Draft Environmental Assessment

Deschutes and Crook Counties Wildfire Mitigation

Deschutes and Crook Counties, Oregon

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FEMA

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TERMS USED IN THIS DOCUMENT

Area of Potential Effects – the geographic area or areas within which an undertaking may cause changes in the character or use of historic properties, if such properties exist. The area of potential effects is influenced by the scale and nature of the undertaking.

Best Management Practices (BMPs) – innovative environmental protection practices applied to help ensure that projects are conducted in an environmentally responsible manner.

Crown Fire – fire that involves the tops of the canopy trees in the forest; can spread rapidly.

Fuels (Ladder) – understory branches or shrubs that can allow a fire to ascend into the canopy.

Fuels Reduction – removal of excess fuels through thinning, limbing, or other methods to reduce the potential for severe wildfires.

Limbing – removal of large tree limbs to reduce fuel load and the potential for crown fires.

Prescribed Fire – any fire ignited by management actions to meet specific objectives. A written approved prescribed fire plan must be completed and appropriate National Environmental Policy Act requirements followed prior to ignition. This term replaces the term "management ignited prescribed fire."

Suppression – a response to wildland fire that results in curtailment of fire spread and elimination of all identified threats from the fire.

Thinning – removal of trees, branches, or shrubs to reduce fuel loads.

Wildfire – an unwanted wildland fire.

Wildland Fire – any non-structure fire, other than prescribed fire, that occurs in the wildland. This term encompasses fires previously referred to as both wildfires and prescribed natural fires.

Wildland-Urban Interface – line, area, or zone where structures and other human development meet or intermingle with vegetative fuels in wildlands.

ACRONYMS USED IN THIS DOCUMENT

APE	Area of Potential Effects
BLM	Bureau of Land Management
BMP	best management practice
CFR	Code of Federal Regulations
CWPP	Community Wildfire Protection Plan
EA	environmental assessment
EO	Executive Order
FEMA	Federal Emergency Management Agency
HFRA	Healthy Forest Restoration Act
NEPA	National Environmental Policy Act
NHMP	Natural Hazard Mitigation Plan
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
SHPO	State Historic Preservation Officer
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
WDFW	Washington Department of Fish and Wildlife

Deschutes and Crook Counties applied to the US Department of Homeland Security's Federal Emergency Management Agency (FEMA) Pre-Disaster Mitigation Program for funding assistance with a wildfire fuel load reduction project in Central Oregon. The Deschutes and Crook Counties Wildfire Mitigation Continuation Project will build upon current efforts to treat fuels on 1,200 acres of public and private lands to assist the region in reducing risk and preventing loss from future wildland fires.

The National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality regulations implementing NEPA (40 Code of Federal Regulations [CFR] Part 1500 through 1508) direct FEMA and other federal agencies to fully understand and take into consideration environmental consequences of proposed federally funded projects. Under NEPA, Congress authorizes and directs federal agencies to carry out their regulations, policies, and programs as fully as possible in accordance with the statute's policies on environmental protection. NEPA requires federal agencies to make a series of evaluations and decisions that anticipate significant effects on environmental resources. This requirement must be fulfilled whenever a federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect the human environment. In compliance with NEPA and its implementing regulations, FEMA prepared this draft environmental assessment (EA) to analyze potential environmental impacts of alternatives.

The purpose of the FEMA Pre-Disaster Mitigation Program is to provide funding to states and communities to implement a sustained, pre-disaster, natural-hazard mitigation program that will reduce the overall risk to the population and structures, while also reducing reliance on federal funding from actual disasters. The purpose of this action is to provide Pre-Disaster Mitigation funding to Deschutes and Crook Counties to expand their wildfire mitigation activities.

The combined lands of Crook and Deschutes Counties cover an area of 6,046 square miles. Lands in these counties have an acute potential for high impact and reoccurring wildland fires due to the region's arid high desert climate, difficult terrain, patterns of hot sun and gusty winds, frequent summer lighting strikes, and stands of timber and other vegetation that contain volatile and highly flammable oils and resins. The geographic areas targeted for wildfire vegetation management under the proposed action were identified as high risk in the Counties' Natural Hazards Mitigation Plans and individual Community Wildfire Protection Plans.

Long-term fire suppression and other past vegetation management choices have exacerbated wildfire risk. Historically, prior to fire suppression practices, frequent fires prevented the build-up of flammable materials. Because of the constant reduction in flammable materials such as grasses, shrubs, and western juniper trees, fires in rangeland plant communities such as Deschutes and Crook Counties were mostly non-lethal and primarily limited to over-story trees.

The region has been the setting for a significant number of large, fast-moving, and destructive wildland-urban interface wildfires during the last quarter century. Due to a rapid rise in population and expanding development, many people are now living within these high wildfire risk areas of the wildland-urban interface, in the forests and grasslands located between and around primary population centers. A total of 136 communities in Central Oregon appear on the federal government's Five-Year Action Plan for communities in the US that are most at risk from wildfires. This presents a real danger to people and property in these areas. The need for this action is to reduce or eliminate the risk to people and to property from wildfires in Deschutes and Crook Counties. From this need, the Counties identified the preferred alternative (vegetative fuel management and removal) as a high priority in their Natural Hazards Mitigation and Community Wildfire Protection plans.

This section discusses the two alternatives considered in this EA: (1) the No Action Alternative and (2) the Proposed Action Alternative to which FEMA funding would contribute.

3.1 ALTERNATIVE 1 – NO ACTION

Under the No Action Alternative, FEMA would not provide funding to reduce wildfire fuel load in target areas of Central Oregon's wildland-urban interface. Existing conditions at these sites would continue to deteriorate. People and nearby structures would continue to be at a higher risk from catastrophic fire events. Current and ongoing activities to protect the open spaces and urban interface would continue, but not to the degree needed and/or anticipated if funding is appropriated. This alternative would not meet the project nor the Counties' goals and objectives identified in their Natural Hazards Mitigation and Community Wildfire Protection Plans.

3.2 ALTERNATIVE 2 – PROPOSED ACTION

The Proposed Action would remove excessive vegetation through hand thinning, brush cutting, mowing, or other low-impact measures by private contractors on approximately 1,000 acres of privately-owned lands (Appendix A - Figure 1). The geographic areas targeted for wildfire vegetation management include the Ochoco Reservoir, Ochoco West and Powell Butte communities in Crook County and the Awbrey Butte, Awbrey Glenn, Tetherow Crossing and Woodside Ranch communities in Deschutes County. These properties were identified as high risk in the Deschutes and Crook County Natural Hazards Mitigation Plans and individual Community Wildfire Protection Plans. Under the Deschutes County Forester and Crook County Fire and Rescue staff direction, each individual property would be assessed to determine the best method of vegetation removal. Vegetation that would be removed includes ponderosa pine, sagebrush, bitterbrush, and juniper. The Counties would remove this material to other areas for disposal in co-generation plants, which produce two useful forms of energy, electricity and process steam, from a single fuel source.

