BUREAU OF RECLAMATION

Finding of No Significant Impact and Decision Record

Programmatic Environmental Assessment Wildland Fire Emergency Stabilization and Rehabilitation

Ephrata Field Office

Interior Region 9 – Columbia Pacific Northwest

Tracking #: CPN-EA-2025-04-FONSI

This document certifies that Reclamation has considered all relevant information raised in the NEPA process and that the NEPA process has concluded. The Proposed Action has been analyzed in an Environmental Assessment and found to have no significant impacts, thus an Environmental Impact Statement is not required.

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Approved and certified by: _____ Date: _____
Name: Candace Carmack
Title: Acting Columbia-Cascades Area Manager
Office: Columbia-Cascades Area Office
Interior Region 9- Columbia-Pacific Northwest, Bureau of Reclamation

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Mission Statements

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Finding of No Significant Impact

Introduction

In accordance with section 102(2) of the National Environmental Policy Act (NEPA) of 1969, as amended, the Bureau of Reclamation (Reclamation) prepared an Environmental Assessment (EA) to examine the potential effects to the environment associated with Reclamation's Proposed Action to implement emergency stabilization and rehabilitation measures following wildland fire impacts on Reclamation lands in Washington under Ephrata Field Office (EFO) jurisdiction. This Finding of No Significant Impact (FONSI) follows implementation regulations for an EA described in 43 CFR Part 46 and the Department of the Interior Handbook of NEPA Implementation Procedures (516 DM 1). This FONSI is supported by Reclamation's Wildland Fire Emergency Stabilization and Rehabilitation Programmatic Environmental Assessment (EA Number CPN-2025-04), incorporated here by reference.

Purpose and Need

Purpose

The purpose of Reclamation's action is to develop a Programmatic Emergency Stabilization and Rehabilitation Plan that establishes a suite of post-fire treatments, enabling their implementation following wildfire. By proactively identifying treatment strategies and completing programmatic environmental compliance in advance, a Programmatic Emergency Stabilization and Rehabilitation Plan would expedite post-fire recovery efforts, minimize risks to public safety and natural resources, and ensure alignment with Reclamation policy. This programmatic approach would enhance efficiency, reduce administrative delays, and improve the effectiveness of Emergency Stabilization and Rehabilitation (ES&R) treatments across the EFO's jurisdiction.

Need

Effective post-fire ES&R treatments are essential for protecting public safety, restoring infrastructure, and preventing further degradation of natural resources, historic properties and traditional cultural places following a wildfire. Reclamation requires that site-specific ES&R plans be developed and submitted within 21 days of fire containment (Reclamation ES&R Handbook). This limits the time available for environmental analysis and compliance with NEPA and other regulatory requirements to implement ES&R in fall and winter post-wildfire.

Currently, the Columbia-Pacific Northwest Region, EFO lacks the necessary tools to efficiently develop site-specific ES&R plans and complete required environmental compliance within Reclamation's timeframes. Programmatic analysis of ES&R treatments prior to fire occurrence is needed to expedite the timely development and implementation of site-specific ES&R plans and streamline the NEPA compliance process to ensure actions are taken as quickly as possible to minimize resource degradation and mitigation costs.

Alternatives Considered

The range of alternatives developed for analysis was based on the purpose and need for the project and on the issues raised during internal and external scoping. The alternatives analyzed include a No Action alternative and the Proposed Action. The No Action alternative does not meet the defined purpose and need for action but was evaluated to provide an appropriate baseline. This FONSI addresses the Proposed Action.

Proposed Action

Reclamation proposes a programmatic approach to implement ES&R treatments on Reclamation lands in Washington under EFO jurisdiction to improve soil and habitat conditions and protect facilities and infrastructure following wildfire. This approach is designed to address areas already degraded or susceptible to degradation due to invasive or noxious weeds and fire effects, while providing NEPA streamlining capabilities for efficiency from planning through implementation.

Objectives
The Proposed Action aims to stabilize soils, restore vegetation, control invasive species, and protect public safety and infrastructure in post-fire landscapes. Treatments would be prioritized in areas that pose risks to facilities, public safety, cultural or natural resource values, or where natural recovery is unlikely. The Proposed Action includes environmental protection measures (EPMs) such as timing restrictions for specific types of treatments that would be applied to minimize impacts.

Treatment Categories and Methods
The Proposed Action includes six main categories of ES&R treatments:

1. **Seeding and Planting**: Applied where native vegetation communities are unlikely to recover naturally. Methods include seedbed preparation (disking, plowing, harrowing, imprinting, mastication), herbicide application prior to seeding, and seed cover techniques such as mulching or straw.

    - Native species will be prioritized for revegetation, with flexibility to include non-native species when necessary and consistent with land use plans. Seed mixes will be developed based on site-specific factors such as soil properties, erosion potential, elevation, precipitation, invasive plant competition, watershed stability, and cost. Shortages may require substitutions with similar species.

2. **Integrated Weed Management**: Combines manual, mechanical, biological, and chemical methods to control invasive species. Manual methods use hand tools for cutting and pulling weeds; mechanical methods employ tractors and specialized equipment for uprooting and chopping vegetation; biological methods introduce natural enemies specific to target plants; chemical methods use approved herbicides applied via hand spraying, basal bark, cut-stump, stem injection, broadcast spraying, and boom spraying.

3. **Watershed Stabilization and Erosion Control**: Treatments include log erosion barriers, rock check dams, timber slash, contour trenches, erosion cloth, water bars, and road stabilization features such as rolling dips and culverts to reduce runoff and soil loss.

4. **In-Channel Treatments**: Techniques such as beaver dam analogs, straw bale and rock check dams, silt fences, log dams, woody riparian cuttings, and gabions are used to stabilize stream channels, trap sediment, and restore riparian vegetation. No in-channel treatments would occur in Endangered Species Act (ESA) critical habitat.

5. **Closures**: Temporary closures of facilities, lands, and waterbodies may be implemented for public safety and resource protection under 43 CFR authorities. Closures may involve signage, barriers, and restrictions on motorized and non-motorized access.

6. **Facility Repair and Safety Actions**: Includes repair or replacement of minor facilities (e.g., campgrounds, fences, kiosks), installation of temporary fencing to protect treatments, hazard tree removal, and posting of safety notices. Larger facility repairs may require separate NEPA analysis.

Environmental Protection Measures
EPMs are identified to avoid or minimize impacts to sensitive resources, including soils, water quality, threatened and endangered species habitats, and historic properties. Site-specific buffers and precautions would be applied during treatment implementation.

Monitoring
Monitoring of treated areas would occur to evaluate effectiveness, with priority given to areas where unique treatments were implemented or where resource values or public concerns are high. Treatment methods will be adjusted based on monitoring results and new information.

Implementation Process
If post-fire actions are needed, an ES&R plan would be developed within 21 days of fire containment by EFO resource staff. Reclamation would then complete a Determination of NEPA Adequacy or other documentation to confirm consistency with the Programmatic EA (PEA) or determine if additional NEPA analysis is required before implementation.

