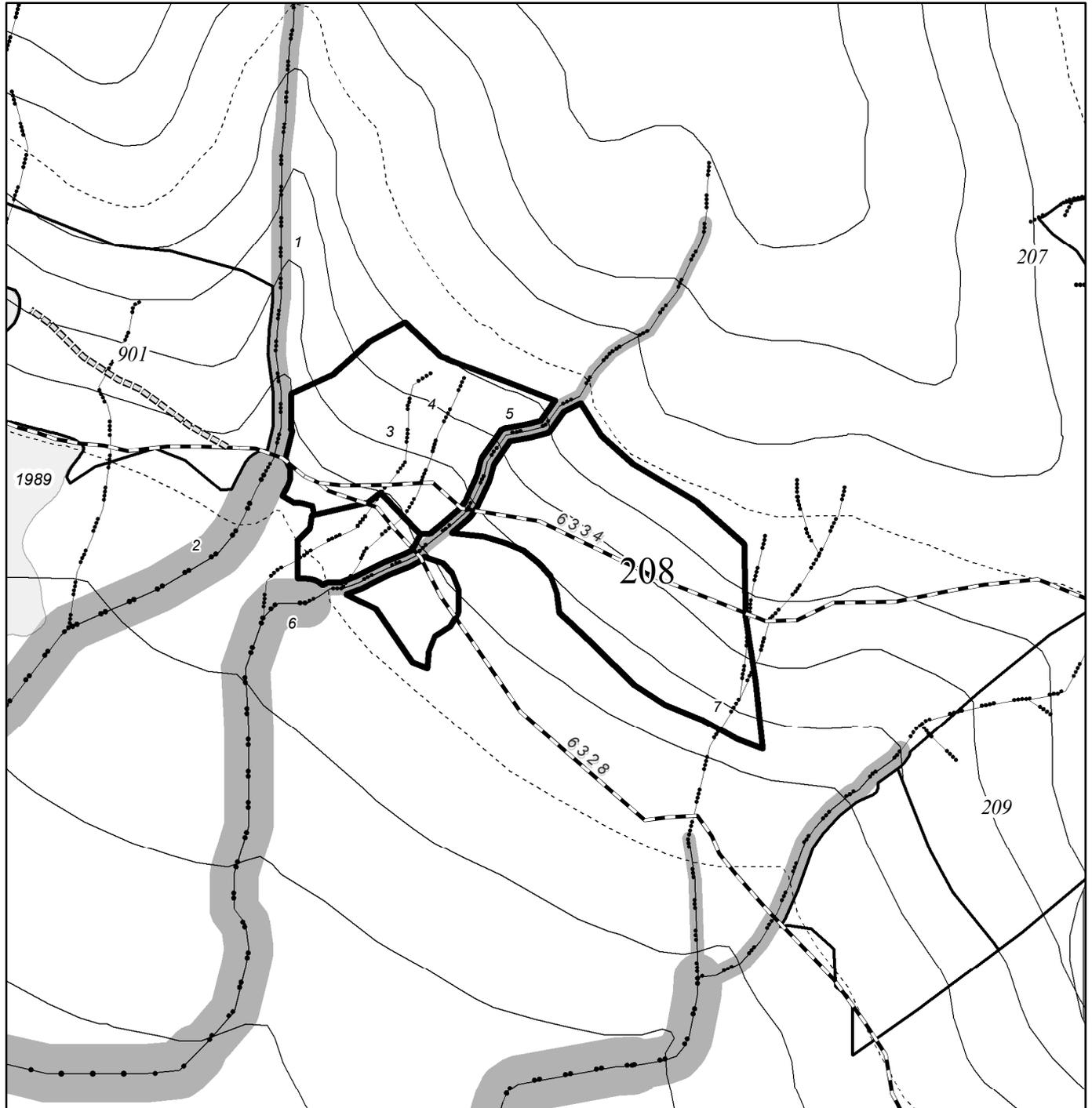
Resource Scenery

Concern: Unit visible in the middleground distance from Big John Bay.

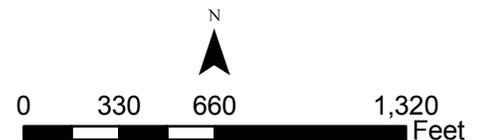
Response: Unit meets the Low Scenic Integrity Objective.

No Concerns: Soils, Recreation, Karst, Wetlands, Sensitive/Rare Plants, Vegetation, Wildlife, Heritage

Central Kupreanof Selected Alternative - Unit 208



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 209	Unit Size (acres): 39	Alternative: Selected
Aerial Photo: 1098-183	VCU: 4271	Volume (mbf): 744
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management with 15% area retention

Logging Method/Transportation: Shovel and cable / existing NFS road and temporary road construction

Resource Concerns & Responses

Resource Fisheries/Watershed

Concern: Stream 1 is Class III HC6.

Streams 2, 3, and 4 are Class IV HC0.

Response: Stream 1: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris (BMPs 13.9, 13.16).
Streams 2, 3, and 4: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).

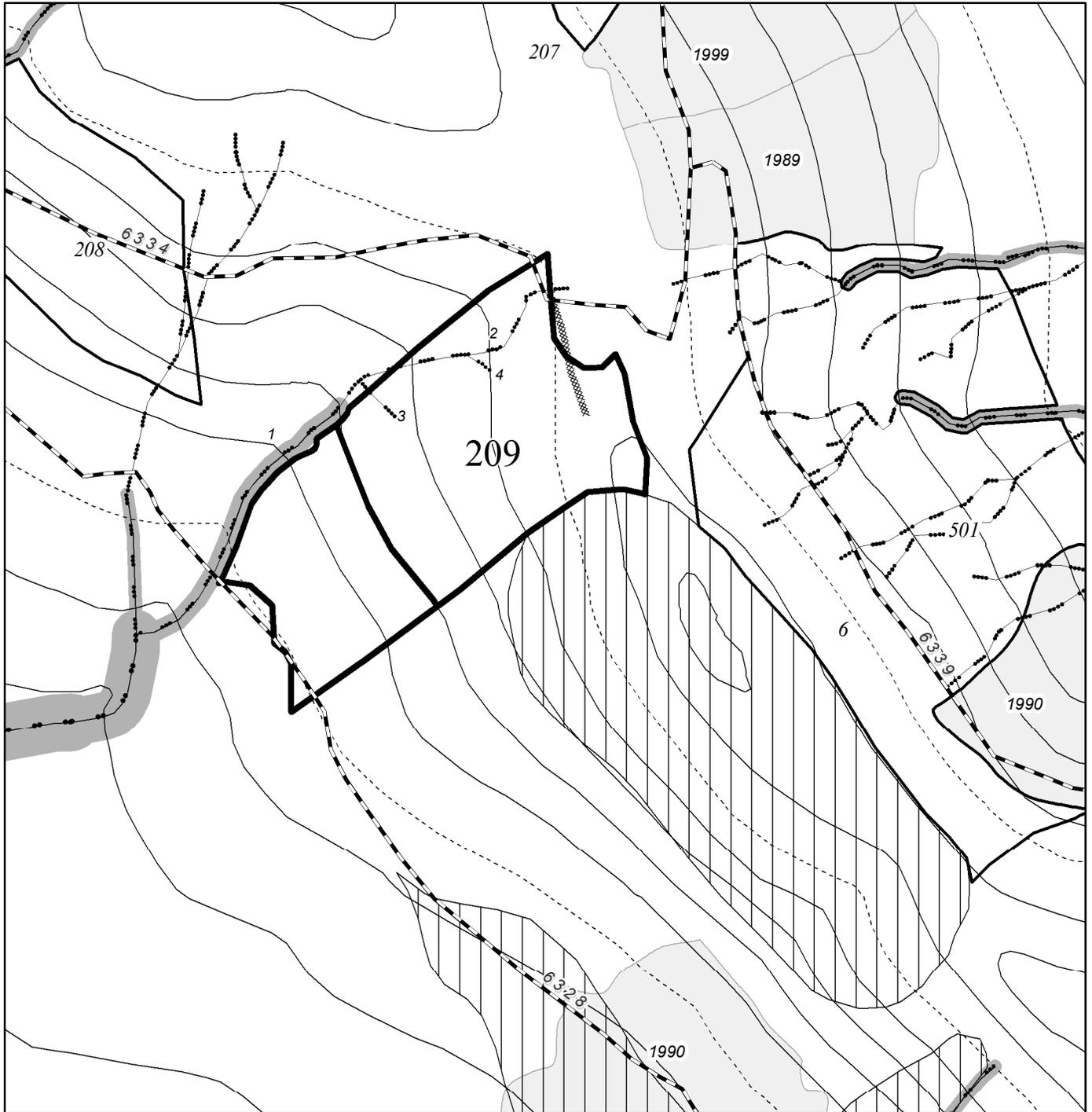
Resource Scenery

Concern: Unit visible in the middleground distance from Big John Bay.

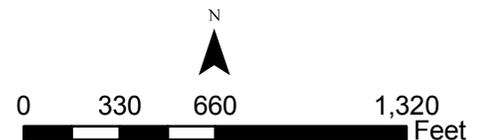
Response: With 15 percent area retention unit meets the Low Scenic Integrity Objective.

No Concerns: Soils, Recreation, Karst, Wetlands, Sensitive/Rare Plants, Wildlife, Heritage, Vegetation

Central Kupreanof Selected Alternative - Unit 209



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 214	Unit Size (acres): 7	Alternative: Selected
Aerial Photo: 1598-45	VCU: 4290	Volume (mbf):158
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road

Resource Concerns & Responses

Resource Fisheries/Watershed

Concern: Stream 1 is Class II HC2.

Stream 2 is Class II HC2 and MM1.

Stream 3 is Class II HC2 and Class III HC2.

Response: Streams 1, 2, and 3 Class II HC2 sections: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 13.9, 13.16).
Stream 2 is Class II MM1 section: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel (BMPs 12.6, 12.6a, 13.9, 13.16).
Stream 3 Class III HC2 section: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris (BMPs 13.9, 13.16).

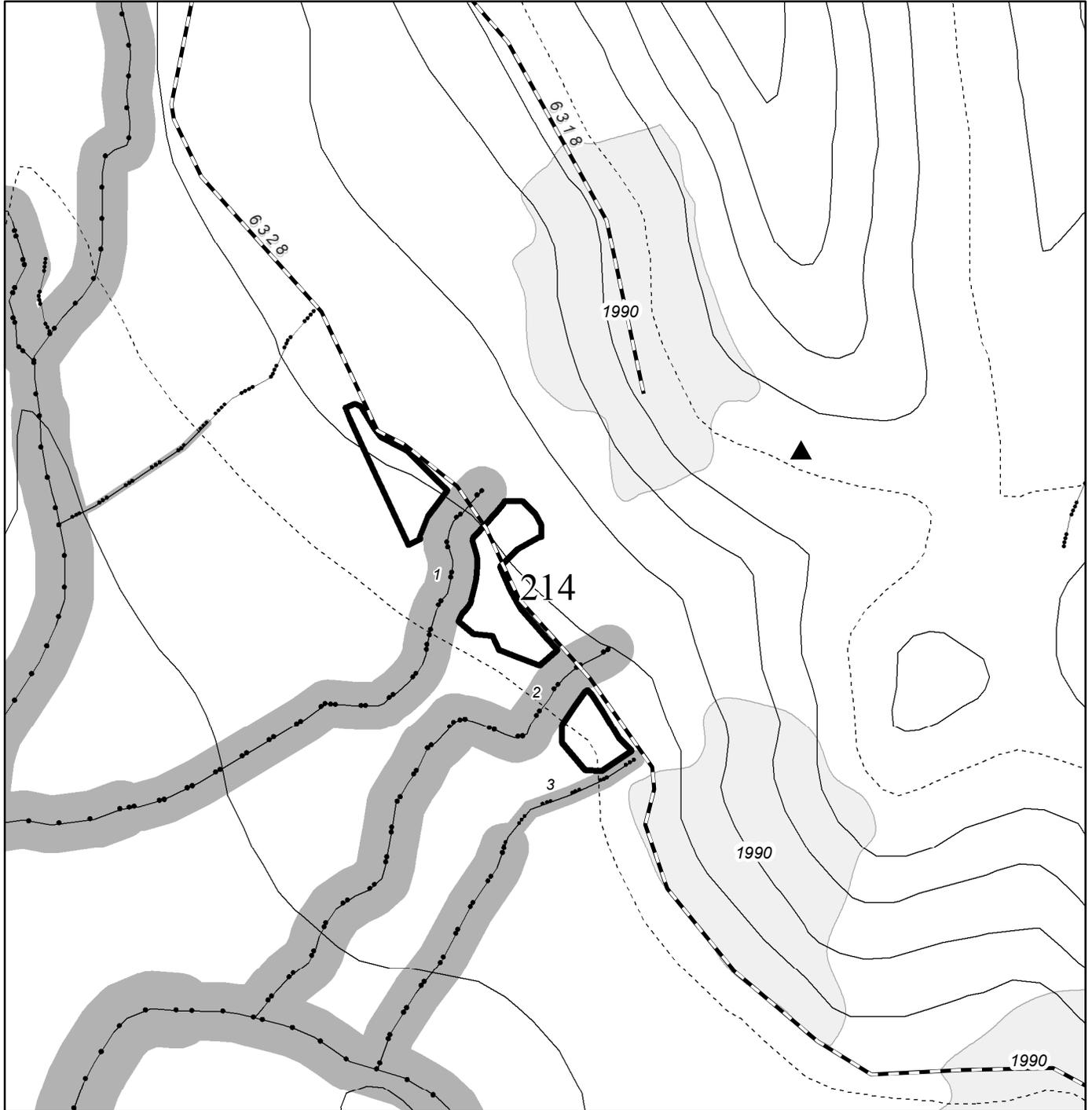
Resource Wetlands

Concern: Approximately 9 acres of harvest is proposed on forested and non-forested wetland (BMP 12.5). Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

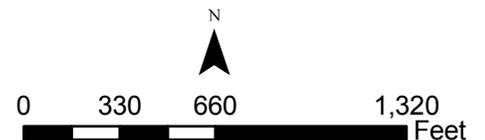
Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit. Do not operate shovel in non-forested areas (BMP 13.2, 13.9).