Each property owner would be required to provide personal labor and/or materials valued at $333 or more per acre and maintain the property in its new fire-safe condition beyond the grant period using the knowledge and skills obtained through participation in the project. A comprehensive inventory of environmental and historical conditions would be completed during the first phase of the project as each property is assessed and provided with a specific mitigation plan that takes into account the topography, critical facilities and other man-made structures, bodies of water, historical use, plant and animal populations, hazardous and toxic materials, as well as cultural, economic, and ethnic demographics.

3.2.1 Alternative 2 Objectives

Implementation of the proposed action would take place using grant funds and matching contributions to accomplish the following activities over a one year period:

1. Plan, supervise, manage, administer, and be accountable for all project activities and funding

2. Develop and adopt program criteria, policies, and operating guidelines

3. Communicate project readiness to property owners and compile working inventory

4. Conduct environmental review of affected properties and plan responsive mitigation strategies

5. Hire contractors to perform the work

6. Administer grant funds, collect and manage matching contributions, authorize and monitor expenditures

7. Monitor and evaluate program effectiveness and adjust if needed to achieve goals

8. Prepare and submit required status reports and communicate project results

9. Explore ways to make program self-sustaining on a long-term basis

The proposed tasks are consistent with the 1998 Integrated Natural Fuels Strategy, the 2000 National Fire Plan, the 2002 Healthy Forests Initiative and 2003 Healthy Forests Restoration Act, and the 2004 Healthy Forests and Firesafe Communities in Central Oregon program.

3.3 OTHER ALTERNATIVES CONSIDERED

Other alternatives were considered to help mitigate the problem, as identified in the Natural Hazards Mitigation and Community Wildfire Protection plans. These include restricting development in high-risk areas, requiring fire-safe building construction and materials, and mandating certain landscape requirements. These alternatives were seen as far more intrusive and potentially unenforceable within the community; therefore, would not meet the purpose and/or need. These alternatives were dropped from further study and no further alternatives were evaluated.

This section discusses the existing conditions by resource and the potential effects of the No Action and Proposed Action alternatives.

For each resource category, the impact analysis follows the same general approach. When possible, quantitative information is provided to establish impacts. Qualitatively, these impacts will be measured based on minor, moderate, and major impacts as outlined in the chart below.

Impact Intensity	Criteria
Small	Environmental effects would not be detectable or would be so minor that they would neither destabilize nor noticeably alter any important attribute of the resource.
Moderate	Environmental effects would be sufficient to alter noticeably, but not to destabilize, important attributes of the resource.
Large	Environmental effects would be clearly noticeable and would be sufficient to destabilize important attributes of the resource.

Impacts are disclosed based on the amount of change or loss of the resource from the baseline conditions. Impacts may be direct or indirect. Direct impacts are caused by an action and occur at the same time and place as the action. Indirect impacts are caused by an action and occur later in time or farther removed from the area, but are reasonably foreseeable. Cumulative impacts are discussed in Section 5.

Resources that were not analyzed in detail include air quality, wild and scenic rivers, and visual resources. No prescribed fire would be used for fuel reduction in this project so no effect to air quality is expected beyond small amounts of dust and exhaust from short term removal operations. The Deschutes River is designated a Wild and Scenic River Corridor but no activities associated with the Proposed Action would be implemented in the corridor. No visual impacts are anticipated due to the minor loss of vegetation and small amounts of ground disturbance. These resources will not be analyzed to any further extent.

4.1 CLIMATE, GEOLOGY, AND SOILS

4.1.1 Climate

Generally, the climate in Crook and Deschutes County can be described as cold with significant snowfall in the winter, and dry and sunny in the summer. The climate is arid with average precipitation of 12 inches annually on the valley floor. Storms are frequent during the summer months and a four-year history of recorded lightning strikes indicates that almost any given location experienced between 0.25 and 10 strikes (Deschutes County NHMP 2006).

Temperatures range from highs in the 80s in the summer to the mid-30s in winter and lows of 40s in the summer to the teens for the winter (Oregon Climate Service 2005a and b).

4.1.2 Geology and Soils

The project area is located within the Deschutes-Columbia Plateau. This plateau is part of the larger Columbia Plateau which covers about 63,000 square miles in Oregon, Washington, and

Idaho. The Deschutes-Columbia Plateau was formed by immense outpourings of lavas during the Miocene Epoch (17 to 14 million years ago) which filled a subsiding basin and formed one of the largest flood basalt provinces in the world. These basalt flows were erupted from vents in central and northeast Oregon and in southeast Washington and adjacent Idaho.

In Central Oregon the province includes the Deschutes Basin which lies between the Cascade Range and the Ochoco Mountains. This basin is underlain by the Columbia River Basalts which make up much of the Columbia Plateau (USFS 2008).

The project area is relatively flat with small topographic changes. The topography is conducive to fire spread with ground fuels and canopy fuels readily available.

Soils in the project area are predominantly volcanic in origin. The majority of soils in the region are composed of volcanic ash or pumice and other volcanic materials from local volcanic mountains. Soils are mostly referred to as loess, which are described as brown, fine-grained, silty soils. This type of soil is vulnerable to accelerated erosion caused by disturbance of natural conditions through burning, excessive grazing, or tillage. These disturbances increase the potential for erosion by wind and water. Wind typically presents the greatest source of erosion under arid conditions. Other soils found include glacial till, basalt, sands, and gravel (Deschutes County NHMP 2006).

4.1.3 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to reduce wildland fuel loads in target areas of Deschutes and Crook Counties wildland-urban interface. No impacts to soil resources within the project area would be expected, except for impacts associated with a catastrophic fire. These impacts may include de-vegetation caused by uncontrolled fire and subsequent soil erosion.

Alternative 2 – Proposed Action

The impact intensity for climate, geology and soils would be small. No effect on climate and geology would be expected based on the small scale of the project and minor ground-disturbing activities. Future natural fires of varying intensities may alter the physical, chemical, and biological properties of the soil as a result of vegetation removal, organic consumption, and increased temperatures. In addition, the lack of fire may alter the soil properties as a result of limited nutrient cycling in fire maintained habitat areas.

No environmental consequences to soils are expected from fuels reduction activities in the project area because the activities would not require leveling of the soil. Mechanical removal activities would be limited to the use of chainsaws, weed cutters, and pulaskis, and would not include heavy equipment. Additionally, no fuels reduction by burning is planned with this project. While individual trees may be removed, vegetation removal in overly large areas at a given time would be avoided and best management practices (BMPs) for erosion control would be employed. Vegetation removal activities would not result in increased turbidity in streams

and increased erosion of stream banks. Limited soil would be removed as a result of individual tree removal.

Direct, indirect, and cumulative effects to soil productivity, fertility, stability, or infiltration capacity would be at or below the level of detection. Any effects on soil productivity or fertility would be slight, and no long-term effects to soils would occur.

4.2 FLOODPLAINS

Priority areas in Deschutes County are adjacent to the Deschutes River, Little Deschutes River, and Fall River floodplains. However, the project actions would not occur within the adjacent floodplains.

