
Draft Environmental Assessment

# Island Park Reduction of Hazardous Fuels on Private Lands

HMGP 4342-ID

Fremont County, Idaho

*December 2022*

FEMA

**Federal Emergency Management Agency**
**Region X**
Department of Homeland Security
130-228th Street SW
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Cover photo credit: Island Park Sustainable Fire Community

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# Acronyms and Abbreviations

| | |
|---|---|
| °F | degrees Fahrenheit |
| APE | Area of Potential Effect |
| BGEPA | Bald and Golden Eagle Protection Act |
| BLM | Bureau of Land Management |
| BMP | Best management practice |
| CEQ | Council on Environmental Quality |
| CFR | Code of Federal Regulations |
| CWA | Clean Water Act |
| dB | decibel |
| DBH | diameter at breast height |
| DHS | Department of Homeland Security |
| EA | Environmental Assessment |
| EFH | Essential Fish Habitat |
| EO | Executive Order |
| ESA | Endangered Species Act |
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Map |
| FMAG | Fire Mitigation Assistance Grant |
| FONSI | Finding of No Significant Impact |
| FSim | Fire simulator model |
| ft | Foot / feet |
| HMGP | Hazard Mitigation Grant Program |
| IOEM | Idaho Office of Emergency Management |
| IPSFC | Island Park Sustainable Fire Community |
| MBTA | Migratory Bird Treaty Act |
| NAAQS | National Ambient Air Quality Standards |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Preservation Act |
| NOAA Fisheries | National Oceanic and Atmospheric Administration Fisheries |
| NPDES | National Pollutant Discharge Elimination System |
| NPS | National Park Service |
| NRHP | National Register of Historic Places |
| POL | petroleum, oils, and lubricants |
| RCRA | Resource Conservation Recovery Act |
| SHPO | State Historic Preservation Office |
| Stafford Act | Robert T. Stafford Disaster Relief and Emergency Assistance Act |
| TMDL | Total Maximum Daily Load |
| USC | U.S. Code |
| USACE | U.S. Army Corps of Engineers |
| USEPA | U.S. Environmental Protection Agency |
| USFS | U.S. Forest Service |
| USFWS | U.S. Fish and Wildlife Service |
| WUI | Wildland-Urban Interface |

# Glossary

**Bucking:** The process of cutting a felled and delimbed tree into logs.

**Conifer Trees:** Conifer trees are types of common softwood trees that are identified by pine-like needles and seed-producing cones.

**Defensible Space:** Area around a structure where fuels and vegetation are treated, cleared, or reduced to slow the spread of wildfire toward a structure. Defensible space also reduces the chance of a structure fire moving from a building to the surrounding forest.

**Felling:** The process of cutting down trees. Hand felling involves the use of axes, chainsaws, and other handheld tools. Mechanical felling involves the use of heavy logging equipment.

**Hazardous Fuels Reduction:** Includes thinning vegetation, removing ladder fuels, reducing flammable vegetative materials, and replacing flammable vegetation with fire-resistant vegetation for the protection of life and property. Vegetation may include excess fuels or flammable vegetation.

**Ladder Fuels:** Fuels including shrubs, small trees, down wood or brush, and low limbs that may provide a route for a fire to climb from ground fuels to the forest canopy.

**Limbing:** Removal of tree limbs to reduce fuel loads and ladder fuels.

**Sedimentation:** Sedimentation is when water velocity slows down to the point where fine sediments (e.g., clay, silt, and sand) can settle out of the water column, often resulting in these small particles filling in the spaces between larger substrates (e.g., gravels, cobbles, etc.

**Slash:** Woody debris created by hazardous fuels reduction and other forest management activities.

**Wildfire:** Any uncontrolled fire that spreads through vegetative fuels such as forests, shrubs, or grasslands, exposing and possibly consuming structures.

**Wildland-Urban Interface:** The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. The intent of a wildland-urban interface boundary is to define an area within or adjacent to private and public property where mitigation actions should occur to prevent damage or loss.

# Section 1 Introduction

In January 2019, the Island Park Sustainable Fire Community (IPSFC) applied to the Federal Emergency Management Agency (FEMA) through the Idaho Office of Emergency Management (IOEM) for a wildfire mitigation grant under FEMA's Hazard Mitigation Grant Program (HMGP). IOEM would be the direct recipient of the grant, and the IPSFC would be the subrecipient. IPSFC proposes to establish defensible spaces through fuels reduction work in 16 target neighborhoods.

The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act). Under the HMGP, federal funds pay 75 percent of the proposed cost, and the remaining 25 percent is obtained from nonfederal funding sources, in this case from the landowners. The HMGP funds were made available via a Fire Mitigation Assistance Grant (FMAG) declaration by FEMA in 2017; these funds are intended to be used for projects that reduce the risk of future wildfires.

The IPSFC is a local non-governmental organization that provides fuels mitigation in the vicinity of the City of Island Park, located in Fremont County, Idaho along the eastern boarder of Idaho (see **Figure 1-1**). In order to create a more fire-resistant landscape, the IPSFC conducts landowner education, home evaluations, slash pick-up, wildfire awareness days, fuels reduction on non-federally managed lands, and other actions. To accomplish these activities, the IPSFC has partnered with various federal, local, and other non-governmental agencies including U.S. Forest Service (USFS), IOEM, City of Island Park, The Nature Conservancy, and Farm Bureau Insurance.

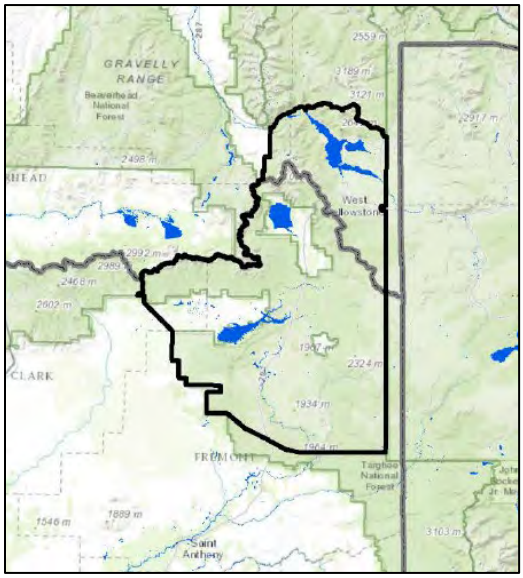



**Figure 1-1 IPSFC Boundary**

*The IPSFC Boundary encompasses approximately 1,170 square miles in eastern Idaho (adjacent to the border with Wyoming) including with Hebgen Lake, Henry's Lake, and Island Park Reservoir. Source: USFS 2016*

The IPSFC jurisdiction includes approximately 4,500 residences spread over approximately 300 subdivisions as well as, businesses, historic structures, communication sites, powerlines, Island Park Dam, the City of Island Park, and Harriman State Park. Property ownership in Island Park includes private lands, Bureau of Land Management (BLM), Idaho State Department of Fish and Game, and USFS. Within the wider Fremont County area, forested lands make up the largest land use, with extensive development within the Wildland-Urban Interface (WUI) in **Table 1-1.**

**Table 1-1 Wildland-Urban Interface and Percent WUI Developed**

| Area | WUI Percent Developed |
|---|---|
| United States | 16.3 |
| State of Idaho | 12.6 |
| Fremont County | 27.8 |

Source: (Fremont County Emergency Management 2016)

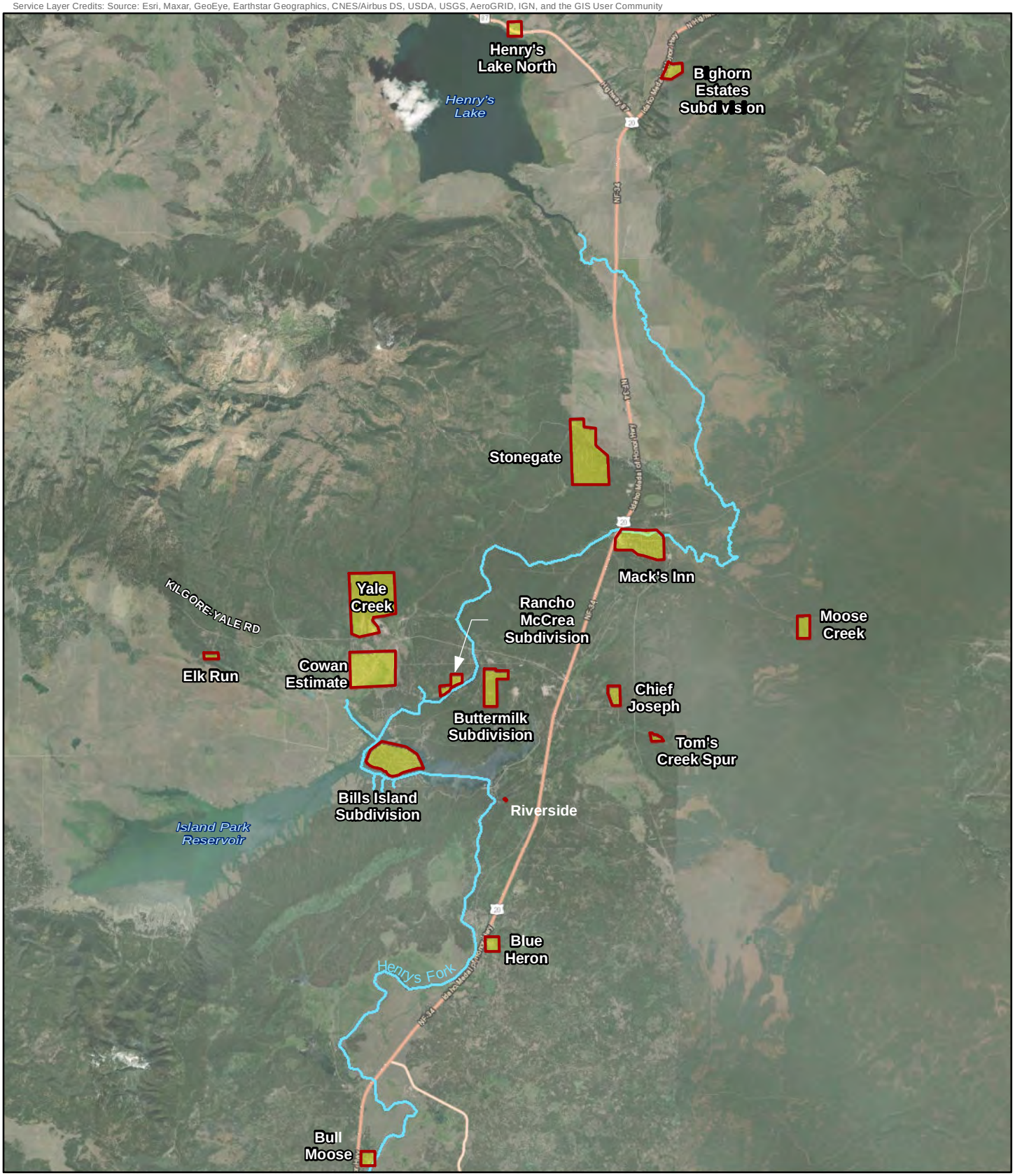
In support of the IPSFC's wildfire reduction goals, fire modeling experts were contracted to determine existing fire risk for developed and undeveloped areas across the project area based on the fire simulator (FSim) model, which indicated that fuels reduction work immediately adjacent to structures on both public and private lands is the most effective way to address the community's vulnerabilities and promote the community's safety, resilience, and vitality in the event of a wildfire (USFS 2016). Fuels reduction projects on federally managed lands – independent of the proposed project – are underway to reduce fuels on public lands.

In order to increase connectivity of vegetation clearance on federally managed lands with similar activities on private lands, the proposed project includes treatments on individual properties that would be based on wildfire risk evaluations and designed to improve defensible space around the home, reduce risk of wildfire spreading rapidly through their property, and improve ingress/egress. Wildfire fuels reduction prescriptions would include tree thinning to reduce canopy density, removal of dead and diseased trees, removal of tree branches and ladder fuels, removal of shrubs and downed trees/branches, and changes to the defensible space surrounding structures. While the Proposed Action does not include grant funding for any modifications to individual structures (e.g., replacing a shake roof with a metal roof, moving firewood away from the structure, or hardening the area within 30 feet of a structure with gravel), these recommendations may be included, as appropriate, in the risk assessment conducted for each property under the proposed project.

The proposed treatment areas are located in subdivisions that have been designated as Priority 1 and 2 communities in the *2016 Fremont County All Hazard Mitigation Plan*, including the *Fremont County Wildfire Mitigation Plan* (Fremont County Emergency Management 2016). Priority 1 and 2 communities are recommended for hazardous fuel reduction treatments including establishing defensible space and ingress/egress standards for road widths and turnaround radii.

This Draft Environmental Assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, the President's Council on Environmental Quality (CEQ) regulations to implement NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508)[1], U.S. Department of Homeland Security (DHS) Instruction 023-01-001, and FEMA Instruction 108-01-1, NEPA implementing procedures. FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of this EA is to analyze the potential environmental impacts of the Proposed Action. FEMA will use the findings of this Draft EA to determine whether preparation of an environmental impact statement or issuance of a finding of no significant impact (FONSI) is appropriate.

[1] CEQ is responsible for developing procedures for the implementation of NEPA by federal agencies. These procedures were initially promulgated in 1971 as guidelines and were then issued as regulations in 1978. In July 2020, CEQ made wholesale revisions to these regulations for the first time in more than 40 years. CEQ is now engaged in a comprehensive review of the 2020 rules pursuant to Executive Order (EO) 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*. In its regulatory agenda, CEQ announced a phased approach to amending the regulations for implementing NEPA. For more information visit: https://ceq.doe.gov/laws-regulations/regulations.html.




# FIGURE 1-2

Treatment Area Subdivisions
FEMA-HMTAP Island Park
Island Park, ID

# Section 2 Purpose and Need

FEMA's HMGP provides funds to eligible state and local governments, federally recognized tribal governments, and non-profit organizations to support implementation of long-term hazard mitigation measures after a presidential disaster declaration. The purpose of the HMGP is to reduce the loss of life and property resulting from natural disasters and to enable implementation of risk mitigation during the recovery from a declared major disaster. Specifically, the purpose of the proposed project is to reduce wildfire hazards on selected privately owned parcels that have been classified as *Extreme* or *High* fire risk. The need for the proposed project is driven by recorded fire history in the region along with the increase in wildfire hazards that have resulted from long-term changes in environmental conditions (e.g., mountain bark beetle infestations) and increased residential development, which exacerbates the risk of fires in the WUI.

The *2016 Fremont County Wildfire Mitigation Plan* included in the *2016 Fremont County All Hazard Mitigation Plan* divides the County into four Fuel Zones based on the fuel types:

- Fuel Zone 1, Lower Valley (cultivated farmlands);
- Fuel Zone 2, Desert (sagebrush-grass fuels);
- Fuel Zone 3, Caldera/Island Park (lodgepole pine [*Pinus contorta*] and Douglas fir [*Pseudotsuga menziesii*]); and
- Fuel Zone 4, High Elevation (quaking aspen [*Populus tremuloides*], Douglas fir, and lodgepole pine).

The Island Park area is located within Fuel Zone 3, Caldera/Island Park, identified as the most challenging area of Fremont County for fire and emergency services personnel based on the significant WUI component, with 211 platted subdivisions, scattered residences, businesses, private and USFS campgrounds, communication facilities, and public infrastructure. In addition to extensive development within the WUI of the Caldera/Island Park zone, barriers to fire suppression and firefighting include varying levels of access to properties, ranging from well-planned streets with turn-arounds that can accommodate firefighting apparatuses to primitive, substandard access routes that limit or hinder access by firefighting personnel and equipment. Additional hinderances to fire suppression in the area is the widespread lack of fire hydrants. While Fremont County Planning and Zoning has adopted current International Fire Code for new structures, not existing, this Code has not been tested by wildfire to date but has proven successful in other places when a structure that follows this Code has been involved in a wildfire. The County and relevant homeowners' associations do not have specific ignition-resistant materials and/or defensible space requirements that apply to treatment properties. Further complicating these issues is the consistent presence of tourists who may be unfamiliar with safe ingress/egress routes as well as the large percentage of residences that are secondary homes belonging to absentee owners with limited seasonal occupancy, which exacerbates issues regarding homeowner education and emergency response (Fremont County Emergency Management 2016).

The recent wildfire history for the Island Park area includes the 1988 North Fork Fire (part of the larger Yellowstone area fires of that year; (Rothermel, Harford and Chase 1994) (National Parks Service 2022) and a range of smaller, more recent fires. Recent fires in the region have burned more than 50,000 acres (see **Table 2-1**).

**Table 2-1 Recent Fire History in IPSFC Vicinity**

| Incident Name | Year | Area Burned (acres) | Location |
|---|---|---|---|
| 2 Lazy 2 | 2010 | 86 | Northwest of Henry's Lake |
| Mt. Two Top | 2013 | 148 | East of Henry's Lake Flat near Canyon Creek headwaters |
| Partridge | 2015 | 582 | Near Pineview |
| Maple | 2016 | 51,556 | Northeast of West Yellowstone |
| Lyle Springs | 2018 | 70 | Near Harriman State Park |
| Sawtell Peak | 2022 | 37 | Northwest of Mack's Inn |

Source: Idaho Department of Fish and Game Online Fire Map Viewer (IDFG 2022)

The IPSFC vision incudes developing a landscape resilient to fire that allows for firefighter safety during suppression of a wildfire, ensuring safe ingress and egress to populated areas during a wildfire event, and creating awareness in the community such that its residents and visitors understand and accept wildfire as a natural, non-threatening component of the environment. Achievement of this vision will take time, dedication, and resources to educate homeowners and land managers of the benefits of fire and fuels reduction around at-risk properties such as homes and businesses. Resources are necessary to create conditions where wildfire risk is reduced; residents and visitors can safely evacuate to allow emergency officials to do their jobs; and for fire to play its natural role without threatening livelihoods or homes.

Currently, the community is still highly vulnerable and unprepared to deal with short and long-term effects, both socially and economically, that a large wildfire event would create. It is crucial to the community's vitality that efforts continue to address the serious threat that wildfire poses by continuing and expanding the IPSFC's work, including the proposed project.

**Figure 2-1 Archival Photo of 1988 Yellowstone Fire**

# Section 3 Alternatives

This section describes the No Action Alternative, the Proposed Action, and an alternative that was considered but dismissed.