No Concerns: Scenery, Soils, Karst, Recreation, Sensitive/Rare Plants, Vegetation, Wildlife, Heritage

Central Kupreanof Selected Alternative - Unit 214



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 304	Unit Size (acres): 28	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 593
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road

Resource Concerns & Responses

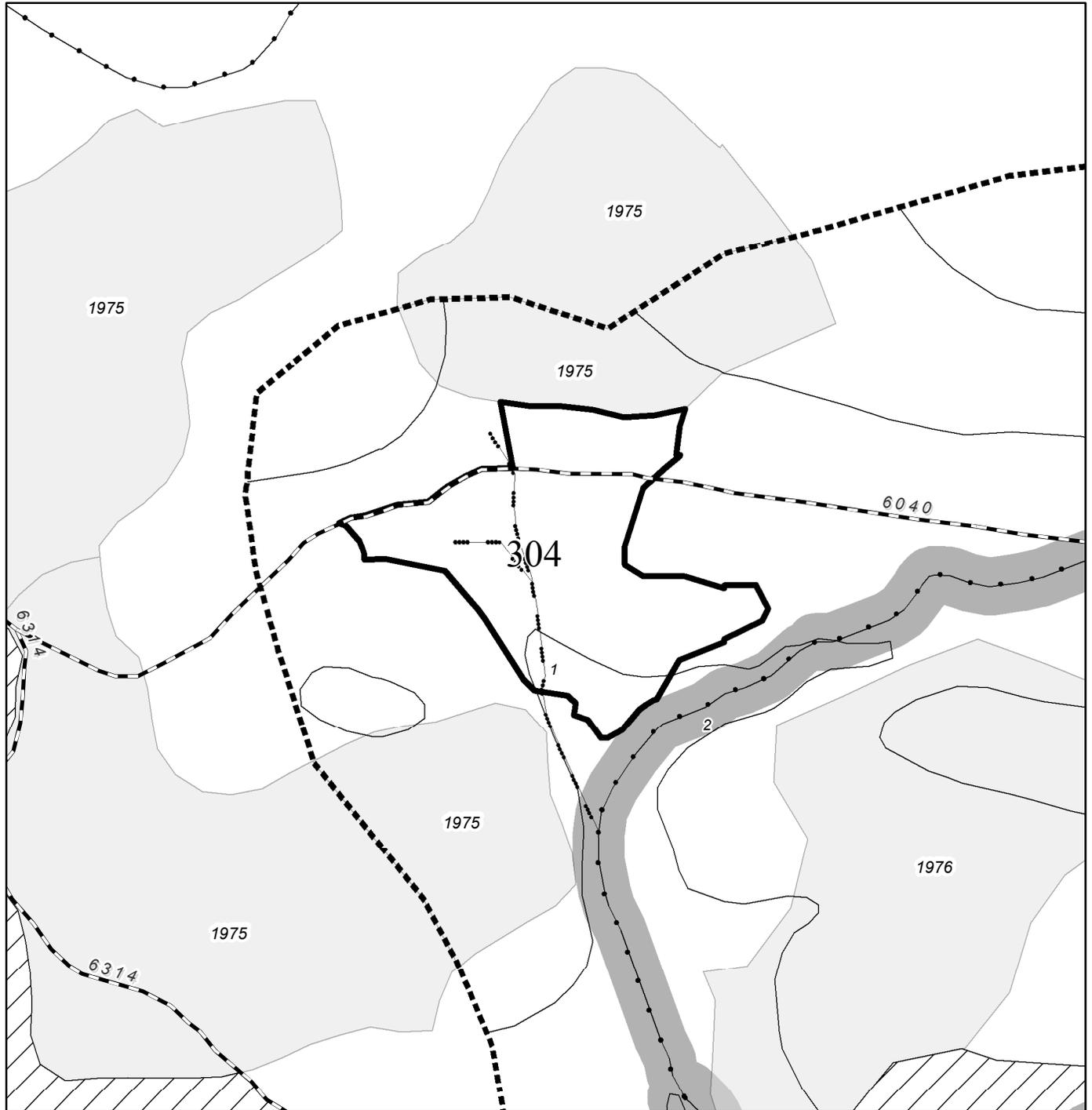
Resource Watershed/Fisheries

Concern: Stream 1 is Class IV MM0.
Stream 2 is Class I MC2.

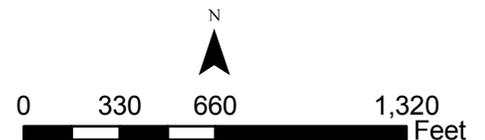
Response: Stream 1: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).
Stream 2: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 12.6a).

No Concerns: Scenery, Recreation, Wetlands, Karst, Sensitive/Rare Plants, Soils, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 304



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 305	Unit Size (acres): 41	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 603
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30% area retention

Logging Method/Transportation: Shovel / existing NFS road and new NFS road construction

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Stream 1 is Class III/IV MM0.
Stream 2 is Class I MM1.
Stream 3 is Class IV MM0.
Stream 4 is Class IV MM1.

Response: Stream 1 (Class III section): No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel) (BMPs 12.6, 12.6a, 13.9, 13.16).
Streams 1 (Class IV section), 3, and 4: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream. (BMP 13.9, 13.16).
Stream 2: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel) (BMPs 12.6, 12.6a, 13.9, 13.16).

Resource Sensitive/Rare Plants

Concern: Found sensitive plant in unit – Wright filmy fern (*Hymenophyllum wrightii*) *This species was removed from the Sensitive Species List in February 2009.*

Response: Plant is within stream riparian buffer so it is be protected.

Resource Wetlands

Concern: Approximately 12 acres of harvest is proposed on forested wetland (BMP 12.5). Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit (BMP 13.2, 13.9).

No Concerns: Scenery, Recreation, Soils, Karst, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 305



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 306	Unit Size (acres): 14	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 185
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

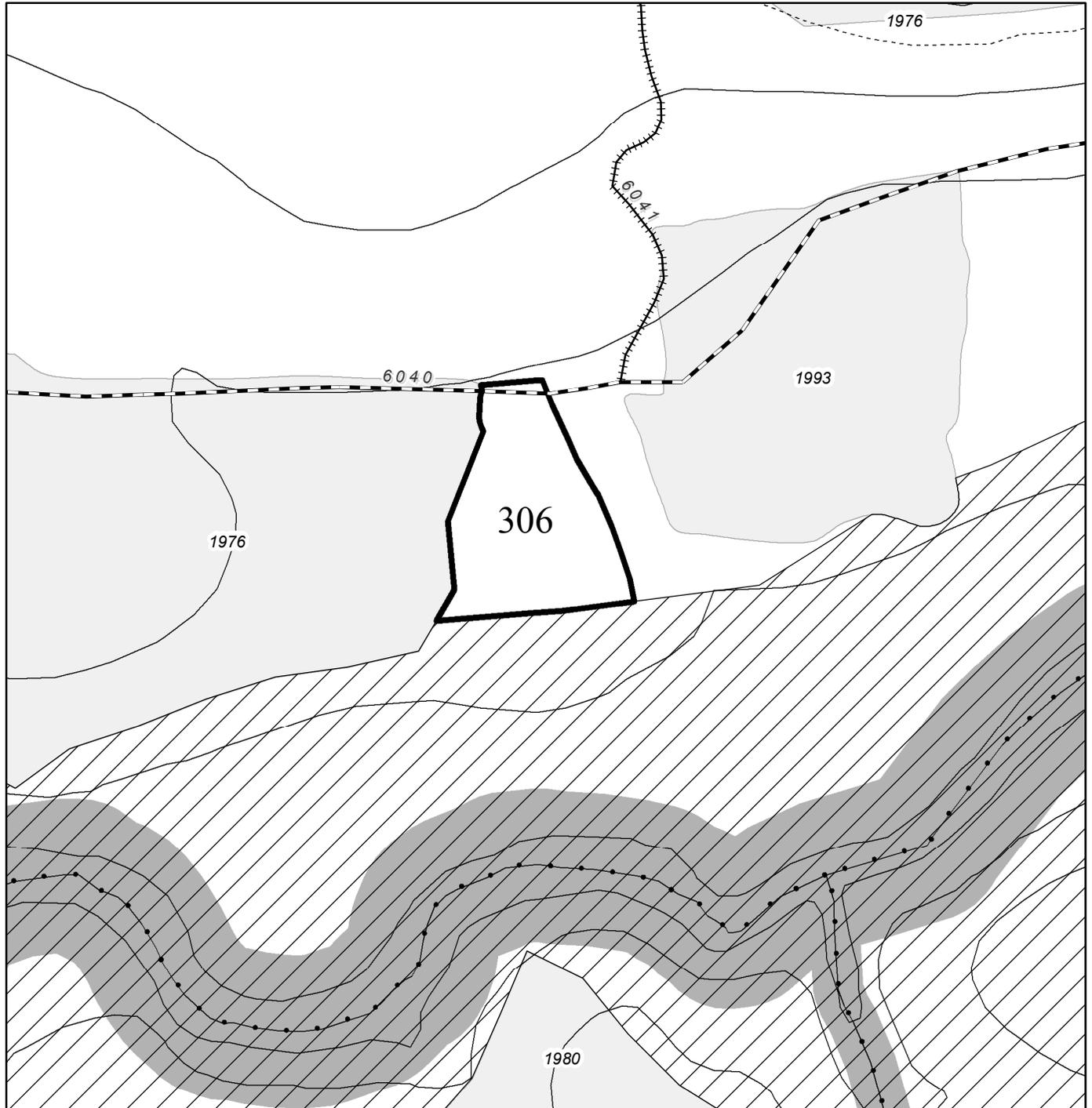
Silvicultural Prescription: Two-aged management, clearcut with 30% area retention

Logging Method/Transportation: Shovel / existing NFS road

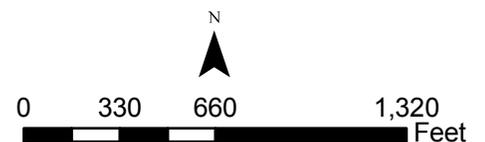
Resource Concerns & Responses

No Concerns: Watershed, Fisheries, Scenery, Recreation, Sensitive/Rare Plants, Soils, Wetlands, Karst, Heritage, Vegetation

Central Kupreanof Selected Alternative - Unit 306



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 307	Unit Size (acres): 22	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 593
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road 6040

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Streams 1 and 2 are Class IV HC5.

Response: Streams 1 and 2: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).

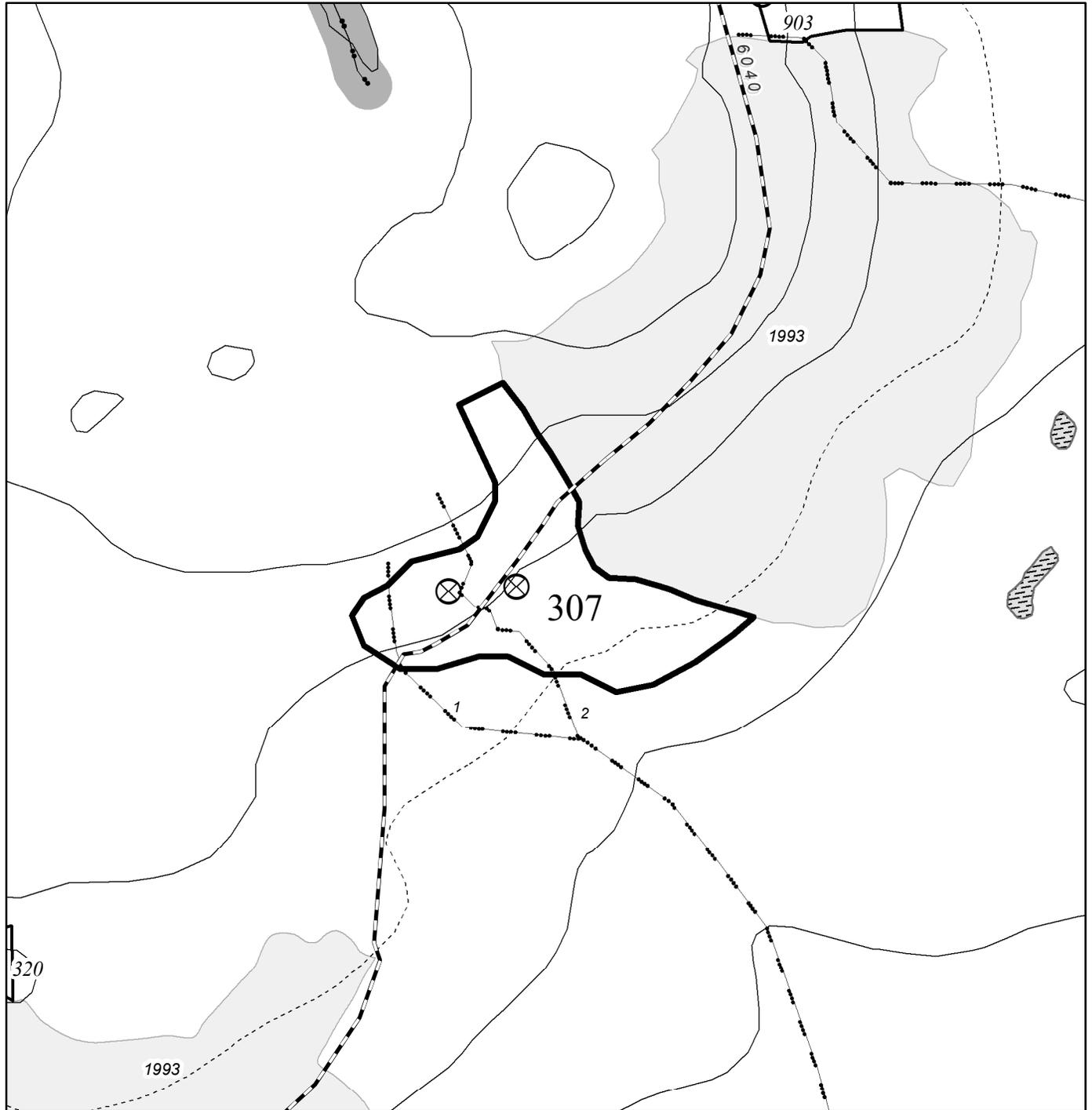
Resource Sensitive/Rare Plants

Concern: Two populations of sensitive plant found in unit – Wright filmy fern (*Hymenophyllum wrightii*). *This species was removed from the Sensitive Species List in February 2009.*