Mitigation, Monitoring, and Enforcement

Mitigation, monitoring, and enforcement measures are identified in Appendix B (EPMs) and Appendix G (Chemical Weed Control) of the PEA. These measures include a combination of EPMs outlined in the PEA and Conservation Measures (CMs) proposed in the programmatic biological assessment for this project, and anticipated Clean Water Act permitting requirements, as applicable. These measures have been adopted as part of the Proposed Action to address potential adverse impacts and are attached to this FONSI as Attachments 1 and 2. Additional terms and conditions from project specific National Historic Preservation Act (NHPA) consultation may be required and would be addressed on a case-by-case basis.

Mitigation measures include EPMs to avoid, minimize, rectify, reduce, eliminate or compensate for impacts caused by implementation of the Proposed Action. The authority to implement these measures is derived from the ESA Section 7 consultation, Clean Water Act Section 404 permitting requirements, National Historic Preservation Act Section 106 consultation, and Reclamation's Directives and Standards, including LND P14 (Wildland Fire Management Policy), SAF 01-01 & 02-01 (Safety and Environmental Protection), and ENV 01-01 (Integrated Pest Management).

Monitoring and Enforcement Provisions

The following measures outline how mitigation actions adopted as part of the Proposed Action will be monitored and enforced to ensure their effectiveness and compliance with applicable laws, regulations, and Reclamation Directives and Standards:

- Monitoring will occur during and after treatment implementation to ensure compliance with mitigation measures and evaluate effectiveness.
- Annual inspections of treated areas will assess vegetation recovery, invasive species control, and adherence to buffer zones and timing restrictions.
- Herbicide applications will be monitored to ensure only approved chemicals are used, and follow all label instructions, buffer requirements, and personal protective equipment standards as outlined in Reclamation Directives and Standards and Attachment 2.
- Adaptive management actions will be documented and implemented based on monitoring results.
- Enforcement will be carried out through Reclamation's project oversight authority, contractual requirements for contractors and partners, and compliance with all applicable Directives and Standards.

Mitigation measures will be applied to avoid or substantially reduce the potential for significant effects on sensitive resources, including threatened and endangered species, water quality, and cultural resources. Implementing these measures will help maintain impacts below thresholds of significance and will support compliance of the Proposed Action with all applicable environmental laws and regulations.

Summary of Environmental Effects

Degree of Effects

The PEA evaluated the reasonably foreseeable effects of the No Action and Proposed Action alternatives. This summary addresses the potential effects of implementing the Proposed Action.

In determining the degree of significance, the following were considered per Section 1.2 of the DOI NEPA Procedures (516 DM1):

1. Short- and long-term effects[1]: The PEA evaluated both temporary and lasting effects of the Proposed Action on soils, water, vegetation, wildlife, fisheries, cultural resources, recreation, and grazing (see PEA Sections 3.4–3.11). Most effects are expected to be minor, localized, and short-term, primarily occurring during project implementation. Long-term effects will generally be beneficial, including improved soil stability, increased native vegetation cover, and enhanced habitat resilience. No major or widespread adverse effects are anticipated.
2. Beneficial and adverse effects: Both beneficial and adverse effects were analyzed for each resource category (PEA Sections 3.4–3.11). Beneficial effects include stabilization of soils, recovery of native vegetation, improved water quality, and protection of infrastructure and public safety. Adverse effects, such as temporary[2] disturbance from ground treatments or herbicide use, will be minimized through application of EPMs (Attachments 1 and 2) and are not expected to be significant.
3. Effects on public health and safety: The Proposed Action is designed to address post-fire risks to public health and safety by stabilizing hazardous areas, repairing damaged infrastructure, and controlling invasive species (PEA Sections 3.4, 3.10, 3.11). EPMs, such as temporary closures and hazard tree removal, will further reduce risks. No significant adverse effects to public health or safety are anticipated.
4. Economic effects: Economic effects were considered in the context of impacts to grazing, recreation, and infrastructure (PEA Sections 3.10, 3.11). While there may be short-term costs associated with closures or restoration activities, these are outweighed by the long-term benefits of resource protection, reduced erosion, and sustained land productivity. The Proposed Action will support the quality of life and economic stability of local communities by maintaining access to public lands and resources.
5. Effects on the quality of life of the American people: The Proposed Action will help maintain and restore the ecological health, recreational value, and safety of public lands managed by Reclamation. By addressing wildfire impacts through implementing ES&R treatments such as controlling invasive species, and supporting habitat recovery, the Proposed Action will contribute positively to the quality of life for residents, visitors, and future generations (PEA Sections 3.6, 3.7, 3.10).

Effects by Resource

The following summarizes the effects that the Proposed Action would have on each resource category analyzed in detail in the PEA. Chapter 3 of the PEA provides a full analysis and explanation of how each resource was evaluated; Appendix F of the PEA provides rationale for resource categories not analyzed in detail.

[1] Short-term: impacts that would occur for less than 5 years after initial activity implementation. Long-term: impacts that would occur for 5 years or longer after initial activity implementation.

[2] Temporary: impacts that would only occur during active implementation for a particular ES&R activity (such as seeding, installation of erosion barriers, etc.).

Based on the analysis presented in the PEA, none of the resource impacts were determined to be potentially significant, as implementation of EPMs, along with CMs from ESA consultations, would keep effects below the threshold of significance.

Soils Resource: Soils within the project area consist of National Resources Conservation Services (NRCS)-mapped ecological site units and soil map units typical of alluvial terraces and foothill environments, characterized by gravelly and stony textures and natural variability in erosion susceptibility. Evaluation of effects on soils is based on two indicators: whether erosion rates would occur outside the range of natural variability, and whether ES&R actions would result in significant soil compaction. Treatment areas are small and dispersed, and ES&R implementation such as erosion control, rapid vegetative recovery, and minimizing disturbance prevents increases in erosion beyond natural post-fire variability. ES&R treatments would cause only minor, short-term, localized disturbance to soils from equipment access, grading, or vegetation removal. No unique or highly sensitive soil types known to occur in the project footprint, and predicted soil loss would remain within NRCS tolerances based on mapped T-factor values. Impacts are therefore not significant and would remain well below thresholds of concern with implementation of standard soil-protection measures, including erosion and sediment control EPMs, minimizing the area of disturbance, restricting equipment to designated routes, stabilizing exposed soils, and restoring disturbed areas following construction. With these EPMs implemented, soils would experience only temporary, negligible effects, and both erosion and compaction indicators remain well below thresholds of concern.

Water: Wildland fire can temporarily increase runoff, erosion, and sediment delivery into nearby waterbodies due to loss of vegetation and soil cover; however, the ES&R proposed suite of treatments is specifically designed to reduce hydrologic instability and prevent post-fire degradation of water resources. As described in PEA Chapter 3, Section 3.5, short-term impacts such as elevated sedimentation or altered flow patterns may occur during implementation of stabilization treatments, but these effects are localized, temporary, and rapidly diminish once treatments take hold. Hydrologic function is expected to improve relative to post-fire conditions because ES&R treatments such as installing erosion-control structures, re-establishing vegetative cover, repairing drainage features, and preventing channel incision directly mitigate runoff and sedimentation risks. The ES&R PEA evaluates effects using three water-quality indicators: stream temperature, turbidity, and nutrient concentrations (nitrogen and phosphorus). Both the beneficial ES&R treatments and the required EPMs act together to ensure these indicators remain within applicable water-quality standards. Stabilization treatments reduce sediment and nutrient transport, riparian and vegetative recovery maintains shading that prevents increases in stream temperature, and erosion-control measures limit turbidity spikes during implementation. The PEA and supporting analyses conclude impacts are not significant due to the temporary nature of impacts and because the combined effect of ES&R treatments and EPMs prevents measurable degradation of water quality or long-term changes to hydrologic processes; therefore, the determination of non-significance is tied to implementation of both the beneficial treatments and the EPMs.