## 3.1 No Action Alternative

The No Action Alternative is included to describe potential future conditions if FEMA would not fund the proposed establishment of defensible space and hazardous fuels reduction in Island Park. The IPSFC may continue to pursue other federal and state funding sources to assist with fuels reduction and landowner education and would continue to conduct homeowner education and outreach activities. Additionally, individual landowners may decide whether or not to conduct fuels reduction to mitigate their risks on their own property with their resources. There would be no guarantee of consistent or measurable fuels reduction work under this alternative. Under the No Action Alternative, existing trends (e.g., overgrowth of wildfire fuels vegetation) would largely remain unchanged with increasing vegetation density along with aggravating other environmental factors (e.g., ongoing bark beetle infestation in the area). Wildfire risks to private properties would remain high in the 16 target neighborhoods.

## 3.2 Proposed Action

The Proposed Action would be implemented through a fuel mitigation cost share program on private lands to facilitate hazardous fuels reduction activities on approximately 68 properties that have been classified as having *Extreme* or *High* fire risk to wildfire in target neighborhoods. These properties cover approximately 110 acres, as distributed across 16 neighborhoods which total over 2,300 acres (see **Table 3-1**). The IPSFC developed the list of properties for inclusion in the Proposed Action based on properties found to have exhibited extreme or high wildfire risk based on wildfire modeling (i.e., analysis of the existing vegetation and ingress and egress to that specific area). Fuel reduction activities would include the removal of crown, ladder, and surface fuels.

### 3.2.1 Treatment Methods

Under the Proposed Action, before any fuels reduction treatment actions occur on individual properties, site-specific wildfire risk evaluations would be conducted to develop written fuels reduction prescriptions for mitigation measures, including thinning trees to reduce canopy density, removal of dead and diseased trees, removal of tree branches and ladder fuels, removal of shrubs, downed trees and branches, and improvements to defensible space surrounding assessed structures.

**Table 3-1 Treatment Areas Included in the Proposed Action**

| Treatment Area Subdivision | Number of Properties | Mitigation Plan Prioritization | Total Subdivision or Property Acreage | Treatment Acreage |
|---|---|---|---|---|
| Bighorn Hills Estates | 3 | 2 | 78 | 5.9 |
| Bill's Island (Woodlands) | 11 | 1 | 218 | 2.8 |
| Buttermilk & Rancho McCrea | 8 | 1 | 196 | 1.9 |
| Chief Joseph | 2 | 1 | 78.9 | 3.5 |
| Cowan | 2 | 1 | 63 | 4.98 |
| Elk Run | 2 | 1 | 120 | 7.13 |
| Mack's Inn | 4 | 1 | 404 | 1.51 |
| Moose Creek | 4 | 1 | 120 | 5.6 |
| Riverside (19 Ponds Lodge) | 1 | Not Prioritized | - | 2.6 |
| Stonegate | 21 | 1 | 451.53 | 53.05 |
| Yale Creek | 3 | 1 | 584 | 1.93 |
| Tom's Creek Spur (Buffalo River) | 4 | 1 | 35.5 | 16.62 |
| Blue Heron Lane | 1 | - | 4.04 | 1.2 |
| Bull Moose Lane | 1 | 2 | 0.023 | 0.15 |
| Highway 87 (North Henry's Lake) | 1 | 1 | 0.610 | 0.32 |
| **Total** | 68 | - | **2,353.603** | **109.19** |

Specific prescriptions include:

- **Tree Removal**
  - 8-inch-diameter at breast height (DBH) or less identified by IPSFC and the homeowner would be marked and removed
  - 8-inch-DBH or less, standing dead and solid down material would be marked and removed
  - Felled large trees would be limbed, bucked, and cut into sections at least 10-feet in length and left on the property
  - All overstory trees must be carefully evaluated before felling so there is no damage to the home or other property improvements
- **Tree Limbing**
  - Unless marked with flagging, all conifer trees would be limbed up to 6 feet (ft) or no more than one third of the total height, whichever is less
  - Branches from the main body of the tree would be cut and removed

- **Brush Clearance**
  - All brush identified by IPSFC and the homeowner within the project area would be cut and removed
- **Material Removal**
  - The contractor would transport all slash and tree material resulting from fuels reduction activities to the Meadow Creek Slash Pit operated by Fremont County located at latitude N 44.59831 / longitude W -11.33035, McCrea Pit operated by the USFS located at latitude N 44.45953 / longitude W -111.39522, or left on-site for firewood at the property owners discretion
  - Material may be chipped and spread on-site or removed to an offsite disposal location per landowner preference
- **Work Timing**
  - Work is expected to be conducted between April 15th and November 30th while there is little to no snow cover on the ground (some of this work may occur during the migratory bird nesting seasons, generally February through August for this region)
- **Heavy Equipment**
  - Skid steers or loaders may be used to access the work site on the property
  - No trees would be pushed over using heavy equipment and trees may be base cut
  - No use of heavy equipment for removal of small vegetation
  - Trucks for transporting removed material or chippers for processing material would only be parked on existing roadways and a skid steer or loader would be used to transport material from the property to the truck or chipper
  - Upon property work completion, the contractor would rehabilitate any skid trails to their condition before work started
- **Proximity to Wetlands**
  - No work including cutting or operation of mechanized equipment would occur within 30 feet of surface water or wetlands
- **Herbicide**
  - No herbicides would be used
- **Contractor Responsibility**
  - The contractor would be responsible for any damages to the home or other property improvements resulting from the contractor's implementation of the contract
- **White Bark Pine**
  - All whitebark pine would be identified within the defensible space by a qualified person and flagged as part of the wildfire risk assessment
  - All blister rust infested branches and saplings/seedlings determined to not survive the infestation will be removed and properly disposed of. This will be conducted as outlined in Options for the Management of White Pine Blister Rust in the Rocky Mountain Region (Burns, et al. 2022)

### 3.2.2 Burning and Smoke Management

Burning would only be used for large concentrations of slash at Fremont County burn pits (i.e., Meadow Creek and McCrea locations) or in smaller concentrations on individual properties by property owners. The Meadow Creek slash pit is operated by the Fremont County Public Works department and is open to the public from mid-May to mid-October. Burn permits are required from the State of Idaho during the fire season May 10 through October 20 when activities would be conducted outside of city limits and would be conducted in compliance with Fremont County Ordinance. The McCrea slash pit is located on Forest Service-managed lands, and IPSFC contractors have permission to deposit slash there in compliance with their contract. USFS later burns slash after an area receives significant moisture or snow is present (USFS 2022).

### 3.2.3 Project Duration

Implementation of the Proposed Action would occur over a 6-10 months period each year over a maximum 5 year period, until all of the target properties are treated. This would be followed by 10 years of required landowner maintenance of treatment work, which is not part of the grant.

### 3.2.4 Maintenance Activities

Under the Proposed Action, the IPSFC would execute 10-year maintenance agreements with the individual landowners who would each be responsible for the associated costs and provision of any needed maintenance activities. Annual maintenance conducted by the property owner would include removal of surface fuels such as pine needle accumulations, new understory trees and shrubs, and down woody material; as well as cleaning of gutters, keeping firewood stockpiles away from homes, sweeping needles from structure rooftops, mowing grasses and forbs, and promotion of fire-resistant tree species (e.g., aspen). Under the Proposed Action, included properties would be inspected on a bi-annual basis by IPSFC Fuels Specialists to ensure fuels reductions are maintained.

## 3.3 Additional Action Alternatives Considered and Dismissed

Aside from the Proposed Action and No-Action Alternative presented above, additional alternatives have been considered and dismissed because they would be infeasible or not meet the Purpose and Need of the Proposed Action. For instance, utilizing prescribed burns is infeasible in close proximity to private property and structures, it would be too hazardous to be implemented and will not be evaluated further in this EA. Another alternative would be ignition-resistant structural retrofits installed alongside proposed defensible space vegetation clearance. This potential alternative has been dismissed from further consideration because the County and relevant HOAs do not have statutory requirements (i.e., building codes, ordinances, or covenants) requiring these updates and this alternative is not considered further in this EA.

# Section 4 Affected Environment, Potential Impacts, and Mitigation

This section describes the environment potentially affected by the alternatives, evaluates potential environmental impacts, and recommends measures to avoid and reduce those impacts. When possible, quantitative information is provided to describe potential impacts. Potential impacts are evaluated qualitatively based on the criteria listed in **Table 4-1**. The study areas generally include the project areas as well as the access and staging areas for the proposed action. If the study area for a particular resource category is different from the project area, differences will be described in the appropriate subsection.

**Table 4-1 Evaluation Criteria for Potential Impacts**

| Impact Scale | Criteria |
|---|---|
| None/Negligible<br>(No Impacts or No Change is often used in the discussion to indicate None/Negligible) | The resource area would not be affected, or changes or benefits would be either nondetectable or, if detected, would have effects that would be slight and local. Impacts would be well below regulatory thresholds, as applicable. |
| Minor | Changes to the resource would be measurable, although the changes would be small and localized. Impacts or benefits would be within or below regulatory thresholds, as applicable. Mitigation measures would reduce any potential adverse effects. |
| Moderate | Changes to the resource would be measurable and have either localized or regional-scale impacts/benefits. Impacts would be within or below regulatory thresholds, but historical conditions would be altered on a short-term basis. Mitigation measures would be necessary, and the measures and/or Best Management Practices (BMPs) would reduce any potential adverse effects. |
| Major | Changes would be readily measurable and would have substantial consequences on a local or regional level. Impacts would exceed regulatory thresholds. Mitigation measures to offset the adverse effects would be required to reduce impacts, though long-term changes to the resource would be expected. |

## 4.1 Resources Not Affected and Not Considered Further

The resource categories identified in **Table 4-2** would not be affected by the No-Action Alternative or the Proposed Action and its alternatives because they do not occur in the project/treatment areas, or the alternatives would have no effect on the resource. These resources have been eliminated from further consideration in this EA.

**Table 4-2 Resources Eliminated from Further Consideration**

| Resource Topic | Reason for Elimination |
|---|---|
| Farmland Soils | According to the Natural Resources Conservation Service, there are no designated Prime or Unique Farmlands within any of the treatment areas (Natural Resources Conservation Service 2022). Therefore, implementation of the Proposed Action or any alternative would have no effect on farmland soils. |
| Geology | The proposed vegetation clearance and establishment of defensible space are surface-level activities that would not affect the underlying geology (e.g., bedrock) within any of the proposed treatment areas. Issues related to surface soils are discussed in **Section 4.2**, *Soils*. |
| Wild and Scenic Rivers Act | According to the National and Wild and Scenic Rivers System (National Parks Service 2022), there are no Wild and Scenic Rivers within the Island Park area. Therefore, the proposed vegetation clearance and establishment of defensible space would have no effect on wild and scenic rivers. |
| Coastal Resources | The proposed treatment areas are not located in the Coastal Zone Boundary. Therefore, the proposed vegetation clearance and establishment of defensible space would have no effect on coastal resources. |
| Land Use and Zoning | The proposed vegetation clearance and establishment of defensible space would not change existing land uses and would be consistent with current zoning in the unincorporated portion of Fremont County. Therefore, implementation of the Proposed Action or any alternative would have no effect on land use and zoning. |

## 4.2 Soils

Fremont County, especially the Island Park area, is defined by volcanic calderas associated with the nearby Yellowstone Hotspot underlying the National Park. The caldera bottoms are generally flat with rolling hills surrounded by steep-side mountains that compose the caldera walls.

There are more than 20 soil map units[2] in the treatment areas (Natural Resources Conservation Service 2022). These units are generally loams with varying degrees of clay, sand, and gravel depending on the local slope and proximity to watercourses.

### No Action Alternative

Under the No Action Alternative, private landowners, may still implement wildfire mitigation activities within the treatment areas without cost sharing support from the IPSFC, including longer-term vegetation maintenance. These activities would have a *negligible adverse impact on soils* as a result of ground disturbance. However, in the event of a major wildfire, there would be substantial loss of vegetation, which may result in higher soils temperatures, increased

[2] A soil map unit is a collection of areas defined and named the same in terms of their soil components (e.g., series) or miscellaneous areas or both.

evaporation, and reduced soil moisture due to loss of shading. Additionally, the loss of vegetation cover exposes soils directly to rainfall and surface water flows which would result in accelerated erosion. Accelerated soil erosion during intense rainstorms may reach such levels that they become mass wasting events where soil and water mixtures flow downhill.

Extreme heat generated from wildfires can cause soils, to form hydrophobic layers that repel water, resulting in decreased stormwater infiltration. Hydrophobic conditions occur when plants burn in wildfires, releasing a gas into the soil that cools and solidifies into a waxy, water-repelling substance that coats soil particles. Large-pored soils, such as sandy or coarse-textured soils, are more vulnerable to becoming hydrophobic because they transmit heat more easily than heavily textured soils such as clays (USFS 2005). Removal of vegetation and alteration of soil structure following wildfires increases soil susceptibility to accelerated erosion and mass wasting events on steep slopes. In the event of a wildfire, there could be *short-term, minor to moderate adverse impacts on soils*, depending on the intensity of the wildfire and steepness of the slope where the wildfire occurred.

**Proposed Action**

Heavy equipment would not be used and ground crews with hand-operated power tools would conduct treatments that would reduce the risk of soil erosion from vegetation removal. Trees would not be dragged on the ground but lifted to the staging point, to reduce soil disturbance relative to other ground-based yarding systems. Soil compaction could occur if the equipment were driven over any given area many times; however, this would generally not occur due to the short duration of activities in a treatment area. Some shrubs and trees would be retained to limit the disruption of the soil and land surface. Thus, the risk of erosion and soil compaction from the Proposed Action would be *short-term and minor adverse impacts on soils*.

Material on private property left for firewood would be left in place or removed from the property at the property owners discretion. Any slash transported to and burned at the existing Meadow Creek or McCrea slash pits would not result in further adverse impacts at those facilities since burning debris is part of their ongoing operation. Previous studies have shown that small pile burning does not result in extreme soils heating, substantial soil erosion, or detrimental changes in soil fertility in the area around the burn pile on individual properties (Hubbert 2013).Therefore, slash pile burning would also have *negligible adverse impact on soils*.

Overall, the Proposed Action would reduce the potential for wildfires to occur and subsequently remove vegetation cover and alter the soil characteristics that would increase the potential loss of soils through accelerated erosion and mass wasting events. Therefore, the Proposed Action would likely have *long-term, minor beneficial impacts on soils* by reducing the risk of soil damage and subsequent mass wasting events following wildfires.

## 4.3 Visual Quality and Aesthetics

The assessment of visual quality is a qualitative analysis that considers the visual context of the treatment area, potential for changes in visual character and contrast, the number of people who can view the site and activities from public viewing locations, and the extent to which treatment activities would alter the aesthetic qualities of the treatment area.

The 68 properties that would receive defensible space treatments are dispersed throughout the

Island Park area and are generally forested. A number of the treatment areas are located along the Henrys Fork (Rancho McCrea and Mack's Inn) and Buffalo River (Tom's Creek Spur) and Island Park Reservoir (Bill's Island). The 1997 Targhee Forest Plan lists Henry's Fork and the Buffalo River as eligible scenic rivers, but these stretches of river have never been fully designated as such since that plan was prepared (USFS 1997, National Parks Service 2022). All of the properties included in the proposed treatment activities are privately held. The only designated scenic highway in the Island Park area is the state-designated Fort Henry Historic Byway (A-2 Clark-Fremont County Road). However, it is unlikely that any of the treatment properties are visible from the Fort Henry Historic Byway.

### No Action Alternative

Under the No Action Alternative, private landowners, may still implement wildfire mitigation activities within the treatment areas without cost sharing support from the IPSFC, including longer-term vegetation maintenance. Properties treated with wildfire mitigation measures by individual property owners on their own initiative would undergo a visual change, from a relatively dense understory to a more open understory, which outside observers may perceive as less cluttered and safer on a localized scale which could be similar to that described for the Proposed Action, resulting in a *negligible adverse impact on visual quality*. However, if the No Action Alternative were selected, a major wildfire would be more likely to spread through the IPSFC area, which could have minor to moderate adverse impacts on the visual quality of the community, depending on the extent of the fire damage.

### Proposed Action

Properties that receive hazardous fuels reduction treatments would undergo a visual change as a result of vegetation management activities, from a relatively dense understory to a more open understory, which outside observers may perceive as less cluttered and safer on a localized scale. Users of nearby USFS-managed lands or waterbodies (i.e., Island Park Reservoir and Henry's Fork) or drivers on the Fort Henry Historic Byway may find this to be visually beneficial. Hazardous fuels reduction activities conducted along ridgelines and roadways would increase the number of viewers to whom visual changes would be visible. Depending on how residents and visitors perceive the visual effects of treatment, the Proposed Action could have *negligible adverse impacts on visual quality and aesthetics* in all treatment areas.

As such, the implementation of the Proposed Action would have *negligible adverse impacts on visual quality and* aesthetics in all treatment areas. Over the long-term, the risk of wildfire spread in the proposed treatment areas would be reduced, which would have a minor long-term beneficial effect on visual quality and aesthetics by reducing the chance that a damaging high-intensity wildfire would rapidly spread through the area. which could have *minor to moderate adverse impacts on the visual quality* of the community, depending on the extent of the fire damage.

## 4.4 Air Quality and Climate

The Clean Air Act, amended in 1990, requires the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) for six criteria pollutants harmful to human and environmental health, including ozone, particulate matter, nitrogen dioxide, carbon monoxide, sulfur dioxide, and lead (USEPA 2022). According to the USEPA's Green Book (USEPA 2022), Fremont County, including the Island Park area, is currently in attainment[3] status for all criterial pollutants.

Air quality is adversely affected by everyday activities such as vehicle use and major events such as wildfires. Wildfire smoke is composed of carbon dioxide, water vapor, particulate matter, carbon monoxide, nitrogen oxides, organic chemicals (e.g., hydrocarbons and trace minerals) which affect air quality (USEPA 2019). Air quality also can be affected by fugitive dust which is considered a component of particulate matter and is released into the air by wind or human activities and can have human and environmental health impacts (California Air Resources Board 2007).

The Island Park area includes portions of the Snake River Plain and Middle Rockies Ecoregions (McGrath, et al. 2002) and relevant sub-ecoregions, each with varying climate characteristics (see **Table 4-3**).