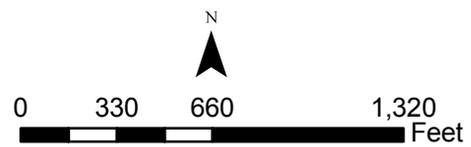
Response: No protection measures proposed.

No Concerns: Scenery, Recreation, Soils, Wetlands, Karst, Wildlife, Heritage, Vegetation

Central Kupreanof Selected Alternative - Unit 307



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 309	Unit Size (acres): 25	Alternatives: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 523
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Stream 1 is Class IV PA1.
Stream 2 is Class I FP3.
Stream 3 is Class IV HC1.

Response: Streams 1 and 3: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).
Stream 2: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 130 feet of channel) (BMPs 12.6, 12.6a, 13.9, 13.16).

Resource Karst

Concern: 1.3 acres of karst located in unit.

Response: Field reconnaissance found no signs of karst features (sink holes or caves); therefore the karst area is classified as low vulnerability and requires no special management (Forest Plan 2008, Standard and Guidelines, pg 4-23).

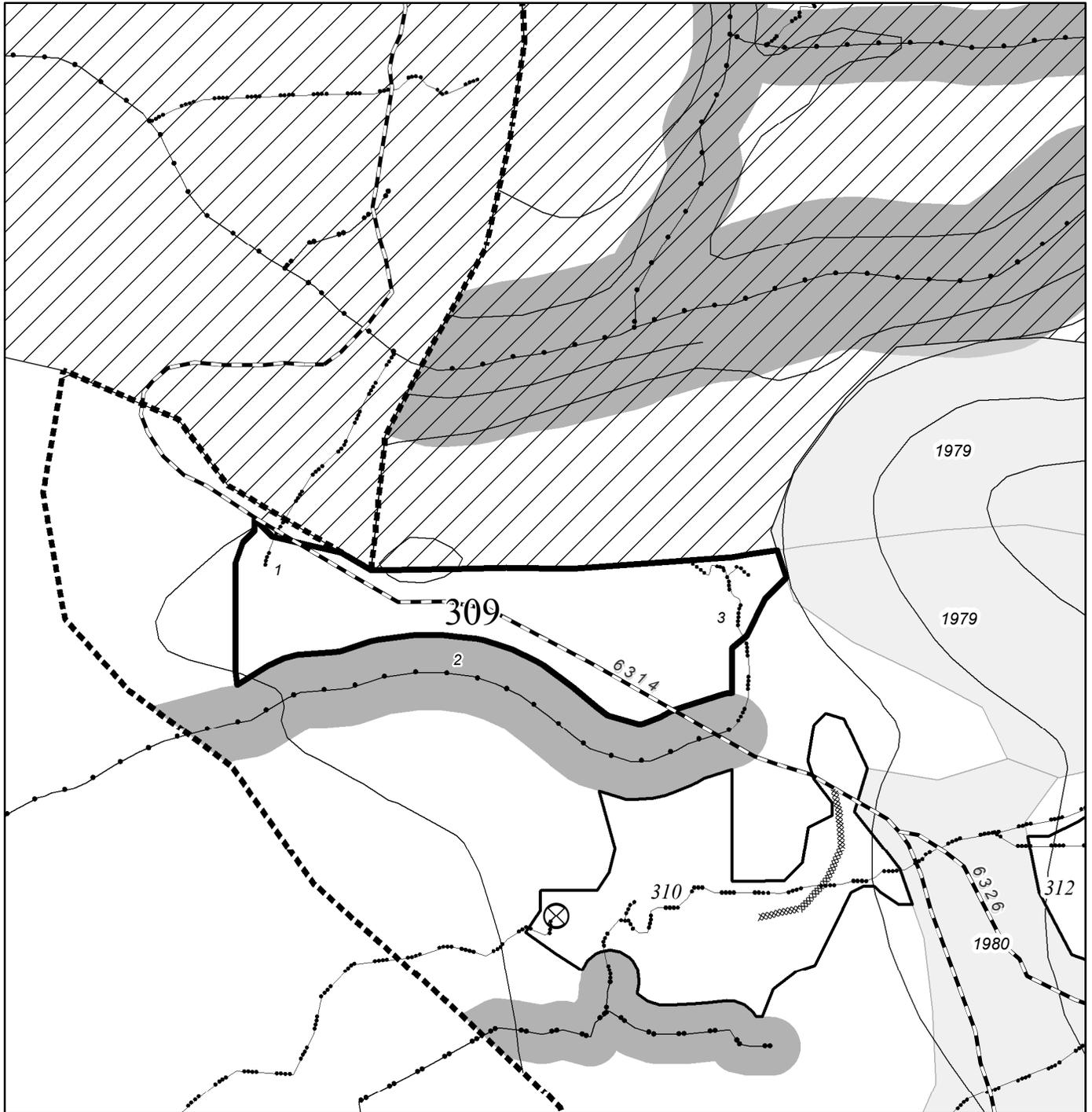
Resource Wetlands

Concern: Approximately 8 acres of harvest is proposed on forested wetland (BMP 12.5). Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

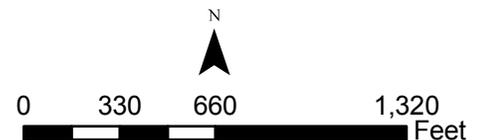
Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit (BMP 13.2, 13.9).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Soils, Heritage, Wildlife, Vegetation

Central Kupreanof Selected Alternative - Unit 309



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 310	Unit Size (acres): 22	Alternatives: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 271
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30% retention

Logging Method/Transportation: Shovel / existing NFS road and temporary road construction

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Stream 1 is Class I FP3.
Streams 2 and 5 are Class IV MM1.
Stream 3 and 4 are Class II MM1.

Response: Stream 1: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 130 feet of channel) (BMPs 12.6, 12.6a, 13.9, 13.16).
Streams 2 and 5: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream.(BMP 13.9, 13.16).
Streams 3 and 4: No timber harvest within the greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel (BMPs 12.6, 12.6a, 13.9, 13.16).

Resource Sensitive/Rare Plants

Concern: Found sensitive plant in unit – Wright filmy fern (*Hymenophyllum wrightii*). *This species was removed from the Sensitive Species List in February 2009.*

Response: No protection measures proposed.

Resource Karst

Concern: 2.5 acres of karst located in unit.

Response: Field reconnaissance found no signs of karst features (sink holes or caves); therefore the karst area is classified as low vulnerability and requires no special management (Forest Plan 2008, Standard and Guidelines, pg 4-23).

Resource Wetlands

Concern: The proposed temporary road is located on forested wetland and no alternative route exists.

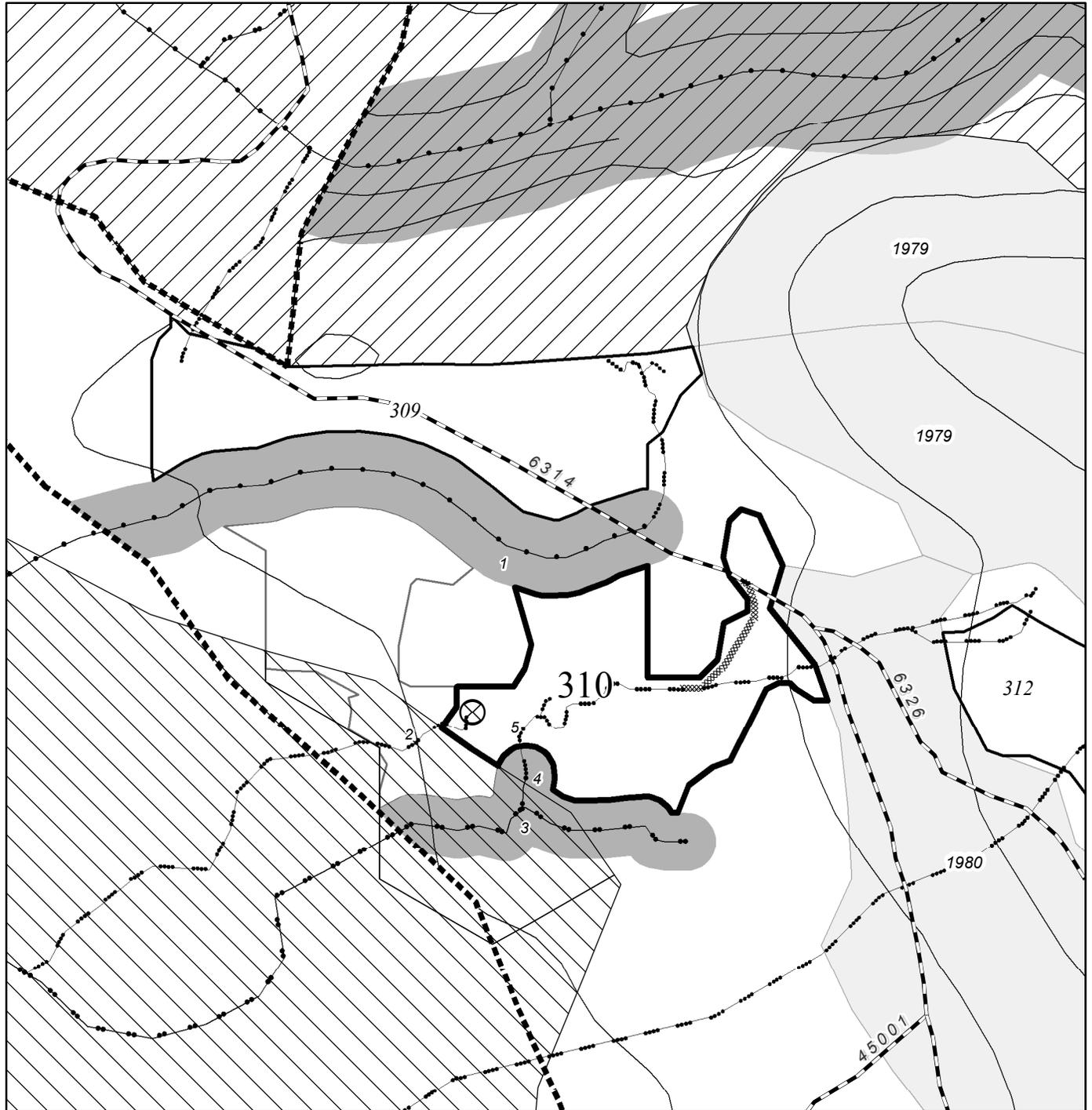
Response: Provide adequate cross drainage to maintain groundwater flow. Remove all structures and close the road after unit has been harvested (BMP 14.9) (33 CFR BMPs 4, 5, 6).

Concern: Approximately 21 acres of harvest is proposed on forested wetland (BMP 12.5). Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

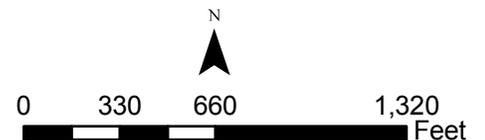
Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit (BMP 13.2, 13.9).

No Concerns: Scenery, Recreation, Soils, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 310



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Roadless | Stream Value Class II |
| Riparian Management Area | Stream Value Class III |
| Very High Hazard Soils (MMI-4) | Stream Value Class IV |
| Lakes | Project Area Boundary |
| Managed Stands | 100-ft Contour Interval |
| Proposed Temporary Roads | 500-ft Contour Interval |
| Open NFS Roads | Sensitive Plants |
| Closed Roads | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 312	Unit Size (acres): 14	Alternative: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 308
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Streams are Class IV HCO.

Response: “C” protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).