Vegetation: Vegetation within the project area consists primarily of shrub-steppe and upland shrubland communities. Small acreages of conifer stands, riparian and wetland communities, and scattered agricultural and developed lands are also present. The analysis indicators for vegetation evaluated in the PEA are habitat quality and quantity. Minor, short-term negative impacts to vegetation would occur from ground disturbance associated with ES&R treatments such as

reseeding, erosion control installation, or repair of fire-damaged infrastructure. These impacts may include temporary vegetation removal, trampling, or soil surface disruption; however, they are localized and would not result in long-term loss of plant communities or negative shifts in ecological vegetation types; rather, the treatments would result in reestablishment/increased acres of native vegetation, reduction in invasive species, and positive shifts in quality of vegetation communities. Vegetation conditions and cover types shown in the PEA vegetation mapping demonstrate that the project area contains broad, resilient landscape units where small-footprint restoration activities do not measurably alter overall vegetation composition. Impacts are not significant because ES&R treatment implementation is designed to restore vegetative cover following wildfire and to move the resource toward desired conditions, consistent with the PEA's impact analysis for vegetation described in Section 3.6.3. In addition to positive shifts in native communities resulting from some of the vegetation treatments, non-significance is tied to implementation of environmental commitments, including using native or site-appropriate seed mixes, controlling noxious and invasive weeds, limiting equipment to designated routes, stabilizing disturbed areas promptly, and following programmatic vegetation protection measures. With implementation of EPMs outlined in Attachments 1 and 2 and CMs outlined in Attachment 3, vegetation effects remain temporary and localized and limited in duration and do not rise to a level of significance.

ESA-listed and sensitive plant species within the project area occur in shrub-steppe, riparian, and upland habitats that have already been altered by wildfire. ES&R activities may cause short-term, localized disturbance during treatments; however, treatment areas are small and targeted at previously burned or degraded sites, so they do not reduce habitat quantity at a scale meaningful for listed plant populations. Habitat quality for ESA vegetation is expected to improve as ES&R treatments promote reestablishment of native plant communities, reduce competition from invasive species, and stabilize soils, which collectively support a positive shift in vegetation condition and long-term resilience. Implementation of ES&R treatments, together with EPMs and CMs that limit disturbance and ensure prompt stabilization, keeps impacts minor and short term. Based on the analysis indicators, the Proposed Action is not expected to result in significant impacts to ESA listed plant species. The U.S. Fish and Wildlife Service (USFWS) provided concurrence that the project is not likely to adversely affect any ESA-listed plant species, further supporting this determination.

Wildlife: Wildlife species within the project area include resident mammals, birds, reptiles, and amphibians that occupy shrub-steppe, riparian, and forested habitats, as described in Chapter 3, Section 3.7 of the PEA. Short-term impacts to wildlife may occur during ES&R activities due to temporary noise, human presence, and limited vegetation disturbance; however, these effects will be highly localized and occur in landscapes already altered by wildfire, meaning most wildlife displacement will have already taken place prior to project implementation. ES&R actions will not create long-term habitat loss, fragmentation, or barriers to movement, and treated areas will remain suitable for wildlife re-establishment shortly after stabilization. The PEA evaluates impacts using indicators related to habitat quantity and quality. Treatment areas are typically small, dispersed, and focused on sites already disturbed by wildfire or emergency response actions. Because of their limited footprint, these treatments do not reduce habitat quantity at a scale that would affect wildlife populations or lead to measurable habitat loss across the landscape. In terms of habitat quality, treated shrub-steppe and upland areas are expected to show improved resistance to future wildfire and a positive shift along the functional and structural condition gradient, contributing to long-term ecosystem resilience and integrity. Vegetation recovery, invasive-species control, and soil-stabilization treatments support the re-establishment of native plant communities that provide

forage, cover, and movement pathways for returning wildlife. Impacts will not be significant because both the beneficial ES&R treatments and the implementation of EPMs outlined in Attachments 1 and 2 work together to minimize disturbance. Limiting equipment to designated routes, applying seasonal timing restrictions where appropriate, minimizing vegetation removal, controlling invasive species, and restoring disturbed sites promptly all reduce the duration and intensity of impacts. Although there may be minor and short term impacts to wildlife, implementation of these measures will keep them below the level of significance.

Similar to general wildlife, ESA listed, proposed, and sensitive species may experience short-term, localized disturbance during ES&R implementation; however, these activities occur in areas already altered by wildfire, and most displacement or habitat disruption will have occurred prior to project actions. Treatment areas are small, dispersed, and focused on previously burned sites, so habitat quantity for listed species is not reduced at a scale that would affect population viability. Habitat quality is expected to improve as ES&R treatments promote vegetation recovery, reduce erosion, improve hydrologic stability, and support a positive shift in the functional and structural condition of shrub-steppe and riparian habitats. With the addition of EPMs and CMs that limit disturbance, avoid occupied or sensitive areas through timing restrictions, minimize vegetation removal, and ensure rapid stabilization, effects remain minor and short-term. Based on these indicators, the Proposed Action is not expected to result in significant impacts to ESA-listed wildlife species. The USFWS provided concurrence that the project is not likely to adversely affect any ESA-listed wildlife species, further supporting this determination.

Fisheries: Fish species within the project area include native and ESA-listed salmonids and non-salmonid species that occupy streams, riparian zones, and associated aquatic habitats, as described in Chapter 3, Section 3.8 of the PEA. Impacts to native and ESA-listed fish instream habitat from the proposed ES&R treatments are considered not significant due to the implementation of EPMs outlined in Attachment 1 and 2 and CMs outlined in the Biological Assessment and included in this FONSI as Attachment 3, as well as a letter of concurrence from USFWS(FWS/R1/2025-0130428**)**. Most ES&R activities, such as seeding, planting, weed management, and watershed stabilization, will be conducted outside of aquatic habitats, focusing on upland and riparian zones rather than direct in-stream work. Herbicide applications are strictly regulated: only Washinton State Department ofTransportation-approved chemicals will be used, and buffer zones (e.g., no broadcast spraying within 100 feet of open water, no spot spraying within 50 feet, and no hand application below bank-full elevation) will be maintained to prevent drift or runoff into water bodies. For streams with ESA critical habitat, no herbicides would be used within 300ft of that habitat. Further, timing restrictions will be applied to ensure treatments avoid sensitive periods for fish, such as spawning and rearing. Watershed stabilization and erosion control measures (e.g., log erosion barriers, mulching, silt fences) will be specifically designed to reduce sedimentation and maintain water quality, thereby protecting instream aquatic habitats. These non-significant determinations are directly tied to the implementation of EPMs described in Attachments 1 and 2.

