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Amendment to the Air Quality Report

Westside Fire Recovery Project

Happy Camp Oak Knoll and Salmon/Scott River Ranger Districts,
Klamath National Forest
Siskiyou County, California

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I. Summary of Modifications between Draft and Final EIS

The report and DEIS stated that Siskiyou County is in non-attainment for 8-hour ozone. In fact, Siskiyou County is currently in attainment for all criteria pollutants including 8-hour ozone. So there is no Conformity Rule analysis is required. The nitrogen oxide analysis (a pollutant related to ozone formation) was remodeled for this addendum for comparison purposes between the DEIS and the FEIS only.

A clarification is needed to describe the number of years burning will take place. It is assumed based on discussion with the fire and fuels specialists on the project that burning will take place over five years which translates into 20% of the burning occurring in any given year.

Naturally occurring asbestos is addressed in the Geology report addendum.

There were changes to the assumptions made by the analysis to better reflect the effects to nitrogen oxide and greenhouse gas emissions.

- The analysis no longer assumes that prescribed fire will only occur in the spring and fall (DEIS page 242 and Air Quality Report page 7). Interdisciplinary review by the fire and fuels specialists prompted the removal of this assumption. For this project, prescribed fire can occur anytime during the year even in the fire season.
- The analysis separates underburning from pile burning. It assumes that in units where pile burning is prescribed, piles will occur on about 20% of the area. Underburning assumes that prescribed fire occurs throughout the entire unit. This refinement of the analysis is due to the increase in specificity of the prescriptions in the fuels treatments in the salvage and site preparation units.

The changes in the prescribed fire analyzed between the DEIS and the FEIS are in Table 1. The total hazardous fuels treatment acres analyzed for the FEIS is the acres of prescribed burn plus 20% of the acres of pile burning. Due to caveats in the emissions model the prescribed fire has to be categorized as either underburn or pile burning. The acres in Table 1 include any acre where underburning is prescribed either as the primary treatment (such as underburn blocks) or as a secondary treatment to reduce fuels such as in salvage units and site preparation and plant. Pile burning is also proposed in areas as a primary or secondary fuels reduction treatment in some of the wildland urban interface, fuels management zones, roadside fuels treatments, salvage units and within site preparation and planting units. The assumptions for mobile source emission remain the same as described in Chapter 3 of the DEIS and the Air Quality Report. This is about 26 tons per year of nitrogen oxide and 1,026 metric tons of carbon dioxide equivalents for alternatives 2, 3, and 4. For alternative 5, the nitrogen oxide emissions are about 8 tons per year and the carbon dioxide equivalent emissions will be about 307 metric tons per year from mobile sources.

Table 1: Summary of changes in acres of prescribed fire analyzed for nitrogen oxide and greenhouse gas emissions between the DEIS and the FEIS.

Alternative	Acres for DEIS	Acres for FEIS Underburn	Acres for FEIS Pile Burning	Total Prescribed Fire Acres Analyzed for FEIS
Alternative 2	16,245	10,770	28,000	16,125
Alternative 3	16,245	10,770	27,135	15,950
Alternative 4	16,245	10,770	26,600	15,850
Alternative 5	17,455	10,770	17,000	13,925

Table 2: Comparison of emissions from DEIS analysis to FEIS analysis by alternative.

Alternative	Nitrogen Oxide Emissions in DEIS (tons/year)	Nitrogen Oxide Emissions in FEIS (tons/year)	Carbon Dioxide Equivalents in DEIS (metric tons/year)	Carbon Dioxide Equivalents in FEIS (metric tons/year)
Alternative 2	34	34	46,525	46,155
Alternative 3	34	34	46,525	45,706
Alternative 4	34	34	46,525	45,231
Alternative 5	17	15	49,180	39,290

Fugitive Dust

A fugitive dust analysis was completed per the request of the Siskiyou County Air Pollution Control District (see response to comments section of FEIS). Fugitive dust is dust from a non-point source that is primarily from disturbing sediment or native substrate. Fugitive dust is measured as particulate matter as either PM_{10} (particulate matter less than 10 micrometers) or $PM_{2.5}$ (particulate matter less than 2.5 micrometers). Since PM_{10} includes $PM_{2.5}$ only PM_{10} is modelled for this analysis. The primary source of fugitive dust for the Westside Fire Recovery project is hauling logs on unpaved roads. Siskiyou County is in attainment for PM_{10} so there are no conformity regulations regarding the emissions. This analysis is for disclosure and response to public comment only.

Analysis Indicator and Methodology

The analysis indicator for this analysis is likelihood of conformity. A high likelihood of conformity will occur if the emissions are less than 50% of the *de minimus* per year. There is a moderate likelihood of conforming if the emissions are estimated to be more than 50% but less than 90% of the *de minimus*, and a low likelihood if the emissions are estimated to be more than 90% of the *de mininus*.

The emissions factor is taken from the *USFS Desk Reference for NEPA Air Quality Analysis* (USFS 1995, page 3.2.1-1:10). The analysis assumes 5 miles is the average haul length and that every haul is a round trip. This is an assumed total 10 miles per log load on unpaved roads.