**Table 4-3 Climate by Island Park Area Subdivision**

| Ecoregion | Subdivisions Included | Climate Characteristics |
|---|---|---|
| **Snake River Plain** | | |
| Eastern Snake River Basalt Plain | Cowan | 6-12 inches annually<br>75-140 frost-free days annually<br>January min/max: 11/30 (degrees Fahrenheit [°F])<br>July min/max: 51/87 °F |
| **Middle Rockies** | | |
| Barren Mountains | Bighorn Hills Estates<br>Elk Run<br>Yale Creek | 18-30 inches annually<br>25-70 frost-free days annually<br>Long cold winters, moist springs |
| West Yellowstone Plateau | Bill's Island<br>Buttermilk<br>Rancho McCrea<br>Chief Joseph<br>Mack's Inn<br>Moose Creek<br>Riverside<br>Stonegate<br>Tom's Creek Spur<br>Blue Heron Lane<br>Bull Moose Lane<br>Highway 87 | 15-40 inches annually<br>50-95 frost-free days annually<br>January min/max: 2/26 °F<br>July min/max: 43/79 °F |

[3] Areas where air pollution levels consistently stay below these standards are designated "attainment." Areas where air pollution levels persistently exceed these standards are designated "nonattainment." If any areas were in nonattainment, but now attains the standard and has an USEPA approved plan to maintain the standard, it is designated a "maintenance" area.

"Climate change" refers to changes in the Earth's climate caused by a general warming of the atmosphere whose primary cause is emissions of greenhouse cases, including carbon dioxide and methane. Climate change can affect species distribution, temperature fluctuations, and overall weather patterns. Climate change is ongoing and projected to continue in Idaho and projected to include increasing temperatures, alteration of precipitation patterns, reduced snowpack, and increased extreme weather events (University of Idaho 2022). Projected increases in annual temperatures across Idaho are 6-11°F by 2100. With regard to wildfires, forests in the Pacific Northwest and Rocky Mountains are likely to experience a doubling or tripling increase in burned areas by 2050 (University of Idaho 2022).

### No Action Alternative

Limited on-going hazardous fuels reduction activities may still occur in the treatment areas under the No Action Alternative. This could potentially result in *negligible short-term adverse impacts on air quality* from vehicle and equipment emissions (e.g., gas-powered chainsaws). However, under this alternative, the risk of wildfire spread would remain high. Wildfire smoke can deteriorate air quality and expose vulnerable populations, such as the young and elderly, to harmful pollutants (USEPA 2019). Particulate matter, specifically, can have many harmful effects, including eye and respiratory tract irritation, reduced lung function, asthma, and heart failure (USEPA 2019). In addition to particulate matter in smoke, a fire in developed residential areas produces a variety of other toxins when buildings and their contents burn.

Smoke from major wildfires can affect air quality over large areas, impacting people far from the fire, even several states away. Additionally, major wildfires can emit high levels of greenhouse gases into the atmosphere, contributing to climate change and exacerbating the risk of wildfires. In the event of a wildfire, the No Action Alternative could have a *short-term, minor to major adverse impact on air quality and regional climate conditions*, depending on the intensity and scale of the wildfire.

### Proposed Action

The Proposed Action would have minor, localized, and short-term impacts on air quality from equipment and vehicle use. Vehicle use on dirt roadways, such as those in some of the treatment areas, can contribute to fugitive dust while gas-powered equipment can produce particulate matter. Vehicles would also be used to transport crews to and from treatment areas. Vehicle use in all treatment areas would be short-term, localized, and involve a small number of vehicles. Vehicles and equipment would be gas-powered and would be kept running to the minimum extent possible. Ground disturbance would be minimal, as explained in **Section 4.2**, *Soils*, limiting the release of fugitive dust. The short duration and limited extent of this activity would minimize potential impacts on air quality. Thus, ground disturbance would be negligible, limiting the release of fugitive dust.

Pile burning of large slash piles would be conducted at established burning locations including the Meadow Creek slash pit operated by Fremont County while small amounts of vegetation could be burned on private property by the property owner. All of these activities would be conducted in compliance with state and local regulations including abiding by relevant permit requirements, as described in **Section 3.2.3**, *Burning and Smoke Management*. Given that vegetation clearing activities and slash burning would occur at locations dispersed across Fremont County and would not occur simultaneously over the duration of the program, it is

anticipated that the Proposed Action would not result in air quality or climate effects such that Fremont County would no longer be in attainment for air quality standards. Since the Proposed Action does not include any new permanent air emissions and pile burning will be geographically and temporally scattered, no detailed analysis of effects on climate change is warranted. Therefore, the Proposed Action would have *minor, short-term adverse air quality impacts* from vehicle and equipment use, slash burning, and activities contributing to the release of fugitive dust. By reducing the risk of wildfire spread, hazardous fuels reduction activities would have *long-term, minor, beneficial effects on air quality and climate*.

## 4.5 Surface Waters and Water Quality

The Clean Water Act (CWA) of 1977, as amended, establishes requirements for states and tribes to identify and prioritize waterbodies that do not meet defined water quality standards. The USEPA and individual states coordinate monitoring and reporting of water quality issues via determinations of impairment specified on the State's CWA Section 303(d) list based on various types of contamination (i.e., sediment, water temperature, chemical contaminants). For waters included on the 303(d) list, states must develop a total maximum daily load (TMDL) for pollutants set at a level to achieve water quality standards compliant with the CWA.

The project area is located within the Upper Henry's Fork subbasin located in Idaho and Wyoming dominated by the Henry's Fork. Henry's Fork runs from north to south starting at Henry's Lake through Island Park Reservoir eventually joining the larger Snake River north of Idaho Falls. Henry's Fork, also known as the North Fork of the Snake River, drains approximately 3,212 square miles. Within the project area, the Buffalo River is the largest tributary of Henry's Fork that it joins just south of Island Park Dam. Smaller creeks and tributaries run through or adjacent to a number of the treatment areas. Of the various waters in proximity to treatment areas, only Moose Creek that passes through the Moose Creek subdivision is the only 303(d) listed water. However, pursuant to the State of Idaho Department of Environmental Quality's 2021 Sediment and Bacterial TMDLs for the Upper and Lower Henrys Fork Subbasins recommends delisting Moose Creek (Idaho Department of Environmental Quality 2021) (see **Table 4-4**).

**Table 4-4 Surface Waters in Proximity to Treatment Areas**

| Subdivision | Adjacent Waterbody | 303d Impairment (Category 5) |
|---|---|---|
| Bighorn Hills Estates | Nearby Howard Creek | No |
| Bill's Island | Surrounded by Island Park Reservoir | No |
| Buttermilk & Rancho McCrea | Henry's Fork | No |
| Chief Joseph | Unnamed stream | No |
| Cowan | Hotel Creek | No |
| Elk Run | Sheep Creek | No |
| Mack's Inn | Henry's Fork | No |
| Moose Creek | Moose Creek | Yes, but proposed for delisting |
| Riverside | Buffalo River | No |

| | | |
|---|---|---|
| Stonegate | None | No |
| Yale Creek | Yale and Hotel Creeks | No |
| Tom's Creek Spur | Tom's Creek | No |
| Blue Heron | Blue Spring Creek | No |
| Bull Moose | Henry's Fork | No |
| Highway 87 | Henry's Lake | No |

### No Action Alternative

Under the No Action Alternative, limited ongoing wildfire hazard reduction activities would be conducted by the IPSFC and property owners on their own initiative. Under the No Action Alternative, the risk of wildfire spread would not be substantially reduced. If a wildfire occurs and spreads, the loss of vegetation would impact surface water quality through increased soil erosion and sedimentation. There may be increased temperatures from the loss of shade along riparian zones outside of the treatment areas. Additionally, intense lasting heat from major wildfires can cause soils to form hydrophobic layers, as described in **Section 4.2**, *Soils*, which would decrease infiltration of stormwater and aquifer recharge while increasing runoff, erosion, sedimentation, and stream discharges. The No Action Alternative could have a *minor to major adverse impacts on surface waters and water quality*, depending on the scale and intensity of a wildfire.

### Proposed Action

The Proposed Action would not require in-water work. Hazardous fuels reduction activities could affect water quality because the removal of vegetation may expose or disrupt soils which in turn would potentially accelerate runoff and sediment into adjacent waterbodies. However, some vegetation would be retained according to the treatment specifications see **Section 3.2.1**, *Treatment Methods*, helping to prevent substantial erosion from vegetation removal. Further, herbicides would not be used to manage vegetation thus there would be no herbicide runoff that would adversely impact adjacent waterbodies.

Vegetation removal activities would not occur within 30 feet of waterbodies, which would minimize erosion and sedimentation into surface waters. To prevent potential impacts from fuel or lubricant leaks, all equipment proposed for use would be kept in good repair without leaks of fluids. If such leaks or drips occur, they would be cleaned up immediately. Equipment maintenance and/or repair would be confined to one location to restrict potential locations of leaks or drips. Fueling of vehicles and equipment would take place at least 30 feet away from the water (and away from drains) over an impervious surface. The contractor would ensure that no fuel, oil, or lubricants from treatment activities are allowed to be placed where they may be washed by rainfall or runoff into any adjacent waterbody.

The Proposed Action would reduce the risk of wildfire spread in the vicinity of treatment areas and would thereby reduce the risk of impacts associated with wildfires on water resources described for the No Action Alternative. Therefore, the Proposed Action would have comparatively *minor, long-term beneficial effects on waterbodies* in and near treatment areas.

## 4.6 Wetlands

Executive Order (EO) 11990, *Protection of Wetlands* requires federal agencies to consider alternatives to work in wetlands and develop/implement measures to limit potential impacts on wetlands if there are no practicable alternatives. FEMA regulation 44 CFR Part 9, *Floodplain Management and Protection of Wetlands* sets forth the policy, procedures, and responsibilities to implement and enforce EO 11990 and prohibits FEMA from funding activities in a wetland unless no practicable alternatives are available. Wetlands are defined by the U.S. Army Corps of Engineers (USACE) and the USEPA as, "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR §328.3[b]). The USACE has the authority to regulate jurisdictional wetlands as Waters of the U.S. under Section 404 of the CWA; however, EO 11990 provides guidance concerning how to mitigate or minimize any net loss of both jurisdictional and non-jurisdictional wetlands.

According to the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory maps, there are several small wetlands that occur within or adjacent to the proposed treatment areas (USFWS 2022a). These include riverine and lacustrine wetlands surrounding Henry's Lake, Henry's Fork, Island Park Reservoir, the Buffalo River, and other minor streams (see **Table 4-5**).

**Table 4-5 National Wetlands Inventory Proximity to Treatment Areas**

| Subdivision | Wetland Type | Proximity to Treatment Area | Structures within 100 Feet of a Mapped Wetland |
|---|---|---|---|
| Bighorn Hills Estates | R4SBA – Riverine Intermittent Streambed Temporary Flooded<br>R4SBC – Riverine Intermittent Streambed Seasonally Flooded | Adjacent to northern and eastern side of the subdivision | No |
| Bill's Island | Island Park Reservoir L1UBHh – Lacustrine, Limnetic Unconsolidated Bottom, Permanently Flooded, Diked/Impoundment | Island Park Reservoir surrounds subdivision and some treatment areas are located on the lakeside | 4 parcels on shoreline of Island Park Reservoir |
| Buttermilk & Rancho McCrea | Buttermilk: None<br>Rancho McCrea: Henry's Fork R3UBH – Riverine, upper Perennial, Unconsolidated Bottom, Permanently Flooded | Buttermilk: None<br>Rancho McCrea: Adjacent to Henry's Fork | Buttermilk: 3 parcels adjacent to Henry's Fork<br>Rancho McCrea: No |
| Chief Joseph | R3SBC – Riverine Intermittent Streambed Seasonally Flooded | Eastern edge of subdivision is adjacent to intermittent streambed | No |
| Cowan | R5UBH – Riverine, unknown Perennial, Unconsolidated Bottom, Permanently Flooded<br>PEM1C – Palustrine emergent | Treatment areas are located adjacent to wetland | No |

| | | | |
|---|---|---|---|
| | Persistent Seasonally Flooded | | |
| Elk Run | R4SBC – Riverine Intermittent Streambed Seasonally Flooded | Treatment areas are located north of mapped wetlands | No |
| Mack's Inn | R3UBH – Riverine Upper Perennial Unconsolidated Bottom Permanently Flooded | Treatment areas located near Henry's Fork | 1 parcel adjacent to Henry's Fork |
| Moose Creek | Moose Creek R2UBH – Riverine Lower Perennial Unconsolidated Bottom Permanently Flooded | Moose Creek runs through subdivision | 1 parcel adjacent to Moose Creek |
| Riverside | Buffalo River R3UBH – Riverine, Upper Perennial, Unconsolidated Bottom, Permanently Flooded | Treatment area is adjacent to Buffalo River | No |
| Stonegate | None | No mapped wetlands in proximity to treatment areas | No |
| Yale Creek | PSS1C – Palustrine Scrub-Shrub Broad-Leaved Deciduous Seasonally Flooded | Southernmost treatment areas in subdivision in proximity to Hotel Creek | No |
| Tom's Creek Spur (Buffalo River) | Buffalo River R3UBH – Riverine Upper Perennial Unconsolidated Bottom Permanently Flooded | Treatment area adjacent to Buffalo River | 1 parcel adjacent to Buffalo River |
| 3788 Blue Heron Lane | Blue Spring Creek PEM1C – Palustrine Emergent Persistent Seasonally Flooded | Treatment area surrounded by Blue Spring Creek | 1 parcel adjacent to Blue Spring Creek |
| 3520 Bull Moose Lane (Pine Haven) | R45BC – Riverine Intermittent Streambed Seasonally Flooded | Nearby Henry's Fork | 1 parcel adjacent to Henry's Fork |
| 3885 Highway 87 (Henry's Lake) | L1UBH – Lacustrine Limnetic Unconsolidated Bottom Permanently Flooded Diked/Impounded | Adjacent to Henry's Lake | No |

### No Action Alternative

In the absence of a major wildfire, the No Action Alternative would have *negligible adverse effects on wetlands*. Any limited wildfire mitigation activities implemented by the IPSFC, or individual property owners would be unlikely to be regulated by the state. Small-scale hazardous fuels treatment activities could affect wetlands if clearing of vegetation occurs around or within a wetland. Additionally, this alternative would not substantially reduce the risk of wildfire spread through the treatment areas, which could destroy or deteriorate vegetation in wetlands near the treatment areas. Destruction of vegetation in nearby wetlands would damage habitat for wildlife

and lessen the effectiveness of wetlands to filter pollutants and maintain water quality. Therefore, the No Action Alternative would have a *minor to moderate adverse impact on wetlands*, depending on the scale and intensity of a wildfire.

**Proposed Action**

Under the Proposed Action, treatment actions may occur in proximity to but not directly within mapped wetland areas for 12 treatment properties with structures 100 feet or less from mapped wetland boundaries (see **Table 4-5**). Hazardous fuel reduction treatment activities would not include fill, removal, or other permanent modifications to any adjacent wetland. Prior to fuel reduction treatments on individual properties, IPSFC specialists will develop individual treatment plans for properties to delineate specifically where treatment activities would occur. As part of the treatment plan, IPFSC will confirm presence or absence of wetlands within treatment areas. The IPSFC would obtain applicable permits from the USACE under Section 404 of the CWA for all work within wetlands, if necessary. The IPSFC would implement, monitor, and maintain BMPs to control soil erosion and sedimentation, minimize spills and pollution from heavy equipment and activities (see **Section 4.5**, *Surface Waters and Water Quality*), and provide protection for any protected species habitat (see also **Section 4.11**, *Threatened and Endangered Species and Critical Habitat*).

The Proposed Action has a *short-term, negligible adverse impact on wetlands*, and would reduce the risk that a major wildfire would spread through the treatment areas and damage nearby wetland vegetation along with burning of upland areas destabilizing soils that would runoff to wetlands.

## 4.7 Floodplains

EO 11988, *Floodplain Management* requires federal agencies to avoid, to the extent possible, short- and long-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. FEMA regulations (44 CFR Part 9.7) use the 1-percent (e.g., 100-year floodplain) annual chance flood as the minimal area for floodplain impact evaluation. Floodplains are environmentally sensitive, ecologically diverse, and hydrologically important areas within a watershed. Naturally functioning floodplains help moderate flood events through storage and infiltration of runoff, as well as filtering some of potential nutrients and pollutants therein before reaching surface waters. Similarly, floodplains also help reduce sedimentation of surface waters. Figures showing georeferenced Flood Insurance Rate Maps (FIRMs) can be found in Appendix C.

Based on FEMA FIRM panels 1600610075B, 1600610100B, 1600610125B, and 1600610225B, all effective March 18, 1991, all treatment areas are located in Zone X, outside of the 100- and 500-year floodplains (1 and 0.2 percent annual chance for flooding) except for Blue Heron, which is located within Zone A, 100-year floodplain of Big Spring Creek. However, Zone X properties in a number of subdivisions are located adjacent to Zone A, 100-year floodplains:

- The Rancho McCrea and Mack's Inn subdivisions are located adjacent to Henry's Fork;
- The Cowan properties where low points and wetlands occur; and
- Tom's Creek Spur along Buffalo River.

**No Action Alternative**

In the absence of a major wildfire, the No Action Alternative would have *a minor effect on floodplains* given that IPSFC would continue to pursue funding and encourage ongoing limited hazardous fuel reduction activities in the proposed treatment areas. However, this alternative does not meaningfully reduce the risk of wildfire spread, which could damage or eliminate existing vegetation beyond the treatment areas, depending on the scale and intensity of a wildfire. If a wildfire were to occur, vegetation could be destroyed over large areas, which could lead to increased stormwater runoff following precipitation events. Loss of vegetation would adversely affect natural floodplain functions outside of the treatment areas by contributing to increased stormwater runoff and sedimentation. The additional sedimentation in the long term could lead to an increase in the base flood elevation and thus greater flood hazard risks to improved property in the affected floodplain. Therefore, the No Action Alternative could have *minor to moderate adverse impacts on floodplains* in surrounding areas, depending on the intensity and scale of a wildfire.

**Proposed Action**

Under the Proposed Action, some vegetation removal would occur in the mapped 100-year floodplain of Big Spring Creek at the Blue Heron property. The Proposed Action would not cause an increase in base flood elevations or modify existing floodplains. There would be *negligible adverse impacts on floodplains* with implementation of these treatments and the small area of floodplain affected by the treatment activities further limits the potential for adverse impacts.

The Proposed Action would help reduce the risk of wildfire spread and associated erosion, surface runoff, and flooding that could adversely affect floodplains. Therefore, there would be *minor, long-term, beneficial effects on floodplains* in and around the proposed treatment areas.

## 4.8 Sole Source Aquifers

Pursuant to the Safe Drinking Water Act of 1974 (42 U.S. Code [USC] §300 *et seq*.), the USEPA designates sole source aquifers using these criteria: 1) supply at least 50 percent of the drinking water for its service area; and 2) there are no reasonably available alternative drinking water sources should the aquifer become contaminated. Fremont County, and all of the treatment areas, is located over the Eastern Snake River Plain Aquifer Source Area (USEPA 2022). Sources of aquifer contamination include spills or leaks of petroleum, oils, and lubricants (POLs) from machinery that may be absorbed at the land surface and then seep into groundwater contained within the sole source aquifer.