4.2.1 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to reduce wildland fuel loads in target areas of Deschutes and Crook Counties' wildland-urban interface. No impacts to floodplains adjacent to the project area would be expected, except for impacts associated with a catastrophic fire. These impacts may include devegetation caused by uncontrolled fire and subsequent soil erosion. The impact intensity would be moderate.

Alternative 2 – Proposed Action

No environmental consequences related to floodplains are expected from fuels reduction activities because the activities do not require soil-leveling or large-scale removal of vegetation that would result in changes to the adjacent floodplain contours or elevations. The actions would not occur within designated floodplains and/or riparian areas. No direct, indirect, or cumulative impacts to floodplains are anticipated. The impact intensity would be small. Other values (biological, cultural) associated with floodplains are addressed in other sections of this EA.

4.3 WETLANDS AND WATER RESOURCES

Wetlands and water bodies were mapped by both Counties, however no wetlands were found within the project areas.

One water body, the Ochoco Reservoir, is located adjacent to the Crook County project area of the same name. The reservoir was formed after World War I for irrigation, flood control, and indirectly for recreation. Mill Creek and Ochoco Creek flow into the reservoir, and the output is Ochoco Creek. The surface water level varies greatly depending on the season, and is highest during spring (USFS 2009).

4.3.1 Environmental Consequences

Alternative 1 – No Action

No impacts to wetlands and water resources within the project area would be expected, except those impacts associated with a catastrophic fire. These impacts may include a loss of vegetation due to uncontrolled fire and subsequent soil erosion, both of which would affect the water quality of wetlands and riparian habitats along water features in the project area. The impact intensity could be small to large, depending on the damage caused by fire.

Alternative 2 – Proposed Action

No environmental consequences are expected to occur to wetlands or water resources within the project area. No manual, mechanical, or chemical vegetation removal would occur in wetlands, riparian areas, or streams. In steep areas requiring vegetation management, soil disturbance would not occur from vegetation control activities; however, BMPs for erosion control would be used if necessary. These BMPs would include the use of straw bales and silt fences to prevent sediment transport and the seeding of disturbed areas with native erosion control seed mixes until native plants can be installed. Impacts on water quality would be considered negligible based on the types of vegetation removal proposed, which requires no to little ground disturbance. The impact intensity would be small.

4.4 VEGETATION

Both counties are located within the rain shadow east of the Cascade Mountains where precipitation is negligible. The eastern location also contributes to a preponderance of annual dry lightning storms which commonly ignite wildfires. While vegetation can vary somewhat from one specific location to the next, the region generally features a mixture of ponderosa pine, mixed conifer, and juniper forests as well as non-forest grasses and sagebrush.

Ponderosa pine is currently found in the southern and western portions of the greater Bend area (which includes northeastern Deschutes County and western Crook County), and in higher elevations, with small patches in the project areas. Historically, ponderosa pine forests contained more understory grasses and less shrubs than are present today. These plants, combined with fallen pine needles, formed fast-burning fuels that led to recurrent widespread burning. The fire history for ponderosa pine is characterized by low-intensity ground fires that occur at intervals of 11 to 15 years. The pattern of low ground fires and stand dynamics resulted in the open park-like conditions that early inhabitants and visitors found in the region.

Less stand management, less logging activity and highly effective wildland fire suppression have significantly altered the ponderosa pine forest type. Removal of the larger “yellow belly” pines has dramatically decreased open park-like forests, replacing them with more evenly spaced and smaller “black-bark” forests. Similar to other species of conifer forest types, fire suppression has greatly increased the number of trees (stocking levels) and density of trees, creating ladder fuels and putting the stands at risk of attack from insects and disease. These factors have contributed to more intense fires in ponderosa pine forests in recent years.

Western juniper occurs mainly in the northern and eastern sections in the greater Bend wildland-urban interface. The fire history of western juniper is characterized by fire that occurs approximately every 30 years and is generally limited by the availability of fuels. Western juniper trees have thin bark and fires kill them easily. Western juniper appeared to spread over the previous century. Several factors may account for the expansion: a) fire suppression, which allows the stands to grow unchecked by fire; b) overgrazing by domestic livestock, which opens up new sites for colonization; c) reestablishment of juniper after being logged; and d) climate change.

Bitterbrush occurs throughout the greater Bend area and is often found with mixed shrubs such as manzanita and sage. Fire severely damages bitterbrush, especially if rain is not received shortly after a burn. Bitterbrush is fire dependent, but not fire resistant. It regenerates mostly from seed after a fire and often sprouts from caches of seeds made by rodents. Bitterbrush will sprout after burning regardless of the severity of the burn and matures relatively quickly. Consequently, the greater Bend wildland urban interface area is rich with patches of bitterbrush that burn well on their own and provide fire-ready ladder fuels for taller tree stands.

Manzanita is a shrub that occurs throughout the greater Bend area, usually mixed with other shrub species such as bitterbrush. Manzanita is established both through sprouts and seeds that are stimulated by fire. Fires in manzanita are conducive to rapid and extensive fire spread due to both physical and chemical characteristics. The shrub has volatile materials in the leaves, low moisture content in the foliage and persistence of dead branches and stems. Manzanita is particularly susceptible to fire where it is the primary understory component.

Western sage is found on the eastern portions of the greater Bend area and commonly grows in association with juniper and bitterbrush. Most fires kill western sage plants. In many western sage communities, changes in fire occurrence along with fire suppression and livestock grazing have contributed to the current condition of sage communities. Prior to the introduction of annuals, insufficient fuels may have limited fire spread in big sagebrush communities. Introduction of annuals, especially cheatgrass, has increased fuel loads so that fire carries easily. Burning in sage communities commonly sets the stage for repeated fires. Fire frequency can be as little as five years, not sufficient time for the establishment and reproduction of big sagebrush. In these cases, annuals such as cheatgrass commonly take over the site.

The result of the fuel hazards and forest types in the greater Bend area is an overgrowth of trees, forest floor fuels, and an abundance of dead or dying vegetation that contribute to a substantially elevated risk of wildland fires that are difficult to control. These overly dense conditions lead to fire behavior that produce flame lengths over eight feet with crowning and torching that can result in stand replacement severity fires.

Not only have large, stand replacement fires not occurred, but also the more frequent low intensity fires have not been allowed to burn either. This practice of fire exclusion along with insufficient vegetation and fuels reduction has resulted in the buildup of excessive live and dead fuels.

4.4.1 Environmental Consequences

Alternative 1 – No Action

As new development occurs within the wildland-urban interface within fire-prone areas, the risk of loss from wildfires would increase. Factors contributing to the highest fire risk include combinations of steep topography, narrow roads with few connecting streets, inadequate water supply in older neighborhoods, dense development, fuel loads, and buildings lacking defensible space (clearings between wildland vegetation and structures). Increased invasive species creating an increased fuel load, resulting in an increased fire risk, would be expected. The impact intensity could be moderate to large, depending on the slope, amount of invasive species, and damage caused by fire.