The tons of fugitive dust can be compared to the general conformity rule *de minimis* contamination. There is no *de minimis* for attainment areas (such as Siskiyou County) but this comparison allows for a quantitative analysis of Clean Air Act compliance and a relative measure of emissions. The *de minimis* for PM_{10} is 100 tons/year.

Direct and Indirect Effects for Alternative 2, 3, and 4

The fugitive dust emissions in PM_{10} emissions for the project area will be about 220 tons/year if no dust mitigation where to occur. The project does include the requirement for dust mitigation in the project design features (Chapter 2 of FEIS). Dust mitigation using water on unpaved surfaces has been shown to reduce PM10 emissions by up to 86% (Watson et al, 2000). This analysis assumes watering will reduce the emission by 80%. So as the project is designed the emissions of fugitive dust as measured by PM_{10} will be about 44 tons/ year. The likelihood of conforming is high for this project with the implementation of the dust mitigations in the project design features should conformity be required.

Cumulative Effects for Alternatives 2, 3, and 4

Siskiyou County is in attainment for PM_{10} and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required.

Direct and Indirect Effects of Alternative 5

There would be about 66 tons per year of fugitive dust created if no mitigations were applied. The project design features requiring dust suppression on log hauling routes (Chapter 2 of the FEIS) will reduce those emissions by as much as 80%. This will reduce the emissions to about 13 tons per year. Alternative 5 has a high probability of conforming should conformity be required.

Cumulative Effects for Alternative 5

Siskiyou County is in attainment for PM_{10} and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required.

II. Environmental Consequences of Modified Alternatives

Modified Alternative 2

Methods

The methods used for this analysis can be found in detail in the Air Quality Report.

Environmental Consequences

The regulations and guidance for air quality analysis for nitrogen oxide and guidance for greenhouse gas emission disclosure are at the project scale. The emissions have been broken down into fire area for comparison purposes only in this addendum.

There are 10,530 acres of underburning in modified alternative 2 and 28,025 acres of pile burning so there will be about 16,130 acres of prescribed burning completed in this alternative. It is assumed that about 20% of the total burning will occur in any given year – which is about 3,225 acres of burning for the project per year. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section). The logic used to calculate these acres is described in Section I of this addendum. This is 16,135 pounds of nitrogen oxide or about 8 tons per year. The emissions from mobile sources (log trucks, yarders, helicopters, etc.) will be about 26 tons of nitrogen oxide/year. The total emissions of nitrogen oxide are approximately 34 tons per year. This is less than 50% of the *de minimus* of 100 tons per year allowed to meet the Conformity Rule and would be very likely to conform if required.

There will be about 45,178 metric tons of carbon dioxide equivalents from prescribed fire and 1,026 metric tons of carbon dioxide equivalents from mobile sources. This is a total of 46,204 metric tons of carbon dioxide equivalents per year from this project. Cumulative effects for global climate change are the same as for alternative 2.

The fugitive dust emissions will be the same as for alternative 2 over the project area.

Project Area A: Beaver Fire

Direct Effects and Indirect Effects

There are about 35 acres of underburning and 3,710 acres of pile burning. There will be about 0.4 tons per year of nitrogen oxide emission from prescribed burning. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. The logic used to calculate these acres is described in Section I of this addendum. There will be about 5 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 5.4 tons per year of nitrogen oxide emissions.

The Beaver fire area is not adjacent to a Class I Wilderness or Inventoried Roadless Areas. The activities in this area will not affect the Regional Haze Rule or roadless character.

There will be 2,175 metric tons of carbon dioxide equivalents from prescribed burning and 168 metric tons from mobile sources for a total of 2,343 metric tons of carbon dioxide equivalents for the Beaver fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Project Area B: Happy Camp Complex

Direct Effects and Indirect Effects

There are about 1,465 acres of underburning and 21,080 acres of pile burning. There will be about 2.8 tons per year of nitrogen oxide emission from prescribed burning. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. The logic used to calculate these acres is described in Section I of this addendum. There will be about 16 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 18.8 tons per year of nitrogen oxide emissions.

Prescribed fire in the Happy Camp fire area may be noticeable in the Marble Mountain Wilderness, which is a Clean Air Act Class I Wilderness. The prescribed fire and related smoke that will affect visibility in the wilderness will occur over a few days any given year. The likelihood of making the worst haze days worse is low. The worst haze days occur during wildfires – when implementing prescribed fire is very unlikely. The likelihood that prescribed burning smoke will affect the best days over an entire year is very low. If prescribed fire should overlap with the worst haze days the haze from the wildfire would overshadow the prescribed fire haze. The project will not have any permanent effect on haze in the Class I wilderness. The likelihood of preventing the progress of the Regional Haze rule is very low.

Effects to inventoried roadless areas from smoke are described in the Air Quality Resources report. There will be 15,906 metric tons of carbon dioxide equivalents from prescribed burning and 672 metric tons from mobile sources for a total of 16,578 metric tons of carbon dioxide equivalents for the Happy Camp fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Project Area C: Whites Fire

Direct Effects and Indirect Effects

There are about 9,030 acres of underburning and 3,235 acres of pile burning. There will be about 4.8 tons per year of nitrogen oxide emission from prescribed burning. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. The logic used to calculate these acres is described in Section I of this addendum. There will be about 5 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 9.8 tons per year of nitrogen oxide emissions.