### No Action Alternative

In the absence of a major wildfire, the No Action Alternative would *have negligible adverse effects on sole source aquifers*. Vegetation clearing actions may be independently implemented by IPSFC or individual property owners but would not be subject to requirements to control POLs to prevent spilled or leaked material seeping into and potentially contaminating the sole source aquifer underlying the treatment areas. The No Action Alternative could have a *minor to major adverse impacts on the Eastern Snake River Plain sole source aquifer*, depending on the scale and intensity of a spill.

### Proposed Action

Under the Proposed Action, vegetation clearance would not disrupt the surface such that soils would be exposed allowing for increased percolation of surface water or spilled POLs to groundwater in the Eastern Snake River Plain Source Aquifer. Additionally fueling of land-based vehicles and equipment would take place over impervious surfaces which would ensure that no POLs spilled during treatment activities would be allowed to be absorbed into the local groundwater including the local sole source aquifer to the extent practicable.

The Proposed Action would help reduce the risk of wildfire spread and associated potential damage to hazardous materials containment vessels (e.g., fuel tanks at residences) that could result in contamination of the sole source aquifer. Therefore, there would be *minor, long-term, beneficial effects on the Eastern Snake River Plain Aquifer Source Area* underlying all of the treatment areas.

## 4.9 Vegetation

The proposed treatment areas are located across the portions of the Snake River Plain (Upper Snake River Plain Subregion) and Middle Rockies (Barren Mountains and West Yellowstone Plateau Subregions) Ecoregions of Idaho (McGrath, et al. 2002) (see **Table 4-6**). Most of the tree cover in the treatment areas include lodgepole pine and Douglas fir. For discussion of the presence of whitebark pine see **Section 4.11**, *Threatened and Endangered Species and Critical Habitat*.

**Table 4-6 Vegetation Communities by Subdivision**

| Ecoregion | Subdivisions Included | Vegetation |
|---|---|---|
| **Snake River Plain** | | |
| Eastern Snake River Basalt Plain | Cowan | Sagebrush steppe / Bluebunch wheatgrass, basin and Wyoming big sagebrush, Thurber needlegrass, Indian ricegrass, bitterbrush, bluegrass, cheatgrass. Saline areas: fourwing saltbush, shadscale, winterfat |
| **Middle Rockies** | | |
| Barren Mountains | Bighorn Hills Estates<br>Elk Run<br>Yale Creek | Western spruce-fir forest, Douglas fir forest<br><br>North-facing slopes: open-canopied Douglas fir-lodgepole pine-subalpine fir stands, aspen groves, sparse shrubs and grasses. |

| | | |
|---|---|---|
| | | South-facing slopes: mountain big sagebrush, mountain brush, sparse grasses.<br><br>Over limestone: curleaf mountain mahogany |
| West Yellowstone Plateau | Bill's Island<br>Buttermilk<br>Rancho McCrea<br>Chief Joseph<br>Mack's Inn<br>Moose Creek<br>Riverside<br>Stonegate<br>Tom's Creek Spur<br>Blue Heron<br>Bull Moose<br>Highway 87 | Douglas fir forest, sagebrush steppe<br><br>North-facing slopes or uplands: Douglas fir, lodgepole pine, aspen, mountain mahogany<br><br>South-facing slopes: mountain big sagebrush, mountain brush, Idaho fescue |

### *Invasive Species*

EO 13112 *Invasive Species*, requires federal agencies to prevent the introduction of invasive species and provide for their control to minimize the economic, ecological, and human health impacts that invasive species cause. Noxious weeds in Fremont County that pose the greatest threat of spread to or from individual properties via equipment transport include (Fremont County Weed Control 2022):

- Leafy spurge (*Euphorbia esula*)
- Spotted knapweed (*Centaurea maculosa*)
- Dalmation toadflax (*Linara dalmatica*)
- Yellow toadflax (*Linaria vulgaris*)
- Hounds tongue (*Cynoglossom offinale*)
- Mayweed chamomile (*Anthemis cotula*)

Douglas fir beetles (*Dendroctonus pseudotsugae*) and mountain pine beetles (*Dendroctonus ponderosae*) are present within Fremont County as mapped by the Caribou-Targhee National Forest (USFS 2004). These bark beetles have resulted in tree mortality events which result in dried and highly combustible fuels.

### No Action Alternative

Under the No Action Alternative, some hazardous fuels reduction work may still occur over time resulting in *negligible to minor adverse impacts on vegetation*. However, the risk of wildfire spread would likely remain high. While fire is a natural component of the ecosystems in and near the treatment areas, years of fire suppression and historic timber management practices have increased fuel densities, which could exacerbate the extent and intensity of future wildfires in the area. Depending on the intensity and scale of wildfire, there could be partial or complete loss of vegetation in and around the treatment areas. In addition, a major wildfire could result in changes

to the soil characteristics (see **Section 4.2**, *Soils*) that would prevent regrowth of forest vegetation for many years following the fire. In the event of a major wildfire, non-native and/or invasive species could become established over large areas. Invasive species are often fire-tolerant grass species that spread and contribute to greater fire risk than areas dominated by native vegetation (U.S. Department of the Interior 2020). Depending on the intensity and scale of a wildfire, there could be *minor to major adverse impacts on vegetation* under the No Action Alternative.

**Proposed Action**

The Proposed Action would primarily remove hazardous fuels including lodgepole pine and Douglas fir as well as brush material at the ground surface. Reducing shrub density would reduce the ability of fire to ladder, or climb, into the crown of the remaining lodgepole pines, Douglas firs, and other trees. By removing hazardous fuels vegetation, more space would be made for preferred native vegetation communities with improved fire resilience, thereby reducing the intensity of wildfires that may occur in the treatment areas. Thus, the Proposed Action would have *minor beneficial effects on existing vegetation communities*.

Trees would be lifted rather than dragged to the extent possible to prevent damage to understory grasses and shrubs to the extent practicable. Removed hazardous fuels would be transported to the local Meadow Creek or McCrea Slash Pits to be burned. Disposing of the material in local pits would ensure that any invasive species present would not be transported to new areas, either to or from individual properties, by attaching to equipment such that the invasive species would be spread. Thus, there would be a *negligible to minor adverse impact to existing vegetation and limited risk of invasive species spread* into or out of the local area.

The implementation of the Proposed Action would result in a *short-term, negligible adverse impact on vegetation* resulting from the removal of individual trees and shrubs and limbing. However, the Proposed Action would have a minor to moderate beneficial effect on existing vegetation communities as the proposed treatments would reduce overcrowded dense thickets of vegetation creating a more open and multi-layer stand conditions conducive to the development of larger, more fire resilient trees. Over the long-term, the Proposed Action would have a *minor to major beneficial effect* because the risk of wildfire spread and associated vegetation damage, vegetation loss, and spread of invasive species would be reduced.

## 4.10 Fish and Wildlife

Fremont County, and neighboring Yellowstone National Park, are known for their biodiversity. However, each of the treatment areas are within subdivisions defined by rural, single-family home development that interrupt natural habitat. Within treatment properties, vegetation is typically installed landscape vegetation and native species. There is a wide variety of wildlife with potential to be present within any of the treatment areas, dependent on localized habitat suitability, including, but not limited to, osprey (*Pandion haliaetus*), fisher (*Martes pennanti*), peregrine falcon (*Falco peregrinus anatum*), snowy egret (*Egretta thula*), and common raven (*Corvus corax*) (IDFG 2022).

The Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 USC 703-711), provides protection for migratory birds and their nests, eggs, and body parts from harm, sale, or other injurious actions, except under the terms of a valid permit issued pursuant to federal regulations. All native migratory birds are protected by the MBTA and existing habitat in the treatment areas

have the potential to support a variety of native bird species. The proposed treatment areas are generally within the easternmost boundary of the Pacific Flyway (Waller, et al. 2018). There are numerous migratory birds (USFWS 2022b) that can be found in Fremont County at different times of year:

- Black Rosy-finch (*Leucosticte atrata*)
- Black tern (*Chlidonias niger*)
- Bobolink (*Dolichonyx oryzivorus*)
- Cassin's finch (*Carpodacus cassinii*)
- Clark's grebe (*Aechmophorus clarkii*)
- Evening grosbeak (*Coccothraustes vespertinus*)
- Franklin's gull (*Leucophaeus pipixcan*)
- Lewis's woodpecker (*Melanerpes lewis*)
- Long-eared owl (*Asio otus*)
- Marbeled godwit (*Limosa fedoa*)
- Olive-sided flycatcher (*Contopus cooperi*)
- Rufous hummingbird (*Selasphorus rufus*)
- Sage thrasher (*Oreoscoptes montanus*)
- Western grebe (*Aechmorphus occidentalis*)
- Willet (*Tringa semipalmata*)

The nesting season for migratory birds is generally February through August. Wetland/shoreline nesting birds, including black tern, Clark's grebe, Franklin's gull, western grebe, and willet, are not expected to build nests within the individual treatment areas which are upland terrestrial environments that would be buffered from being located in aquatic habitats and associated nesting grounds. Therefore, these wetland/shoreline nesting birds can be excluded from further consideration. Additionally, lesser yellowlegs and marbled godwit do not breed in Fremont County and can also be excluded from further consideration. Lewis's woodpecker typically nests in larger dead or dying trees (greater than 11"dbh), thus excluding them from further consideration (Ministry of the Environment and Climate Change - Ecosystems Branch 2018).

The Bald and Golden Eagle Protection Act (BGEPA) of 1940 prohibits the take, possession, sale, or other harmful action of any bald or golden eagle, alive or dead, including any part, nest, or egg (16 USC 668[a]). Eagle nesting typically ranges from January 1 to August 31 depending on local conditions. While large trees and rocky cliffs located away from human activity are preferred by eagles for nest sites, they have been known to nest along freeways and roadways with minimal human foot traffic. Given the lack of preferred nesting sites within the individual treatment sites, bald (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) are not expected to nest in the proposed treatment areas but, they may occasionally pass through treatment areas while foraging.

Pursuant to the Magnuson-Stevens Fisheries Conservation and Management Act as implemented by the National Oceanic and Atmospheric Administration Fisheries division (NOAA Fisheries), Essential Fish Habitat (EFH) is designated for certain commercially managed marine and anadromous fish species that is intended to protect the habitat of these species from being lost due disturbance and/or degradation. Pacific coast salmon are not present in the fish-bearing streams within or adjacent to any of the treatment areas and no designated EFH is present in Fremont County (NOAA Fisheries 2022).

### No Action Alternative

In the absence of a major wildfire, the No Action Alternative would have a *negligible adverse effect on common fish and wildlife species* in the project area. Limited ongoing defensible space

and hazardous fuels reduction conducted in the treatment areas would remove some vegetation and habitat. However, impacts on fish and wildlife would be negligible due to the limited and dispersed extent and nature of the defensible space created. Similarly, adverse impacts on migratory birds would be negligible even if work were performed during the nesting season. However, a major wildfire would be more likely to spread under the No Action Alternative and could result in the destruction of terrestrial and aquatic habitat, depending on the scale and intensity of the fire. Therefore, the No Action Alternative would result in *minor to moderate adverse impacts on fish and wildlife* and their habitats.

**Proposed Action**

The Proposed Action has the potential to impact common wildlife species and associated habitats occurring within the treatment areas because of the removal of understory vegetation and individual trees. Additionally, noise impacts related to vegetation removal activities could disturb wildlife and cause individuals to move from their preferred areas or temporarily change their behavior. Given that the treatment areas are generally heavily forested areas, and the Proposed Action would not remove all vegetation in each treatment area, wildlife species would be able to relocate to suitable habitat relatively easily.

There would be no in-water work or herbicide use as part of the Proposed Action. Vegetation removal activities would not occur within a 30-foot buffer from waterbodies and wetlands in compliance with the Fremont County Development Code (Fremont County 2022) which would minimize erosion and sedimentation into neighboring surface waters or aquatic habitats. The Proposed Action could affect migratory birds if work were to occur during the breeding season. The vegetation removal in the proposed treatment areas could result in inadvertent active nest destruction, birds abandoning nesting activities, and their displacement from preferred foraging areas. Ground-nesting and shrub-nesting birds would be impacted to a greater extent than birds that nest in the upper canopy of trees. Under these circumstances, the Proposed Action would be subject to the prohibitions of the MBTA (no take of active nests). IPSFC would be required to check treatment areas for active bird nests (and avoid active nests if present) prior to conducting treatment during nesting periods. If searching individual work areas prior to conducting treatment operations during nesting season is not achievable, IPSFC must obtain and comply with any necessary permits from USFWS before work and document this on the associated project parcel assessment/treatment plan. Therefore, the Proposed Action could have a *short-term, minor adverse impact on migratory birds*.

The Proposed Action would likely have a *negligible adverse effect on bald and golden eagles* and their habitat because defensible space and hazardous fuels reduction treatments would primarily take place near residences and roadway infrastructure, where eagles are unlikely to exist. Before work, IPSFC will confirm that defensible space treatment plus a 660-ft buffer does not contain active eagle nests. If an active nest is determined prior to or incidentally while conducting treatment actions, work will stop at that location and IPSFC will need to coordinate avoidance or minimization measures with the local USFWS office, which will likely require waiting until those juveniles are fully fledged or seek a take permit.

Based on avoidance and minimization measures, the Proposed Action would result in overall *short-term minor adverse impacts to fish and wildlife* within the treatment areas. However, over the long term, there would be minor beneficial effects on fish, wildlife, migratory birds, and

eagles due to the reduction of risk in wildfire intensity and spread and the associated widespread vegetation loss (including ecologically sensitive vegetation).

## 4.11 Endangered Species Act-Listed Species and Critical Habitat

The Endangered Species Act (ESA) of 1973 gives USFWS and NOAA Fisheries authority for the protection of threatened and endangered species. This protection includes a prohibition on direct take (e.g., killing, harassing) and indirect take (e.g., destruction of habitat).

The ESA defines the action area as "all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action" (50 CFR §402.02). Therefore, the action area where effects on listed species must be evaluated may be larger than the project area where project activities would occur. The potential physical and biological disturbance effects of this project would be limited to areas within 0.25 mile of project activities. Noise impacts have the potential to extend the farthest based on the maximum noise generation of a chainsaw (85 decibels [dB]). This distance is derived from existing impact analysis documents that indicate no impacts on ESA-listed birds are expected when habitat occurs more than 0.25 miles away from heavy equipment operation (including chainsaws) (Washington State Department of Transportation 2014).

The USFWS Information for Planning and Consultation database was used to identify proposed, threatened, and endangered species in Fremont County (see **Table 4-7**).

**Table 4-7 Threatened and Endangered Species in Fremont County, Idaho**

| Species Name (Scientific Name) | Species, Subspecies, or Distinct Population Segment (DPS) | Listing |
|---|---|---|
| **Plants** | | |
| Whitebark Pine *Pinus albicaulis* | Wherever found | Proposed Threatened |
| Ute ladies' tresses *Spiranthes diluvialis* | Wherever found | Threatened |
| **Birds** | | |
| Yellow-billed cuckoo *Coccyzus americanus* | Western US DPS | Threatened |
| **Mammals** | | |
| Grizzly bear *Ursus arctos horribilis* | Lower 48 states | Threatened |
| Gray wolf *Canis lupus* | Northern Rocky Mountain DPS | Under Review |
| Canada lynx *Lynx canadensis* | Wherever found in lower 48 states | Threatened |
| North American wolverine | Wherever found | Proposed Threatened |

| | | |
|---|---|---|
| *Gulo gulo luscus* | | |

Note: Shaded species are those species expected to occur in the Action Area.

The USFWS ECOS entry for Ute ladies' tresses (USFWS 2022c) states, "*When Ute ladies-tresses was listed in 1992 it was known primarily from moist meadows associated with perennial stream terraces, floodplains, and oxbows at elevations between 4300-6850 feet (1310-2090 meters). Surveys since 1992 have expanded the number of vegetation and hydrology types occupied by Ute ladies-tresses to include seasonally flooded river terraces, sub-irrigated or spring-fed abandoned stream channels and valleys, and lakeshores. In addition, 26 populations have been discovered along irrigation canals, berms, levees, irrigated meadows, excavated gravel pits, roadside barrow pits, reservoirs, and other human-modified wetlands.*" . Additionally, the USFWS has mapped the range of Ute ladies' tresses in Fremont County (only located in the southern portion of the county) and none of the proposed treatment areas overlap with this range. Therefore, between lack of documented presence and suitable habitat, no Ute ladies' tresses are expected to occur within any of the treatment areas.

Wolverine are a proposed threatened species; however, the USFWS has initiated but not completed the proposed withdrawal procedure to de-list the species [85 FR 64618, 10/13/2020]. Additionally, wolverine are alpine or sub alpine species and unlikely to be present in the project area during project implementation and is not included in further analysis below.

Whitebark pine is currently proposed threatened [85 FR 77408, 12/02/2020], and are typically found in higher elevation areas of the Rockies and other mountain ranges of the American west which includes the proposed project area (USFWS 2022d). This proposed rule may be enacted during the NEPA process or implementation for the Proposed Action, hence whitebark pine is included in the affects analysis.

Gray wolves are currently listed as threatened in the state of Minnesota and endangered in all states except Idaho, Montana, Wyoming, and eastern portions of Washington and Oregon where the Northern Rocky Mountains distinct population segment (DPS) was de-listed on November 3, 2020 and now fall under state management. Therefore, gray wolves in the vicinity of Island Park are not currently subject to the ESA. However, the USFWS has issued the intent to re-list this and other gray wolf DPS [86 FR 69778, 9/17/2021], and the status is currently 'Under Review'.

The remaining species are quite mobile and have some (if limited) potential to occur within the action area and will be included in the impact analysis. Yellow-billed cuckoo are documented by Idaho Department of Fish and Game (IDFG) to occur in southwestern Fremont County (which is modeled as part of their summer range) and there is a small chance that the rare individual may travel across the AA (IDFG 2022). Grizzly bears whose range in the lower 48 states includes the vicinity of Island Park. The Island Park area, including all proposed treatment areas, is located within the Greater Yellowstone recovery zone, one of the USFWS-designated recovery zones for the grizzly. Canada lynx whose range includes the mountainous portions of the state of Idaho, including the Island Park area. While Canada lynx are typically a higher elevation species, they are known to occasionally venture down into lower elevations.

Of these ESA-listed animal species, designated critical habitat (DCH) for the yellow-billed cuckoo is designated at the southern border of Fremont County but not near any of the treatment areas included in the Proposed Action (USFWS 2022e). No DCH for other listed animal species (i.e., grizzly bear, gray wolf, Canada lynx,) is present within Fremont County.