Alternative 2 – Proposed Action

The impact intensity for vegetation could be moderate in the short term and small in the long term. Integrating thinning and manual/mechanical vegetative treatment could result in a small loss of individual native plants. Various disturbances, as a result of the work crews, removal of individual trees, and hard thinning/limbing would result in localized, direct, small effects to native plant communities. However, in these habitat types thinning is generally desirable and promotes reduction of overstocked understory trees and shrubs.

Changes in vegetative community or species population would be minor, with small and localized effects to a relatively minor proportion of any native species population. Many of these species are ecologically dependant on fire and fire cycles and effects are considered small in the short term and beneficial in the long term.

The education to be provided as part of mitigation efforts would increase home and business owner's awareness of the risks and would provide them with alternatives for reducing those risks. Using education in combination with the use of manual/mechanical vegetative treatment would benefit natural resources and the ecological system as a whole.

Juniper and sagebrush would be removed from the project sites within Crook County, and also from Tetherow Crossing in Deschutes County. Bitterbrush would be removed from all sites.

4.5 BIOLOGICAL RESOURCES

There are hundreds of wildlife and fish species associated with the forests, rangeland, and streams in Central Oregon. In a classic wildland-urban interface environment, priority growth areas overlap each of the vegetative communities present in Crook and Deschutes Counties. The seven project areas represent such wildland-urban interface areas.

4.5.1 Federally Listed Species and Critical Habitat

Lists of federally endangered and threatened species with the potential to occur in Deschutes and Crook Counties were obtained from the US Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service on January 8, 2009 (Appendix B). Two federally listed species may be

found within the proposed action area; the northern spotted owl and bull trout. Both species have designated critical habitat specified in Deschutes and Crook Counties.

4.5.1.1 Northern Spotted Owl

The northern spotted owl (*Strix occidentalis caurina*) is a federal and Oregon State listed species. The northern spotted owl was listed as threatened on June 26, 1990 (55 FR 26114 – 26194). A draft recovery plan was published in 1992 (USFWS 1992).

The northern spotted owl is a forest bird that inhabits old-growth coniferous and mixed conifer-hardwood forests from British Columbia through northern California. Suitable habitats for spotted owls provide elements necessary for nesting, roosting, foraging, and dispersal. Characteristics of nesting and roosting in Oregon generally include forests dominated by Douglas-fir and western hemlock with large (more than 30 inches diameter at breast height) overstory trees. Canopies exhibit a moderate to high canopy closure (60 to 80 percent), and are multi-layered with multiple tree stories (USFWS 1992). In addition, trees with various structural deformities (cavities, broken tops, mistletoe infections) and large snags are also characteristic of northern spotted owl habitat, as well as accumulated fallen trees and debris on the forest floor (USFWS 1992). Most nest and roost sites are within forest stands with trees that are often more than 200 years old, but northern spotted owls also utilize mature forests 100 to 200 years old. Foraging and dispersal habitats may be in younger, more open and fragmented forests than those associated with nesting and roosting (USFWS 1992).

Critical habitat has been designated for the spotted owl in Deschutes County. There is no potential habitat for northern spotted owls in the proposed action areas.

4.5.1.2 Bull Trout (Columbia River Basin)

On June 10, 1998, the Columbia River Bull Trout Distinct Population Segment (DPS) was listed as threatened (63 FR 31647 – 31674). On November 1, 1999, all bull trout in the continuous United States were listed as threatened (64 FR58910). In 2002, a draft recovery plan was developed for three of five bull trout DPSs, including the Columbia River Bull Trout DPS (USFWS 2002).

Bull trout have stringent requirements for cold water and clean gravel to rear and reproduce, and spawning usually occurs in mountain streams fed by snow-melt or springs fed by snow fields (USFWS 2004a and b, Goetz et al. 2004). Juvenile bull trout feed on aquatic insects and crustaceans, while adult bull trout feed almost entirely on fish. Bull trout have been recorded to make movements of over 100 miles during foraging or spawning migrations (Goetz et al. 2004).

Bull trout have been documented to exhibit four life-history forms in the northwest. Resident bull trout reproduce in small streams, where they remain for their entire life-cycle. Fluvial bull trout reproduce in small streams, but as one- to two-year old juveniles, migrate into mainstem rivers to rear and mature. Fluvial-lacustrine populations reproduce in streams, but soon migrate into large lakes to rear and mature (WDFW 2004). All of these life history types have been documented to occur in the Columbia River basin (WDFW 2004, USFWS 2002). In the Columbia River Basin, bull trout historically were found in about 60 percent of the basin. They now occur in less than half of their historic range. The Deschutes Recovery Unit encompasses

the entire Deschutes River basin and its tributaries. Bull trout have been observed in the Deschutes River and its tributaries.

Bull trout critical habitat has been designated along portions of the Deschutes River downstream of Big Falls near Redmond, Oregon and the Crooked River downstream of Prineville, Oregon (70 FR 56212 – 56311). Bull trout do not currently occupy the Crooked River and only occupy the Deschutes River upstream to Big Falls. The proposed action areas are beyond the range of the current bull trout population or its designated critical habitat.

4.5.1.3 Migratory Birds

The project areas provide habitat for a variety of migratory birds, including songbirds and birds of prey. The USFWS Office of Migratory Bird Management maintains a list of migratory birds (50 CFR 10.13). The Migratory Bird Treaty Act of 1918, as amended, provides federal protections for migratory birds, their nests, eggs, and body parts from harm, sale, or other injurious actions. The act includes a "no take" provision. Fuels reduction activities such as vegetation removal have the potential to directly and indirectly affect migratory birds. However, potentially negative impacts to migratory birds can be eliminated or greatly reduced by avoiding fuels reduction activities during the most sensitive portion of the breeding season (early March through July). If seasonal restrictions are not practicable, a pre-construction survey to identify active nests should be conducted by a qualified avian biologist prior to any disturbing or vegetation clearing activities.

4.5.2 Environmental Consequences

Alternative 1 – No Action

The No Action Alternative would not conduct vegetation management activities, resulting in no direct affects to non-listed or listed threatened and endangered species and their critical habitats in the project areas. However, the potential for losses of listed and non-listed species due to wildfire would remain. Future uncontrolled wildfires could result in adverse impacts to wildlife through the loss of habitat and/or the mortality of individuals. The impact intensity could be small to moderate, depending on the damage from fire.

Alternative 2 – Proposed Action

Under the Proposed Action Alternative, wildfire fuel reduction activities would not affect federally listed threatened or endangered wildlife species or their critical habitats. No spotted owl or bull trout habitat occurs in the proposed project locations. The impact intensity to listed or threatened species would be small.

Impacts to non-listed wildlife, including migratory birds, could occur through displacement and habitat modification. Various factors including changes in food sources, shelter, population density, and dispersal effort would determine the severity of impacts to non-listed wildlife. The impact intensity to non-listed wildlife would be moderate. These impacts would dissipate as displaced individuals either establish new home ranges or are outcompeted. However, these effects would not be expected to exceed the natural range of variability or have long-term effects on the natural processes sustaining these populations.