The effects to Class I wildernesses and Inventoried Roadless Areas the same as described in the Happy Camp Complex analysis above. There will be 27,095 metric tons of carbon dioxide equivalents from prescribed burning and 186 metric tons from mobile sources for a total of 27,281 metric tons of carbon dioxide equivalents for the Whites fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Compliant with Law, Policy and the Forest Plan

The Alternative is compliant with the Clean Air Act and the Conformity Rule. The project will not prevent the progress of the State of California's Regional Haze Plan as required by the Regional Haze Rule. The character of the roadless area will only be affected in the short term and there will not be any permanent change to the air-quality related characteristics.

Modified Alternative 3

The regulations and guidance for air quality analysis for nitrogen oxide and guidance for greenhouse gas emission disclosure are at the project scale. The emissions have been broken down into fire area for comparison purposes only in this addendum.

There are 11,440 acres of underburning in modified alternative 3 and 26,700 acres of pile burning so there will be about 16,780 acres of prescribed burning completed in this alternative. It is assumed that about 20% of the total burning will occur in any given year – which is about 3,355 acres of burning for the project per year. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. The logic used to calculate these acres is described in Section I of this addendum. This is 16,775 pounds of nitrogen oxide or about 8.4 tons per year. The emissions from mobile sources (log

trucks, yarders, helicopters, etc.) will be about 26 tons of nitrogen oxide/year. The total emissions of nitrogen oxide are approximately 34.4 tons per year. This is less than 50% of the *de minimus* of 100 tons per year allowed to meet the Conformity Rule and would be very likely to conform if required.

There will be about 46,985 metric tons of carbon dioxide equivalents from prescribed fire and 1,026 metric tons of carbon dioxide equivalents from mobile sources. This is a total of 48,010 metric tons of carbon dioxide equivalents per year from this project. Cumulative effects for global climate change are the same as for alternative 2.

The fugitive dust emissions will be the same as for alternative 2 over the project area.

Project Area A: Beaver Fire

Direct Effects and Indirect Effects

There are about 575 acres of underburning and 3,515 acres of pile burning. There will be about 0.6 tons per year of nitrogen oxide emission from prescribed burning. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. The logic used to calculate these acres is described in Section I of this addendum. There will be about 5 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 5.6 tons per year of nitrogen oxide emissions.

The Beaver fire area is not adjacent to a Class I Wilderness or Inventoried Roadless Areas. The activities in this area will not affect the Regional Haze Rule or roadless character.

There will be 3,578 metric tons of carbon dioxide equivalents from prescribed burning and 168 metric tons from mobile sources for a total of 3,746 metric tons of carbon dioxide equivalents for the Beaver fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Project Area B: Happy Camp Complex

Direct Effects and Indirect Effects

There are about 1,465 acres of underburning and 21,200 acres of pile burning. There will be about 2.8 tons per year of nitrogen oxide emission from prescribed burning. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. The logic used to calculate these acres is described in Section I of this addendum. There will be about 16 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 18.8 tons per year of nitrogen oxide emissions.

The effects to Class I wildernesses and Inventoried Roadless Areas is the same as for modified alternative 2.Effects to inventoried roadless areas from smoke are described in the Air Quality Resources report. There will be 15,975 metric tons of carbon dioxide equivalents from prescribed burning and 672 metric tons from mobile sources for a total of 16,646 metric tons of carbon dioxide equivalents for the Happy Camp fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Project Area C: Whites Fire

Direct Effects and Indirect Effects

There are about 9,400 acres of underburning and 1,985 acres of pile burning. There will be about 4.8 tons per year of nitrogen oxide emission from prescribed burning. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. The logic used to calculate these acres is described in Section I of this addendum. There will be about 5 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 9.8 tons per year of nitrogen oxide emissions.

The effects to Class I wildernesses and Inventoried Roadless Areas the same as described in the Happy Camp Complex analysis above. There will be 27,432 metric tons of carbon dioxide equivalents from prescribed burning and 186 metric tons from mobile sources for a total of 27,618 metric tons of carbon dioxide equivalents for the Whites fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Compliant with Law, Policy and the Forest Plan

The Alternative is compliant with the Clean Air Act and the Conformity Rule. The project will not prevent the progress of the State of California's Regional Haze Plan as required by the Regional Haze Rule. The character of the roadless area will only be affected in the short term and there will not be any permanent change to the air-quality related characteristics.

III. Summary of Environmental Consequences by Fire Area

Affected Environment

The Affected Environment for air quality indicators is the same for all three fire areas and is described in the Air Quality Resource report.

Environmental Consequences

The regulations and guidance for air quality analysis for nitrogen oxide and guidance for greenhouse gas emission disclosure are at the project scale. The analysis of the emissions for the entire project area is summarized above in Table 2.The emissions have been broken down into fire area for comparison purposes only in this addendum.

Alternative 1

The effect of no action on the air quality analysis indicators is the same for all of the fire areas and is described in the Air Quality Resource Report.

