DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

SECTION A. Project Title: Post Fire Recovery Actions

SECTION B. Project Description and Purpose:

As wildland fires become more common across the west and the Idaho National Laboratory (INL) Site, it is important to have NEPA coverage for activities that occur in response to fire suppression activities in order to minimize the time between the fire and recovery actions. This ECP outlines the common and likely post-fire non-emergency recovery actions including dust suppression, site restoration, weed control, revegetation, and other activities evaluated in the Final Wildland Fire Management Environmental Assessment (EA), DOE/EA-1372 (April 2003), and outlined in the “Candidate Conservation Agreement for Greater Sage-grouse (Centrocercus urophasianus) on the Idaho National Laboratory Site in Southeast Idaho” (2014).

Fire suppression activities typically result in four forms of ground disturbance: (1) fire breaks created by dozers and graders; (2) clearing of vegetation in “safety zones” or staging areas; (3) new access roads created along fire perimeters; and (4) widening and disturbance along existing access roads. This environmental compliance permit (ECP) focuses on both the damage caused by suppression activities as well as the damage caused by the fire itself. Fires on the INL are fought using Minimum Impact Suppression Tactics (MIST) – MIST emphasizes suppressing a wildland fire with the least impact on the land. Actual fire conditions and good judgment dictate actions taken. Firefighter and public safety would not be compromised nor would the overall objective of property protection and early containment. Appropriate actions are taken based on the fire’s potential to spread and cause damage to resources, including mature sagebrush.

INL’s Wildland Fire Management EA identifies site restoration activities that include “filling in deep and wide containment lines and cup trenches and recontour[ing] of containment lines”. Generally, INL facility and Site Services (F&SS) recontours containment lines as part of the post-fire activities when leaving the fire area (that is, the activity is covered under the emergency actions associated with the fire). INL’s Wildland Fire Management Committee may choose to delay the recontour activities to allow time for INL to evaluate potential impacts to cultural resources and enhance revegetation of the containment lines by delaying reseeding until the fall.

The typical proposed action is for INL’s F&SS personnel to recontour (using a road-grader or bull-dozer) and reseed (using a mechanical Tru-Ax drill or hand broadcasting) containment line soil piles created during fire suppression activities. This action will be done in accordance with INL’s Wildland Fire EA and the following guidance to keep potential impacts to a minimum and to avoid adverse impacts to cultural and biological resources. Recontouring the containment lines may help native vegetation to return under natural conditions.

Natural resource recovery issues may be organized into four objectives. Those objectives are listed here, along with the information that should be considered for developing treatment actions (Sheep Fire Ecological Resources Post-Fire Recovery Plan, 2020).

1) Soil stabilization for erosion and weed control immediately post-fire
   - Characterize the amount/severity of direct soil disturbance and prioritize restoration activities
   - Recontour containment lines and seed direct soil disturbance with a native grass mix (additional information below)
   - Sign and/or barricade the containment lines to prevent traffic
   - Monitor and spray containment lines for weeds
   - Assess any soil disturbance associated with powerline repair and restore accordingly

2) Cheatgrass and noxious weed control within the larger burned area
   - Identify areas that may benefit from cheatgrass treatment
   - Apply a pre-emergent herbicide to selected areas at greatest risk for cheatgrass dominance
   - Conduct a weed inventory and treat noxious weeds

3) Native herbaceous recovery
   - Rest the grazing allotment portion of the burn area for at least two growing seasons
   - Identify locations of potentially poor native herbaceous recovery
   - Plant native perennial grasses in areas with poor native recovery

4) Sagebrush habitat restoration
   - Prioritize areas that would benefit from planting sagebrush
   - Evaluate planting options
   - Coordinate a local seed collection effort
   - Locate available seed that may be appropriate for use on the INL Site
   - Aerially plant sagebrush seed in high priority areas
   - Plant sagebrush seedlings strategically to address specific areas where accelerated recovery would be beneficial to habitat recovery

Actions included in this ECP and possible variations are listed below:

Dust Suppression – The INL could use chemical and physical methods such as soil tackifier, surfactants, or mulch to minimize fugitive dust following wildland fires, including dust from soil contamination areas (SCAs). In addition, the INL may use other methods to control dust, such as water cannons around facilities and snow fences upwind of facilities.