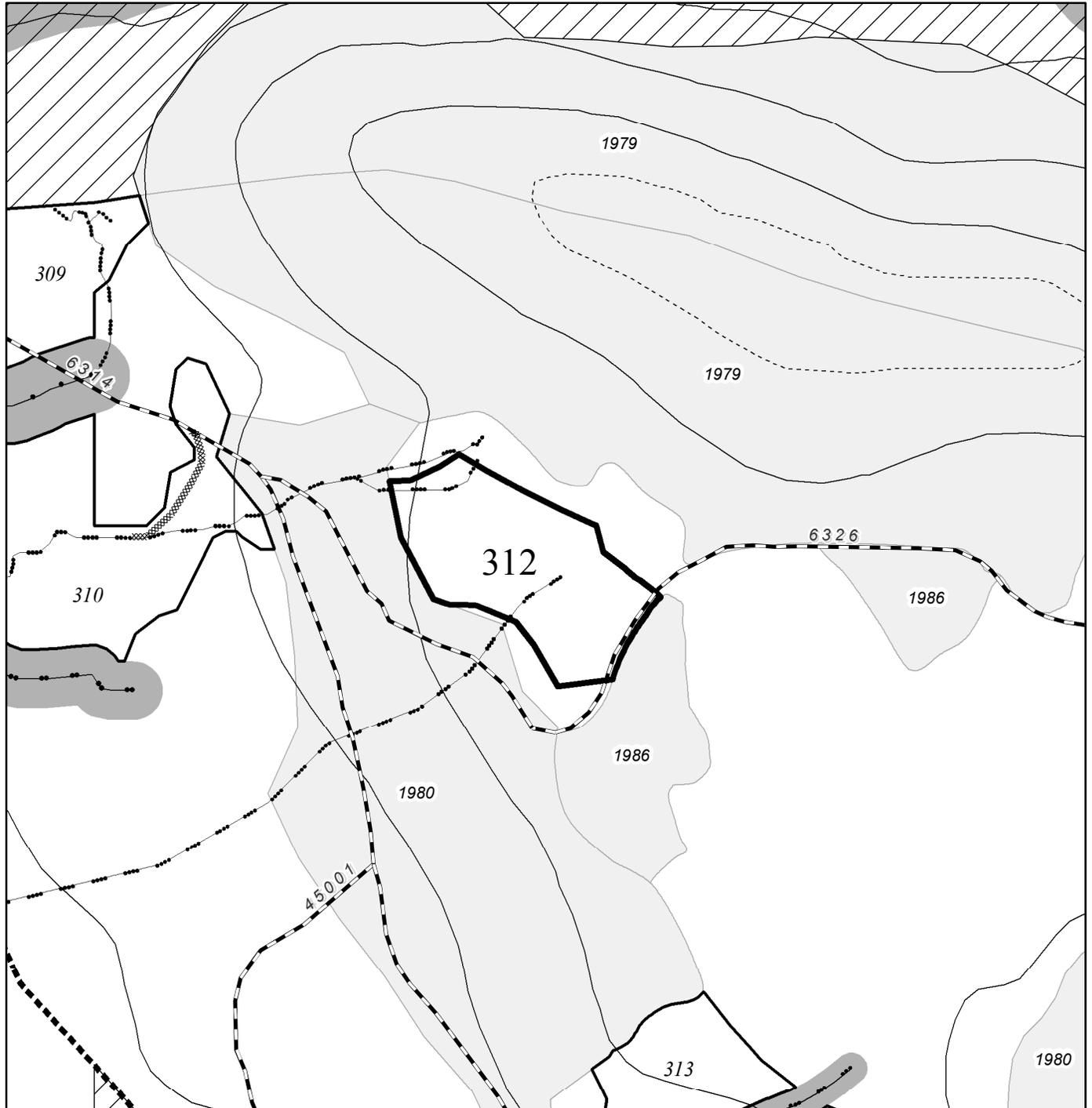
Resource Karst

Concern: 8.3 acres of karst located in unit.

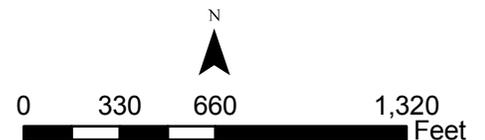
Response: Field reconnaissance found no signs of karst features (sink holes or caves); therefore the karst area is classified as low vulnerability and requires no special management (Forest Plan 2008, Standard and Guidelines, pg 4-23).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Soils, Wetlands, Heritage, Wildlife, Vegetation

Central Kupreanof Selected Alternative - Unit 312



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 313	Unit Size (acres): 39	Alternative: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 559
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30% area retention

Logging Method/Transportation: Shovel / existing NFS road and temporary road construction

Resource Concerns & Responses

Resource **Watershed/Fisheries**

Concern: Stream 1 is Class III HC3.
Stream 2 is Class IV HC2.
Streams 3 and 4 are Class IV HC1.

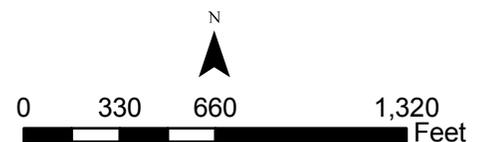
Response: Stream 1: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris. (BMP 13.9, 13.16).
Streams 2-4: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required.
Remove logging debris from stream. (BMP 13.9, 13.16).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Soils, Wetlands, Karst, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 313



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 314	Unit Size (acres): 120	Alternative: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 1,876
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30% area retention

Logging Method/Transportation: Shovel / existing NFS road, new NFS road, and temporary road construction

Resource Concerns & Responses

Resource **Watershed/Fisheries**

Concern: Stream 1 is a Class II HC2.
Stream 2 is a Class IV HC2.
Stream 3 is a Class I MM1.
Stream 4 is a Class IV MM1.
Stream 5 is a Class IV HC0.
Stream 6 is a Class IV PA1.
Stream 7 is a Class I FP3.
Stream 8 is a Class I MM1.

Response: Stream 1: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater. (BMPs 12.6, 12.6a).
Streams 2 and 4-6: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMP 13.9, 13.16).
Streams 3 and 8: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel) (BMPs 12.6, 12.6a, 13.9, 13.16).
Stream 7: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 130 feet of channel) (BMPs 12.6, 12.6a, 13.9, 13.16).

Resource **Sensitive/Rare Plants**

Concern: Found sensitive plant between units 314 and 315 – Wright filmy fern (*Hymenophyllum wrightii*). (This species was removed from the Sensitive Species List in February 2009.)

Response: Plant is protected within stream riparian buffer.

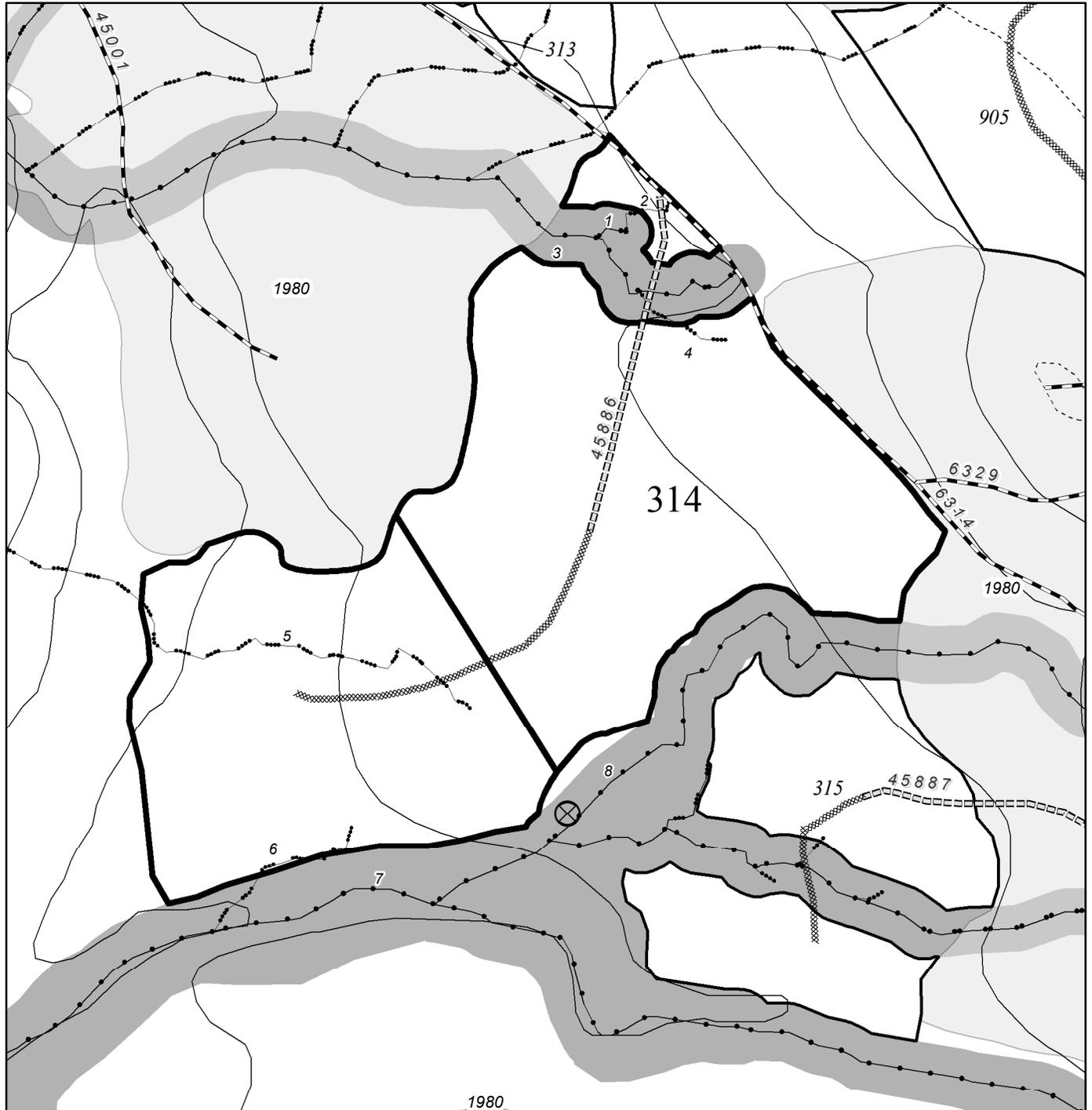
Resource **Vegetation**

Concern: Opening size is larger than 100 acres.

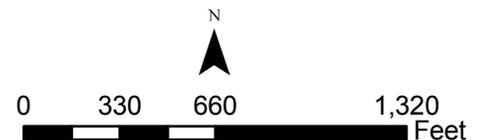
Response: Change to two-aged management silviculture system and retain 20 percent of the basal area to eliminate acreage size limitation.

No Concerns: Scenery, Recreation, Soils, Wetlands, Karst, Wildlife, Heritage

Central Kupreanof Selected Alternative - Unit 314



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 315	Unit Size (acres): 33	Alternative: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 706
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road, new NFS road, and temporary road construction

Resource Concerns & Responses

Resource **Watershed/Fisheries**

Concern: Streams 1 and 2 are Class I MM1.
Stream 3 is Class III MM0.
Stream 4 is Class IV MM0.
Streams 5 and 6 are Class IV HC0.
Stream 7 is Class I FP3 and MM1.

Response: Streams 1, 2, 3, and MM1 portion of 7: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel) (BMPs 12.6, 12.6a, 13.9, 13.16).
Streams 4, 5, and 6: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMP 13.9, 13.16).
Stream 7: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 130 feet of channel) (BMPs 12.6, 12.6a, 13.9, 13.16).

Concern: Temporary road crosses Class II stream.