Reclamation concludes that, with these measures in place, the proposed action will not result in significant changes to instream habitat and are not likely to adversely affect ESA listed fish or their critical habitats. USFWS has concurred with this determination through its Not Likely to Adversley Affect (NLAA) finding. In-channel work in ESA critical habitat and 300ft upstream of critical habitat is excluded from this assessment; if proposed, it would require separate ESA consultation with USFWS and National Marine Fisheries Service (NMFS).

Historic Properties, Traditional Cultural Places, & Paleontological Resources: Impacts to historic properties, traditional cultural places, and paleontological resources from the proposed ES&R treatments will be analyzed post-fire on a case-by-case basis. Before any ground-disturbing activities, consultations will be conducted with the Washington State Department of Archaeology & Historic Preservation (WA-DAHP) and affected Tribal Historic Preservation Officers (THPOs) to determine the Area of Potential Effect (APE) and the necessary level of effort for identifying historic properties and cultural resources. Non-ground disturbing treatments are generally determined to have no potential to cause effects. If National Register of Historic Places eligible or unevaluated historic properties are present, complete avoidance will be required, and implementation monitoring by qualified cultural resource management professionals may be mandated to prevent inadvertent damage. In the event of post-review discoveries, work will cease immediately in the vicinity until proper consultation and mitigation are completed. Additional measures will include marking avoidance areas, installing temporary fencing, and posting signage to protect sensitive sites. Application of these commitments and mitigation measures, as outlined in Attachment 1 (Environmental Protection Measures) and EA Section 3.9 (Historic Properties, Traditional Cultural Places & Paleontological Resources) will support avoidance, minimization, and mitigation of any potential adverse effects to the maximum extent practicable. Therefore, the determination of non-significance for impacts to these resources is directly tied to the implementation of these EPMs.

Recreation: Recreational use of the project area occurs across reservoir, riparian, and upland settings and includes both developed and dispersed recreation opportunities, as described in Chapter 3, Section 3.10 of the PEA. Impacts to recreation from the proposed ES&R actions are considered minor and not significant due to the temporary nature of closures and disruptions following wildfire events. Indicators evaluated for this determination included access to recreation areas and facilities, visitor use, and overall visitor experience. While access to recreation areas and facilities may be restricted during implementation of stabilization and rehabilitation treatments, these closures will be short-term and necessary for public safety and resource recovery. Visitor use would be limited primarily through short-term closures of recreation sites during ES&R implementation, where fencing, signage, or temporary gate closures restrict public entry for safety and resource protection, resulting in temporarily reduced visitation and displaced users. Visitor experience may be temporarily affected by the presence of equipment and treatment activities; however, EPMs such as expedited infrastructure repair, invasive species control, and visual mitigation reduce visual disturbance, shorten the duration of disruptions, and help maintain overall visitor experience during ES&R implementation. Improving habitat and landscape resilience may enhance long-term recreational opportunities. Reclamation's determination of non-significance is directly tied to the implementation of ES&R treatments, temporary nature of impacts, and adoption of EPMs and CMs, as detailed in Section 3.10 (Recreation) and Appendix B of the PEA, and Attachments 1 through 3 of this FONSI.

Livestock Grazing and Management: Livestock grazing occurs throughout the project planning area within designated grazing parcels and is an established land use managed under Reclamation's discretionary permitting framework, as described in Chapter 3, Section 3.11 of the PEA. Impacts to livestock grazing and management from the proposed ES&R actions are anticipated to be minor and not significant. Indicators evaluated for this determination included changes to the quality and quantity of forage available for livestock, changes to livestock access to water, and changes in overall

livestock grazing operations. ES&R treatments such as seeding, planting, invasive species reduction, soil stabilization accelerate the recovery of desirable forage and improve longterm forage quality and quantity. Temporary closures allow vegetation to reestablish without grazing pressure, ensuring restored forage conditions before livestock return. Integrated weed treatments, erosion control, and timely facility repairs further support the rapid recovery of grazing parcels and minimize operational disruptions. ES&R watershed stabilization and erosion control treatments help retain moisture on grazing parcels, improve water storage, and maintain functional watering areas, allowing livestock continued and more reliable access to water postfire recovery. Temporary closures may in the short term limit access, but these closures allow vegetation and soil conditions to recover, supporting longerterm water availability and grazing sustainability. Because these actions collectively improve forage quality and quantity, enhance water availability, and shorten the duration of grazing restrictions, the degree of effect remains minor, temporary, and localized. Reclamation's determination of nonsignificance is based on the combined effects of the beneficial ES&R treatments and EPMs, as outlined in Section 3.11 and Appendix B of the PEA and in Attachments 1 and 2 of this FONSI. As a result, impacts do not rise to the level of significance.

Resources Not Analyzed

The following resources were reviewed during the scoping and analysis process but were not carried forward for detailed analysis in the PEA and will not be significantly affected. This determination was based on the absence of the resource in the project area and/or a lack of potential for measurable effects. For each of these resources, the PEA provides a rationale for elimination from detailed analysis in Appendix F, Table 6.6-1; the rationale is summarized below:

- Air Quality: Minor, temporary impacts from equipment and dust are expected; there are no air quality nonattainment areas in the project area. EPMs for dust abatement will be implemented.
- Floodplains: No designated floodplains are present in the project area.
- Geology and Mineral Resources: No modifications to operations are anticipated; impacts are expected to be negligible.
- Hazardous and Solid Wastes: Management and minimization measures will be in place; impacts are expected to be negligible.
- Indian Trust Assets and Indian Sacred Sites: No Indian trust assets or sacred sites have been identified in the project area.
- Lands and Realty: No changes to land use authorizations are proposed.
- Public Health and Safety: Risks are considered negligible to minor and will be addressed through standard procedures and EPMs. ES&R treatments reduce post-fire risks to public health and safety by stabilizing slopes, roads, and drainage structures to prevent debris flows, flooding, and hazardous conditions in burned areas. These actions also help protect water quality and critical infrastructure.
  Transportation: Temporary road closures may occur for safety, but impacts will be minor and short-term. Visual Resources: Temporary and minor impacts are expected. Treatments are intentionally designed to blend with the landscape as outlined in Appendix B of the PEA (EPMs) and Attachment 1 of this FONSI. The EPMs specifically emphasize minimizing visual disturbance and maintaining the natural character of project areas. These design features help ensure that stabilization and rehabilitation actions remain unobtrusive and consistent with surrounding landforms and vegetation.

Finding

After consideration of the information described above and analysis contained within the PEA, Reclamation's responsible official has determined that implementation of the Proposed Action, with adopted EPMs as outlined in Attachments 1 and 2, will not have a significant impact on the quality of the human environment. Therefore, preparation of an Environmental Impact Statement is not required. This determination is made in accordance with the NEPA of 1969 (42 U.S.C. § 4321 et seq.). Rationale for this finding is detailed above in the summary of environmental effects.

Decision Record

Selected Alternative

Based on the analysis of actions in the Wildland Fire Emergency Stabilization and Rehabilitation PEA (CPN-EA-2025-04) and the associated FONSI, Reclamation has decided to select the Proposed Action (Section 2.2) for implementation. The Proposed Action best meets the purpose and need to expedite post-fire recovery efforts, minimize risks to public safety and natural resources, and ensure compliance with Reclamation policy by establishing a programmatic framework that identifies ES&R treatments in advance and streamlines environmental review. This proactive approach will reduce administrative delays, contribute toward achieving the 21-day post-fire containment requirement, and improve the effectiveness and efficiency of ES&R implementation across the EFO's jurisdiction.