Site Restoration – The INL could implement the following site restoration guidelines. The Wildland Fire Management Committee (see below) would determine the restoration activities for individual fires or specific burned areas.
• Inventory the burned area for fire and fire suppression impacts to resources
• Fill in deep and wide containment lines and cup trenches and recontour containment lines
• Waterbar newly created roads or containment lines, as necessary, to prevent erosion, or use woody material to act as sediment dams
• Scatter, in a natural pattern, large-size brush or trees cut during containment line construction
• Install sediment controls to prevent sedimentation of waterways and wastewater treatment basins
• Remove debris and sediment from waterways (check annually)
• Restore helicopter landing sites, equipment staging sites, and similarly disturbed areas
• Control all noxious weeds
• Evaluate necessity to revegetate all or portions of the burn or areas impacted by fire suppression activities using native species by broadcast seeding, drilling, containerized stock, wildings, or aerial application
• Use seeds, containerized stock, or wildings from local collections of site-adapted stock
• Base decision to revegetate an area on inventories of affected areas for natural recovery that approaches pre-fire densities of native species
• Use GIS to map all areas receiving restoration treatments
• Prohibit off-road vehicles from using burned areas
• Continue monitoring until restoration is complete
• Remove all signs of human activity (such as plastic flagging, litter, spills)
• Conduct surveys of affected areas associated with burn suppression activities, such as containment lines and equipment staging areas, and to assess damage to cultural and natural resources

In addition, the INL has established a Wildland Fire Management Committee to provide recommendations to the DOE Idaho Operations Office (DOE-ID) manager for pre- and post-fire activities and to facilitate the implementation of those activities.

Through the CCA, INL has a responsibility to control noxious weeds, maintain the native sagebrush and other native plants, and control cheatgrass on the INL Site. Control of noxious weeds, cheatgrass and other undesirable vegetation may be accomplished a variety of ways including, backpack or handheld spray device, truck or ATV mounted, etc. These activities may be subcontracted.

Copies of Safety Data Sheets (SDSs) and the EPA registered pesticide label for chemical agents for INL approval are managed via the Vendor Data Schedule (VDS).

Cultural Resource Conditions that must be followed to avoid adverse impacts:

Post-fire recovery activities described in this ECP are subject to cultural resource conditions described in MCP-8014 between DOE-ID and the Idaho State Historic Preservation Office. Whenever the Emergency Operations Center (EOC) is activated in response to a wildfire, a designated CRMO Resource Advisor (RA) must be contacted as soon as reasonably possible for guidance on how to avoid or minimize impacts to known historic properties during the emergency response. Following the emergency, F&SS must continue to coordinate with the CRMO-RA during all stages of post-fire stabilization as well as habitat recovery and restoration efforts. Specific conditions are outlined below for emergency stabilization, weed control, native herbaceous recovery, and sagebrush habitat restoration. The current CRMO-RA for fire suppression and post-fire rehab is Jeremias Pink, (208) 232-5552.

Emergency Stabilization: If emergency stabilization, including recontouring and re-seeding of containment lines as well as repair of powerlines and other infrastructure, is deemed necessary by DOE within seven days of an incident, F&SS will coordinate with the designated CRMO Resource Advisor (RA) to minimize effects to known historic properties through monitoring and avoidance. If conditions allow, and the affected area has not been subject to previous survey, the CRMO-RA may conduct a preliminary reconnaissance level survey of areas with a high potential for cultural resources to identify additional areas to avoid during emergency stabilization. Whenever possible, all vehicles and heavy equipment must remain on containment lines or established roads. Any inadvertent discoveries of cultural resources that occur during stabilization efforts represent a stop work condition and must be promptly reported to INL CRMO staff before work may continue.

Following emergency stabilization, an intensive cultural resource survey will be required in all areas impacted by fire suppression that have not been subject to previous inventory, including containment lines, staging areas, off-road two tracks, and historic roads. If stabilization of containment lines is not conducted within seven days of the incident, the CRMO may require an intensive survey of all areas impacted by fire suppression efforts prior to recontouring and re-seeding. In most cases, historic properties impacted by containment lines will require soil stabilization to prevent further impacts from erosion. The CRMO will coordinate with F&SS and representatives of the Shoshone-Bannock Tribes to monitor stabilization of known historic properties, as well as those identified through reconnaissance or intensive survey.

Cheatgrass and Noxious Weed Control: The application of herbicides in burn areas is exempt from cultural resource review as long as all vehicles remain on established roads.

Native Herbaceous Recovery: Any revegetation by manual or aerial broadcast seeding is exempt from cultural resource review given that (1) reseeding does not involve ground-disturbance beyond placing seeds on the ground; and (2) that all vehicle travel is restricted to established roads. Restoration efforts that require off-road use of vehicles or equipment, mechanical seeders, or other activities that result in soil movement or ground disturbance require review by a cultural resource specialist prior to initiation.
**Sagebrush Habitat Restoration:** Manual planting of sagebrush using hand-held augers or planting bars results in some soil disturbance. However, the benefits of soil stabilization achieved through replanting of burned areas far outweigh any potential impacts to historic properties. To expedite post-fire habitat restoration and stabilization of soils, the CRMO does not require intensive survey of restoration areas prior to replanting. However, the CRMO must be contacted prior to planting to identify any known historic properties that may be impacted by this activity. In addition, all personnel involved in planting efforts must complete cultural resource training or receive a pre-job briefing from a cultural resource specialist prior to initiation of work. Any inadvertent discoveries of cultural resources that occur during restoration efforts represent a stop-work condition and must be promptly reported to INL CRMO staff before work may continue.