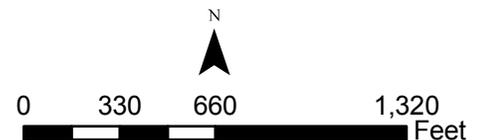
Response: Stream crossing will be accomplished with a log stringer bridge to maintain fish passage and minimize stream channel disturbance (BMPs 14.14, 14.17).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Soils, Wetlands, Karst, Heritage, Vegetation, Wildlife

Central Kupreanof Selected Alternative - Unit 315



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 316	Unit Size (acres): 14	Alternative: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 296
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road

Resource Concerns & Responses

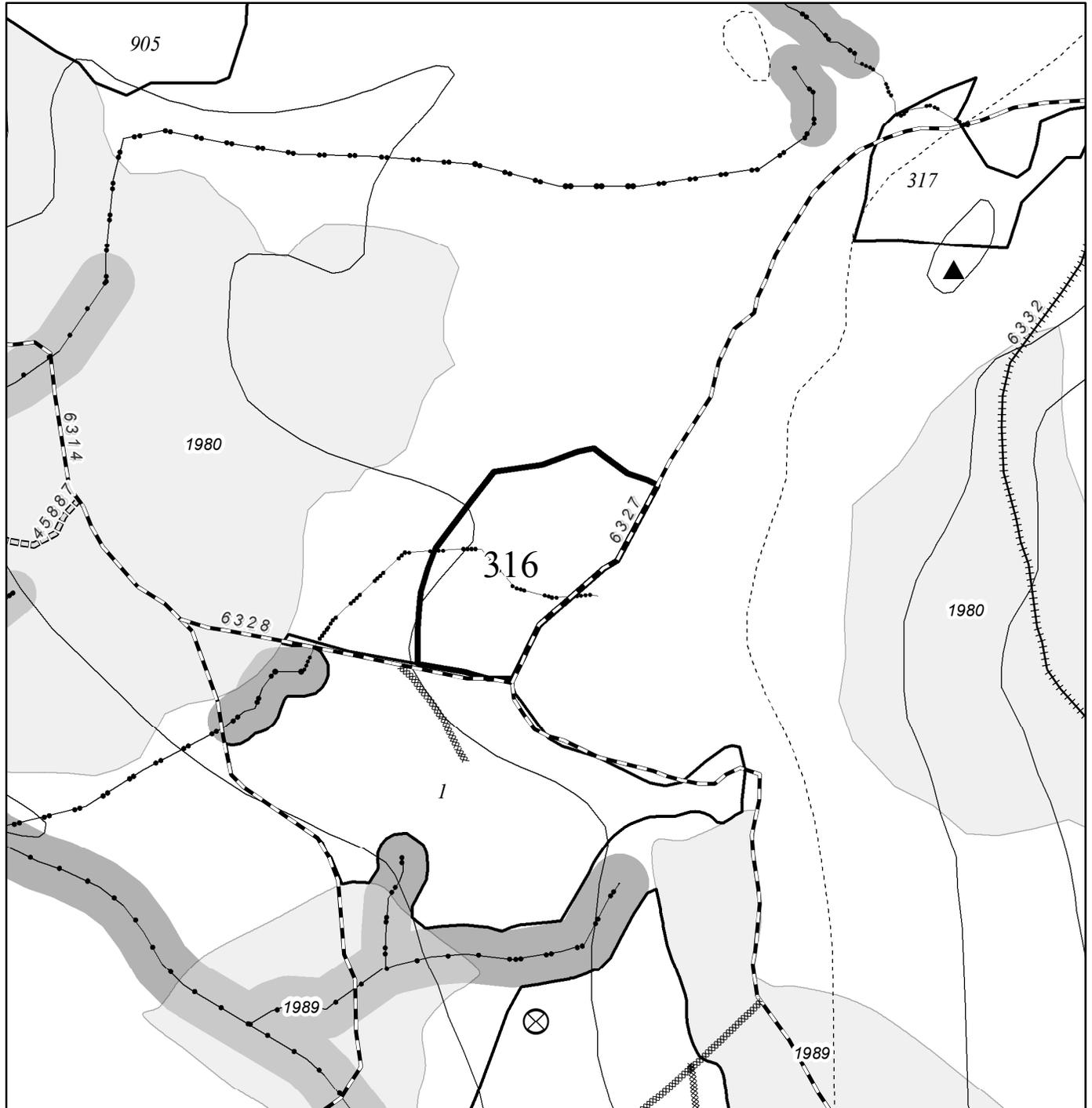
Resource **Watershed/Fisheries**

Concern: Stream is Class IV HC0.

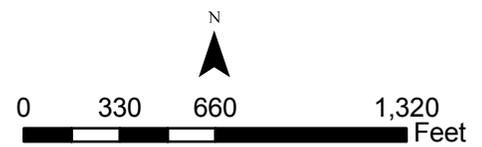
Response: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Soils, Karst, Wetlands, Heritage, Wildlife, Vegetation

Central Kupreanof Selected Alternative - Unit 316



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 317	Unit Size (acres): 10	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 198
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Stream is Class IV MM0

Response: “C” protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream. (BMP 13.9, 13.16).

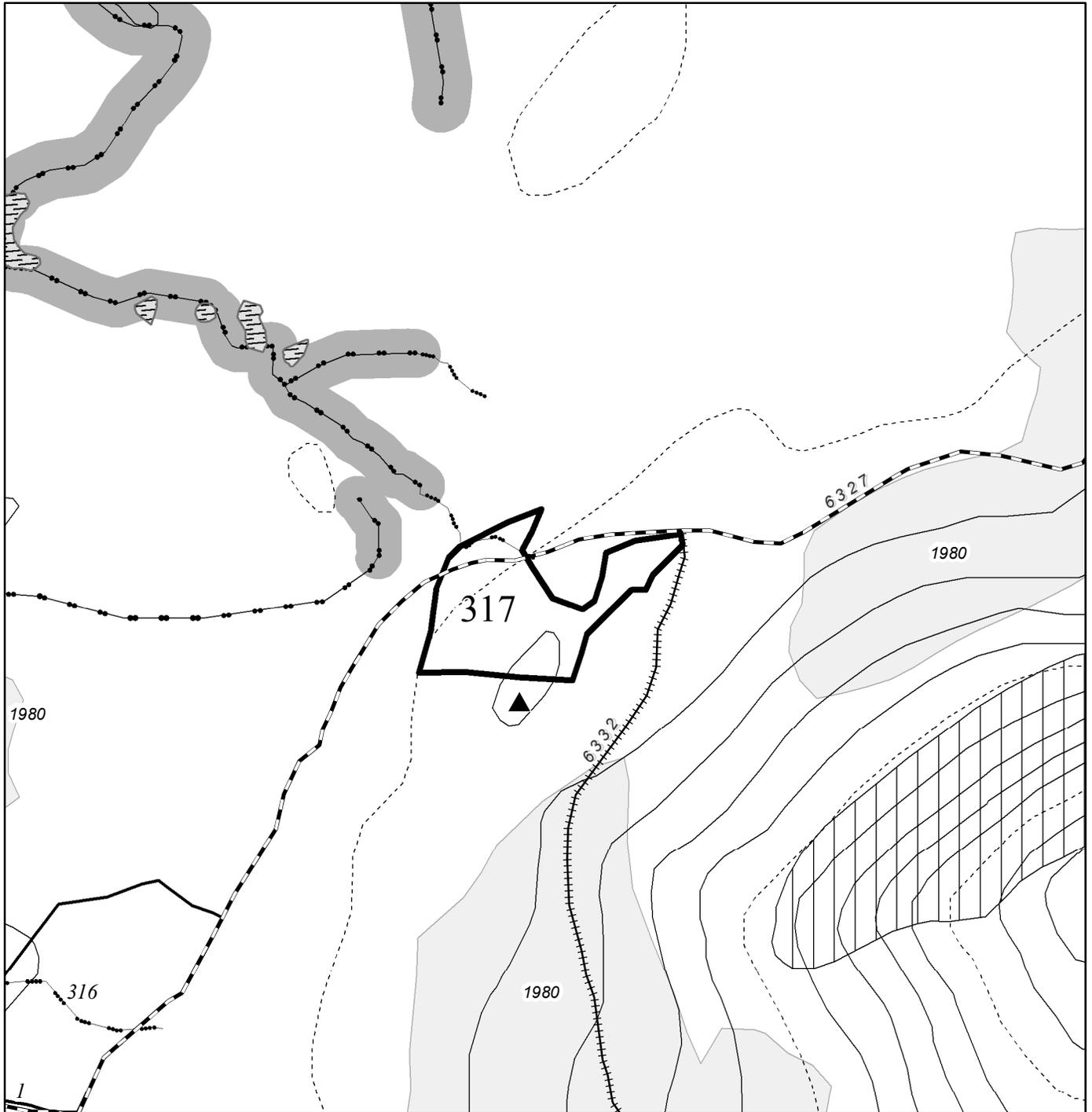
Resource Sensitive/Rare Plants

Concern: Found rare plant near unit – Broad lipped twayblade (*Listera convallarioides*).

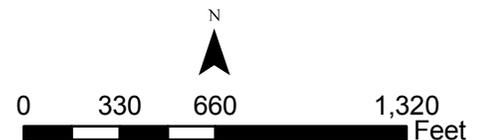
Response: Falling timber into unit will protect population.

No Concerns: Scenery, Recreation, Soils, Wetlands, Karst, Heritage, Wildlife, Vegetation

Central Kupreanof Selected Alternative - Unit 317



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| Rare Plants | |



Central Kupreanof Unit Card Narrative		
Unit # 318	Unit Size (acres): 47	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 1021
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road and reconstructed NFS road

Resource Concerns & Responses

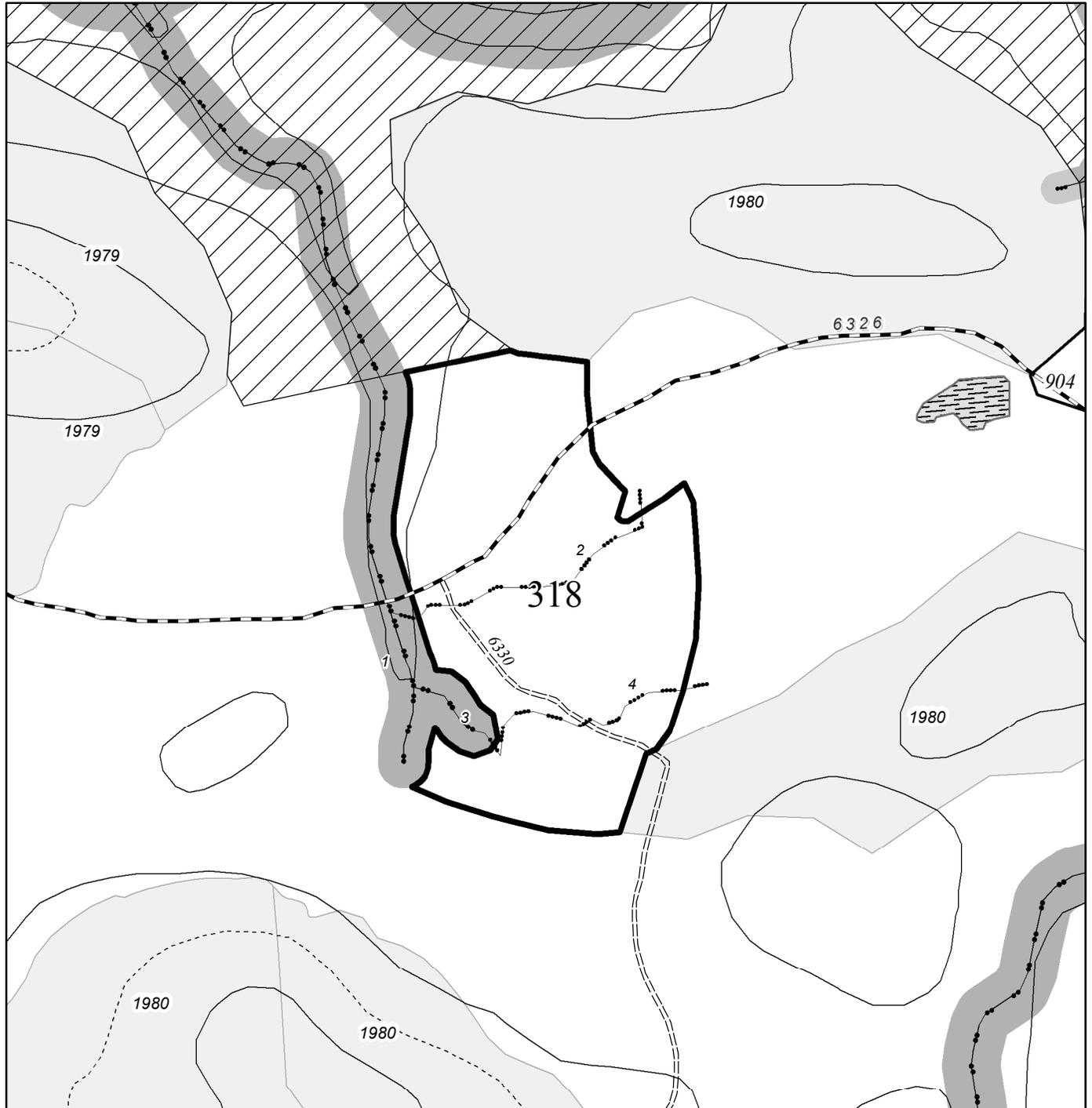
Resource **Watershed/Fisheries**

Concern: Streams 1 and 3 are Class II HC3.
 Stream 2 is Class IV HC1.
 Stream 4 is Class IV HC3.

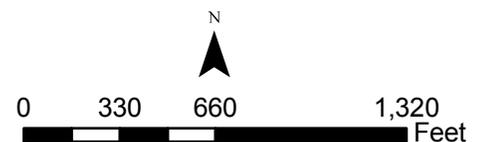
Response: Streams 1 and 3: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 12.6a).
 Streams 2 and 4: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required.
 Remove logging debris from stream (BMPs 13.9, 13.16).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Soils, Karst, Wetlands, Vegetation, Wildlife, Heritage

Central Kupreanof Selected Alternative - Unit 318



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 320	Unit Size (acres): 27	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 281
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30 percent area retention

Logging Method/Transportation: Shovel / existing NFS road

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Stream 1 is Class II HC1.
Streams 2 and 3 are Class IV HC5.
Stream 4 is Class IV HC3.

Response: Stream 1: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater (BMPs 12.6, 12.6a).
Streams 2, 3, and 4: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMP 13.9, 13.16).