4.6 HISTORIC, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Section 106 of the National Historic Preservation Act (NHPA) mandates that activities occurring on federal lands, or those that require federal permits or use federal funds, undergo a review process to protect cultural resources that are or may be eligible for listing on the National Register of Historic Places (NRHP).

4.6.1 Historic Resources

An online database of the NRHP was reviewed. There did not appear to be any NRHP-listed resources located within the project area. However, the Oregon State Historic Preservation Officer (SHPO) maintains a statewide database of inventoried historic resources, and there may be historic resources present within the project area that are not listed on the NRHP but that may be eligible for listing. Examples of historic resources include canals, railroads, residences, and other structures 50 years or older. No known historic structures are located within the project area.

4.6.2 Archaeological and Cultural Resources

The Area of Potential Effects (APE) for archaeological and cultural resources would include all areas where potential ground disturbance related to vegetation removal would occur within the 1,000 acre project area.

4.6.3 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to reduce wildland fuel loads in target areas of Deschutes and Crook Counties' wildland-urban interface. Because no federal activity would occur, no requirement for compliance with Section 106 of the NHPA exists. Structures would continue to be at the same risk for potential damages. The impact intensity could be small to large, depending on the damage from fire.

Alternative 2 – Proposed Action

The Proposed Action includes removal of vegetation from approximately 1,000 acres of private lands. Funding from FEMA would be provided to the counties for the purposes of hiring contractors to conduct vegetation removal from private lands. Consequently, compliance with Section 106 of the NHPA is required.

The scope of the Proposed Action, reduction of fuel loading through removal of brush by private contractors using manual means such as hand thinning, brush cutting, and other low-impact measures, is generally limited in terms of potential to impact historic resources. No effect to historic structures would be expected as the Counties would avoid aboveground structures. Since the project areas are located within already developed residential subdivisions and no ground disturbance is anticipated, no effects to cultural resources are expected. The impact intensity would be small. In the event of an unanticipated discovery, in compliance with various

state and Federal laws protecting cultural resources, including Section 106 of the NHPA, all work shall cease in the immediate vicinity of the find until appropriate parties (including the SHPO) are consulted and an appropriate plan is established.

4.7 SOCIOECONOMIC AND ENVIRONMENTAL JUSTICE (EO 12898)

Executive Order (EO) 12898, Environmental Justice, directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations in the US resulting from federal programs, policies, and activities. Socioeconomic and demographic data for residents in the project vicinity was studied to determine if a disproportionate number (defined as greater than 50 percent) of minority or low-income persons have the potential to be affected by the alternatives.

4.7.1 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to reduce wildland fuel loads in target areas of Deschutes and Crook Counties' wildland-urban interface. Because no federal activity would occur, no requirement for compliance with EO 12898 exists.

Alternative 2 – Proposed Action

U.S. Census Bureau data for Deschutes and Crook Counties were used to identify the minority[1] and low-income[2] compositions of the study area. The project areas in Deschutes County were located in Census Tracts 9905, 9911, and 9912.01. The Crook County project areas were located within Census Tracts 9501, 9502, and 9503. Census 2000 data at the county level and census tract level was reviewed.

In Deschutes County, the minority population was 5 percent. Within the three Census Tracts studied, the minority population was 4 percent. The poverty level for Deschutes County was 9.3 percent, while the levels within the project areas ranged from 5.4 percent in Census Tract 9911 to 8.1 percent in Census Tract 9912.01.

In Crook County, the minority population was 7 percent. The minority population within Census Tracts 9501 and 9502 was also 7 percent, while the population of Census Tract 9503 (containing

[1] A minority person is "a person who is: (1) Black (a person having origins in any of the black racial groups of Africa); (2) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race); (3) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or (4) American Indian and Alaskan Native (a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition)."

[2] Low-income is identified as "one whose median household income is at or below the Department of Health and Human Services poverty guidelines." Income data based on Department of Health and Human Services (HHS) guidelines are difficult to gather, so Census Bureau data are often used for environmental justice analyses.

the Powell Butte project area) was 8 percent. The poverty level for Crook County was 11 percent, while the levels within the three Census Tracts studied was 10 percent.

The areas selected under the preferred alternative are areas determined high priority based solely on their need for fuel reduction. Since most project areas have a lower percentage of minorities and residents below poverty level as the respective County, and one location, Powell Butte, has slightly higher minority population of one percent, the Proposed Action would not cause adverse economic impacts, and would comply with EO 12898. The impact intensity would be small. The intended result of the Proposed Action is general safety for all area and local populations. The ability to decrease the potential for catastrophic fire would be a social and economic beneficial impact to the community as a whole.

The Council on Environmental Quality regulations for implementing NEPA requires an assessment of cumulative effects during the decision-making process for federal projects. Cumulative effects are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative effects are considered for both the No Action and Proposed Action alternatives. Cumulative effects were determined by combining the effects of the alternative with other past, present, and reasonably foreseeable future actions.

This action and other urban interface activities that are planned in the fire management plans by the Counties are not expected to have adverse cumulative impacts to climate, geology, and soils; floodplains; wetlands; vegetation; historic, archeological, and cultural resources; or socioeconomics and environmental justice as no project impacts are anticipated. Impacts to biological resources, specifically non-listed wildlife and migratory birds, could occur through displacement and habitat modification. However, these effects would not be expected to exceed the natural range of variability or have long-term effects on the natural processes sustaining these populations. The action includes an educational element for the private land owners to maintain these fuel reduction practices over time and the understanding of fire related risks as development increases in the wildland urban interface. Due to the limited scope of the work, no loss of any sensitive species or habitat is expected that would contribute a measurable amount to the cumulative effects.

FEMA is the lead federal agency for conducting the NEPA compliance process for the proposed vegetation management project. As the lead agency, FEMA expedites the preparation and review of NEPA documents, responds to the needs of residents surrounding the treated lands, meets the spirit and intent of NEPA, and complies with all NEPA provisions.

A public notice is required for this draft EA. The public will have the opportunity to comment on the EA for 30 days after the publication of the public notice. The notice identifies the action, location of the proposed site, responsible agency, location of the draft EA, and who to write to provide comments. FEMA will review all written comments submitted for identification of any significant issues that need to be addressed and will incorporate them into the final EA, as appropriate.

Public involvement is ongoing and had begun before the initiation of this EA. With the passing of the Healthy Forests Restoration Act (HFRA) in 2003, many communities in Oregon organized or increased their public education efforts to reduce hazardous fuels on public and private forested lands. HFRA also directed federal agencies to work each community to develop a Community Wildfire Protection Plan (CWPP). The plans outline priority areas, strategies and action plans for wildfire fuel reduction treatments and educate their respective communities on living in a fire-adapted ecosystem. These plans were developed in large part by the efforts of Oregon local community groups. The groups also have worked to provide public information concerning National Fire Plan goals and to develop wildfire education and prevention programs.