Reclamation will implement the Proposed Action as described in the PEA for the Ephrata Field Office's Wildland Fire Emergency Stabilization and Rehabilitation Program. This action will authorize the full suite of ES&R treatments, including seeding and planting; integrated weed management; watershed stabilization and erosion control; in-channel treatments; closures; and facility repair and safety actions; along with all required EPMs identified in the PEA (and in Attachments 1 and 2 of this document). These measures must be implemented to ensure compliance with the NEPA and all other applicable environmental laws and regulations.

The final decision was made based on the analysis presented in the PEA, which compared the No Action alternative with the Proposed Action and determined that the Proposed Action will not result in significant environmental impacts. This conclusion is supported by the FONSI and reflects the outcome of internal and external coordination, including agency and tribal consultation and the public involvement process. After reviewing all relevant environmental consequences, commitments, and scoping input, Reclamation determined that the Proposed Action meets project needs and regulatory requirements and therefore will proceed.

Other Alternatives Considered

The No Action alternative was the only additional alternative considered in the PEA. The No Action alternative was not selected as it would not meet the purpose and need. It would result in continued delays to post-fire ES&R treatments because environmental compliance and treatment planning would only begin after a wildfire occurs. Under Reclamation's requirement to submit site-specific ES&R plans within 21 days of fire containment, starting NEPA analysis and regulatory consultations post-fire leaves insufficient time for thorough review and approval. This reactive approach creates repeated administrative bottlenecks for each event, slowing implementation of critical treatments and increasing risks to public safety, infrastructure, and natural resources.

Compliance and Conformance

Reclamation has coordinated with appropriate federal, state, and local entities through permitting and consulting procedures. Reclamation reviewed the Proposed Action for conformance with land use plans, and compliance with laws pertinent to the decision. The following are relevant findings of the Proposed Action, with respect to the plans and laws associated with the affected environment.

- *Land Use Plans:* Although the Reclamation Resource Management Plans (RMPs) that cover areas within the project planning area do not provide specific direction on ES&R objectives or treatments, the activities outlined in the Proposed Action are consistent with the intent of these land use plan goals, objectives, and decisions. The Ephrata Field Office Fire Management Plan (FMP) (2018) identifies ES&R as part of its post-wildfire management framework. While it does not prescribe specific treatment options, the Proposed Action implements the types of stabilization and rehabilitation actions anticipated by the FMP such as soil stabilization, vegetation recovery, weed management, and infrastructure repair, which align with the FMP's goals for post-wildfire recovery, and resource protection. This approach also aligns with the overarching objectives of the Potholes Reservoir RMP (2002), Columbia Basin Scattered Tracts RMP (1998), and Banks Lake RMP (2001) to protect natural resources, maintain public safety, and support sustainable land management across the EFO's jurisdiction. Because the Reclamation RMPs do not provide specific ES&R treatments, Reclamation developed the 2025 Columbia–Pacific Northwest Burned Area ES&R Handbook, which establishes region-wide standards, allowable treatments, and procedures for implementing ES&R actions. The handbook provides the programmatic framework that guides soil stabilization, vegetation recovery, invasive species management, and infrastructure repair, ensuring these activities are consistent with Reclamation's post-fire management goals.

- *National Historic Preservation Act:* ES&R treatments under the Proposed Action will conform with the National Historic Preservation Act – Section 106 compliance reviews will be required prior to treatment implementation. This includes identification and evaluation of historic properties, traditional cultural places and paleontological resources within the Area of Potential Effect. EPMs are incorporated to avoid, minimize, or mitigate adverse effects to historic properties, and all ground-disturbing activities are subject to pre-implementation cultural resource surveys and Section 106 NHPA consultation requirements (PEA Section 3.9; Appendix B).

- *Endangered Species Act:*
  The Proposed Action complies with ESA by incorporating measures to avoid and minimize impacts to federally listed species and their habitats. Reclamation consulted with the USFWS under Section 7 of the Act. Consultation efforts included informal consultation resulting in concurrence of not likely to adversely affect determinations received from USFWS on May 18, 2026 (Reference Number FWS/R1/2025-0130428). Reclamation has also established buffers for species under NMFS jurisdiction; any activity proposed within these buffer areas would require separate NMFS consultation. No in-water work is proposed in ESA-listed streams or designated critical habitat under this PEA, and ESA compliance is maintained by avoiding such activities. Any future ES&R action that could affect ESA-listed aquatic species

or designated critical habitat would require separate consultation with USFWS and/or NMFS before implementation (Sections 3.5 and 4.3).

- *Clean Water Act*: ES&R treatments under the Proposed Action will conform with the Clean Water Act by incorporating EPMs to prevent sedimentation, control erosion, and protect water quality during ES&R activities. These measures include maintaining buffer zones near water bodies, selecting herbicides with lower aquatic risk, scheduling treatments to avoid runoff, and securing Clean Water Act permits (PEA Appendix B, Section 6.2.2; Section 3.5). The EA specifies that a Clean Water Act permit will be secured and all terms and conditions followed as applicable for activities involving ground disturbance (i.e. dredge or fill) of federally regulated wetlands or surface waters (streams, rivers, lakes, ponds). Coordination with state water quality agencies and the U.S. Army Corps of Engineers will be conducted as required for permitting and compliance.

- *Clean Air Act*: The Programmatic EA demonstrates conformance with the Clean Air Act by ensuring that all ES&R activities, including the use of diesel- or gasoline-powered equipment and ground-disturbing work, are conducted in a manner that minimizes air quality impacts. EPMs will be implemented to control dust generation, such as scheduling high-dust activities during cooler, higher-humidity periods and prioritizing rapid stabilization of disturbed surfaces (PEA Appendix B, Section 6.2.10). The EA confirms that all air quality impacts will be minor and temporary, and notes that there are no air quality nonattainment areas in Washington State (PEA Appendix F, Resource Summary Table).

- *Wildland Fire Management Policy (LND P14):* Reclamation's Wildland Fire Management Policy (WFM) establishes the overarching direction for managing wildland fire activities on Reclamation lands, ensuring these actions protect resources and comply with Department of the Interior requirements. Although the policy itself provides high-level guidance, its implementing Directive and Standard (LND 14-01), explicitly includes stabilization and post-fire recovery as core elements of the Wildland Fire Management Program, providing mandatory direction for activities such as entering into suppression agreements, preparing Fire Management Plans, applying stabilization treatments, and conducting post-fire recovery efforts. LND P14 and LND 14-01 confirm that emergency stabilization and rehabilitation are integral components of Reclamation's wildland fire responsibilities, and ES&R treatments implemented under the Proposed Action are fully consistent with this policy framework.

Mitigation, monitoring, and enforcement

As described in the FONSI and Attachments 1 and 2 of this document, the monitoring, EMPs, and chemical use restrictions are to be adopted as part of this decision to implement the Proposed Action. All practicable means to avoid or minimize environmental harm from the Proposed Action will be implemented.

The Proposed Action encompasses a detailed suite of EPMs, including timing restrictions, resource buffers, herbicide application restrictions, erosion control, and adaptive management. These measures are designed to mitigate or substantially reduce potential impacts during ES&R

implementation. For any unavoidable impacts, mitigation and monitoring will be applied to assess effectiveness and compliance with all applicable environmental laws and regulations.