### No Action Alternative

In the absence of a major wildfire, the No Action Alternative would have a *negligible adverse impact on ESA-listed species and their habitats*. Limited ongoing defensible space and hazardous fuels reduction conducted in the treatment areas would remove some vegetation in disparate locations. These treatments may not be as prescriptive as the Proposed Action nor include conservation measures to avoid or minimize impacts on federally listed species that may be present. A major wildfire would be more likely to spread under the No Action Alternative, which could have *minor to major adverse impacts on ESA-listed species and their habitats*, depending on the scale and intensity of a fire.

### Proposed Action

*ESA-listed Plant Species*

The implementation of the Proposed Action would include hazardous fuels reduction to create defensible space that would potentially affect ESA-listed plant species whitebark pine by either physical removal of individual plants or disruption of habitat if they are present. The range of whitebark pine in Fremont County is mapped in the upland portions of northern Fremont County and overlap with the following treatment area subdivisions: Henry's Lake North property, Bighorn Estates, and Yale Creek. Prior to implementation, each of the treatment areas would be inspected for whitebark pines as part of the development of vegetation management plans for individual properties. Based on these inspections, whitebark pines would be flagged and only infested vegetation (branches/limbs/saplings/seedlings) would be removed and destroyed to prevent spread of blister rust infestation. As of this Draft EA, whitebark pine is proposed threatened; voluntary discussions have been initiated with the USFWS in case a final rule is issued. Best Management Practices for treatment of white pine blister rust (Burns, et al. 2022)is included in the proposed action. In the event of a final ruling, this is a minor, short-term impact that will likely benefit whitebark pine stands and their resiliency to blister rust infestation. Thus, considering current ESA listed plant species, the Proposed Action would result *in no adverse impacts to listed plant species*.

*ESA-listed Animal Species*

The implementation of the Proposed Action would include hazards fuels reduction to create defensible space (only affecting previously modified habitat) that has limited potential to affect ESA-listed terrestrial species by changing habitat or generating noise that would result in additional disturbance. Treatment activities would occur in rural development including established neighborhoods and roadways. The Proposed Action would be unlikely to adversely affect any of the ESA-listed mammal species potentially present in the Action Area because individual members of these species in the area would have either self-selected away from disturbances from the existing noise and activity conditions or have become acclimated to human activities within the rural developed environment of the treatment areas. These activities would include vegetation clearing activities (100 ft from homes) that already typically occur in the

action area. Additionally, each of these species are not constrained to single locations and utilize large individual home ranges. These large individual home ranges and relatively close proximity of treatment areas to less developed areas (i.e., Yellowstone National Park or National Forest lands) would allow individuals to avoid vegetation clearing activities as they occur. The Proposed Action would be unlikely to adversely affect the yellow-billed cuckoo because they are not documented to nest in the treatment areas (residential yards) and any rare individual that could be in the area would be transitory and enroute to the expected activity range (as per IDFG) in the southwest portion of Fremont County. Therefore, the Proposed Action would have *no or negligible adverse impacts on ESA-listed animal species*. Based on these findings, no ESA consultation with the USFWS is warranted.

Yellow-billed cuckoo DCH is present within Fremont County, but it is not present in any treatment sites subdivisions. No DCH for grizzly bear, or lynx is mapped within Fremont County including the treatment site subdivisions. Therefore, the Proposed Action would have a *no impact on DCH for ESA-listed animal species*.

## 4.12 Cultural Resources

This section provides an overview of potential environmental effects on cultural resources, including historic properties. Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (16 USC 470f), requires that activities using federal funds undergo a review process to consider potential effects on historic properties that are listed in or may be eligible for listing in the National Register of Historic Places (NRHP). Cultural resources include prehistoric or historic archeology sites; historic standing structures; historic districts; objects; artifacts; cultural properties of historic or traditional significance, referred to as Traditional Cultural Properties that may have religious or cultural significance to federally recognized Indian tribes; or other physical evidence of human activity considered to be important to culture, subculture, or community for scientific, traditional, religious, or other reasons.

Pursuant to 36 CFR §800.4(a)(1), an Area of Potential Effects (APE) was defined to include the areas within which the undertaking may directly or indirectly affect cultural resources. Within the APE, impacts on cultural resources were evaluated for both historic structures and archaeologic resources by the Idaho State Historic Preservation Office (SHPO).

*Indigenous Cultural Setting*

The Cooper's Ferry site in western Idaho is one of the oldest pre-contact sites in North America, dating up to 15,000 years before present and pre-dating the earliest appearance of the Clovis Paleoindian tradition (Davis, et al. 2019). Closer to what is now Yellowstone National Park, and including the Island Park area, humans likely occupied the area following the recession of glaciers 13,000 to 14,000 years ago, evidence of which includes a Clovis point from Obsidian Cliff (at least 11,000 years ago) and Folsom projectile points (at last 10,900 years ago) (National Parks Service 2022). Some historic peoples of the area, including the Crow and Sioux, arrived in the area between the 1500s and 1700s while the presence of "Intermountain Ware" vessels link the Shoshone people to the area as early as 700 years before present (National Parks Service 2022).

FEMA sent consultation letters to the Eastern Shoshone and Shoshone-Bannock Tribes dated July 21, 2022, seeking comment on the Proposed Action, with a focus on Section 106 of the NHPA. The tribal consultation letters included the statement that FEMA has, thus far, determined that the Proposed Action would have no adverse effect to historic properties. No response or comments were received from the Tribes.

*Historic Setting*

The Idaho Heritage Trust lists 13 historic resources in Fremont County, none of which are located within any of the treatment areas (Idaho Heritage Trust 2022). To support the assessment of historic resources, IPSFC sent a consultation letter to the Idaho SHPO, dated February 14, 2019. The requested review by the Idaho SHPO included review of proximity to Johnny Sack Cabin at Big Springs as well as the Crabtree Cabin, the only potentially historic resources within a quarter mile of any of the treatment areas. In a response letter, dated February 20, 2019, the Idaho SHPO determined that the proposed treatment activities would have No Adverse Effect on historic properties. FEMA reinitiated consultation with the Idaho SHPO on July 12, 2022, to account for the addition of four properties to the proposed Program. Idaho SHPO concurred on August 1, 2022, with the updated request for consultation that even with the inclusion of the four additional properties, the SHPO's original No Adverse Effect determination is appropriate.

**No Action Alternative**

Under the No Action Alternative, private landowners may continue to implement wildfire mitigation activities, which could disturb the ground or alter the appearance of structures, potentially affecting cultural resources that may be present in the treatment areas. The risk of wildfire spread would remain high, despite the potential for some scattered wildfire mitigation activities to occur. A wildfire could have *minor to moderate adverse impacts on unidentified archeological resources or historic structures* in the project area depending on the scale and intensity of the fire.

**Proposed Action**

The Proposed Action would avoid and minimize potential impacts to cultural resources by implementing the following measures:

- Hazardous fuels work would be conducted with ground crews using hand tools.
- Pickup trucks, skid steers, or loaders would be used.
- Debris would not be dragged across the land surface but rather moved by hand or with small, wheeled vehicles.

Therefore, it is unlikely that cultural resources would be disturbed by vegetation removal activities within the treatment areas. The Proposed Action would not alter any existing structures within the treatment areas. Therefore, as supported by the No Adverse Effect on Historic Properties determination from the Idaho SHPO and consultation with Tribes, the Proposed Action would have *no adverse effects on historic properties*. In the event that any archaeological resources are discovered during project implementation, work would immediately cease, the area would be secured, and IPSFC would notify the SHPO and FEMA for further evaluation.

## 4.13 Environmental Justice

Environmental justice is defined by EO 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 Federal Register 7629) and CEQ guidance (1997). Under EO 12898, demographic information is used to determine whether minority populations or low-income populations are present in the areas potentially affected by the range of project alternatives. If so, a determination must be made whether implementation of the program alternatives may cause disproportionately high and adverse human health or environmental impacts on those populations.

This environmental justice analysis is focused at the local level. The local area included in this analysis is where project-related impacts would occur, potentially causing an adverse and disproportionately high effect on neighboring minority and low-income populations. Minority or low-income census tracts are defined as meeting either or both of the following criteria:

- Area contains 50 percent or more minority persons or 25 percent or more low-income persons.
- Percentage of minority or low-income persons in any census tract is more than 10 percent greater than the average of the surrounding county.
- U.S. Census tracts are map units that generally contain 1,200 to 8,000 people with an optimum coverage of 4,000 people. The similarity of population contained in each Census tract allows for comparisons across wide geographies. Because the population density of the Fremont County is low, Census Tract 9701 includes all of Fremont County, and the Proposed Action area.

### *Minority Populations*

CEQ (1997) defines the term "minority" as persons from any of the following groups: Black, Asian or Pacific Islander, American Indian or Alaskan Native, and Hispanic. According to USEPA's Environmental Justice Screening tool (USEPA 2022), the minority population in the project area encompassing the treatment areas is less than 50 percent with Census Tract 9701 reporting 2 percent minority population. Therefore, Census Tract 9701 does not meet the criteria listed above for environmental justice communities related to minority populations.

### *Low-Income Populations*

Residents of areas with a high percentage of people living below the federal poverty level may be considered low-income populations. According to USEPA's Environmental Justice Screening Tool, the low-income population in the area is approximately 20 percent (USEPA 2022). Therefore, Census Tract 9701 does not meet the criteria listed above for environmental justice communities related to low-income populations.

### No Action Alternative

Under the No Action Alternative, some scattered hazardous fuels reduction activities work may be independently implemented by the property owners over time; however, the risk of wildfire spread would remain high. In the event of a wildfire, the populations within Census Tract 9701

described above, including minority and low-income residents, may experience adverse health impacts due to wildfire smoke or damage or loss of property and assets (see **Section 4.18**, *Public Health and Safety*). However, because there are no minority or low-income populations in the project area, based on the threshold levels defined above, the No Action Alternative would not result in *disproportionately high and adverse impacts on environmental justice populations*.

**Proposed Action**

The Proposed Action would implement defensible space and hazardous fuels treatment to reduce the risk of wildfire spread in the proposed treatment areas. Temporary and localized impacts from the Proposed Action, such as noise, would impact those proximate to the work location, including minority and low-income residents. The benefits of reduced risk of wildfire spread would be benefit all residents across the IPSFC, including minority and low-income residents. Because there are no minority or low-income populations present in the project area, based on the above thresholds, the Proposed Action would result in *no disproportionately high and adverse impacts on minority or low-income populations*.

## 4.14 Hazardous Materials

Hazardous materials are those substances defined by the Comprehensive Environmental Response, Compensation, and Liability Act, as amended by the Superfund Amendments and Reauthorization Act, and the Toxic Substances Control Act. The Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA), which was further amended by the Hazardous and Solid Waste amendments, defines hazardous wastes. In general, both hazardous materials and waste include substances that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may present substantial danger to public health or to the environment when released or otherwise improperly managed.

Hazardous materials may be encountered in the course of a project, or they may be generated by project activities. To determine whether any hazardous waste facilities exist in the vicinity or upgradient of the proposed treatment areas or whether there is a known and documented environmental issue or concern that could affect the proposed treatment areas, a search for Superfund sites, toxic release inventory sites, industrial water dischargers, hazardous facilities or sites, and multiactivity sites was conducted using USEPA's NEPAssist website (USEPA 2022).

According to the USEPA NEPAssist database, the Caribou-Targhee National Forest Island Park Ranger Station is the single RCRA waste generator is located in Fremont County. However, the Ranger Station is not located close to of any of the treatment properties.

Aside from the RCRA waste generator, the NEPAssist database does not record any toxic releases, Superfund sites, or Toxic Substances Control Act sites in Fremont County.

**No Action Alternative**

Under the No Action Alternative, existing conditions would not substantially change. Individual private property owners may independently implement some hazardous fuels reduction work, which would pose a negligible threat of release of hazardous materials from equipment and potentially localized and negligible site contamination from leaks or spills. The risk of wildfire spread would not be effectively reduced under this alternative. Wildfire damage in residential areas also directly releases hazardous materials into the air, soil, and water as plastics burn and

materials that are otherwise safely stored are damaged and released (CalRecycle 2022). Because of the lack of hazardous waste generators and low residential density in this area, the potential for the release of hazardous materials from burning homes, even in the event of a large-scale fire, would be expected to be minor.

### Proposed Action

No hazardous materials sites are present within or immediately adjacent to the proposed treatment areas so there would be no impact on hazardous material generator sites from implementation of the Proposed Action. The Proposed Action would include the use of mechanical equipment such as chainsaws, chippers, and vehicles, which would pose the threat of leaks and spills. The short-term duration of the use of equipment at any individual treatment area and the use of equipment in good condition would reduce any potential effect to an insignificant level. All equipment and hazardous fuels reduction activities would adhere to local regulations to reduce the risk of hazardous leaks and spills. Any spills during implementation would be immediately contained and cleaned. Thus, there would be a *negligible threat of hazardous materials releases from vehicle and equipment use*.

## 4.15 Noise

Sounds that disrupt normal activities or otherwise diminish the quality of the environment are considered noise. Noise events that occur during the night (10 p.m. to 7 a.m.) are more annoying than those that occur during normal waking hours (7 a.m. to 10 p.m.). The Fremont County Development Code sets forth noise limits for waking hours (60 decibels) and nighttime (50 decibels but allows for exceedances by temporary construction and maintenance activities (Fremont County 2022). Assessment of noise impacts includes the proximity of the Proposed Action to sensitive receptors. A sensitive receptor is defined as an area of frequent human use that would benefit from a lowered noise level (i.e., residences, schools, or hospitals). Sensitive receptors near the project area consists of residences, including those which would receive treatment. Any noise-generating activities in proximity to residences could have the potential to adversely affect these receptors.

Sensitive receptors near the proposed treatment area consists of residences, including those which would receive treatment, as well as nearby residences. Schools, churches, hospitals, and libraries are located at a much greater distance (e.g., generally 0.25 miles or more) from the proposed treatment areas and are unlikely to experience noise from the implementation of the Proposed Action. Typical noise events in the vicinity of the proposed treatment areas vary from quiet (e.g., bird calls) to loud commercial and industrial noises. For example, existing noise is likely associated with light traffic noise from nearby roadways, and other intermittent residential conditions such as lawnmowers and leaf blowers.

### No Action Alternative

Under the No Action Alternative, hazardous fuels reduction work may be conducted independently by private landowners over time without FEMA-funded support. The tools and equipment used for these activities would be similar to those already in use for general landscape maintenance around these rural residences, including chainsaws, small chippers, etc. Therefore, there would be negligible change in existing noise levels that could affect sensitive receptors in the proposed treatment areas and *negligible adverse impacts on existing noise levels*.

### Proposed Action

Under the Proposed Action, noise would be generated by the operation of equipment, such as chainsaws and chippers. The loudest equipment likely to be used would be chainsaws, which can produce noise levels up to 85 dB when perceived from approximately 50 feet away (Federal Highway Administration 2017).

The implementation of the Proposed Action would increase noise levels within the immediate vicinity of residences and other infrastructure. However, increases in noise levels would be minor and of short duration at any one location, and all work would occur during normal waking hours. Vehicle and equipment runtimes would be kept to a minimum. *Negligible to minor short-term adverse noise impacts would occur* and following the completion of the proposed treatment activities, there would be no long-term change to the ambient noise environment.

## 4.16 Transportation

Regional access within the Island Park area, and Fremont County, is centered on US Route 20 which runs north to south through the area passing directly through the Mack's Inn area and Island Park itself. The Bighorn Estates, Stonegate, Mack's Inn, and Riverside treatment area subdivisions are all located in close proximity to US Route 20 with either direct access to the highway or short surface street connections. The Yale Creek, Cowan, Elk Run, and Rancho McCrea subdivisions are all located west of US Route 20 with primary access connection to the highway via Kilgore-Yale Road. The Bill's Island area, surrounded by Island Park Reservoir, and Buttermilk subdivision are accessed from US Route 20 via Kilgore Yale Road, Buttermilk Loop Road (Forest Road 126), and Bills Loop North Road (Forest Road 336).

### No Action Alternative

Under the No Action Alternative, some hazardous fuels and defensible space work may be implemented by the IPSFC or individual property owners over time. The increase in traffic resulting from these activities would result in a short-term, *negligible adverse impact on area transportation* given that the timing of the activities would not be coordinated and would be dispersed throughout the project area. However, the potential for a major wildfire to spread would remain high. Wildfire may encroach upon roadways and wildfire smoke may inhibit the ability to see roadways clearly. Further, with limited emergency vehicle and escape route access, the spread of wildfire could inhibit the ability for evacuation or increase the risk for firefighters.

### Proposed Action

Under the Proposed Action, crews would access scattered treatment areas at different times from existing roads and driveways. Work on each of the proposed treatment areas would require a small number of vehicles for a short duration. There may be a *short-term, negligible adverse impact on local traffic* from vehicle staging on roadsides. The work may require several crews to be working at any given time and would require vehicle staging at several points along roadsides in the road network. However, no road closures or detours would be expected. Over the long-term, the reduction of hazardous fuels would help to reduce the risk of wildfire spread in the treatment areas. This would create a safer environment for residents and firefighters and help avoid damage to transportation infrastructure or creation of traffic problems. Therefore, there

would be a *long-term beneficial impact on transportation and traffic*.

## 4.17 Utilities

The treatment areas are within the service areas for public utilities within Fremont County. Fall River Electric Cooperative supplies electrical service throughout Fremont County including the Chester and Island Park dams that generate hydroelectric power for the Cooperative. The Intermountain Gas Company provides natural gas service to Fremont County. Rural properties in the unincorporated portion of Fremont County generally receive domestic water supply from private wells. Most subdivisions within the unincorporated portion of Fremont County use septic systems on individual properties for wastewater disposal. Of the subdivisions included in the Proposed Action, only the Mack's Inn and Stonegate subdivisions are tied to sewer systems.

**No Action Alternative**

Although some scattered defensible space or hazardous fuels reduction work may be implemented by the IPSFC and property owners under the No Action Alternative, the risk of wildfire spread would remain high. Electrical services provided via overhead power lines would continue to be at risk of damage from wildfires. Water wells could be physically damaged by wildfires or experience microbial contamination due to loss of pressure during a fire (Montana Department of Environmental Quality 2012). Ash, sediment, and debris from wildfires may contaminate uncovered wells or storage tanks. Intense heat from wildfires could adversely impact water system components on the surface and underground. If intense heat modifies the chemical properties of water system components, chemicals might leach into the water, causing contamination. Thus, *adverse impacts on area public utilities could be minor to major*, depending on the intensity and scale of a wildfire.