The following eleven plans are relevant to public involvement efforts supporting this EA.

Deschutes County Natural Hazards Mitigation Plan

Representatives from private and public agencies, organizations, businesses and community groups collaborated to develop this plan. The Deschutes County Natural Hazards Mitigation Plan provides an opportunity to merge common strategies and actions related to five potential natural hazards - wildland fire, severe winter storms, volcanic eruption, earthquakes, and floods. The wildland area near the City of Redmond is considered a moderate fire risk, while Bend's wildland area is a high fire risk.

The short-term wildland fire mitigation action items include 1) continuing and expanding education and training, 2) expand public information and education initiatives in support of active hazardous fuels treatment, and 3) expand public information and education initiatives expanding the self-governing Rangeland Association.

Prineville/Crook County Natural Hazards Mitigation Plan

The Crook County Natural Hazards Mitigation Action Plan (CCEM 2005) is the result of a collaborative effort between Crook County citizens, public agencies, non-profit organizations, the private sector, and regional and state organizations. Public participation played a key role in development of goals and action items. Interviews were conducted with stakeholders throughout the county, and all of their workshops were open to the public. Several citizens were actively involved in the plan's development. This plan does not identify specific communities at-risk, rather that is done by the individual Community Fire Plans (see discussion on Crook County Community Wildfire Protection Plan, page 6-3).

The overall goals for participation include are 1) develop and implement education and outreach programs, 2) provide information on tools, partnership opportunities, and funding resources, 3) strengthen communication and coordinate participation among and within public agencies, citizens, non-profit organizations, business, and industry, and 4) encourage leadership within public and private sector organizations.

Upper Deschutes River Natural Resources Coalition Community Wildfire Protection Plan

The Upper Deschutes River Natural Resources Coalition comprises sixteen neighborhoods in southern Deschutes County and includes the La Pine Rural Fire Protection District, the Oregon Department of Forestry, the USFS, the Bureau of Land Management (BLM), and Deschutes County. Since 2004 this coalition has worked to increase neighborhood interest in restoration and protection of natural resources along the Upper Deschutes River. The coalition regularly participates in wildfire prevention education and activities.

The Upper Deschutes River Natural Resources Coalition plan (Upper Deschutes River Natural Resources Coalition 2007) also lists seven "Communities at Risk" as defined by HFRA. These consist of Three Rivers, Wild River, Foster Road Corridor, Little Deschutes Corridor, Big River, Haner Park, and Fall River. These communities face significant threat from wildfire due to location (near federal land), have conditions conducive to large-scale wildfires, and face a threat to human life and property from these fires. Due to this, community education and involvement efforts have been ongoing.

Greater La Pine Community Wildfire Protection Plan

Greater La Pine community members involved in the development of their plan include members of fire agencies, local businesses and organizations, and individuals. Similarly to Upper Deschutes, the La Pine Rural Fire Protection District, the Oregon Department of Forestry, the USFS, and the Bureau of Land Management (BLM) all were involved in the effort to develop the plan and continue to be involved in the ongoing process of revision and improvement of the plan (Project Wildfire 2005).

The Greater La Pine plan has two primary goals: education and outreach. The Greater La Pine community also continues to educate and inform residents about living in a fire-adapted environment and increasing personal responsibility for creating defensible space. With the rapid influx of new residents in the area, efforts have been established to educate new residents and make informational resources easily available. The La Pine Rural Fire Protection District routinely partners with Project Wildfire for public educational efforts. Some homeowners' associations and other organized groups in the Greater La Pine area provide valuable ongoing education to their members about the risks of wildland fire and the ways to reduce those risks.

Additional public outreach is ongoing in the Greater La Pine "Communities at Risk" as defined by the HFRA. These communities consist of Wickiup Acres, Newberry Estates, 6th and Dorrance, Ponderosa Pines, Masten Road, Day Road Corridor, Little Deschutes River, Huntington South, and Section 36.

Greater Redmond Community Wildfire Protection Plan

Community members and local businesses and organizations collaborated with representatives from Redmond Fire & Rescue, Deschutes County Rural Fire Protection District #1, Oregon Department of Forestry, the USFS, the BLM, the Oregon Military Department, Deschutes County, and Project Wildfire to develop this plan (Project Wildfire 2006a). The three main purposes of this plan are to 1) instill a sense of personal responsibility for taking preventative actions regarding wildland fire, 2) increase public understanding of living in a fire-adapted ecosystem, and 3) increase the community's ability to prepare for, respond to, and recover from wildland fires. To reach these goals, public involvement and education are ongoing.

Greater Redmond selected seven subregions as their "Communities at Risk" as defined by the HFRA. These are the Northwest, Southwest, Northeast, Southeast, Urban Northwest, Urban Northeast, Urban Southwest, and Urban Southeast subregions. In order to meet the fire safety needs of these communities, education and outreach are top priorities of the Greater Redmond community.

Further public education has been made possible by the individual and collaborative efforts of Redmond Fire & Rescue, Oregon Department of Forestry, the Central Oregon Fire Prevention Cooperative, and Project Wildfire. These groups provide a variety of wildland fire prevention programs in the Greater Redmond area.

Crook County Community Wildfire Protection Plan

The Crook County plan was developed by the collaborative efforts of the Crook County Court, Crook County Fire and Rescue, Crook County Emergency Management, Crook County Natural Resources Planning Committee, Oregon Department of Forestry, and the Ochoco National Forest and BLM-Prineville District via Central Oregon Fire Management Services (Crook County Community Wildfire Protection Plan Committee 2005).

The Community Emergency Preparedness Committee and the Crook County Natural Resources Planning Committee presented the plan to the public for review and input and posted a draft of the document on the County website. Additional presentations of the plan were held throughout the county during the 2005 Cook County Sheriff's Town Hall meetings.

The Crook County plan divided the county into six geographical blocks containing multiple communities and referred to as Risk Assessment Areas to identify "Community at Risk" (as defined by HFRA). These areas were Juniper Canyon, Powell Butte, McKay, Paulina, Maury, and Twelve Mile. These communities will direct outreach and resources.

Greater Sisters Country Community Wildfire Protection Plan

Education and outreach are primary goals for the Greater Sisters Country plan (Watershed Research and Training Center 2006). The two main themes of education and outreach are to increase public understanding of living in a fire-adapted ecosystem and to increase personal responsibility for creating defensible living space. To accomplish this, in the fall of 2004 the Greater Sisters Country plan steering committee hosted four community meetings to introduce the idea of a plan to the public and to obtain feedback. The meetings increased public support for the plan, identified community members who wanted to participate in additional efforts,

gathered information about community values and concerns, identified potential emergency response and preparedness improvements, identified community priorities for federal land fuel reduction, and identified future educational opportunities.