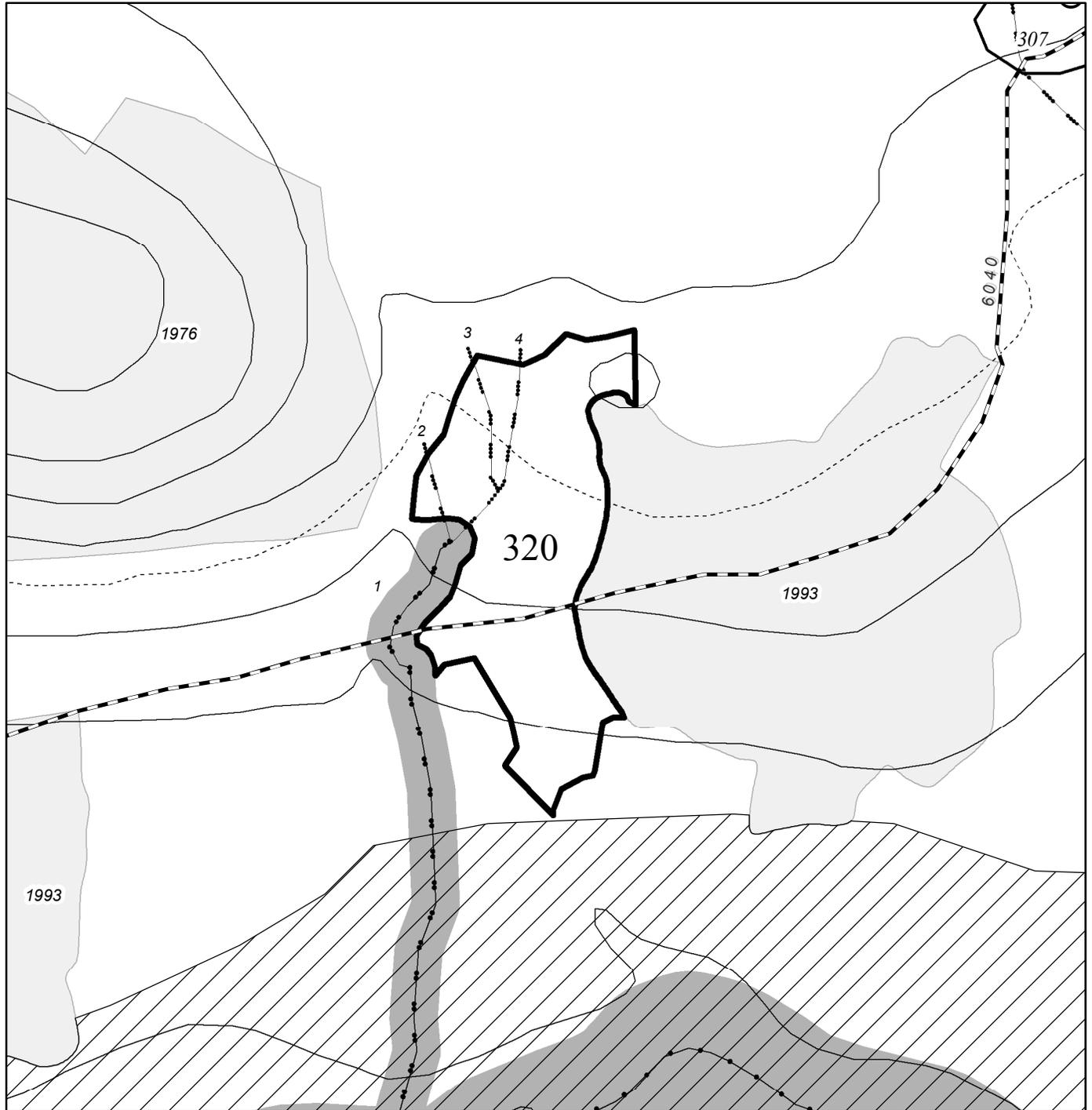
Resource Wetlands

Concern: Approximately 7 acres of harvest is proposed on forested wetland (BMP 12.5). Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

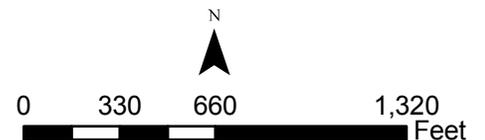
Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit (BMPs 13.2, 13.9).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Soils, Karst, Wildlife, Heritage, Vegetation

Central Kupreanof Selected Alternative - Unit 320



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 501	Unit Size (acres): 44	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 756
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30 percent area retention

Logging Method/Transportation: Cable / existing NFS road

Resource Concerns & Responses

Resource **Watershed/Fisheries**

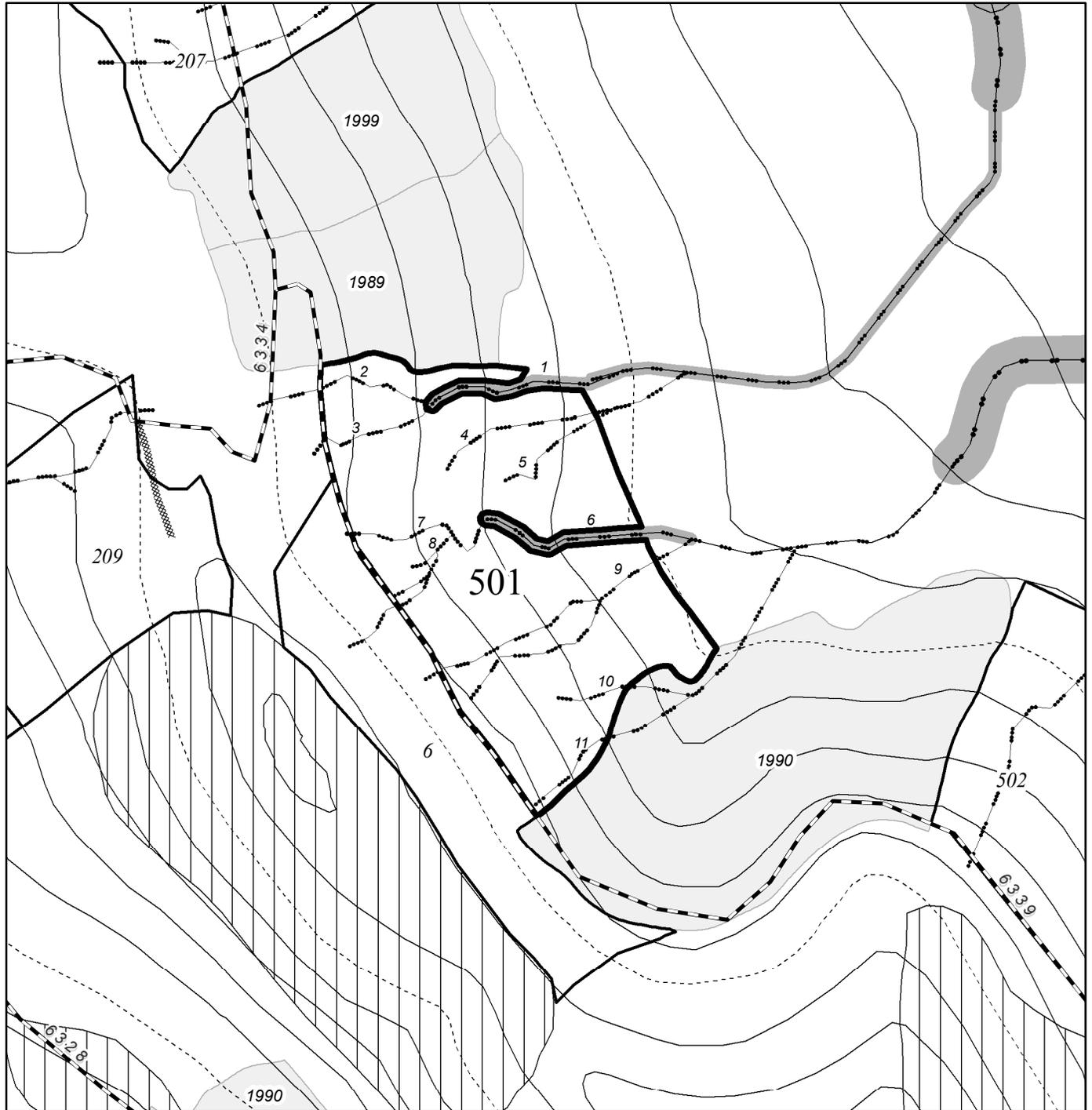
Concern: Streams 1 and 6 are Class III HC5.

Streams 2-5 and 7-11 are Class IV HC5.

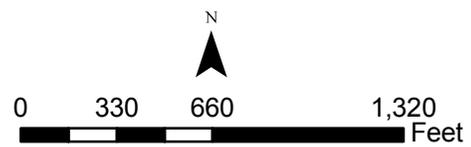
Response: Streams 1 and 6: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris. (BMP 13.9, 13.16).
Streams 2-5 and 7-11: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).

No Concerns: Scenery, Karst, Wetlands, Recreation, Sensitive/Rare Plants, Soils, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 501



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 502	Unit Size (acres): 66	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 1,256
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30 percent area retention

Logging Method/Transportation: Cable / existing NFS road

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Streams 1, 2 and 4 are Class IV HC5.

Stream 3 is Class III HC5.

Response: Streams 1, 2, and 4: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream (BMPs 13.9, 13.16).
Stream 3: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris (BMPs 13.9, 13.16).

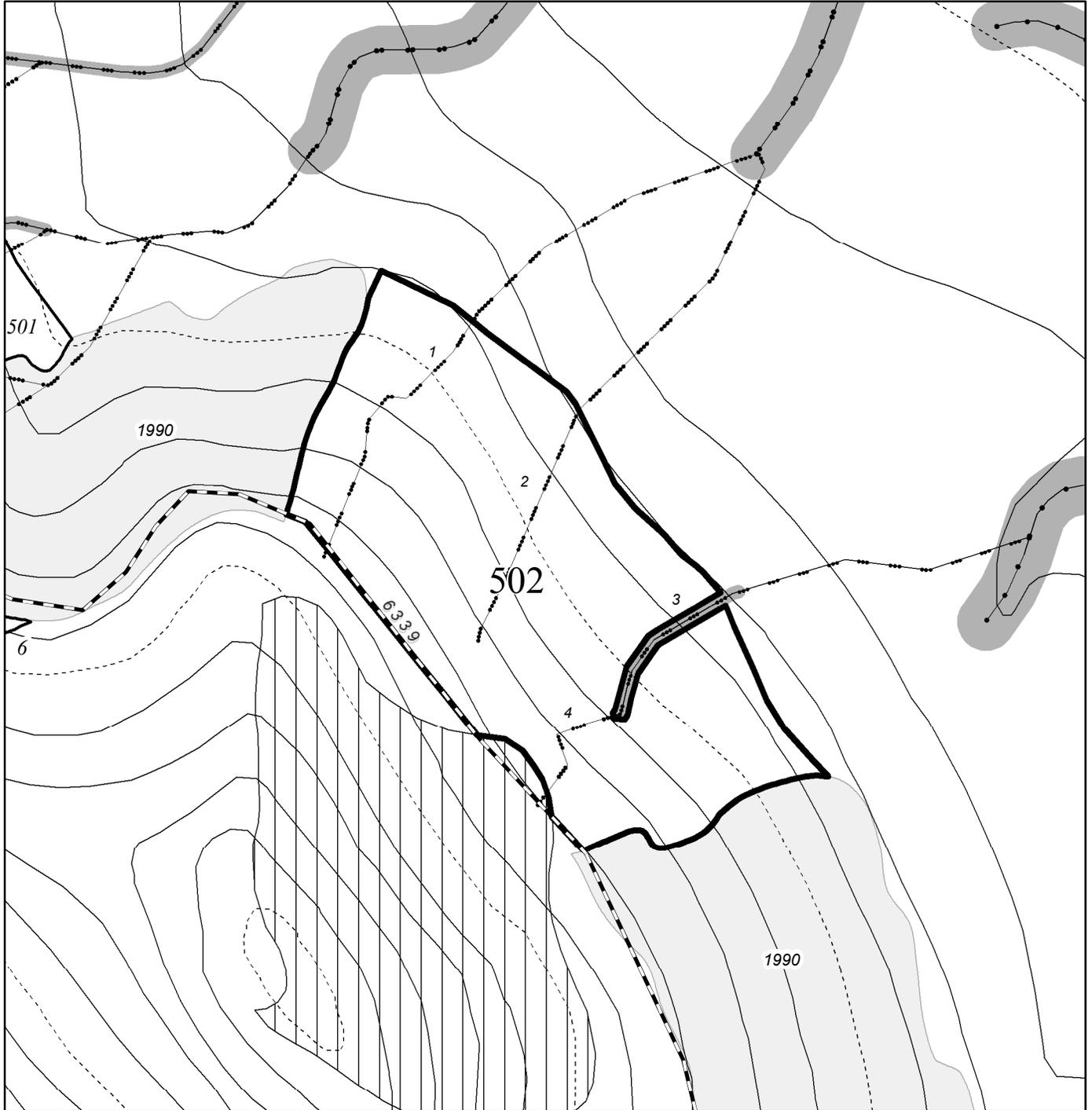
Resource Soils

Concern: Southwestern portion of originally proposed unit contained MMI-4 soils.

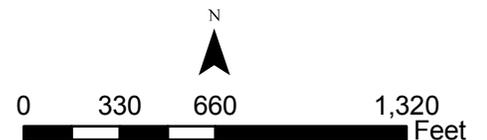
Response: The unit boundary was modified to exclude these soils (BMP 13.5).

No Concerns: Scenery, Recreation, Karst, Wetlands, Sensitive/Rare Plants, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 502



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | Project Area Boundary |
| Proposed Temporary Roads | 100-ft Contour Interval |
| Open NFS Roads | 500-ft Contour Interval |
| Closed Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 900	Unit Size (acres): 33	Alternative: Selected
Aerial Photo:	VCU: 4290	Volume (mbf): 791
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Cable / existing NFS road and reconstructed NFS road

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Streams 1, 2, 3, and 4 are Class IV HC5.
Stream 5 is Class I MM1.

Response: Streams 1, 2, 3, and 4: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream. (BMP 13.9, 13.16).
Stream 5: No timber harvest within the greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel (BMPs 12.6, 12.6a, 13.9, 13.16).