Mitigation measures and associated monitoring, as detailed in Attachments 1 and 2, will be adopted as terms and conditions of this decision and carried forward as conditions of approval for all authorized ES&R activities. These include, but are not limited to:

- Site-specific EPMs for soils, water quality, vegetation, wildlife, fisheries, and cultural resources
- Monitoring of treatment effectiveness and resource recovery
- Adaptive management to address unforeseen impacts or treatment failures
- Enforcement of timing, buffer, and application restrictions for herbicide and mechanical treatments
- Reporting and compliance tracking to ensure all mitigation measures are implemented as required

Tribal Engagement

On July 7, 2025, consultation invitations were sent to five Federally recognized Tribes (Confederated Tribes of the Colville Reservation, Nez Perce Tribe, Yakama Nation, Spokane Tribe of Indians, and Umatilla Indian Reservation) and one non-federally recognized group (Wanapum Band). These tribes have traditional lands and interests in the project planning area and are knowledgeable about its cultural and natural resources. The Confederated Tribes of the Colville Reservation responded with comments and requested formal government-to-government consultation, which took place on September 2, 2025. No other consultation requests have been made.

Public Involvement

To identify issues and concerns related to the Proposed Action, Reclamation conducted public scoping from June 27 through July 11, 2025. This effort was intended to gather input from stakeholders and the public early in the NEPA process. During the scoping period, one comment from tribe and one comment from EPA was received and reviewed alongside internally identified issues relevant to the Proposed Action.

Following the posting of the Draft PEA, Reclamation solicited public comments from January 16 through January 31, 2026. A notice of the public comment period for the PEA was published in the Wenatchee World and the Columbia Basin Herald. This ensured that the public was informed about the opportunity to provide input on the proposed ES&R actions and that community members had access to details of the action and the comment process. The PEA documents this outreach as part of its public involvement efforts (Section 4.4, Scoping and Public Involvement). No comments were received during this review period. The absence of substantive comments indicates that the Proposed Action and associated analysis did not raise significant concerns among stakeholders or the public.

Attachments

Attachments 1 and 2 correspond to Appendices B and G of the PEA, which outline the applicable Environmental Protection Measures and associated implementation guidance. Attachment 3 consists of Conservation Measures developed by Reclamation for the Proposed Action, which the USFWS reviewed and concurred with in its Letter of Concurrence.

Attachment 1– Environmental Protection Measures

This attachment includes a preliminary list of EPMs that may be employed for the ES&R PEA activities to reduce or eliminate environmental impacts when the ES&R plan is implemented. For site-specific herbicide treatments, the EFO will identify the applicable EPMs based on site conditions (e.g., soil type, rainfall, vegetation type, herbicide treatment method, and herbicide application rate). Reclamation may use timing restrictions or similar practices to reduce the level of risk to an acceptable level.

Soils

- Where practical, methods that reduce soil surface disturbance will be used on soils with high to very high wind erosion susceptibility.
- Temporary access roads. Existing roadways will be used whenever possible. Minimize the number of temporary access roads and travel paths to lessen soil disturbance and compaction and impacts to vegetation.
- Wet (saturated) soils will be minimally disturbed.
- Ensure drill rows and all seed covering projects run along the contours of the land, where possible, to reduce erosion.

Water Quality

- Select herbicide products to minimize impacts on water. This is especially important for application scenarios that involve risk from active ingredients in a particular herbicide, as predicted by risk assessments.
- Use local historical weather data to choose the month of treatment. Considering the phenology of the target species, schedule treatments based on the condition of the water body and existing water quality conditions.
- Plan to treat between weather fronts (calms) and at appropriate time of day to avoid high winds that increase water movements, and to avoid potential stormwater runoff and water turbidity.
- Review hydrogeologic maps of proposed treatment areas. Note depths to groundwater and areas of shallow groundwater and areas of surface water and groundwater interaction. Minimize treating areas with high risk for groundwater contamination.

- Do not rinse spray tanks in or near water bodies. Do not broadcast pellets where there is danger of contaminating water supplies.
- Maintain buffers between treatment areas and water bodies. Buffer widths will be developed based on herbicide- and site-specific criteria to minimize impacts to water bodies.
- Apply measures to prevent sedimentation into surface water from treatment areas.
- Use a selective herbicide and a wick or backpack sprayer.
- Use appropriate herbicide-free buffer zones for herbicides.
- Do not apply fertilizer within 25 ft of streams and supersaturated soils; apply fertilizer following labeling instructions.
- Within 150 ft of wetlands or riparian areas, do not fuel/refuel equipment, store fuel, or perform equipment maintenance (locate all fueling and fuel storage areas, as well as service landings outside of protected riparian areas).

Vegetation

- Disturbed areas would be revegetated to conditions similar to prework conditions by spreading stockpiled native materials (such as spoils, vegetation, rock, and woody debris), seeding, and/or planting with certified, weed-free seed mixes or native cultivars.
- Existing roadways will be used whenever possible. Minimize the number of temporary access roads and travel paths to lessen soil disturbance and compaction and impacts to vegetation.
- Mapped wetlands would be avoided during construction activities to the maximum extent practicable. Where practicable, no ground-disturbing activities would occur within a 50-foot buffer area of mapped wetlands.
- Clean Water Act permit will be secured, and terms and conditions followed, as applicable, where ground disturbance results in dredge or fill of federally regulated wetlands.
- Newly seeded or planted areas would be protected from livestock and/or wildlife to prevent consumption and trampling.
- Chemical treatments would be applied carefully to noxious weeds and invasive plants according to package instructions to prevent impacts to desired existing or newly planted vegetation.
- Use a selective herbicide and a wick or backpack sprayer to minimize risks to special status plants.
- The treatment areas would be surveyed for invasive plant species prior to treatments. Areas with invasive weed infestations would be avoided where possible; if avoidance is not possible, the area would be pretreated using appropriate treatment to prevent the spread of invasive plant species.
- All equipment that is planned to be on-site would be inspected for invasive species (plant and animals) using properly trained staff, prior to entering the site. To avoid or reduce introduction of weed seeds and propagules to the project planning area, provisions would be

followed to ensure all vehicles, earth disturbance, construction, and road maintenance equipment are cleaned and inspected prior to entering the project planning area Reclamation or their contractors must ensure all equipment is free of soil, seeds, vegetative matter, or other debris that could contain invasive seeds.