Alternative 2

Direct Effects and Indirect Effects

There will be about 8 tons of nitrogen oxide emissions per year from prescribed fire and 26 tons per year from mobile sources for a total of 34 tons per year. This is less than 50% of the *de minimus* of 100 tons per year allowed to meet the Conformity Rule and would be very likely to conform if required.

There will be about 45,130 metric tons of carbon dioxide equivalents from prescribed fire and 1026 metric tons of carbon dioxide equivalents from mobile sources. This is a total of 46,155 metric tons of carbon dioxide equivalents per year from this project.

There will be about 220 tons per year of fugitive dust that will be mitigated by project design features requiring dust mitigation on non-paved roadways. The mitigation will reduce the fugitive dust emissions to about 44 tons per year for the entire project area.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM_{10} and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required.

The total greenhouse emissions of this alternative are less than 0.005% of the annual emissions and will occur for about 5 years. Greenhouse gases are integrated into the global atmosphere. It is impossible to discern the effects of the project emissions from those of other sources. However, the emissions will be added to the existing and future global greenhouse gases and will contribute to climate change effects described in the Intergovermental Panel on Climate Change (IPCC) Fifth Assessment Report.

Project Area A: Beaver Fire

Direct Effects and Indirect Effects

There will be 35 acres of underburning and 3,625 acres of pile burning in the Beaver Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section).The logic used to calculate these acres is described in Section I of this addendum. The nitrogen oxide emissions from prescribed fire will be 0.4 per year for the Beaver Fire area. The emissions from heavy equipment (including logging trucks) will be about 5 tons per year and there are no emissions from helicopters. The total nitrogen oxide emitted from the Beaver Fire area treatments will be 5.4 per year.

There will be no effect to any inventoried roadless areas or Class I wildernesses due to their absence in the Beaver Fire area.

Greenhouse gas emission will be about 2,128 metric tons of carbon dioxide equivalents per year from prescribed burning. There will be about 168 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks) and no emissions associated with helicopters for the Beaver Fire area. This is a total of 2,296 metric tons of carbon dioxide equivalent per year from the Beaver Fire area.

There would be about 13 tons per year of fugitive dust created if no mitigations were applied. The project design features requiring dust suppression on log hauling routes (Chapter 2 of the FEIS) will reduce those emissions by as much as 80%. Which will reduce the emissions to about 2 tons per year.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM_{10} and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required.

Project Area B: Happy Camp Complex

Direct Effects and Indirect Effects

There will be 1,465 acres of underburning and 21,080 acres of pile burning in the Happy Camp Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section).The logic used to calculate these acres is described in Section I of this addendum. The nitrogen oxide emissions from prescribed fire will be 2.8 per year for the Happy Camp Fire area. The emissions from heavy equipment (including logging trucks) will be about 15 tons per year and about 0.9 tons per year from helicopter use. The total nitrogen oxide emitted from the Happy Camp Fire area treatments will be about 19 per year.

Prescribed fire in the Happy Camp fire area may be noticeable in the Marble Mountain Wilderness which is a Clean Air Act Class I Wilderness. The prescribed fire and related smoke that will affect visibility in the wilderness will occur over a few days any given year. The likelihood of making the worst haze days worse is low. The worst haze days occur during wildfires – when implementing prescribed fire is very unlikely. If prescribed fire should overlap with the worst haze days the haze from the wildfire would overshadow the prescribed fire haze. The project will not have any permanent effect on haze in the Class I wilderness. The likelihood that prescribed burning smoke will affect the best days over an entire year is very low. The likelihood of preventing the progress of the Regional Haze rule is very low.

Effects to inventoried roadless areas from smoke are described in the Air Quality Resources report.

Greenhouse gas emission will be about 15,906 metric tons of carbon dioxide equivalent per year from prescribed burning. There will be about 504 metric tons of carbon dioxide equivalent per year from heavy equipment used for treatments (including log trucks). There will be about 168

tons per year of carbon dioxide equivalents from helicopter use. This is a total of 16,578 metric tons of carbon dioxide equivalent per year from the Happy Camp Fire area.

There would be about 174 tons per year of fugitive dust created if no mitigations were applied. The project design features requiring dust suppression on log hauling routes (Chapter 2 of the FEIS) will reduce those emissions by as much as 80%or to about 35 tons per year.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM_{10} and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required.

Project Area C: Whites Fire

Direct Effects and Indirect Effects

There will be 9,030 acres of underburning and 3,235 acres of pile burning in the Whites Fire area.These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section).The logic used to calculate these acres is described in Section I of this addendum. so the nitrogen oxide emissions from prescribed fire will be 4.8 per year for the Whites Fire area. The emissions from heavy equipment (including logging trucks) will be about 5 tons per year and about 0.1 tons per year from helicopter use. The total nitrogen oxide emitted from the Whites Fire area treatments will be about 10 tons per year.

The effects to Class I wildernesses and Inventoried Roadless Areas the same as described in the Happy Camp Complex analysis above.

Effects to inventoried roadless areas from smoke are described in the Air Quality Resources report.

Greenhouse gas emission will be about 27,095 metric tons of carbon dioxide equivalent per year from prescribed burning. There will be about 168 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks). There will be about 18 tons per year of carbon dioxide equivalents from helicopter use. This is a total of 27,281 metric tons of carbon dioxide equivalent per year from the Whites Fire area.