**Proposed Action**

The Proposed Action would not directly affect utilities. Although tree trimming to protect power lines is not the purpose of the Proposed Action, some of the proposed defensible space and hazardous fuels treatment could incidentally provide protection to overhead power lines and reduce the potential for powerlines to spark a fire. In the long term, the Proposed Action would reduce the risk of damage to public and private utilities from wildfire spread. Therefore, the Proposed Action could have *minor, long-term beneficial effects on utilities*.

## 4.18 Public Health and Safety

As described in **Section 2**, *Purpose and Need*, the Island Park area has a history of wildfires. Wildfire smoke can exacerbate respiratory health issues, such as asthma and chronic obstructive pulmonary disease. Wildfire smoke may contribute to respiratory infections and cardiovascular concerns (see **Section 4.4**, *Air Quality and Climate*).

Emergency medical services are provided by Fremont County Emergency Services. Fremont County Emergency Services also provides fire response to the unincorporated portions of Fremont County including the treatment areas. The Fremont County Sheriff's Office provides patrols and search and rescue services including the treatment areas.

**No Action Alternative**

Although some fuels reduction work may be independently implemented by the individual property owners over time, current conditions would not substantively change, and the risk of wildfire spread would remain high. In the event of a wildfire, there is an increased risk to public health and safety and to services provided to protect public safety, such as firefighters. Wildfires can generate substantial amounts of particulate matter, which can affect the health of people breathing smoke-laden air. This is a particular concern for vulnerable populations, such as the youth and elderly, as described in **Section 4.4,** *Air Quality and Climate*. Wildfires can generate substantial amounts of carbon monoxide, which can pose a health concern for frontline firefighters. In addition, fires that are burning residences can release toxic materials into the air, soils, and water, posing health risks to populations both during the fire and later during cleanup and recovery (CalRecycle 2022).

Heavy rain conditions following wildfires can contribute to sediment and debris in nearby waterways, which can affect downstream water quality and damage structures, roads, and utilities critical to the safety and well-being of citizens. Under the No Action Alternative, there could be *minor to major adverse impacts on public health and safety* depending on the scale and intensity of the fire.

### Proposed Action

Under the Proposed Action, the reduction of hazardous fuels would help to reduce the spread of wildfire in the treatment areas. This would create a safer environment for firefighters and allow them to more easily control the spread of a wildfire. These activities would not prevent wildfires but could contribute to containment, reducing the intensity and frequency of wildfires, which would ultimately reduce the risks for people living in and near the treatment areas. In addition, when wildfires are controlled more quickly, a smaller area may be burned, and less sediment and debris may be transported downstream during future precipitation events that could potentially cause damages to infrastructure. The Proposed Action could reduce the probability that emergency services would be focused on firefighting and would allow emergency responders to remain available to respond to other emergencies throughout the IPSFC. Therefore, the Proposed Action would have a *moderate long-term beneficial impact on public health and safety*.

## 4.19 Summary of Effects and Mitigation

**Table 4-8** provides a summary of the potential environmental effects from implementation of the Proposed Action, any required agency coordination efforts or permits, and any applicable proposed mitigation or BMPs.

**Table 4-8 Summary of Impacts and Mitigation**

| Affected Resource Area | Impacts | Agency Coordination or Permits | Mitigation/ Avoidance / BMPs |
|---|---|---|---|
| Soils | • Negligible adverse impacts due to limited subsurface effects, lack of farmland soils. | N/A | • Vehicles (aside from skid steer or loader) would be restricted to existing roads. . |
| Visual Quality and Aesthetics | • Negligible adverse | N/A | N/A |

| | | | |
|---|---|---|---|
| | impacts or benefits depending on how changes are perceived.<br>• Minor long-term beneficial effects as a result of reduced damage from wildfire. | | |
| Air Quality and Climate | • Minor short-term impacts from vehicle and equipment use.<br>• Minor long-term beneficial effects by reducing the risk of wildfire spread. | N/A | • Vehicles and equipment running times would be kept to the minimum extent possible.<br>• Large concentrations of slash material would only be burned at the Meadow Creek and McCrea pits. |
| Surface Waters and Water Quality | • Negligible short-term adverse impacts.<br>• Minor long-term beneficial effect by reducing the risk of wildfire spread and associated vegetation loss and sedimentation effects. | N/A | • No work would occur within 30 feet of waterbodies or wetlands.<br>• Some riparian vegetation would be retained according to the treatment specifications, to prevent erosion from vegetation removal to affect water quality.<br>• Equipment maintenance and/or repair would be confined to one location. Runoff from this area would be controlled to prevent contamination of water.<br>• Fueling of land-based vehicles and equipment would take place at least 30 feet away from the water (and away from drains) over an impervious surface.<br>• The contractor would ensure that no fuel, oil, or lubricants from treatment activities are allowed to be placed where they may be washed by rainfall or runoff into the any surface waters. |
| Wetlands | • Negligible short-term adverse impacts.<br>• Minor long-term beneficial effect by reducing the risk of wildfire spread and associated vegetation loss. | N/A | • No work would occur within 30 feet of waterbodies or wetlands..<br>• Work in the immediate vicinity of the wetlands would be limited.<br>• Prior to fuel reduction work, field surveys would be conducted in the treatment areas to determine the prescribed treatment.<br>• Equipment maintenance and/or repair would be confined to one location. Runoff from this area would be controlled to prevent contamination of wetlands.<br>• Fueling of land-based vehicles and equipment would take place at least 30 feet away from the water (and away from drains) over an impervious surface. |
| Floodplains | • Negligible short-term adverse impacts. | N/A | N/A |

| | | | |
|---|---|---|---|
| | • Minor, long-term beneficial effects on floodplains in surrounding areas from the reduced risk of wildfire spread. | | |
| Sole Source Aquifers | • Negligible short-term adverse impacts.<br>• Minor long-term beneficial effect by reducing the risk of wildfire spread. | N/A | See Surface Waters and Wetlands. |
| Vegetation | • Minor short-term impacts on removed vegetation.<br>• Minor long-term beneficial effects by reducing the risk of wildfire spread and vegetation loss. | N/A | • Thinning activities would reduce inter-tree competition, thereby improving conditions for residual trees. |
| Fish and Wildlife | • Minor, short-term impacts on wildlife and migratory birds from vegetation-clearing activities.<br>• Negligible short-term adverse impacts on eagles; negligible short-term adverse impacts on fish species.<br>• Minor long-term beneficial effects by reducing the risk of wildfire spread and vegetation loss. | N/A | • No work would occur within 30 feet of waterbodies or wetlands..<br>• Work in the immediate vicinity of the waterbodies would be limited.<br>• Equipment maintenance and/or repair would be confined to one location. Runoff from this area would be controlled to prevent contamination of water.<br>• Fueling of land-based vehicles and equipment would take place at least 30 feet away from the water (and away from drains) over an impervious surface.<br>• The contractor would ensure that no fuel, oil, or lubricants from treatment activities are allowed to be placed where they may be washed by rainfall or runoff into any neighboring waterbody.<br>• Migratory bird nesting may occur within the proposed treatment areas ranging from February 1 to August 31; and avoiding active nests would occur as part of pre-clearing surveys.<br>• Bald and golden eagle nesting may occur within the proposed treatment areas ranging from January 1 to August 31; and avoiding active nests would occur as part of pre-clearing surveys. |
| ESA-listed Species and DCH | • Negligible short-term impacts to proposed ESA vegetation (Whitebark Pine).<br>• Negligible short-term adverse impacts on ESA-listed animal species. | USFWS Informal Discussion | • All whitebark pine would be identified within the defensible space by a qualified person and flagged as part of the wildfire risk assessment. The proposed action meets guidance included in the Options for the Management of White Pine Blister Rust in the Rocky Mountain Region document. |

| | | | |
|---|---|---|---|
| | • Minor long-term beneficial effects by reducing the risk of wildfire spread and habitat loss. | | • No work would occur within 30 feet of waterbodies or wetlands.<br>• Equipment maintenance and/or repair would be confined to one location. Runoff from this area would be controlled to prevent contamination of water.<br>• Fueling of land-based vehicles and equipment would take place at least 30 feet away from the water (and away from drains) over an impervious surface.<br>• The contractor would ensure that no fuel, oil, or lubricants from treatment activities are allowed to be placed where they may be washed by rainfall or runoff into and surface waterbody. |
| Cultural Resources | No Historic Properties Affected. | N/A | • If archaeological or cultural resources are uncovered during vegetation removal activities, IPSFC and/or the landowner will contact the Idaho SHPO to coordinate appropriate treatment of the resource. |
| Environmental Justice | No disproportionately high and adverse impacts on low-income populations.<br>• Minor, long-term beneficial effects associated with reduced risk of wildfire spread. | N/A | N/A |
| Hazardous Materials | • Negligible, short-term adverse contamination threat from equipment use. | N/A | N/A |
| Noise | • Negligible to minor adverse temporary impacts from increased noise levels within the project area and the immediate vicinity of the work.<br>• No long-term adverse impacts. | N/A | • Noise-producing equipment use would occur during less-sensitive, waking hours (7 a.m. to 10 p.m.).<br>• Vehicle and equipment runtimes would be kept to a minimum. |
| Transportation | • Minor short-term adverse impacts.<br>• Minor long-term beneficial effects by reducing the risk of wildfire spread. | N/A | N/A |
| Utilities | • No short-term adverse impacts.<br>•minor long-term beneficial effects from reduced risk of wildfire | N/A | N/A |

| | | | |
|---|---|---|---|
| | spread. | | |
| Public Health and Safety | • No short-term adverse impacts.<br>•minor to moderate long-term beneficial effects by reducing the risk of wildfire spread. | N/A | N/A |

# Section 5 Cumulative Impacts

This section addresses the potential cumulative impacts associated with the implementation of the Proposed Action. Cumulative impacts can be defined as the impacts of a Proposed Action when combined with impacts of past, present, or reasonably foreseeable future actions undertaken by any agency or person. CEQ's regulations for implementing NEPA require an assessment of cumulative effects during the decision-making process for federal projects. Cumulative impacts can result from individually minor but collectively significant actions.

IPSFC has completed 581 wildfire risk evaluations for individual properties as well as 51 fuels mitigation cost share projects including defensible space clearance activities spanning the 2015 to 2020 time period in proximity to the proposed treatment areas (see **Table 5-1**).

**Table 5-1 IPSFC Defensible Space Treatments (2015-2020)**

| Treatment Area Subdivision | IPSFC Acreage Treated (2015-2020) |
|---|---|
| Bighorn Hills Estates | 2.34 |
| Bill's Island | 114.5 |
| Buttermilk & Rancho McCrea | 60 |
| Chief Joseph | 0 |
| Cowan | 11 |
| Elk Run | 23.8 |
| Mack's Inn | 173.7 |
| Moose Creek | 36.8 |
| Riverside (19 Ponds Lodge) | 0 |
| Stonegate | 215.6 |
| Yale Creek | 109.4 |
| Tom's Creek Spur (Buffalo River) | 0 |
| Blue Heron Lane | 0 |
| Bull Moose Lane | 15.1 |
| Highway 87 (North Henry's Lake) | 32.6 |
| **Total** | **794.8** |

Beyond actions conducted by IPSFC and individual landowners above, various federal land management agencies (e.g., USFS and BLM) have conducted vegetation clearance and defensible space creation projects (see **Table 5-2**). These agencies would continue to conduct defensible space creation and vegetation clearance activities based on assessed need and availability of funding.

**Table 5-2 Federal Vegetation Clearance Activities in the IPSFC Vicinity**

| Federal Agency | Location | Acreage (ac) Treated |
|---|---|---|
| USFS | Yale Creek Subdivision | 3,161 |
| | Meadow Creek Area | 395 |
| | Bighorn Estates Area | 207 |
| BLM | Yale/Kilgore Road | 989 |

Source: IPSFC Application Materials

There is the potential for these various projects and wildfire mitigation efforts to combine potential effects with the Proposed Action with respect to effects on soils, visual quality and aesthetics, air quality and climate, surface waters and water quality, wetlands, vegetation, fish and wildlife, hazardous materials, noise, and transportation. However, it is unlikely that there would be significant cumulative impacts because, in most cases, there would be temporal and spatial separation between activities. Similar to the Proposed Action, these projects would have or would be required to implement some avoidance and minimization measures to prevent potential impacts to air quality, surface waters, sensitive habitats, ESA-listed species, and cultural resources. These activities have or would result in long-term cumulative beneficial effects and complement the Proposed Action by reducing the risk of wildfire spread in the treatment areas and vicinity.

# Section 6 Agency Coordination, Public Involvement, and Permits

This section provides a summary of the agency coordination efforts and public involvement process for the proposed IPSFC Hazardous Fuels Reduction on Private Lands Project. In addition, an overview of the permits that would be required under the Proposed Action is included.

## 6.1 Agency Coordination

Consultation with the Eastern Shoshone Tribe (also known as the Shoshone Indians of Wind River Reservation) and the Shoshone-Bannock Tribe was initiated via the letter dated July 21, 2022. IPSFC conducted an informal coordination with the Idaho State Historic Preservation Office regarding historic resources on February 14, 2019 and received a response on February 20, 2019. Appendix A provides a copy of all agency and tribal correspondences.

## 6.2 Public Participation

In accordance with NEPA, this Draft EA was released to the public, resource agencies and Tribes for a 30-day public review and comment period. The Draft EA was available on FEMA's website at: https://www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa-repository. Hard copies of the Draft EA were available at: City of Island Park Office located at 3753 N. Highway 20, just south of Pond's Lodge. Comments on the Draft EA should be submitted to fema-r10-ehp-comments@fema.dhs.gov or submitted via mail to:

FEMA Region 10
Attention: Regional Environmental Officer
130-228th Street SW
Bothell, WA 98021

There will be a 30-day public comment period for the Draft EA, initiated by a public notice of availability published in the *Island Park News* (see Appendix A). The notice was emailed to the following federal and state agencies:

- U.S. Forest Service Caribou-Targhee National Forest - Ashton/Island Park Ranger District
- U.S. Bureau of Land Management Idaho Falls Field Office
- U.S. Department of the Interior Region 9
- National Interagency Fire Center
- National Parks Service
- U.S. Army Corps of Engineers Northwest Division & Walla Walla District
- Natural Resources Conservation Service
- U.S. Environmental Protection Agency Region 10
- U.S. Fish &Wildlife Service Pacific Region
- Idaho State Department of Agriculture
- Idaho Department of Lands
- Idaho Department of Water Resources
- Idaho Department of Environmental Quality

- Idaho Department of Fish and Game
- Idaho Department of Parks and Recreation
- Idaho Soil & Water Conservation Commission

The notice will also be sent to the Eastern Shoshone Tribe and Shoshone-Bannock Tribe, and area residents. The notice will invite the public and agencies to submit their comments about the proposed action, potential impacts, and proposed mitigation measures so that they may be considered and evaluated. The comment period will start when the public notice is published and extend for 30 days. At this time, a public meeting is not planned.

## 6.3 Permits

IPSFC, and participating landowners, would be responsible for obtaining any necessary local, state, or federal permits needed to conduct the proposed work.

# Section 7 List of Preparers

The following is a list of preparers who contributed to the development of the Island Park Reduction of Hazardous Fuels on Private Lands EA for FEMA. The individuals listed below had principal roles in the preparation of this document (see **Table 7-1** and **Table 7-2**). Many others, including senior managers, administrative support personnel, and technical staff, contributed and their efforts were no less important to the development of this EA.

**Table 7-1 Third-Party Consultant Preparers**

| Preparers | Experience and Expertise | Role in Preparation |
|---|---|---|
| Doug McFarling | Task Order Manager | NEPA Documentation |
| Matt Sauter | Project Manager | NEPA Documentation |
| Nick Meisinger | Senior Reviewer | NEPA Documentation |
| Lana Cary | Graphics and Section 508 | Section 508 Compliance |

**Table 7-2 FEMA Reviewers**

| Reviewers | Experience and Expertise | Role in Preparation |
|---|---|---|
| Science Kilner | Regional Environmental Officer | NEPA Review |
| Owen Coskey | Environmental Protection Specialist | NEPA Review |
| Jeff Parr | Biologist | NEPA Review |

# Section 8 References

Burns, Kelly S., Anna W. Schoettle, William R. Jacobi, and Mary F. Mahalovich. 2022. *Options for the management of white pine blister rust in the Rocky Mountain Region.* General Technical Report RMRS-GTR-206, Fort Collins, Colorado: US Department of Agriculture, Forest Service, Rocky Mountain Research Station.

California Air Resources Board. 2007. "Fugitive Dust Control Self-Inspection Handbook." *California Air Resources Board.* Accessed April 14, 2022. https://www.arb.ca.gov/pm/fugitivedust_large.pdf.

CalRecycle. 2022. *Wildfire Debris Cleanup and Recovery.* April 20. https://calrecycle.ca.gov/disaster/wildfires/.

Council on Environmental Quality. 1997. "Environmental Justice - Guidance Under the National Environmental Policy Act." energy.gov/sites/default/files/nepapub/nepa_documents/RedDont/G-CEQ-EJGuidance.pdf.

Council on Environmental Quality. 1997. *Environmental Justice Guidance Under the National Environmental Policy Act.* Council on Environmental Quality. Accessed April 20, 2022. epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf.

Council on Environmental Quality. 2016. "Guidance on Consideration of Greenhouse Gas Emissions and the Effects on Climate Change." Accessed April 19, 2022. https://obamawhitehouse.archives.gov/administration/eop/ceq/initiatives/nepa/ghg-guidance.

Davis, Loren G., David B. Madsen, Lorena Becerra-Valdivia, David A. Sisson, Sarah M. Skinner, Daniel Stueber, Alexander J. Nyers, et al. 2019. "Late Upper Paleolithic Occupation at Cooper's Ferry, Idaho, USA, ~16,000 Years Ago." *Science.*

Federal Highway Administration. 2017. "Construction Noise Handbook: 9.0 Construction Equipment Noise Levels and Ranges." https://www.fhwa.dot.gov/Environmental/Noise/construction_noise/handbook/handbook09.cfm.

Fremont County Emergency Management. 2016. "Fremont County All Hazard Mitigation Plan." St. Anthony, ID.

Fremont County. 2022. *Fremont County Development Code.* September 8. https://www.co.fremont.id.us/departments/planning_building/devcode/ADOPTED_FCDevCode_2011_Edition.pdf.

Fremont County Weed Control. 2022. *Fremont County's Noxious Weeds List.* co.fremont.id.us/departments/weed/fremont_noxious_weeds.html.

Hubbert, Busse, and Overby. 2013. *Effects of Pile Burning in the Lake Tahoe Basin on Soil and Water Quality.* Southern Nevada Public Lands Management Act Final Report 12576, U.S. Forest Service. Accessed August 2022. https://www.fs.fed.us/psw/partnerships/tahoescience/documents/p035_FinalReport_30sep13.pdf.