Ongoing education and outreach efforts continue in the form of guided tours for the public of recent large wildland fires in the area, guided tours of the Metolius Heritage Demonstration Project, an interactive website, and tours of the ongoing Highway 20 Fuels Reduction Project.

The Greater Sisters Country Community selected 14 communities as their "Communities at Risk" (as defined by HFRA) through a wildfire risk assessment, which included input from community meetings. These communities require additional efforts to reduce wildland fire risk. They are Tollgate, Crossroads, Panoramic View Estates, Camp Sherman, Sage Meadows, Sisters Area, Indian Ford Meadows, Squaw Creek, Black Butte, Cascade Meadows, Forked Horn Estates, Suttle Lake, Plainview Estates and Area, and Aspen Lakes.

Greater Bend Community Wildfire Protection Plan

After the passing of HFRA in 2003, three community meetings were held to generate interest and participation in the planning process. This inspired the Greater Bend Community to develop the Greater Bend plan (Project Wildfire 2006b). Participants included the City of Bend Fire Department, Deschutes County Rural Fire Protection District #2, Oregon Department of Forestry, the USFS, the BLM, Deschutes County, members of fire agencies, local businesses and organizations, and individuals.

Three of the public education goals of the Greater Bend plan are 1) instill a sense of personal responsibility for taking preventative actions regarding wildfires, 2) increase public understanding of living in a fire-adapted ecosystem, and 3) increase the community's ability to prepare for, respond to, and recover from wildland fires. These goals have made education and outreach top priorities for the plan. The City of Bend Fire Department, the Central Oregon Fire Prevention Cooperative and Project Wildfire all provide wildfire prevention education to the public and federal and state agencies. Many neighborhood groups and homeowner associations also provide ongoing information to their residents to reduce wildfire risk and improve their protection.

The Greater Bend plan selected 10 "Communities at Risk" (as defined by HFRA) for assessment and prioritization. These are identified as North, Northeast, Southeast, Urban Growth Reserve East, Urban Growth Reserve West, West, Deschutes River Woods, Tumalo, Skyliners, and Saddleback. These risk areas require ongoing planning and public education efforts.

Sunriver Community Wildfire Protection Plan

The Sunriver Owners Association, the Sunriver Fire Department, federal and state agencies, community individuals, and other interested parties collaborated to develop the Sunriver plan (Sunriver Owners Association Environmental Services and Sunriver Fire Department 2005). Prior to this collaboration, the association had drafted a Fuels Modification Plan as early as 1991 (later called the Ladder Fuels Reduction Plan). The plan detailed the reduction of fuels on private properties and common areas. In 1996 Sunriver made fuels reduction mandatory for property owners.

Walker Range Community Wildfire Protection Plan

A multi-jurisdictional group of agencies, organizations, and individuals collaborated to develop the Walker Range CWPP. The purpose of the Walker Range plan is to protect human life and reduce property loss due to wildland fire in the communities and surrounding areas of the Crescent, Crescent-Odell Lakes, Chemult, and Oregon Outback Rural Fire Protection Districts and the Walker Range Forest Protective Association. The steering committee selected 38 "Communities at Risk" (as defined by HFRA). These include the Odell Lake summer homes, Crescent Lake summer homes, Crescent Lake Junction Cluster, Crescent/Gilchrist Cluster, Highway 97 West, Oregon Outback Cluster, and Schoonover and vicinity Cluster.

In the fall of 2004, the Walker Range Fire Plan Team hosted a series of six community meetings about the Walker Range plan. Each of the meetings included an overview of the wildfire plan and a discussion of key issues. In May of 2005, the Walker Range Fire Plan Team hosted a second series of five community meetings about the Walker Range plan. Overall, attendees were pleased with the overall strategy of reducing fuels and the priorities in the plan. Many comments addressed additional emergency evacuation routes. As a result of this feedback, many new emergency evacuation routes were added to the priorities in the action plan.

Four of the public education goals of the Walker Range plan are 1) increase homeowner responsibility, 2) improve web page, 3) keep working with education cooperatives, and 4) distribute the Defensible Space Checklist at appropriate opportunities.

East and West Deschutes County Community Wildfire Protection Plan

This plan encompasses the remaining unincorporated and/or unprotected wildland urban interface areas in Deschutes County that are not included in previous plans. Four project areas are profiled in the plan: West, Paulina and East Lakes, Alfalfa, and Brothers/Hampton. For each area, Communities at Risk were identified according to the Healthy Forests Restoration Act. Seven Communities at Risk were identified in the West area, five were identified in the Paulina and East Lakes area, one was identified in the Alfalfa area, and six were identified in the Brothers/Hampton area.

Members of fire agencies, local businesses, organizations, three steering committees, and individuals collaborated to develop the East and West Deschutes County plan. A draft of the East and West Deschutes County CWPP was available for public comment for 30 days prior to the final signing and approval of the plan. Interested parties provided comments for consideration by the Steering Committees during this period.

Deschutes and Crook Counties are required to obtain and comply with all required local, state, and federal permits and approvals prior to implementing the Proposed Action Alternative. Development at the Proposed Action Alternative sites shall comply with the approved site plans. Any expansion or alteration of this use beyond that initially approved would require a new or amended permit. In the event that historically or archaeologically significant materials or sites (or evidence thereof) are discovered during the implementation of the project, the project shall be halted immediately and all reasonable measures taken to avoid or minimize harm to property. The Counties would then be required to consult with FEMA and the SHPO for further guidance.

The draft EA evaluated potentially significant resources that could be affected. The evaluation resulted in identification of no significant impacts associated with the resources of climate, geology and soils; floodplains; wetlands and water resources; vegetation; biological resources (endangered species act); historic, archaeological, and cultural resources; and socioeconomic and environmental justice. Obtaining and implementing permit requirements along with appropriate BMPs will avoid or minimize any effects associated with the action. It is recommended that a finding of no significant environmental impact to the human or natural environment be issued for the Proposed Action Alternative.