There would be about 33 tons per year of fugitive dust created if no mitigations were applied. The project design features requiring dust suppression on log hauling routes (Chapter 2 of the FEIS) will reduce those emissions by as much as 80%. Which will reduce the emissions to about 7 tons per year.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM_{10} and will

remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required.

Alternative 3

Direct Effects and Indirect Effects

There will be about 8 tons of nitrogen oxide emissions per year from prescribed fire and 26 tons per year from mobile sources for a total of 34 tons per year. This is less than 50% of the *de minimus* of 100 tons per year allowed to meet the Conformity Rule and would be very likely to conform if required.

There will be about 44,680 metric tons of carbon dioxide equivalents from prescribed fire and 1026 metric tons of carbon dioxide equivalents from mobile sources. This is a total of 45,706 metric tons of carbon dioxide equivalents per year from this project.

There will be about 220 tons per year of fugitive dust that will be mitigated by project design features requiring dust mitigation on non-paved roadways. The mitigation will reduce the fugitive dust emissions to about 44 tons per year for the entire project area.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM_{10} and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required. Cumulative effects for global climate change are the same as for alternative 2.

Project Area A: Beaver Fire

Direct Effects and Indirect Effects

There will be 35 acres of underburning and 3,285 acres of pile burning in the Beaver Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section). The logic used to calculate these acres is described in Section I of this addendum. The nitrogen oxide emissions from prescribed fire will be 0.3 per year for the Beaver Fire area. The emissions from heavy equipment (including logging trucks) will be about 5 tons per year and there are no emissions from helicopters. The total nitrogen oxide emitted from the Beaver Fire area treatments will be 5.3 per year.

There will be no effect to any inventoried roadless areas or Class I wildernesses due to their absence in the Beaver Fire area.

Greenhouse gas emission will be about 1,938 metric tons of carbon dioxide equivalents per year from prescribed burning. There will be about 168 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks) and no emissions associated with helicopters for the Beaver Fire area. This is a total of 2,106 metric tons of carbon dioxide equivalent per year from the Beaver Fire area.

Fugitive dust emissions will be the same as for alternative 2.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report. The cumulative effects on fugitive dust emissions are the same as for alternative 2.

Project Area B: Happy Camp Complex

Direct Effects and Indirect Effects

There will be 1,465 acres of underburning and 20,675 acres of pile burning in the Happy Camp Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section). The logic used to calculate these acres is described in Section I of this addendum. so the nitrogen oxide emissions from prescribed fire will be 2.8 per year for the Happy Camp Fire area. The emissions from heavy equipment (including logging trucks) will be about 15 tons per year and about 0.9 tons per year from helicopter use. The total nitrogen oxide emitted from the Happy Camp Fire area treatments will be about 19 per year.

The effects to Class I wildernesses and Inventoried Roadless Areas is the same as for Alternative 2.

Greenhouse gas emission will be about 15,680 metric tons of carbon dioxide equivalent per year from prescribed burning. There will be about 504 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks). There will be about 168 tons per year of carbon dioxide equivalents from helicopter use. This is a total of 16,352 metric tons of carbon dioxide equivalent per year from the Happy Camp Fire area.

Fugitive dust emissions will be the same as for alternative 2.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report. The cumulative effects on fugitive dust emissions are the same as for alternative 2.

Project Area C: Whites Fire

Direct Effects and Indirect Effects

There will be 9,030 acres of underburning and 3,175 acres of pile burning in the Whites Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section). The logic used to calculate these acres is described in Section I of this addendum. So the nitrogen oxide emissions from prescribed fire will be 4.8 per year for the Whites Fire area. The emissions from heavy

equipment (including logging trucks) will be about 5 tons per year and about 0.1 tons per year from helicopter use. The total nitrogen oxide emitted from the Whites Fire area treatments will be about 10 tons per year.

The effects to Class I wildernesses and Inventoried Roadless Areas the same as described in the Alternative 2 Happy Camp Complex analysis above.

Greenhouse gas emission will be about 27,062 metric tons of carbon dioxide equivalent per year from prescribed burning. There will be about 168 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks). There will be about 18 tons per year of carbon dioxide equivalents from helicopter use. This is a total of 27,248 metric tons of carbon dioxide equivalent per year from the Whites Fire area.

Fugitive dust emissions will be the same as for alternative 2.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report. The cumulative effects on fugitive dust emissions are the same as for alternative 2.

Alternative 4

Direct Effects and Indirect Effects

There will be about 8 tons of nitrogen oxide emissions per year from prescribed fire and 26 tons per year from mobile sources for a total of 34 tons per year. This is less than 50% of the *de minimus* of 100 tons per year allowed to meet the Conformity Rule and would be very likely to conform if required.

There will be about 44,391 metric tons of carbon dioxide equivalents from prescribed fire and 845 metric tons of carbon dioxide equivalents from mobile sources. This is a total of 45,231 metric tons of carbon dioxide equivalents per year from this project.