Idaho Department of Environmental Quality. 2021. "Upper and Lower Henrys Fork Subbasins - 2021 Sediment and Bacteria TMDLs."

Idaho Heritage Trust. 2022. *Idaho Heritage Trust Resources.* September 8. https://www.idahoheritagetrust.org/projects/category/east-central/fremont/.

IDFG. 2022. *Fremont County Observations List.* https://idfg.idaho.gov/species/taxa/list/county/fremont.

—. 2022. *Idaho Fire Map Online Viewer.* October 17. https://idfg.idaho.gov/ifwis/maps/realtime/fire/.

—. 2022. *Yellow-billed Cuckoo.* August. https://idfg.idaho.gov/species/taxa/19476.

Labat Environmental. 2007. *Ecological Risk Assessment: Wildland Fire-Fighting Chemicals.* Missoula, MT: US Forest Service - Montana Technology and Developmental Center.

McGrath, C.L., A.J Woods, J.M. Omernik, S.A. Bryce, M. Edmondson, J.A. Nesser, J. Shelden, R.C. Crawford, J.A. Comstock, and and M.D. Plocher. 2002. "Ecoregions of Idaho." Virginia: U.S. Geological Survey.

Ministry of the Environment and Climate Change - Ecosystems Branch. 2018. "Wildlife Habitat Features Field Guide (Kootenay Boundary Region) - Section 6 A Nest of a Lewis's Woodpecker."

Montana Department of Environmental Quality. 2012. *Your Well and Septic System After a Wildfire.* https://deq.mt.gov/Portals/112/Water/WPB/SWP/Guidance/Factsheet_114_Wildfire_WellsSeptics..pdf#:~:text=A%20wildfire%20can%20impact%20a%20well%20or%20septic,and%20a%20functioning%20wastewater%20system%20following%20a%20wildfire .

National Parks Service. 2022. *1988 Fires - Yellowstone National Park.* February 21. https://www.nps.gov/yell/learn/nature/1988-fires.htm#:~:text=1988%20Fires%20in%20Yellowstone&text=36%25%20(793%2C880%20acres)%20of,acres%20of%20the%20total%20acreage. .

—. 2022. *Wild and Scenic Rivers Program.* https://nps.maps.arcgis.com/apps/View/index.html?appid=ff42a57d0aae43c49a88daee0e353142.

—. 2022. *Yellowstone National Park.* September 8. https://www.nps.gov/yell/learn/historyculture/earliest-humans.htm.

Natural Resources Conservation Service. 2022. *Web Soil Survey.* websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

NOAA Fisheries. 2022. *Essentional Fish Habitat Mapper.* habitat.noaa.gov/apps/efhmapper/.

Rothermel, R C, R A Harford, and C H Chase. 1994. *Fire Growth Maps for the 1988 Greater Yellowstone Area Fires.* General Technical Report INT-304, US Forest Service , Intermountain Reserach Station.

The Cadmus Group, Inc. 2013. "Report on the Effects of Wildfire on Drinking Water Utilities and Effective Practices for Wildfire Risk Reduction and Mitigation." https://www.bendoregon.gov/Home/ShowDocument?id=14309.

University of Idaho. 2022. "Idaho Climate-Economy Impacts Assessment." https://www.uidaho.edu/president/direct-reports/mcclure-center/iceia.

USEPA. 2022. *EJ Screen.* ejscreen.epa.gov/mapper/.

—. 2022. *Idaho Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants.* April 14. www3.epa.gov/airquality/greenbook/anayo_id.html.

—. 2022. *Map of Sole Source Aquifer Locations.* epa.gov/dwssa/map-sole-source-aquifer-locations.

—. 2022. *Reviewing National Ambient Air Quality Standards (NAAQS): Scientific and Technical Information.* April 14. epa.gov/naaqs.

—. 2022. *US Environmental Protection Agency - NEPAssist Mapping Site.* nepassisttool.epa.gov/nepassist/nepamap.aspx.

USEPA. 2019. "Wildfire Smoke: A Guide for Public Health Officials."

USFS. 2004. "Bark Beetles - Are Your Trees at Risk?" fs.usda.gov/Internet/FSE_DOCUMENTS/fsbdev3_015010/pdf.

—. 2022. "Caribou-Targhee National Forest - News Release." *Ashton/island Park Range District to Conduct Fall Prescribed Fires.* October 22. Accessed December 5, 2022. https://www.fs.usda.gov/detail/ctnf/news-events/?cid=FSEPRD1068162.

USFS. 1997. *Targhee Forest Plan.* Forest Plan, Caribou-Targhee National Forest. Accessed October 19, 2022. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd1063782.pdf.

USFS. 2016. "Wildfire Risk to Residential Structures in the Island Park Sustainable Fire Community."

USFS. 2005. "Wildland Fire in Ecosystems: Effects of Fire on Soil and Water. General Technical Report RMRS-GTR-42-volum4." https://www.fs.fed.us/rm/pubs/rmrs_gtr042_4.pdf.

USFWS. 2022c. *ECOS.* August. https://ecos.fws.gov/ecp/species/2159#rangeInfo.

—. 2022d. *ECOS.* August. https://ecos.fws.gov/ecp/species/1748.

—. 2022e. *Environmental Conservation Online System.* ecos.fs.gov/ecp/report/table/critical-habitat.html.

—. 2022a. *National Wetlands Inventory Mapper.* fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper.

—. 2022b. *USFWS Information for Planning and Consultation.* ipac.ecosphere.fws.gov.

Waller, Eric K., Theresa M. Crimmins, Jessica J. Walker, Erin E. Posthumous, and Jake F. Weltzin. 2018. "Differential changes in the onset of spring across US National Wildlife Refuges and North American bird flyways." *PLoS One* 13 (9).

Washington State Department of Transportation. 2014. "Programmatic Biological Opinion for Norther Spotted Owl (Strix occidentalis caurina) in the Western Washington Lowlands Province."

## List of Appendices

The Federal Emergency Management Agency (FEMA) has worked to ensure that this Environmental Assessment (EA) is accessible to persons with disabilities, in compliance with Section 508 of the Rehabilitation Act of 1973. Regarding the appendices, this EA has reported what was done and how those results affect the decision that will be made based on the totality of the findings provided in the EA. In case any of these appendices poses a challenge to be read electronically by persons with disabilities, each appendix is briefly described and summarized below, rather than being simply listed.

**Appendix A. Public Notice and Agency Correspondence.** This appendix includes a public notice of availability to be published as a legal advertisement in the Island Park News. The notice announces that the Draft EA is available for public review in electronic format on FEMA's website and in hardcopy at the City of Island Park Office. The notice of availability describes that comments on the Draft EA should be either mailed to Science Kilner, Regional Environmental Officer, Region X, 130 228th Street SW, Bothell, WA 98021 or submitted via email to fema-r10-ehp-comments@fema.dhs.gov.

**Appendix B. Tribal Coordination and Section 106 Consultation.** This appendix includes an email requests for comment from the Eastern Shoshone and Shoshone-Bannock tribes relative to Section 106 of the National Historic Preservation Act. This appendix also includes an email response from the Idaho State Historic Preservation Office regarding the potential effect of the proposed action on historic properties including the determination that no adverse effects to historic properties would occur.

**Appendix C. Flood Insurance Rate Maps.** This appendix includes four flood insurance rate maps (FIRMs) covering the properties included for vegetation removal activities. These maps include 100- and 500-year floodplains as mapped by FEMA (all effective March 18, 1991):

- 1600610075B;
- 1600610100B;
- 1600610125B; and,
- 1600610225B.

# Appendix A
# Public Notice and Agency Correspondence

# Appendix B
# Tribal and Section 106 Consultation

**U.S. Department of Homeland Security**
FEMA, Region X
130 228th Street, SW
Bothell, WA 98021-8627

FEMA

July 21, 2022

John St. Clair, Chairman
Eastern Shoshone Tribe
PO Box 217
Fort Washakie, Wyoming 82514
*Sent via email*

Re: FEMA HMGP 4342, Island Park Fuels Reduction, Fremont County, Idaho

Dear Chairman St. Clair:

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to fund Island Park Sustainable Fire Community (Applicant) for a wildfire fuels reduction project (Undertaking). This funding is available from FEMA's Hazard Mitigation Grant Program (HMGP) and administered by the Idaho Office of Emergency Management (OEM). The proposed Undertaking is being reviewed pursuant to Section 106 of the National Historic Preservation Act, as amended. FEMA is also preparing an Environmental Assessment for this project per the National Environmental Policy Act.

**Proposed Undertaking**
The proposed Undertaking will create defensible space and reduce hazardous fuels mostly around structures, roads, and driveways from 68 properties in 15 communities located around Island Park, in Fremont County Idaho, as shown on Figure 1. Target communities are Bighorn Hills Estates, Bill's Island (Woodlands), Buttermilk & Rancho McCrea, Chief Joseph, Cowan, Elk Run, Mack's Inn, Moose Creek, Riverside (19 Ponds Lodge), Stonegate, Yale Creek, Tom's Creek Spur (Buffalo River), Blue Heron Lane, Bull Moose Lane, and Highway 87 (North Henry's Lake). Properties to be treated include homes with landscaped yards to small mobile homes with no landscaping, and a few properties with no structures or driveways. All work will be done on the proposed properties and no work or modifications will be done with this grant to the structures themselves. Work entails creating defensible space within 100 feet of homes and fuels reduction past this by removing flammable materials and vegetation and removing ladder fuels, such as shrubs, small trees, brush, or low limbs, that may provide a route for a fire to climb up from ground fuels to the forest canopy. In addition, this Undertaking involves hazardous fuels reduction through strategic thinning of overcrowded forest stands all to promote healthy and resilient forest conditions. Properties for treatment range in size from 0.15 acres to 58 acres.

Work will include defensible space up to 100 feet around residences, roads, and driveways and prescriptive landscape hazardous fuels treatments beyond 100 feet through the following:

- Reduce the density and continuity of the tree and shrub canopy by thinning around individuals or clumps to create space between crowns.
- Reduce shrub cover.
- Reduce potential ladder fuels that could carry fire into the crowns.
- Prune trees up to 6 feet from the ground or no more than one third of the total height, whichever is less.
- Remove dead material, including snags, limbs, and surface fuels.
- Removal of trees ≤ 8-inches in diameter at breast height (DBH).
    - Felled large trees for removal would be limbed and bucked into sections while those left on the property will be limbed and bucked in 10-foot log lengths.
- Remove hazard trees that are dead and or dying.

Work will be completed entirely by hand with ground crews using chainsaws, pruning saws, and other hand tools to cut limbs and trees. Vegetation root balls would not be disturbed in the process of thinning and clearing. Materials may be chipped or removed to an offsite disposal location per landowner preference. Removal would involve the transport all slash and tree material resulting from fuels reduction activities to the Meadow Creek Slash Pit operated by Fremont County located at Latitude 44.59831, Longitude -111.33035 or the McCrea Pit located at Latitude 44.45953, Longitude 111.39522. Alternatively, material can be left on-site for the property owners for firewood if they should choose.

A rubber tired mechanized vehicle such as a truck or skid steer may be used on some properties off improved roads to facilitate the removal of cut materials to a nearby truck or chipper. Trucks for transporting removed material or chippers for processing material will only be parked on existing roadways. Any mechanized vehicle would be a rubber-tire unit to access the work site on the property. Vehicles will not be used to push over trees or the leveling and removal of shrubs and other small vegetation. There will be minimal ground disturbance from the removal of material off improved road surfaces from a property and loading it into trucks to be hauled away.

**Area of Potential Effects**

FEMA has determined that the Area of Potential Effects (APE) for the proposed Undertaking is composed of the 68 properties for defensible space and fuels reduction as delineated on Figures 1 and 2. The APE totals approximately 118 acres. As the final acreage for defensible space and fuels reduction will be determined during work and the condition of each property, the acreage for treatment will likely be less than the 118-acre APE.

**Historic Property Identification and Evaluation**

None of the properties proposed for treatment in this Undertaking have dwellings or properties that are historic in age. Prior to becoming a FEMA Undertaking, the Island Park Sustainable Fire Community consulted with the Idaho SHPO on this proposed project in a letter dated February 14, 2019. The Idaho SHPO (SHPO# 2019-380) responded on February 20, 2019, with a No Adverse Effect to Historic Properties determination. Due to the low impact nature of the Undertaking focused almost entirely on properties with existing structures, driveways, and roads no additional identification or evaluation efforts are planned.

**Determination of Effects**
Barring additional information from the Tribe, based on the low impact nature of the activities, FEMA has determined that the Undertaking will result in No Adverse Effect to Historic Properties. Furthermore, the project will be conditioned to protect any unanticipated discoveries during fuels reduction work. We respectfully request your concurrence with these findings, or additional comments. To assist your review please find enclosed project maps. Should you have any questions, please contact Philip Fisher (425) 471-9018 or philip.fisher@fema.dhs.gov. Thank you.

Sincerely,

Science Kilner
Regional Environmental Officer

cc. Joshua Mann, Tribal Historic Preservation Officer (via email)


**Figure 1**. The Island Park Fuels Reduction APE Communities shown on a recent aerial image.

**U.S. Department of Homeland Security**
FEMA, Region X
130 228th Street, SW
Bothell, WA 98021-8627

FEMA

July 21, 2022

Nathan Small, Chairman
The Shoshone-Bannock Tribes
PO Box 306
Pima Drive
Fort Hall, Idaho 83203
*Sent via email*

Re: FEMA HMGP 4342, Island Park Fuels Reduction, Fremont County, Idaho

Dear Chairman Small:

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to fund Island Park Sustainable Fire Community (Applicant) for a wildfire fuels reduction project (Undertaking). This funding is available from FEMA's Hazard Mitigation Grant Program (HMGP) and administered by the Idaho Office of Emergency Management (OEM). The proposed Undertaking is being reviewed pursuant to Section 106 of the National Historic Preservation Act, as amended. FEMA is also preparing an Environmental Assessment for this project per the National Environmental Policy Act.

**Proposed Undertaking**
The proposed Undertaking will create defensible space and reduce hazardous fuels mostly around structures, roads, and driveways from 68 properties in 15 communities located around Island Park, in Fremont County Idaho, as shown on Figure 1. Target communities are Bighorn Hills Estates, Bill's Island (Woodlands), Buttermilk & Rancho McCrea, Chief Joseph, Cowan, Elk Run, Mack's Inn, Moose Creek, Riverside (19 Ponds Lodge), Stonegate, Yale Creek, Tom's Creek Spur (Buffalo River), Blue Heron Lane, Bull Moose Lane, and Highway 87 (North Henry's Lake). Properties to be treated include homes with landscaped yards to small mobile homes with no landscaping, and a few properties with no structures or driveways. All work will be done on the proposed properties and no work or modifications will be done with this grant to the structures themselves. Work entails creating defensible space within 100 feet of homes and fuels reduction past this by removing flammable materials and vegetation and removing ladder fuels, such as shrubs, small trees, brush, or low limbs, that may provide a route for a fire to climb up from ground fuels to the forest canopy. In addition, this Undertaking involves hazardous fuels reduction through strategic thinning of overcrowded forest stands all to promote healthy and resilient forest conditions. Properties for treatment range in size from 0.15 acres to 58 acres.

Work will include defensible space up to 100 feet around residences, roads, and driveways and prescriptive landscape hazardous fuels treatments beyond 100 feet through the following:

- Reduce the density and continuity of the tree and shrub canopy by thinning around individuals or clumps to create space between crowns.
- Reduce shrub cover.
- Reduce potential ladder fuels that could carry fire into the crowns.
- Prune trees up to 6 feet from the ground or no more than one third of the total height, whichever is less.
- Remove dead material, including snags, limbs, and surface fuels.
- Removal of trees ≤ 8-inches in diameter at breast height (DBH).
    - Felled large trees for removal would be limbed and bucked into sections while those left on the property will be limbed and bucked in 10-foot log lengths.
- Remove hazard trees that are dead and or dying.

Work will be completed entirely by hand with ground crews using chainsaws, pruning saws, and other hand tools to cut limbs and trees. Vegetation root balls would not be disturbed in the process of thinning and clearing. Materials may be chipped or removed to an offsite disposal location per landowner preference. Removal would involve the transport all slash and tree material resulting from fuels reduction activities to the Meadow Creek Slash Pit operated by Fremont County located at Latitude 44.59831, Longitude -111.33035 or the McCrea Pit located at Latitude 44.45953, Longitude 111.39522. Alternatively, material can be left on-site for the property owners for firewood if they should choose.

A rubber tired mechanized vehicle such as a truck or skid steer may be used on some properties off improved roads to facilitate the removal of cut materials to a nearby truck or chipper. Trucks for transporting removed material or chippers for processing material will only be parked on existing roadways. Any mechanized vehicle would be a rubber-tire unit to access the work site on the property. Vehicles will not be used to push over trees or the leveling and removal of shrubs and other small vegetation. There will be minimal ground disturbance from the removal of material off improved road surfaces from a property and loading it into trucks to be hauled away.

**Area of Potential Effects**

FEMA has determined that the Area of Potential Effects (APE) for the proposed Undertaking is composed of the 68 properties for defensible space and fuels reduction as delineated on Figures 1 and 2. The APE totals approximately 118 acres. As the final acreage for defensible space and fuels reduction will be determined during work and the condition of each property, the acreage for treatment will likely be less than the 118-acre APE.

**Historic Property Identification and Evaluation**

None of the properties proposed for treatment in this Undertaking have dwellings or properties that are historic in age. Prior to becoming a FEMA Undertaking, the Island Park Sustainable Fire Community consulted with the Idaho SHPO on this proposed project in a letter dated February 14, 2019. The Idaho SHPO (SHPO# 2019-380) responded on February 20, 2019, with a No Adverse Effect to Historic Properties determination. Due to the low impact nature of the Undertaking focused almost entirely on properties with existing structures, driveways, and roads no additional identification or evaluation efforts are planned.

**Determination of Effects**
Barring additional information from the Tribe, based on the low impact nature of the activities, FEMA has determined that the Undertaking will result in No Adverse Effect to Historic Properties. Furthermore, the project will be conditioned to protect any unanticipated discoveries during fuels reduction work. We respectfully request your concurrence with these findings, or additional comments. To assist your review please find enclosed project maps. Should you have any questions, please contact Philip Fisher (425) 471-9018 or philip.fisher@fema.dhs.gov. Thank you.