- All in-water equipment, including boats and equipment for water drafting and dust abatement, and personal gear would be inspected and sanitized to prevent aquatic invasive species transmission and establishment. Sanitation is required if equipment or gear has been used in an area known to be contaminated with aquatic invasive species. Boats or barges found to have aquatic invasive species present are not allowed to launch until they have been treated and cleared for use.
- Threatened and endangered (T&E) plant occurrences would be buffered out of all treatment types. Buffer size for T&E plants vary by herbicide. Buffers are taken from June 2007 Vegetation Treatments on BLM Lands in 17 Western States Final BA and the April 2015 BA for Vegetation Treatments Using Aminopyralid, Fluroxypyr, and Rimsulfuron on BLM Lands in 17 Western States. Buffer sizes herbicides are found in appendix H.
- Spot treatments with herbicides using protective barriers, such as buckets or panels to block herbicide spray from around individual plants could occur on case-by-case bases with the Botanist on site during treatment (within the above designated buffers) when it has been determined that the invasive plants are threatened and endangered or Sensitive plant occurrence. These treatment methods and appropriate mitigation measures would be supervised by qualified personnel prior to manual, herbicide, and/or biological agent treatments in occupied threatened and endangered plant habitat. Otherwise, distances in appendix H table H-3 would be used. Post-treatment monitoring for effects to T&E plants and habitat would also be done.
- Seeding and planting seedlings within sensitive plant populations would not be done, unless it is clearly beneficial for the sensitive plants occupying the site. Only native or native like species would be used if seeding or planting is deemed necessary.
- Projects proposed in areas with known threatened and endangered or sensitive plants would consider protecting these species, including fencing if necessary. If a Proposed Action is predicted to have an adverse effect on threatened and endangered or sensitive plants, the action would either be abandoned or redesigned to eliminate such adverse effects.
- The needs of sensitive plants would be considered when selecting herbicides and application methods. Non-herbicide treatment is preferred over one that uses herbicides. Herbicides that target only annual grasses would be used within sensitive plant habitats infested with non-native annual grasses. The treatment of invasive annual plants and noxious weeds would be a priority in sensitive plant habitats. Emphasis would be on hand spot spraying and mechanical control in order to avoid or minimize risk to sensitive plants. No chemicals would be applied directly on sensitive plants during spot applications. Applicators would be trained in sensitive plant identification for those habitats being treated.
- The potential presence of special status plants and their habitats in an area prior to wildfire will be determined using existing data and information. Populations, particularly undocumented special status plants, may be difficult or impossible to detect in the post-burn environment. If special status plant populations and their habitats are known to occur in a

burned area, that area would be evaluated for post-fire habitat quality and the need for treatment. Planning treatments would consider species biology, population ecology (e.g., disturbance and reproductive ecology), conservation status, seasonal sensitivities (e.g., growing or dormant periods), and current habitat condition. Appendix H lists special status plants known or potentially present in the EFO.

Wildlife

- The presence of birds protected by the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act would be determined on burned areas that are proposed for treatment. This may include a combination of desktop exercise contacting local biologists to verify presence of migratory birds. If migratory birds are known or suspected to occur in a site-specific project area, the area would be examined for habitat quality and the need for treatment. Treatments would be designed to minimize potential impacts to migratory birds and their habitats. Specific mitigation/guidelines such as avoidance of occupied areas, distances from occupied habitat, etc. would be outlined in the site-specific ES&R plans. Many of the birds listed on the Migratory Birds Species of Conservation Concern are also designated as special status species. Design features for those migratory birds that are designated as special status species are listed below.
- Burrowing owl (Athene cunicularia): nest sites would be marked to avoid destruction/collapse of burrows; disturbance would be avoided within ½ mile of nest sites between February 15 and September 25 (WDFW 2005).
- Bald eagle:
    - Where feasible, avoid use of the following herbicides in bald eagle habitat: bromacil, clopyralid, diquat, diuron, glyphosate, hexazinone, imazapyr, metsulfuron methyl, picloram, and triclopyr.
    - Do not broadcast spray 2, 4-D, clopyralid, diuron, glyphosate, hexazinone, picloram, or triclopyr within ¼ mile of bald eagle nest sites or winter roost sites;
    - If broadcast spraying bromacil, diquat, imazapyr, or metsulfuron methyl in or adjacent to bald eagle habitat, apply at the typical, rather than the maximum, application rate.
    - If conducting manual spot applications of glyphosate, hexazinone, or triclopyr to vegetation in bald eagle habitat, utilize the typical, rather than the maximum, application rate.
- Ferruginous hawks:
    - Avoid or minimize activities that disturb nesting ferruginous hawks from March 1 to July 31 within 1.0 mile of occupied nests.
- Use herbicides of low toxicity to wildlife, where feasible.
- Use spot applications or low-boom broadcast operations where possible to limit the probability of contaminating non-target food and water sources, especially non-target vegetation over areas larger than the treatment area.

- Use timing restrictions (e.g., do not treat during critical wildlife breeding or staging periods) to minimize impacts to wildlife.
- Sage-grouse:
    - Sage-grouse would be used as an umbrella species when planning ES&R treatments in sagebrush steppe (Noss, 1990; Rich and Altman, 2001; Rowland, Wisdom, Suring, & Meinke, 2005). The assumption is habitat needs for other sagebrush-obligate and sensitive species would benefit from protection, improvement, and restoration of sage-grouse habitat. Other sagebrush obligates include pygmy rabbit (*Brachylagus idahoensis*), Washington ground squirrel (*Urocitelus washingtonii*), sage thrasher (*Oreoscoptes montanus*), sage sparrow (*Amphispiza belli*), and Brewer's sparrow (*Spizella breweri*). Due to the similarities in behavior and habitat use, Columbian sharp-tailed grouse is also included. In some cases, some species may have habitat needs in addition to what is outlined for sage-grouse. Where identified, the interdisciplinary team would address unique habitat needs of other sagebrush obligates.
    - The following EPMs would apply to sagebrush steppe habitats:

      •Fences would not be constructed within 400 yards of an occupied sage-grouse lek. Fences would be placed to avoid areas of high collision risk for sage-grouse through consultation with Washington Department of Fish and Wildlife (WDFW), using the Collision Risk model (Stevens and Naugle, 2012) or as new science dictates. If sage-grouse collisions are possible due to fence placement, repair of fencing, marking or flagging would be included.

      •Avoid potentially disturbing activities such as farming, mining, and recreation near leks (-2 km) between the hours of 1800 and 0900 during February-April. Disturbing activities are those which cause the birds to flush or alter their behavior for a substantial length of time. Persistent disturbing activities are a more serious problem; farming activities on a single day of the breeding season is not likely to be a significant problem (Stinson et al. 2004).

      •Where applicable, design treatment objectives to protect existing sagebrush ecosystems, modify fire behavior, restore native plants, and create landscape patterns that benefit sage-grouse habitat.

      •Wherever possible, prevent disturbance in sage-grouse nesting and brood rearing habitat between March 1 and June 15 (Stinson et al. 2004).

- The potential presence of special status wildlife and their habitats in an area prior to a wildfire will be determined using existing data and information. Populations may be difficult or impossible to detect in the post-burn environment. If special status wildlife populations and their habitats are known to occur in a burned area, that area would be evaluated for post-fire habitat quality and the need for treatment. Planning treatments would consider species biology, population ecology (e.g., disturbance and reproductive ecology), conservation status, seasonal sensitivities (e.g., breeding or dormant periods), and current habitat conditions. Appendix I lists special status wildlife species known or potentially present in the EFO.