As defined in LST-8000 and referenced by LWP-8000: Pesticide.

Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a herbicide (for example plant regulator, defoliant, or desiccant), other than any article that: (1) is a new animal drug under FFDCA section 201(w), or (2) is an animal drug that has been determined by regulation of the Secretary of Health and Human Services not to be a new animal drug, or (3) is an animal feed under FFDCA section 201(x) that bears or contains any substances described by paragraph 1., or 2., of this definition. At the INL, site “pesticide” includes all of those materials covered by The Federal Insecticide, Fungicide and Rodenticide Act (i.e., insecticides, herbicides, fungicides, rodenticides, and antimicrobials.) Products that are not pesticides because they are not deemed to be used for a pesticidal effect include: A product that is not intended to prevent, destroy, repel, or mitigate a pest, or to defoliate, desiccate or regulate the growth of plants, is not considered to be a pesticide. The following types of products or articles are not considered to be pesticides unless a pesticidal claim is made on their labeling or in connection with their sale and distribution: (a) Deodorizers, bleaches, and cleaning agents; (b) Products not containing toxicants, intended only to attract pests for survey or detection purposes, and labeled accordingly; (c) Products that are intended to exclude pests only by using a physical barrier against pest access, and which contain no toxicants, such as certain pruning paints to trees.

**SECTION C. Environmental Aspects or Potential Sources of Impact:**

**Air Emissions**

Areas burned by natural fires which have yet to be revegetated or stabilized are considered a natural source of fugitive dust and reasonable precautions to suppress dust are not required during the stabilization and revegetation process.

For support activities outside the burned area, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

**Discharging to Surface-, Storm-, or Ground Water**

When working near the Big Lost River channel there is a potential to ‘push’ soil or debris into the channel.

**Disturbing Cultural or Biological Resources**

Following suppression and containment of fires, the INL CRMO would complete a cultural resources survey and inventory of areas within 30 m of known containment lines, staging areas, new access roads, and disturbed historic roads. Historic properties would be identified during this survey including those recommended eligible for the National Historic Register.

Restoration of containment lines will reduce the secondary impacts of erosion to these historic properties by stabilizing soils and restoring native vegetation. However, the proposed actions have some potential to result in further unintended disturbance of cultural deposits at sites bisected by containment lines.

Use native seed during the reseeding activities following the guidance given below under. Contact Colby Kramer (208-227-9031) if you have questions.

**Generating and Managing Waste**

Waste generated by post-fire non-emergency actions will likely be in the form of paper, chemical containers, seed bags or other containers, etc. INL transfers this waste to a certified recycler or a properly permitted solid waste landfill for disposal. Projects characterize and manage soils and environmental media generated during restoration activities in accordance with laboratory procedures. INL has an active program to minimize waste generation. The waste minimization program includes both source reduction and recycling. Waste Minimization and Pollution Prevention Opportunities are also an integral part of the work review process. INL continually considers opportunities for waste minimization and pollution prevention during routine maintenance activities.

**Releasing Contaminants**

Pesticides and herbicides may be used to control weeds and localized pest and vegetation control. The types of pesticides and herbicides and the methods of application employed at INL are controlled by federal and state laws, rules, and regulations. INL applies pesticides and herbicides in accordance with these requirements through laboratory procedures. Only certified applicators apply “Restricted Use” and “General Use” pesticides at INL.
Although not anticipated, there is a potential for spills when using chemicals or fueling equipment. In the event of a spill, notify facility Environmental Staff. If the Environmental Staff cannot be contacted, report the release to the Spill Notification Team (208-241-6400). Clean up the spill and turn over spill cleanup materials to WGS.

Using, Reusing, and Conserving Natural Resources
N/A

SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification:

Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not “connected” to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

References:
Idaho National Engineering and Environmental Laboratory Wildland Management Environmental Assessment, DOE/EA-1372, April 2003. CX B3.2 Aviation Activities.

Justification:
Activities outlined in this ECP are consistent with ‘Post-Fire Activities’ described in the above referenced EA (DOE/EA-1372). In addition, project activities are consistent with other post fire action documents including the Candidate Conservation Agreement and the Sheep Fire Ecological Resources Post-Fire Recovery Plan, PLN-611, and INL-19-110 (Sheep Fire Non-Emergency Recovery Actions). CX B3.2: Aviation activities for survey, monitoring, or security purposes that comply with Federal Aviation Administration regulations.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) ☐ Yes ☒ No

Approved by Jason Anderson, DOE-ID NEPA Compliance Officer on: 04/29/2021