Resource Sensitive/Rare Plants

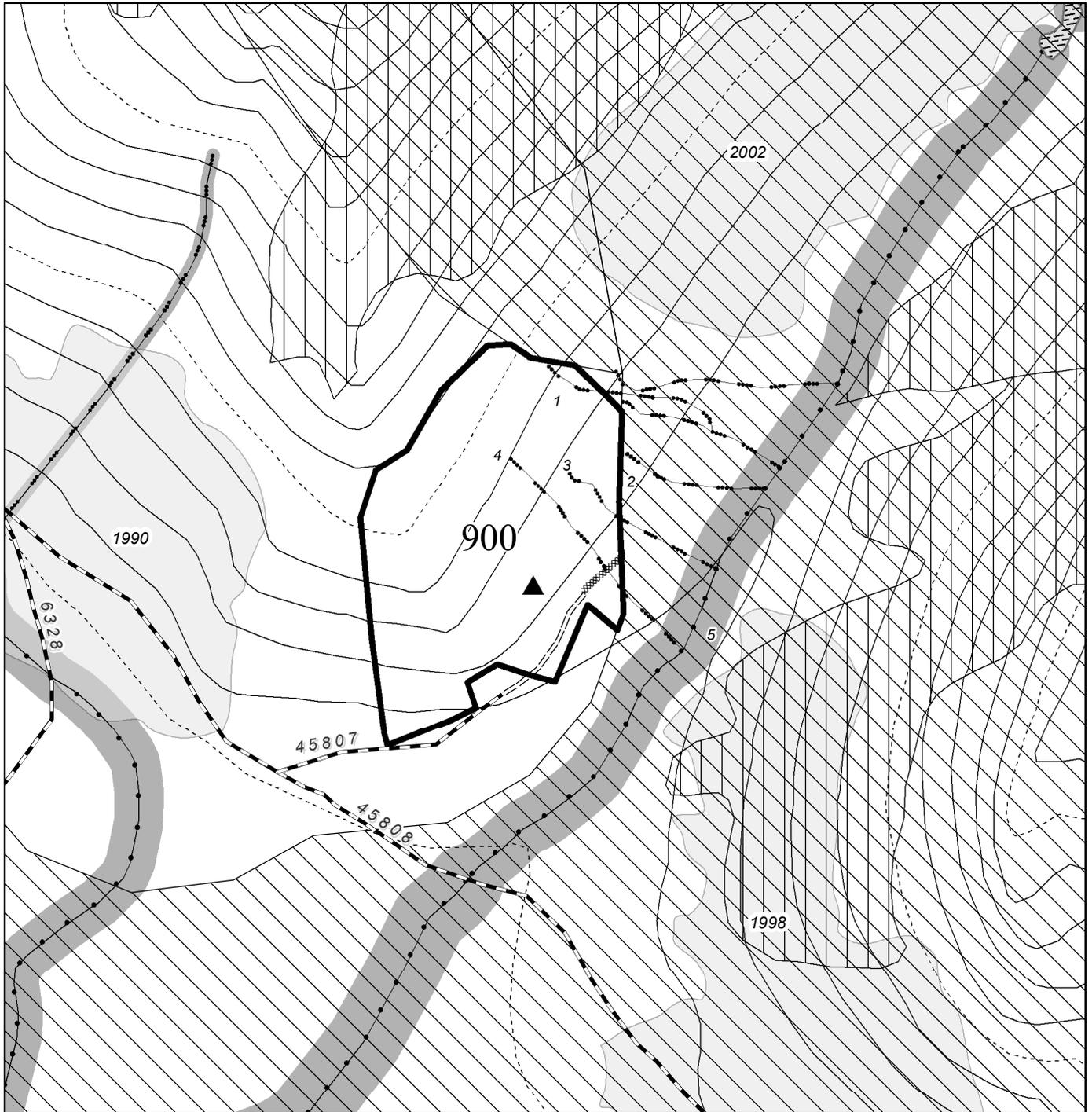
Concern: Found rare plant in unit – Broad leaved twayblade (*Listera convallarioides*).
Response: No protection measures proposed.

Resource Soils

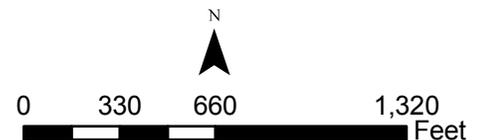
Concern: Portions of unit along northwestern and western boundary exceed 72 percent slope.
Response: Soil Stability Investigation Report prescribes partial suspension in the portion of the unit that exceeds 72 percent slope in order to meet soil resource and slope stability objectives.

No Concerns: Scenery, Recreation, Wetlands, Karst, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 900



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Roadless | Stream Value Class II |
| Riparian Management Area | Stream Value Class III |
| Very High Hazard Soils (MMI-4) | Stream Value Class IV |
| Lakes | 100-ft Contour Interval |
| Managed Stands | 500-ft Contour Interval |
| Closed Roads | Project Area Boundary |
| Proposed Temporary Roads | Sensitive Plants |
| Open NFS Roads | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 901	Unit Size (acres): 39	Alternative: Selected
Aerial Photo:	VCU: 4271	Volume (mbf): 858
Land Use Designation: Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel and cable, existing NFS road, new NFS road and temporary road construction

Resource Concerns & Responses

Resource **Watershed/Fisheries**

Concern: Streams 1 and 3-6 are Class IV HC5.
Stream 2 is Class IV HC6.
Stream 7 is Class III HC6.
Stream 8 is Class II HC1.

Response: Streams 1-6: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream.(BMPs 13.9, 13.16).
Stream 7: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris (BMPs 13.9, 13.16).
Stream 8: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater. (BMPs 12.6, 12.6a).

Resource **Scenery**

Concern: Unit visible in the middleground distance from Big John Bay.

Response: With 10 percent area retention in the even-aged management portion of the unit and 60 percent basal area retention in the uneven-aged management, portion of the unit meets Low Scenic Integrity Objective.

Resource **Soils**

Concern: MMI-4 soils in the northwestern portion of unit.

Response: Soil Stability Investigation Report prescribes partial suspension in the MMI-4 portion of the unit in order to meet soil resource and slope stability objectives.

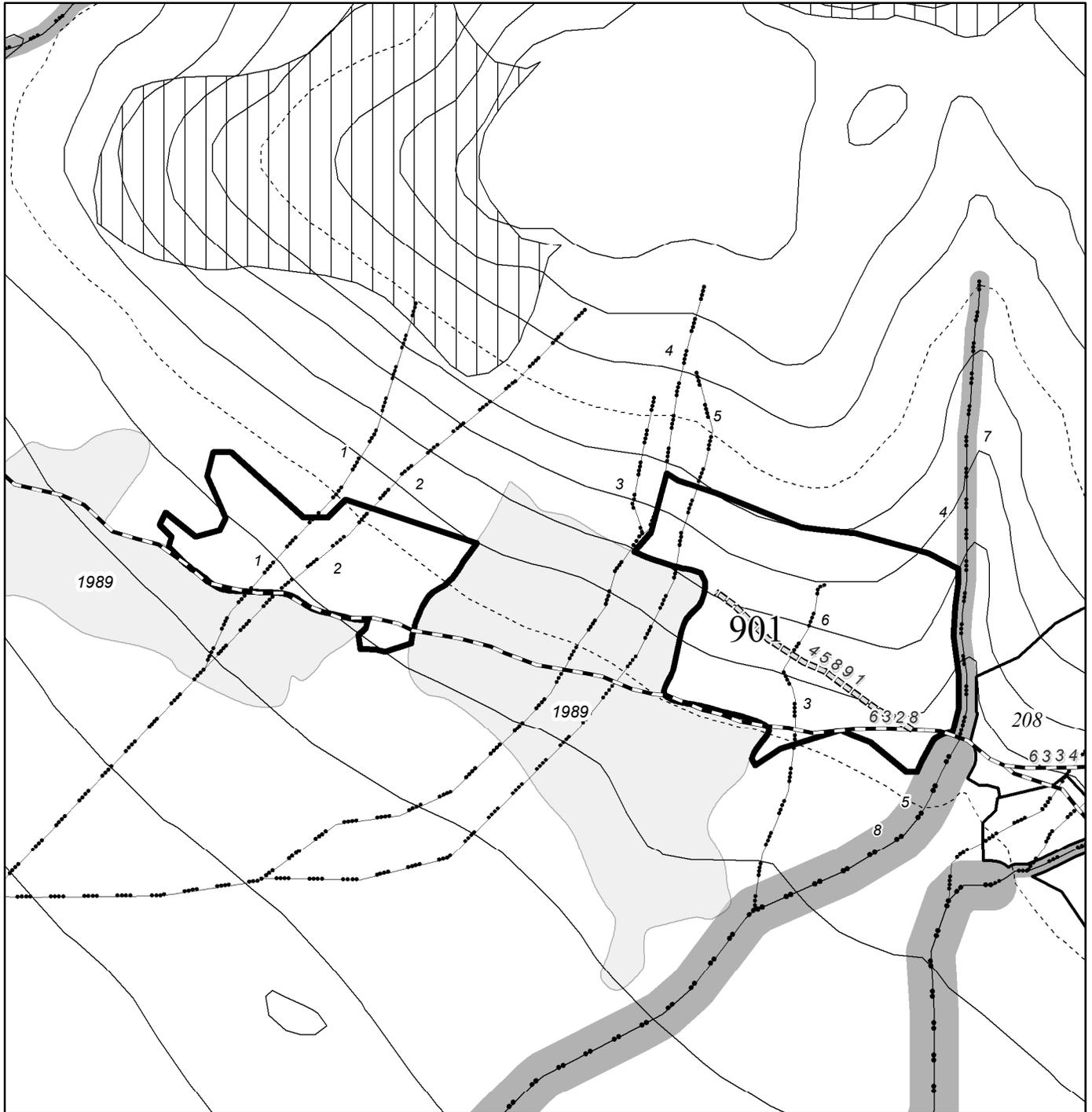
Resource **Wetlands**

Concern: Approximately 3 acres of harvest is proposed on forested wetland (BMP12.5). Shovel yarding may cause rutting due to lack of bearing strength on poorly drained organic soils.

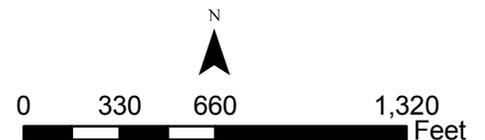
Response: Operate shovel on puncheon or slash mattress to provide adequate bearing strength on the higher areas of the unit (BMP 13.2, 13.9).

No concerns: Recreation, Sensitive/Rare Plants, Karst, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 901



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Road |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | 100-ft Contour Interval |
| Closed Roads | 500-ft Contour Interval |
| Proposed Temporary Roads | Project Area Boundary |
| Open NFS Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 903	Unit Size (acres): 36	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 544
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Two-aged management, clearcut with 30% area retention

Logging Method/Transportation: Shovel and cable / existing NFS road and new NFS road construction

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Streams 1 and 3 are Class IV HC5.
Streams 2 and 4 are Class IV HC2.
Streams 5, 7, 9, and 10 are Class IV HC0.
Stream 6 is Class III HC6.
Stream 8 is Class IV HC6.

Response: Streams 1-5 and 7-10: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream. (BMP 13.9, 13.16).
Stream 6: "B" protection. No harvest within the v-notch, directional felling, full suspension, immediate removal of logging debris. (BMP 13.9, 13.16).

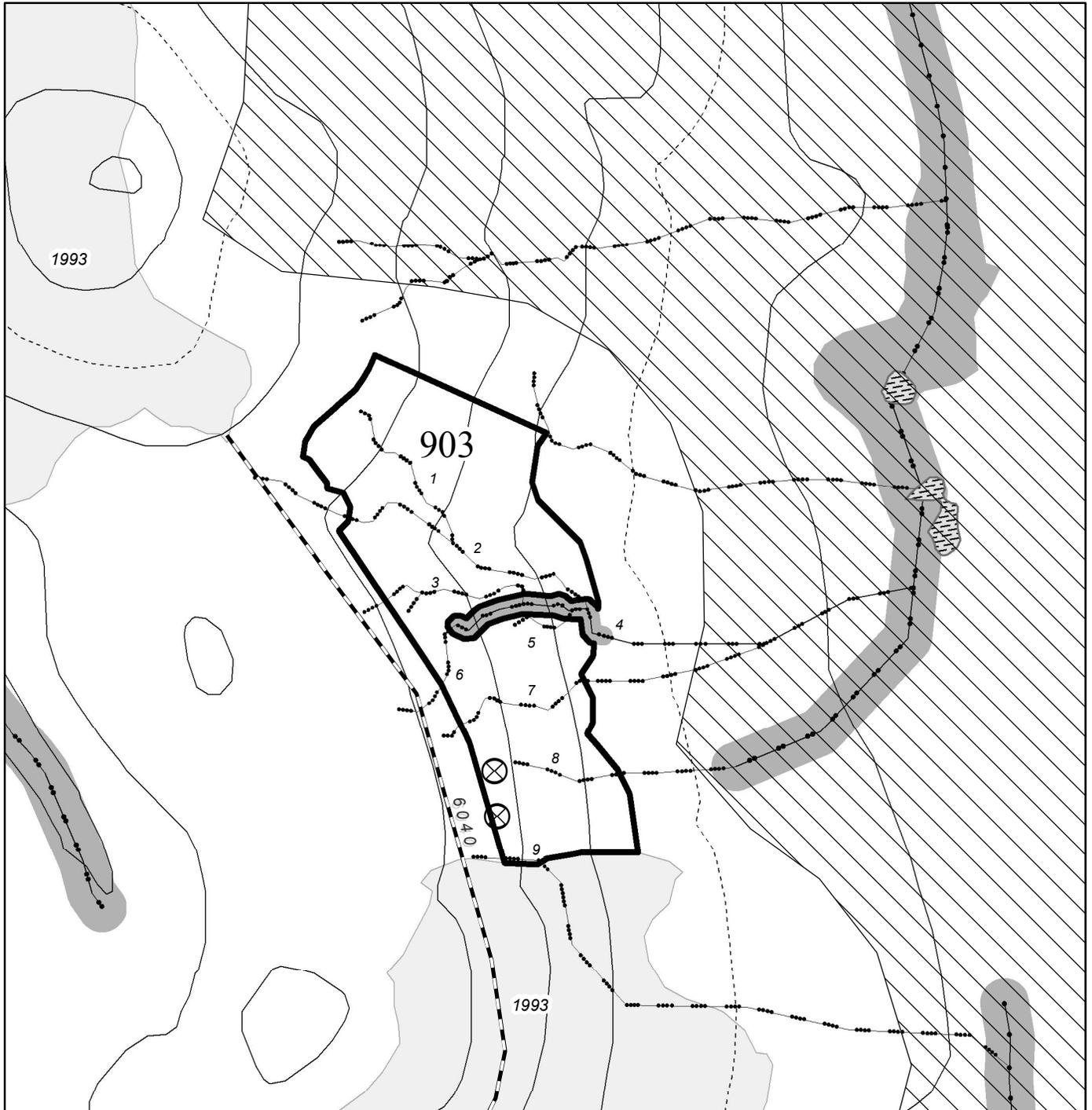
Resource Sensitive/Rare Plants

Concern: Found two populations of sensitive plant in unit – Wright filmy fern (*Hymenophyllum wrightii*). *This species was removed from the Sensitive Species List in February 2009.*