There will be about 220 tons per year of fugitive dust that will be mitigated by project design features requiring dust mitigation on non-paved roadways. The mitigation will reduce the fugitive dust emissions to about 44 tons per year for the entire project area.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM10 and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required. Cumulative effects for global climate change are the same as for alternative 2.

Project Area A: Beaver Fire

Direct Effects and Indirect Effects

There will be 35 acres of underburning and 3,590 acres of pile burning in the Beaver Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant

units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section).The logic used to calculate these acres is described in Section I of this addendum. The nitrogen oxide emissions from prescribed fire will be 0.4 per year for the Beaver Fire area. The emissions from heavy equipment (including logging trucks) will be about 5 tons per year and there are no emissions from helicopters. The total nitrogen oxide emitted from the Beaver Fire area treatments will be 5.4 per year.

There will be no effect to any inventoried roadless areas or Class I wildernesses due to their absence in the Beaver Fire area.

Greenhouse gas emission will be about 2,108 metric tons of carbon dioxide equivalents per year from prescribed burning. There will be about 168 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks) and no emissions associated with helicopters for the Beaver Fire area. This is a total of 2,276 metric tons of carbon dioxide equivalent per year from the Beaver Fire area.

Fugitive dust emissions will be the same as for alternative 2.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report. The cumulative effects on fugitive dust emissions are the same as for alternative 2.

Project Area B: Happy Camp Complex

Direct Effects and Indirect Effects

There will be 1,465 acres of underburning and 19,795 acres of pile burning in the Happy Camp Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section).The logic used to calculate these acres is described in Section I of this addendum. so the nitrogen oxide emissions from prescribed fire will be 2.8 per year for the Happy Camp Fire area. The emissions from heavy equipment (including logging trucks) will be about 15 tons per year and about 0.9 tons per year from helicopter use. The total nitrogen oxide emitted from the Happy Camp Fire area treatments will be about 19 per year.

The effects to Class I wildernesses and Inventoried Roadless Areas is the same as for Alternative 2.

Greenhouse gas emission will be about 15,188 metric tons of carbon dioxide equivalent per year from prescribed burning. There will be about 504 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks). There will be about 168 tons per year of carbon dioxide equivalents from helicopter use. This is a total of 15,860 metric tons of carbon dioxide equivalent per year from the Happy Camp Fire area.

Fugitive dust emissions will be the same as for alternative 2.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report. The cumulative effects on fugitive dust emissions are the same as for alternative 2.

Project Area C: Whites Fire

Direct Effects and Indirect Effects

There will be 9,030 acres of underburning and 3,234 acres of pile burning in the Whites Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section).The logic used to calculate these acres is described in Section I of this addendum. so the nitrogen oxide emissions from prescribed fire will be 4.8 per year for the Whites Fire area. The emissions from heavy equipment (including logging trucks) will be about 5 tons per year and about 0.1 tons per year from helicopter use. The total nitrogen oxide emitted from the Whites Fire area treatments will be about 10 tons per year.

The effects to Class I wildernesses and Inventoried Roadless Areas the same as described in the Alternative 2 Happy Camp Complex analysis above.

Greenhouse gas emission will be about 27,095 metric tons of carbon dioxide equivalent per year from prescribed burning. There will be about 168 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks). There will be about 18 tons per year of carbon dioxide equivalents from helicopter use. This is a total of 27,281 metric tons of carbon dioxide equivalent per year from the Whites Fire area.

Fugitive dust emissions will be the same as for alternative 2.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report. The cumulative effects on fugitive dust emissions are the same as for alternative 2.

Alternative 5

Direct Effects and Indirect Effects

There will be about 7 tons of nitrogen oxide emissions per year from prescribed fire and 8 tons per year from mobile sources for a total of 15 tons per year. This is less than 50% of the *de minimus* of 100 tons per year allowed to meet the Conformity Rule and would be very likely to conform if required.

There will be about 38,982 metric tons of carbon dioxide equivalents from prescribed fire and 308 metric tons of carbon dioxide equivalents from mobile sources. This is a total of 39,290 metric tons of carbon dioxide equivalents per year from this project.

There will be about 60 tons per year of fugitive dust that will be mitigated by project design features requiring dust mitigation on non-paved roadways. The mitigation will reduce the fugitive dust emissions to about 12 tons per year for the entire project area.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM10 and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive

dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required. Cumulative effects for global climate change are the same as for alternative 2.

Project Area A: Beaver Fire

Direct Effects and Indirect Effects

There will be 35 acres of underburning and 3,591 acres of pile burning in the Beaver Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section).The logic used to calculate these acres is described in Section I of this addendum. The nitrogen oxide emissions from prescribed fire will be 0.4 per year for the Beaver Fire area. The emissions from heavy equipment (including logging trucks) will be about 1.5 tons per year and there are no emissions from helicopters. The total nitrogen oxide emitted from the Beaver Fire area treatments will be 1.9 per year.

There will be no effect to any inventoried roadless areas or Class I wildernesses due to their absence in the Beaver Fire area.

Greenhouse gas emission will be about 2,108 metric tons of carbon dioxide equivalents per year from prescribed burning. There will be about 50 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks) and no emissions associated with helicopters for the Beaver Fire area. This is a total of 2,158 metric tons of carbon dioxide equivalent per year from the Beaver Fire area.