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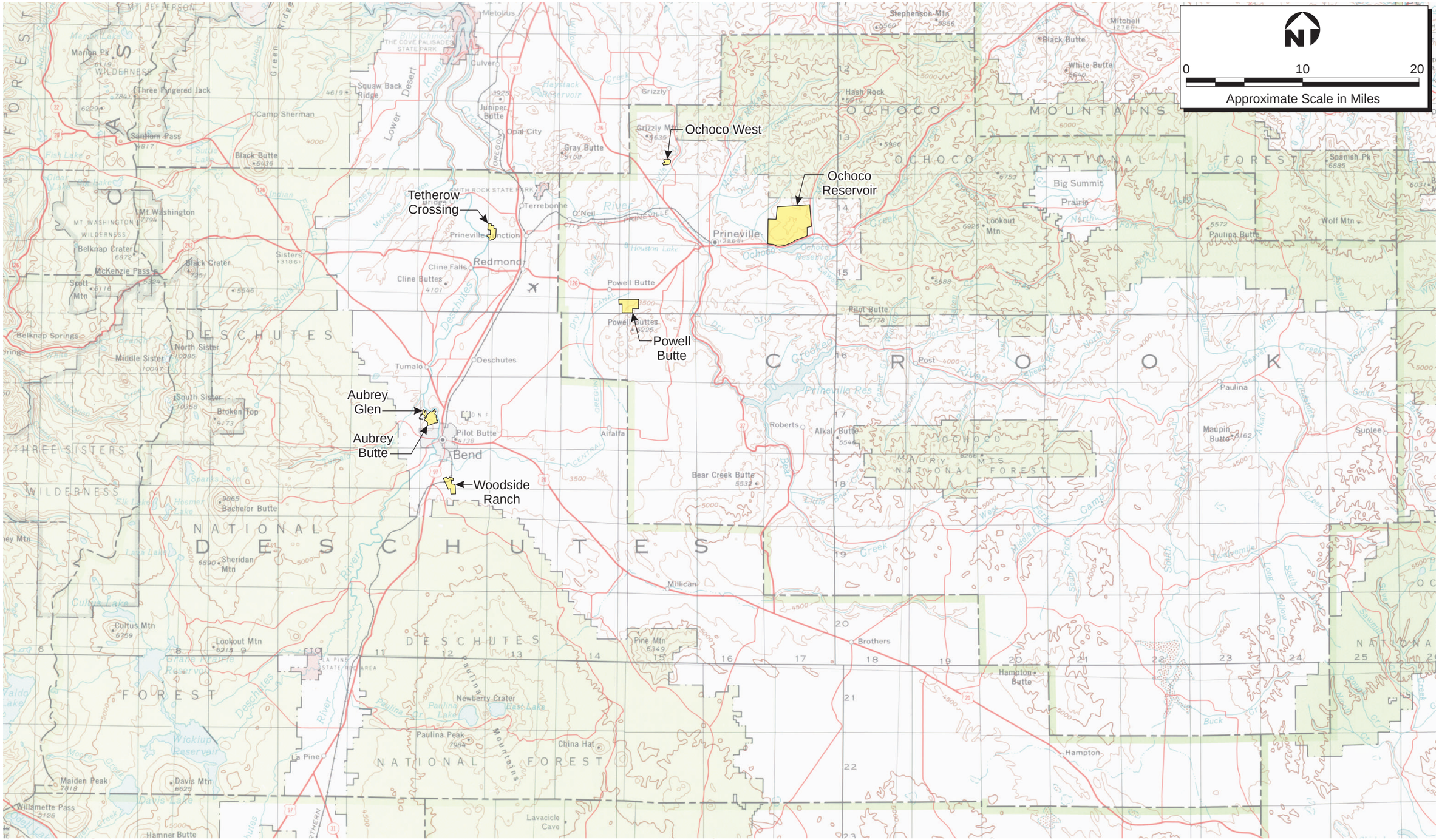
Washington Department of Fish and Wildlife (WDFW). 2004. Washington State Salmonid Stock Inventory Bull Trout/Dolly Varden. Olympia, Washington.

Watershed Research and Training Center. 2006. Greater Sisters Country Community Wildfire Protection Plan. Prepared by Marcus Koffman. June 25.

Figure 1 - Proposed Project Areas

15300278_01.cdr



Source: USGS 1:500,000 quadrangle map, Oregon, revised 1982.

Job No. 15300278

Figure 1

Proposed Project Areas

URS

2008 Wildfire Mitigation Continuation Project
Deschutes and Crook Counties, Oregon

Per FEMA web posting guidance, **Appendix B** (U.S. Fish and Wildlife Species Lists) is not included in the online version as the species lists are not vital to this EA.

Interested persons may contact the Regional Environmental Officer (REO) listed on the FEMA website for more information.

The Proposed Action would comply with the following conditions and conservation measures:

- The applicants shall obtain all required local, state, and federal permits and approvals prior to implementing the Proposed Action Alternative and comply with any and all conditions imposed.
- The applicant is responsible for selecting, implementing, monitoring, and maintaining best management practices to control erosion and sediment, reduce spills and pollution, and provide habitat protection.
- The Counties shall develop and recommend appropriate landscaping requirements for new homes within the wildlife-urban interface, such as reducing the amount and type of vegetation around structures, providing a plant list of fire-resistant species appropriate for residential lots, offering tips for continued vegetation maintenance, and promoting property certification under the Oregon Forestland-Urban Interface Fire Protection Act. At a minimum, the default standards under the Oregon Forestland-Urban Interface Fire Protection Act should be recommended, which are to:
    - Establish a fuel break around structures
    - Improve driveway access for fire trucks
    - Remove tree branches near chimneys
    - Remove dead branches overhanging a roof
    - Move firewood away from structures, or cover it
    - Remove flammables from under decks and stairways
    - Create fuel breaks along roadsides and property lines (only on properties with a fire-risk classification of High-Density Extreme).
- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other laws and Executive Orders.
- In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity should be discontinued, the area secured, and the State and FEMA notified.

PUBLIC NOTICE

Federal Emergency Management Agency
Draft Environmental Assessment
Wildfire Fuels Reduction in Deschutes & Crook Counties, Oregon

The US Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to provide funding to the counties of Deschutes and Crook for a wildfire fuels reduction project in central Oregon. Funding would be provided as authorized by §203 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act (Stafford Act), 42 USC.

FEMA prepared a draft environmental assessment (EA) for the proposed project pursuant to the National Environmental Policy Act (NEPA) of 1969 and FEMA's implementing regulations found in 44 Code of Federal Regulations (CFR) Part 10. The EA evaluates alternatives for compliance with applicable environmental laws, including Executive Orders #11990 (Protection of Wetlands), #11988 (Floodplain Management), and #12898 (Environmental Justice). Many alternatives were evaluated during the development of Community Wildfire Protection Plans and the Hazard Mitigation Plan for Deschutes and Crook Counties. The alternatives evaluated in the EA are the (1) no action; and (2) reduction and management of fuel loads through mechanical and manual means in targeted areas as identified in the Community Wildfire Protection Plans for Deschutes and Crook Counties.

The EA is available for review online at the FEMA environmental website at: http://www.fema.gov/plan/ehp/envdocuments under Region X. If no significant issues are identified during the comment period, FEMA will finalize the EA, issue a Finding of No Significant Impact (FONSI) and fund the project. Unless substantive comments are received, FEMA will not publish another notice for this project. However, should a FONSI be issued, it will be available for public viewing at http://www.fema.gov/plan/ehp/envdocuments under Region X.

The draft EA is also available for review on April 6, 2009 at the Deschutes County Roads Department at 61150 SE 27th Street, Bend, Oregon, and the Crook County Courthouse at 300 NE 3rd Street, Prineville, Oregon.

Written comments on the draft EA should directed no later than 5:00 pm on May 6, 2009 to Mark G. Eberlein, Regional Environmental Officer, FEMA Region 10, 130 228th Street SW, Bothell Washington 98021, or by e-mail at mark.eberlein@dhs.gov. Comments also can be faxed to 425-487-4613.