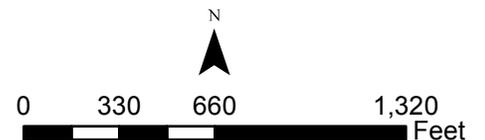
Response: No protection measures proposed.

No Concerns: Scenery, Recreation, Soils, Wetlands, Karst, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 903



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Road |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | 100-ft Contour Interval |
| Closed Roads | 500-ft Contour Interval |
| Proposed Temporary Roads | Project Area Boundary |
| Open NFS Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative		
Unit # 904	Unit Size (acres): 12	Alternative: Selected
Aerial Photo:	VCU: 4260	Volume (mbf): 300
Land Use Designation: Timber Production		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / existing NFS road

Resource Concerns & Responses

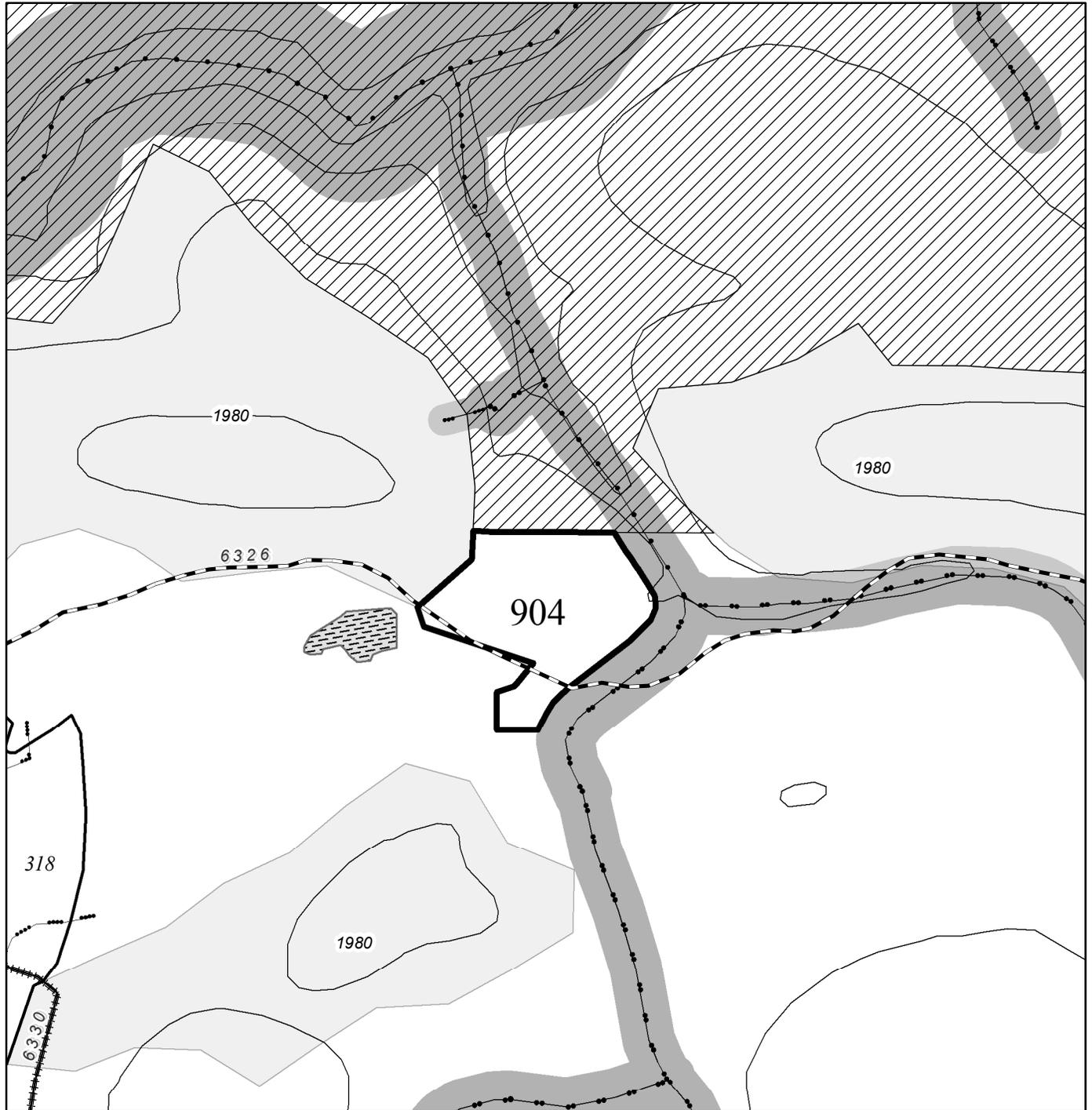
Resource Watershed/Fisheries

Concern: Stream 1 is Class I HC3.
Stream 2 is Class II MM1.

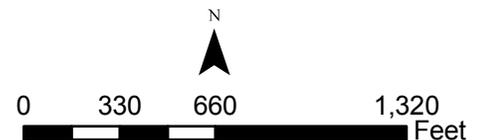
Response: Stream 1: No timber harvest within 100 feet of the stream or the top of the v-notch, whichever is greater. (BMPs 12.6, 12.6a).
Stream 2: No timber harvest within the RMA (greatest of the flood plain, riparian vegetation or soils, riparian associated wetland fens, or 120 feet from channel.(BMPs 12.6, 12.6a, 13.9, 13.16).

No Concerns: Scenery, Recreation, Sensitive/Rare Plants, Soils, Wetlands, Karst, Wildlife, Vegetation, Heritage

Central Kupreanof Selected Alternative - Unit 904



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Road |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | 100-ft Contour Interval |
| Closed Roads | 500-ft Contour Interval |
| Proposed Temporary Roads | Project Area Boundary |
| Open NFS Roads | Sensitive Plants |
| | Rare Plants |



Central Kupreanof Unit Card Narrative

Unit # 905	Unit Size (acres): 77	Alternative: Selected
Aerial Photo:	VCU: 4260 & 4271	Volume (mbf): 1,668
Land Use Designation: Timber Production & Modified Landscape		

Existing Stand Condition: Old-growth

Silvicultural Prescription: Even-aged management, clearcut

Logging Method/Transportation: Shovel / reconstructed NFS road and temporary road construction

Resource Concerns & Responses

Resource Watershed/Fisheries

Concern: Stream is Class IV HC1.

Response: "C" protection. Directional felling if feasible. Full suspension or split yard away from streams if feasible, a minimum of partial suspension is required. Remove logging debris from stream. (BMP 13.9, 13.16).

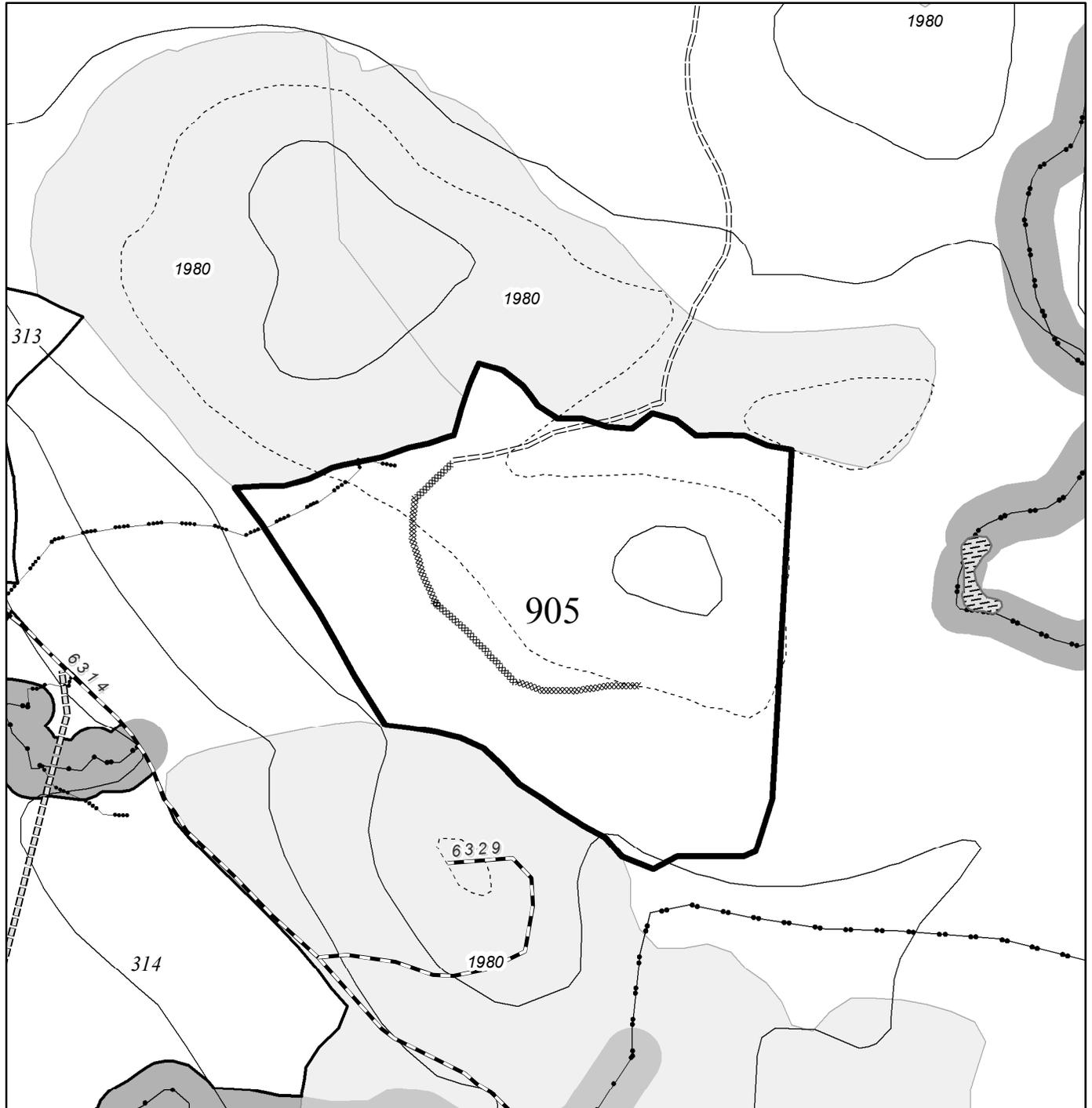
Resource Scenery

Concern: Unit visible in the middleground distance from Big John Bay.

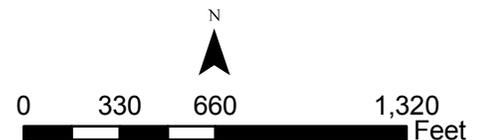
Response: Unit meets Low Scenic Integrity Objective.

No Concerns: Recreation, Sensitive/Rare Plants, Soils, Wetlands, Karst, Wildlife, Heritage, Vegetation

Central Kupreanof Selected Alternative - Unit 905



- | | |
|--------------------------------|-------------------------|
| Selected Unit | Proposed NFS Roads |
| Adjacent Selected Unit | Reconstructed Roads |
| Old-growth Reserve | Stream Value Class I |
| Riparian Management Area | Stream Value Class II |
| Very High Hazard Soils (MMI-4) | Stream Value Class III |
| Lakes | Stream Value Class IV |
| Managed Stands | 100-ft Contour Interval |
| Closed Roads | 500-ft Contour Interval |
| Proposed Temporary Roads | Project Area Boundary |
| Open NFS Roads | Sensitive Plants |
| | Rare Plants |



Backside of map