There would be about 4 tons per year of fugitive dust created if no mitigations were applied. The project design features requiring dust suppression on log hauling routes (Chapter 2 of the FEIS) will reduce those emissions by as much as 80%. This will reduce the emissions to about 1 tons per year.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM_{10} and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required.

Project Area B: Happy Camp Complex

Direct Effects and Indirect Effects

There will be 1,465 acres of underburning and 11,410 acres of pile burning in the Happy Camp Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section). The logic used to calculate these acres is described in Section I of this addendum. so the nitrogen oxide emissions from

prescribed fire will be 1.8 per year for the Happy Camp Fire area. The emissions from heavy equipment (including logging trucks) will be about 4 tons per year and about 0.9 tons per year from helicopter use. The total nitrogen oxide emitted from the Happy Camp Fire area treatments will be about 6.7 per year.

The effects to Class I wildernesses and Inventoried Roadless Areas is the same as for Alternative 2.

Greenhouse gas emission will be about 10,492 metric tons of carbon dioxide equivalents per year from prescribed burning. There will be about 151 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks). There will be about 51 tons per year of carbon dioxide equivalents from helicopter use. This is a total of 10,694 metric tons of carbon dioxide equivalent per year from the Happy Camp Fire area.

There would be about 52 tons per year of fugitive dust created if no mitigations were applied. The project design features requiring dust suppression on log hauling routes (Chapter 2 of the FEIS) will reduce those emissions by as much as 80%. This will reduce the emissions to about 10 tons per year.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM_{10} and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required.

Project Area C: Whites Fire

Direct Effects and Indirect Effects

There will be 9,030 acres of underburning and 1,962 acres of pile burning in the Whites Fire area. These acres include secondary fuels treatment in salvage units and site preparation and plant units in addition to the hazardous fuels treatments. It is assumed that only 20% of the areas planned for pile burning will contain piles (see methods section).The logic used to calculate these acres is described in Section I of this addendum. so the nitrogen oxide emissions from prescribed fire will be 4.8 per year for the Whites Fire area. The emissions from heavy equipment (including logging trucks) will be about 1.5 tons per year and about 0.1 tons per year from helicopter use. The total nitrogen oxide emitted from the Whites Fire area treatments will be about 6.4 tons per year.

The effects to Class I wildernesses and Inventoried Roadless Areas the same as described in the Alternative 2 Happy Camp Complex analysis above.

Greenhouse gas emission will be about 26,382 metric tons of carbon dioxide equivalent per year from prescribed burning. There will be about 50 metric tons of carbon dioxide equivalents per year from heavy equipment used for treatments (including log trucks). There will be about 6 tons per year of carbon dioxide equivalents from helicopter use. This is a total of 26,438 metric tons of carbon dioxide equivalent per year from the Whites Fire area.

There would be about 4 tons per year of fugitive dust created if no mitigations were applied. The project design features requiring dust suppression on log hauling routes (Chapter 2 of the FEIS) will reduce those emissions by as much as 80%. This will reduce the emissions to about 1 ton per year.

Cumulative Effects

Cumulative effects are described in the Air Quality Resources report for nitrogen oxide and greenhouse gas emissions. For fugitive dust, Siskiyou County is in attainment for PM_{10} and will remain in attainment with the implementation of this project in conjunction with the future and on-going projects. It is assumed that all Forest and private lands projects have a high likelihood of conforming because of the common mitigation of watering or otherwise mitigating fugitive dust on unpaved roads. So cumulatively the project will have a high likelihood of conforming should conformity be required.

Modified Alternative 2

There will be about 8 tons of nitrogen oxide emissions per year from prescribed fire and 26 tons per year from mobile sources for a total of 34 tons per year. This is less than the de minimus allowed to meet the Conformity Rule.

There will be about 45,163 metric tons of carbon dioxide equivalents from prescribed fire and 1026 metric tons of carbon dioxide equivalents from mobile sources. This is a total of 46,196 metric tons of carbon dioxide equivalents per year from this project.

There will be about 44 tons per year of fugitive dust that will be mitigated by project design features requiring dust mitigation on non-paved roadways. The mitigation will reduce the fugitive dust emissions to about 12 tons per year for the entire project area.

Project Area A: Beaver Fire

Direct Effects and Indirect Effects

There will be about 0.4 tons per year of nitrogen oxide emission from prescribed burning. There will be about 5 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 5.4 tons per year of nitrogen oxide emissions.

The Beaver fire area is not adjacent to a Class I Wilderness or Inventoried Roadless Areas. The activities in this area will not affect the Regional Haze Rule or roadless character.

There will be 2,175 metric tons of carbon dioxide equivalents from prescribed burning and 168 metric tons from mobile sources for a total of 2,343 metric tons of carbon dioxide equivalents for the Beaver fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Project Area B: Happy Camp Complex

Direct Effects and Indirect Effects

There will be about 2.8 tons per year of nitrogen oxide emission from prescribed burning. There will be about 16 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 18.8 tons per year of nitrogen oxide emissions.

The effects to Class I wildernesses and Inventoried Roadless Areas is the same as for Alternative 2.