Sincerely,

For

Science Kilner
Regional Environmental Officer

cc. Carolyn Smith, Cultural Resources Coordinator (via email)
Louise E. Dixey, Cultural Resources Director (via email)


**Figure 1**. The Island Park Fuels Reduction APE Communities shown on a recent aerial image.

IDAHO STATE
HISTORICAL
SOCIETY

20 February 2019

**Brad Little**
Governor of Idaho

**Janet Gallimore**
Executive Director
State Historic
Preservation Officer

**Administration:**
2205 Old Penitentiary Rd.
Boise, Idaho 83712
208.334.2682
Fax: 208.334.2774

**Idaho State Museum:**
610 Julia Davis Dr.
Boise, Idaho 83702
208.334.2120

**Idaho State Archives and State Records Center:**
2205 Old Penitentiary Rd.
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**State Historic Preservation Office:**
210 Main St.
Boise, Idaho 83702
208.334.3861

**Old Idaho Penitentiary and Historic Sites:**
2445 Old Penitentiary Rd.
Boise, Idaho 83712
208.334.2844

HISTORY.IDAHO.GOV

Tim Stonks
Executive Director
Island Park Sustainable Fire Community
PO Box 493
Island Park, Idaho 83429

**Re: FEMA Wildfire Fuels Reduction Grant, Island Park, Idaho / SHPO# 2019-380**

Dear Mr. Stonks,

Thank you for consulting with our office on the above referenced project. We understand the scope of work includes an effort to evaluate individual properties and prescribing actions to make a property more resistant to wildfire. Depending on each individual property, the work will include: limbing up trees, removing ladder fuels such as bushes and small trees, removing dead and diseased trees, and removing trees for better spacing between trees to reduce crown fires.

Pursuant to 36 CFR 800, we have applied the criteria of effect to the proposed undertaking. Based on the information received 19 February 2019, we have determined the proposed project actions will have **no adverse effect** to historic properties.

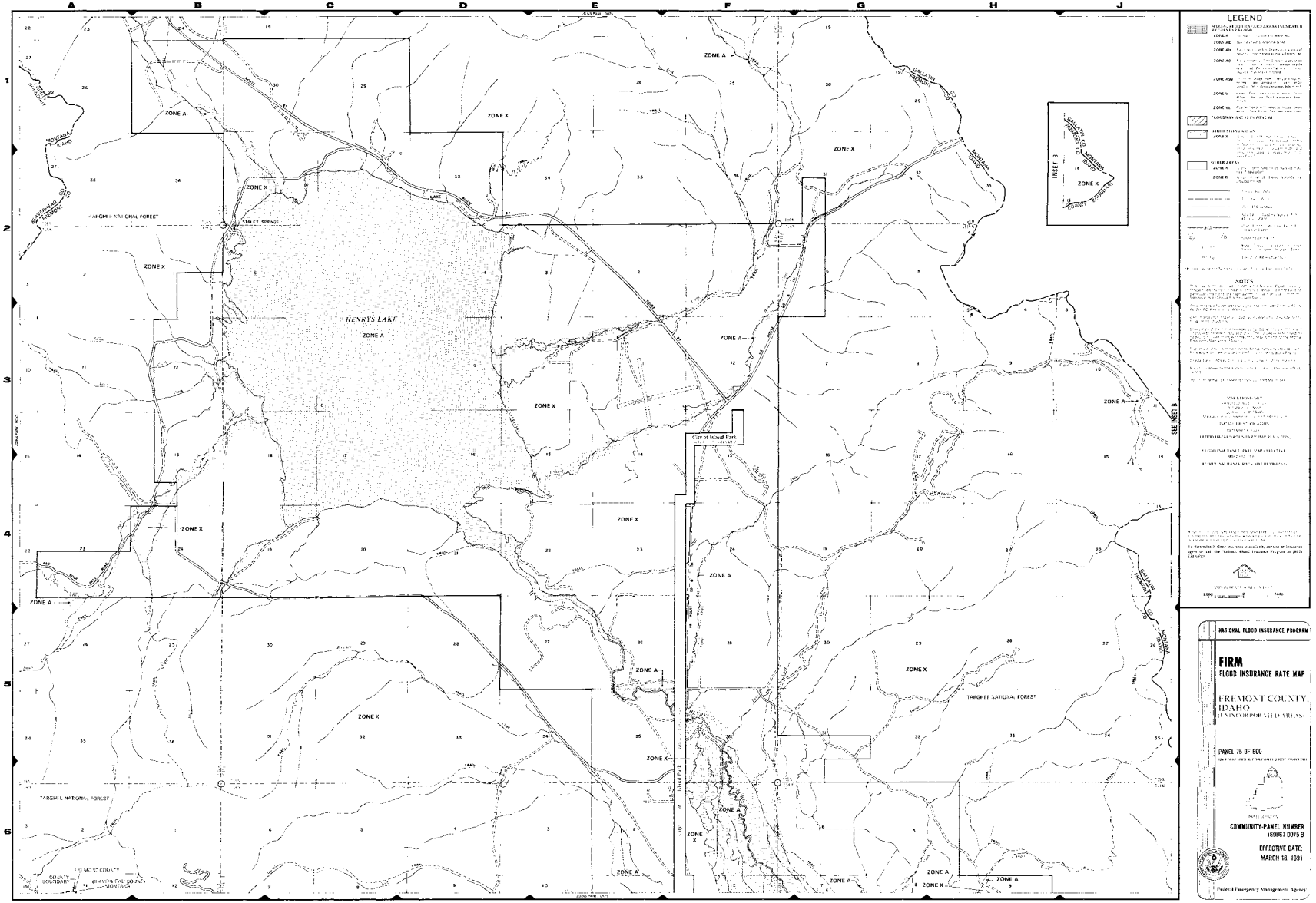
In the event that cultural material is inadvertently encountered during implementation of this project, work shall be halted in the vicinity of the finds until they can be inspected and assessed by the appropriate consulting parties.

If you have any questions or the scope of work changes, please contact me via phone or email at 208.488.7463 or ashley.brown@ishs.idaho.gov.

Sincerely,

**Ashley Brown**
**Historical Review Officer**
**Idaho State Historic Preservation Office**

# Appendix C
# Flood Insurance Rate Maps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3
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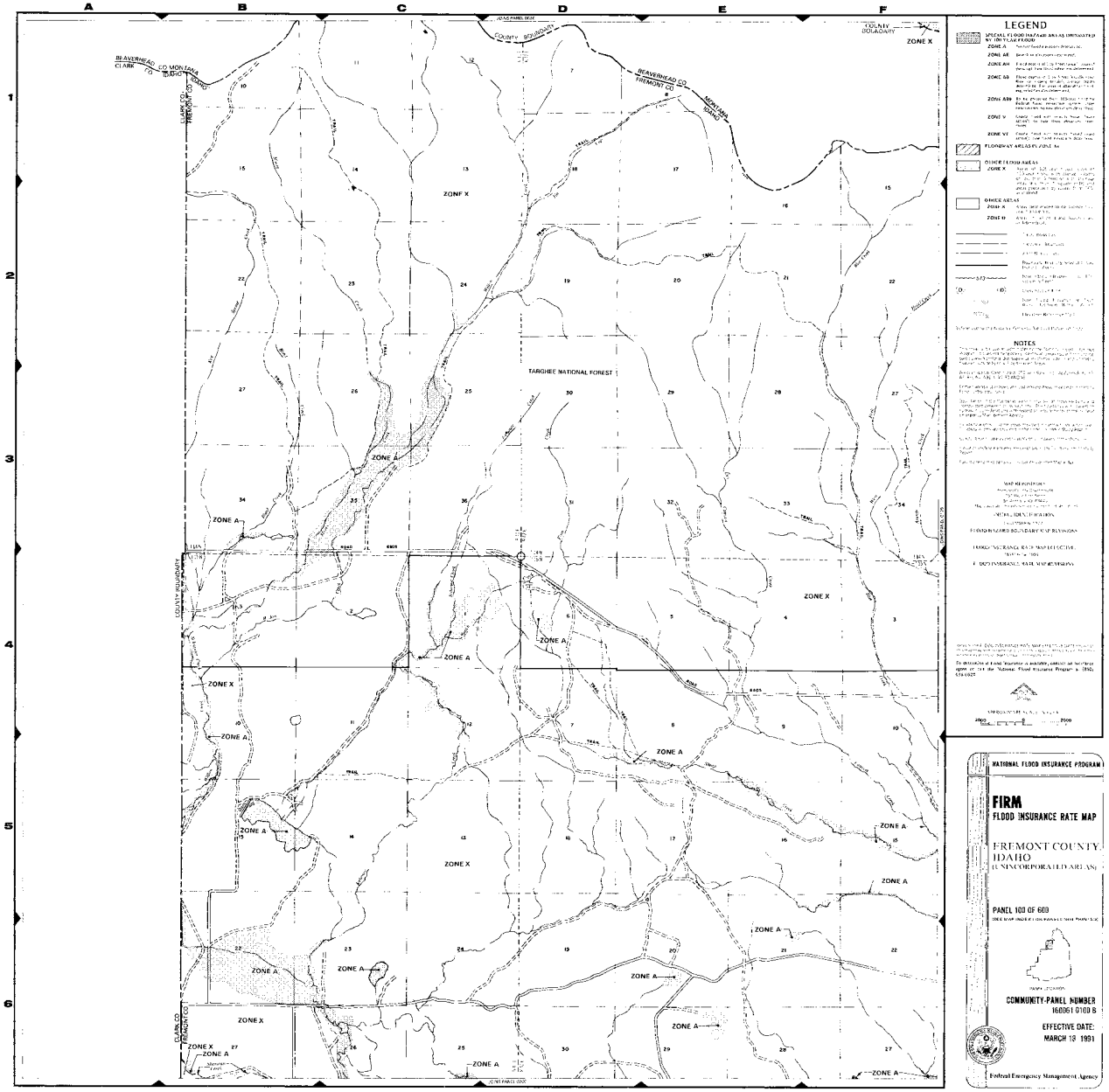
ZONE A
ZONE X
HENRYS LAKE
TARGHEE NATIONAL FOREST
STALEY SPRINGS
City of Island Park
SEE INSET B
INSET B
LEGEND
NOTES
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
FREMONT COUNTY, IDAHO
(UNINCORPORATED AREAS)
PANEL 75 OF 600
COMMUNITY-PANEL NUMBER
160061 0075 B
EFFECTIVE DATE:
MARCH 18, 1991
Federal Emergency Management Agency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LEGEND
NOTES
TARGHEE NATIONAL FOREST
ZONE A
ZONE X
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
FREMONT COUNTY
IDAHO
(UNINCORPORATED AREAS)
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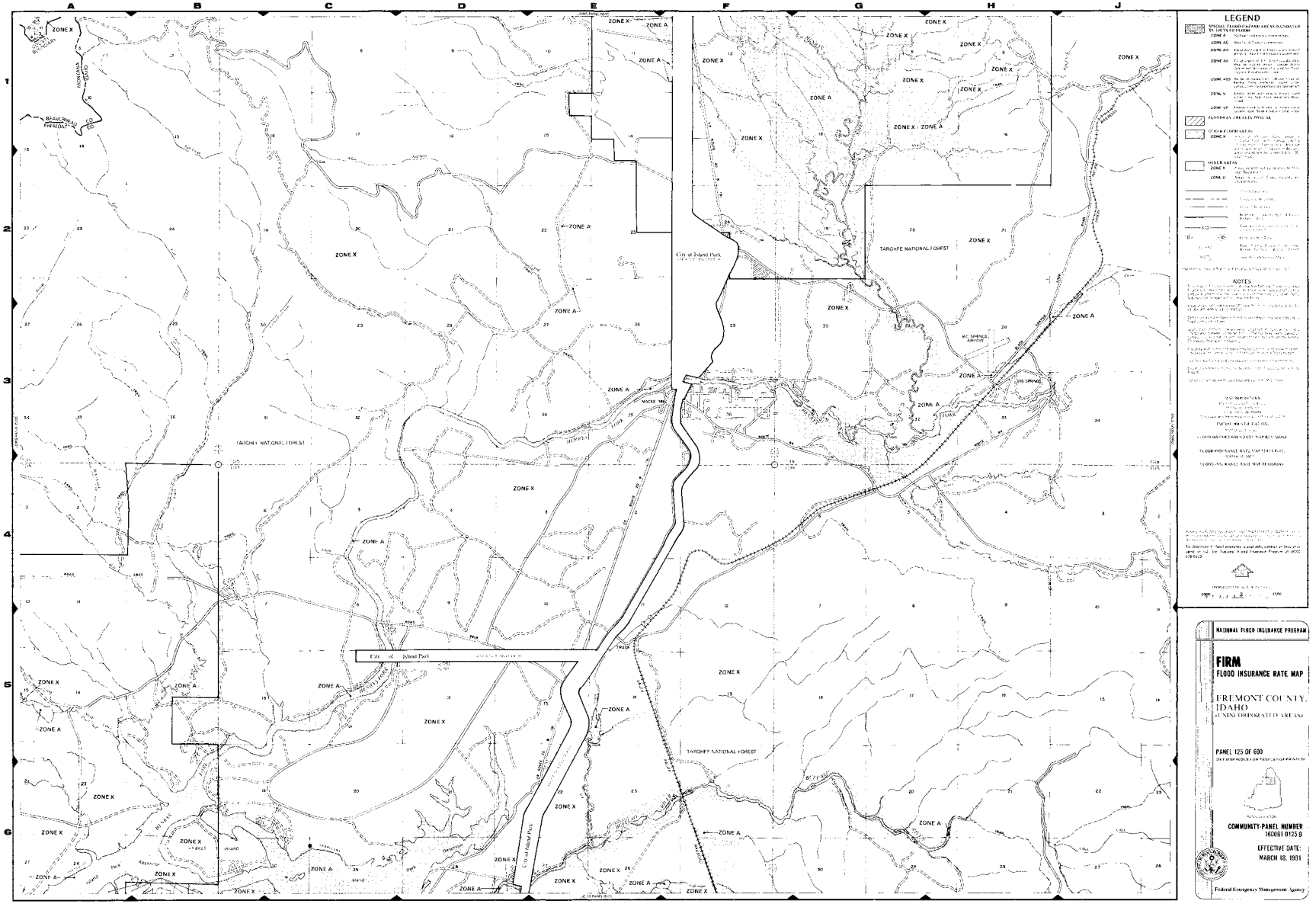
MARCH 18 1991
Federal Emergency Management Agency


LEGEND
NOTES
TARGHEE NATIONAL FOREST
City of Island Park
ZONE A
ZONE X
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
FREMONT COUNTY, IDAHO
(UNINCORPORATED AREAS)
PANEL 125 OF 600
COMMUNITY-PANEL NUMBER
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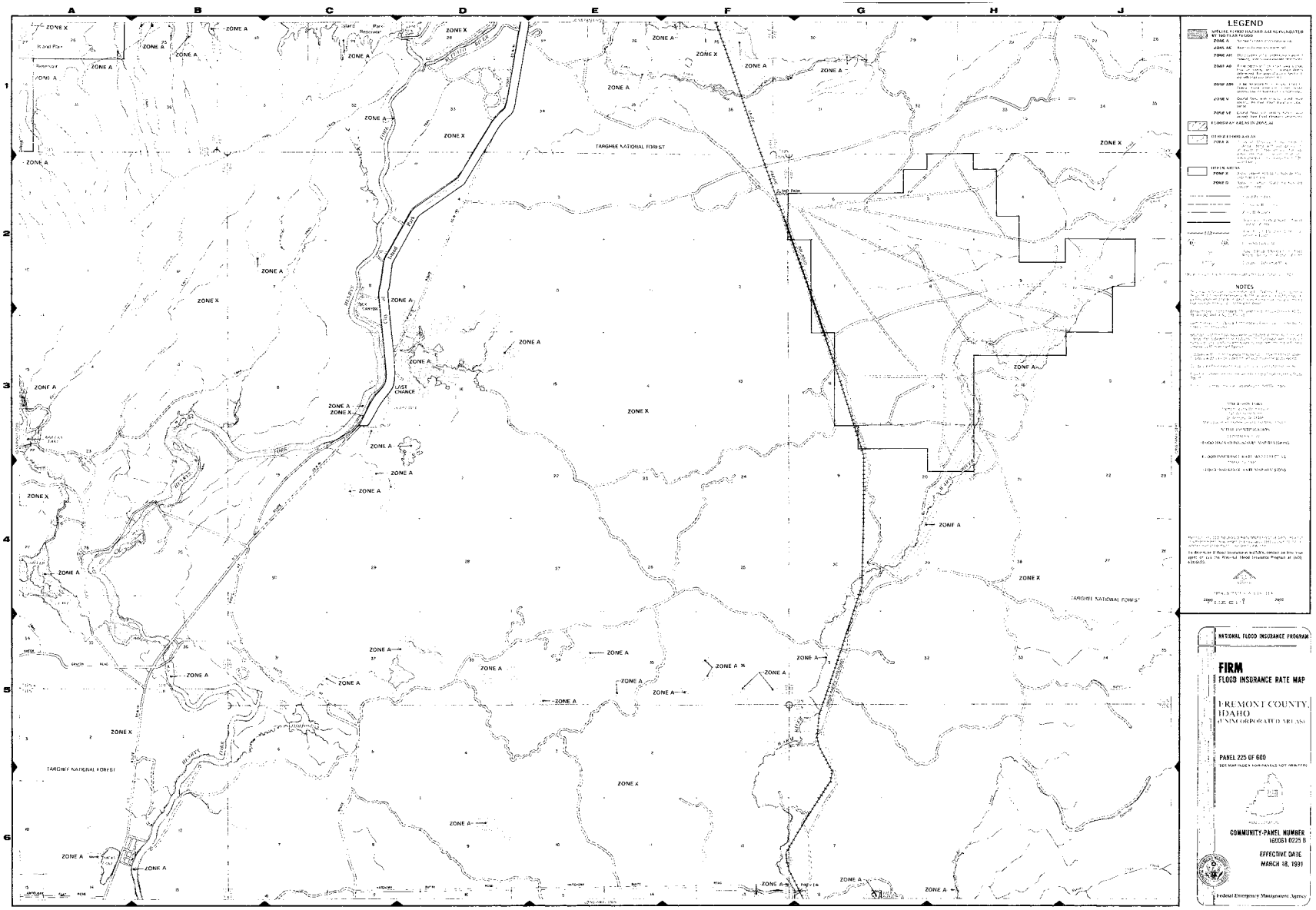
EFFECTIVE DATE:
MARCH 18, 1991
Federal Emergency Management Agency


LEGEND
NOTES
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
FREMONT COUNTY, IDAHO
(UNINCORPORATED AREAS)
PANEL 225 OF 600
COMMUNITY-PANEL NUMBER
160061 0225 B
EFFECTIVE DATE
MARCH 18, 1991
Federal Emergency Management Agency
TARGHEE NATIONAL FOREST
ZONE A
ZONE X