There will be 15,906 metric tons of carbon dioxide equivalents from prescribed burning and 672 metric tons from mobile sources for a total of 16,572 metric tons of carbon dioxide equivalents for the Happy Camp fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Project Area C: Whites Fire

Direct Effects and Indirect Effects

There will be about 4.8 tons per year of nitrogen oxide emission from prescribed burning. There will be about 5 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 9.8 tons per year of nitrogen oxide emissions.

The effects to Class I wildernesses and Inventoried Roadless Areas the same as described in the Alternative 2 Happy Camp Complex analysis above.

There will be 27,095 metric tons of carbon dioxide equivalents from prescribed burning and 186 metric tons from mobile sources for a total of 27,281 metric tons of carbon dioxide equivalents for the Whites fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Modified Alternative 3

There will be about 8.4 tons of nitrogen oxide emissions per year from prescribed fire and 26 tons per year from mobile sources for a total of 34.4 tons per year. This is less than the de minimus allowed to meet the Conformity Rule.

There will be about 46,984 metric tons of carbon dioxide equivalents from prescribed fire and 1026 metric tons of carbon dioxide equivalents from mobile sources. This is a total of 48,010 metric tons of carbon dioxide equivalents per year from this project.

There will be about 44 tons per year of fugitive dust that will be mitigated by project design features requiring dust mitigation on non-paved roadways. The mitigation will reduce the fugitive dust emissions to about 12 tons per year for the entire project area.

Project Area A: Beaver Fire

Direct Effects and Indirect Effects

There will be about 0.6 tons per year of nitrogen oxide emission from prescribed burning. There will be about 5 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 5.6 tons per year of nitrogen oxide emissions.

The Beaver fire area is not adjacent to a Class I Wilderness or Inventoried Roadless Areas. The activities in this area will not affect the Regional Haze Rule or roadless character.

There will be 3,578 metric tons of carbon dioxide equivalents from prescribed burning and 168 metric tons from mobile sources for a total of 3,746 metric tons of carbon dioxide equivalents for the Beaver fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Project Area B: Happy Camp Complex

Direct Effects and Indirect Effects

There will be about 2.8 tons per year of nitrogen oxide emission from prescribed burning. There will be about 16 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 18.8 tons per year of nitrogen oxide emissions.

The effects to Class I wildernesses and Inventoried Roadless Areas is the same as for Alternative 2.

There will be 15,974 metric tons of carbon dioxide equivalents from prescribed burning and 672 metric tons from mobile sources for a total of 16,646 metric tons of carbon dioxide equivalents for the Happy Camp fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Project Area C: Whites Fire

Direct Effects and Indirect Effects

There will be about 4.8 tons per year of nitrogen oxide emission from prescribed burning. There will be about 5 tons per year of nitrogen oxide emissions from mobile sources. This is a total of 9.8 tons per year of nitrogen oxide emissions.

The effects to Class I wildernesses and Inventoried Roadless Areas the same as described in the Alternative 2 Happy Camp Complex analysis above.

There will be 27,431 metric tons of carbon dioxide equivalents from prescribed burning and 186 metric tons from mobile sources for a total of 27,617 metric tons of carbon dioxide equivalents for the Whites fire area.

The effects to fugitive dust are the same as for alternative 2.

Cumulative Effects

Cumulative effects are the same as for Alternative 2.

Summary of Effects

Table 3: Summary of Effects for the Beaver Fire Area.

Indicator	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Mod Alt. 2	Mod Alt. 3
Nitrogen Oxide Emissions (tons/year)	0	5.4	5.3	5.4	1.9	5.4	5.6
Carbon Dioxide Equivalent Emissions (metric tons/year)	0	2,296	2,106	2,276	2,158	2,343	3,746
Fugitive Dust (tons/year)	0	2	2	2	1	2	2

Table 4: Summary of Effects for the Happy Camp Fire Area.

Indicator	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Mod Alt. 2	Mod Alt. 3
Nitrogen Oxide Emissions (tons/year)	0	19	19	19	6.7	18.8	18.8
Carbon Dioxide Equivalent Emissions (metric tons/year)	0	16,578	16,352	15,860	10,694	16,572	16,646
Fugitive Dust (tons/year)	0	35	35	35	10	35	35

Table 5: Summary of Effects for the Whites Fire Area.

Indicator	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Mod Alt. 2	Mod Alt 3
Nitrogen Oxide Emissions (tons/year)	0	10	10	10	6.4	9.8	9.8
Carbon Dioxide Equivalent Emissions (metric tons/year)	0	27,281	27,248	27,095	26,438	27,281	27,617
Fugitive Dust (tons/year)	0	7	7	7	2	7	7

Table 6: Summary of Effects for the entire project area.

Indicator	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Mod Alt. 2	Mod Alt 3
Nitrogen Oxide Emissions (tons/year)	0	34	34	34	15	34	34
Carbon Dioxide Equivalent Emissions (metric tons/year)	0	46,155	45,706	45,231	39,290	46,196	48,010
Fugitive Dust (tons/year)	0	44	44	44	12	44	44

Compliance with law, regulation, policy, and the Forest Plan

Compliance with law, regulation, policy and the Forest Plan has not changed from the DEIS (DEIS page 243).

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