Fisheries Resource

- In-water work. Any work within 2-year floodplain of any fish bearing stream will follow WDFW guidelines for timing of in-water work. Fish passage will be maintained during all ES&R work. Isolate the construction area and remove fish from a project site for projects that include concentrated and major excavation at a single location within the stream channel.
- For treatment of aquatic vegetation, 1) treat only that portion of the aquatic system necessary to achieve acceptable vegetation management; 2) use the appropriate application method to minimize the potential for injury to desirable vegetation and aquatic organisms; and 3) follow water use restrictions presented on the herbicide label.
- Minimize herbicide weed management treatments near fish-bearing water bodies during periods when fish are in life stages most sensitive to the herbicide(s) used; use spot rather than broadcast or aerial weed management treatments.
- Pollution and Erosion Control. Wherever hazardous materials including fuels will be present within riparian areas, follow Pollution and Erosion Control Measures in NMFS 2013. These include not storing hazardous materials within 300 feet of flowing streams and maintaining materials for emergency erosion and hazardous materials control onsite (silt fence, straw bales, oil absorbing floating booms).
- All equipment used for instream work will be cleaned for petroleum accumulation, dirt, and plant material (to prevent the spread of noxious weeds), and leaks repaired prior to entering the project area.
- Hazard trees. If possible, fell hazard trees within riparian areas towards a stream. Keep felled trees on site to meet coarse large wood objectives for instream habitat.
- Herbicides. Within 300 feet of streams supporting federally listed fishes, herbicide active ingredients are restricted to the following chemicals: aminopyralid, chlorsulfuron, clopyralid, dicamba, aquatic glyphosate, imazapic, imazapyr, picloram sethoxydim, sulfometuron methyl, aquatic triclopyr, and/or aquatic 2,4-D. The only surfactants and adjuvants14F[3] permitted are those allowed for use on aquatic sites, as listed by the Washington State Department of Ecology: https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Aquatic-pesticide-permits.
- Herbicide buffers. Herbicide drift and leaching will be minimized. Reclamation to follow buffer widths as BLM is using (BLM 2018, 2020) for herbicide spraying near any waterbodies in watersheds supporting federally listed fish. For most herbicides used by Reclamation, no broadcast spray within 100 feet of flowing streams, no spot spraying within 50 feet of flowing streams and no hand application below bank full elevation (Appendix G).

[3] An adjuvant is a supplemental substance added to a chemical mixture, particularly in the context of pesticides, to enhance its performance and application characteristics

For intermittent systems, these buffer widths change to no broadcast spray within 50 feet, no spot spraying within 0 feet, and no hand application within 0 feet.

- Herbicide application. Limit vegetation treatment to manual application when adjacent to ESA Critical Habitat streams.
- Any equipment – including hoses or pumps – placed in streams, lakes, ponds, or reservoirs would be cleaned/inspected/sanitized for invasive species and disease.
- Any water drafting for watering plants for ES&R treatments will adhere to the water drafting guidelines in the NOAA Fisheries WCR Anadromous Salmonid Design Manual (NMFS 2022).
- Use appropriate waterbody buffer zones based on herbicide label and risk assessment guidance.
- Treatments near or adjacent to special status species habitat would typically be designed to occur outside the sensitive periods of a species life cycle or habitat (e.g. breeding season, winter habitat). However, there may be situations where completing the project during the sensitive period may be more beneficial to the species over time than if the project was not done at all. Treatments occurring during sensitive periods would be designed to minimize potential impacts to special status species and their habitats. Specific mitigation/guidelines such as avoidance of occupied areas and applying buffer distances from occupied habitat, would be outlined in the individual site-specific ES&R plans.
- Do not apply fertilizer within 25 ft of streams and supersaturated soils; apply fertilizer following labeling instructions.

Historic Properties, Traditional Cultural Places & Paleontological Resources

As part of Reclamation's requirements under NHPA Section 106 & 36 CFR 800.3-800.6, consultations will occur with Washington State Department of Archaeology & Historic Preservation (WA-DAHP) and Affected Tribes' THPOs on individual ES&R treatment plans, prior to implementation, to determine the APEs and the level of effort necessary to identify historic properties, traditional cultural places and paleontological resources. Historic properties identified during the surveys would be fully documented and evaluated for historical significance.

Cultural Resources Managment professionals may determine that non-ground disturbing treatments have no potential to cause effect to historic properties. If findings of "no historic properties affected" or "no adverse effect" are made, but properties are present in the treatment area(s), then complete avoidance of these properties will be required. Implementation monitoring by CRM professionals may be required to prevent inadvertent damage (adverse effects) to significant historic properties that are in proximity to ES&R treatment areas.

In the event of a short timeframe within which to implement ES&R treatments, Reclamation may seek a shorter review period for NHPA 106 compliance, as allowed in 36 CFR 800.3(g). Once all consulting parties, typically WA-DAHP, Affected Tribes' THPOs, and Reclamation, have agreed upon the APEs, level of effort required to identify historic properties, and appropriate

documentation and reporting methods, then a concurrence request timeline can be agreed upon to help meet ES&R implementation needs.

- Adverse effects to historic properties will be avoided, minimized, or mitigated to the maximum extent practicable. If mitigation is necessary, then it will be completed in consultation with WA-DAHP and consulting Tribes.
- In the event of a post-review discovery of previously unknown or un-recorded historic properties, materials, or sites, ground-disturbing activities in the immediate vicinity would cease until a Secretary of the Interior qualified archaeologist or historian, State Historic Preservation Officer, and potentially affected Native American Tribes are consulted.
- In the event of a post-review discovery of previously unknown or unrecorded historic property or paleontological resource, a discovery plan would be developed for activities involving ground disturbance.
- In the event of a discovery of human remains, ground-disturbing activities in the immediate vicinity would cease and the finds secured until a Secretary of the Interior qualified archaeologist and potentially affected Native American Tribes are contacted. Ground disturbing activities will not re-commence until after the creation and implementation of a NAGPRA Plan of Action.
- Post-review discovery plans would be developed for activities involving ground disturbance
- If the APEs changes, then concurrences with its definition/boundaries will be requested from WA-DAHP and consulting Tribes.
- For herbicide application in known tribal traditional gathering areas, provide early tribal notification & signage/postings on site; recommend signs remain posted long-term if repeated treatments are deemed necessary.
- Historic property avoidance, minimization, or mitigation measures may be marked as avoidance areas on implementation drawings and flagged under direction of agency approved archaeologists as "no-work/no disturbance areas" in the field prior to ground disturbance.
- Temporary fencing may be installed, or law enforcement patrols may be called upon to protect historic properties from unauthorized human activities.

Hazardous Materials

- Herbicides proposed for use are listed in Appendix G and must follow applicable Reclamation Safety and Health Standards.
- Standard operating procedures shall be followed for use, storage, and disposal of all hazardous materials.
- A Spill Prevention, Control, and Countermeasure plan shall be prepared and followed for the use of potentially hazardous materials and petroleum products.
- Product labels shall be followed for use and storage of chemicals.

- Review, understand, and conform to the "Environmental Hazards" section on the herbicide label.
- Material Safety Data Sheets shall be reviewed and kept at work sites.
- Dispose of unwanted herbicides and other chemicals promptly and correctly.
- Appropriate signage shall be posted in areas where hazardous materials are used.

Recreation Resources

- Minimize impacts to visual resources through location and design; by repeating form, line, color and texture (BLM Manual 8400 Visual Resource Management, Handbook 8410-1 Visual Resource Inventory, Handbook 8431-1 Visual Resource Contrast Rating). Objectives for restoration include reducing long-term visual impacts by decreasing the amount of disturbed area and blending the disturbed area into the natural environment while still providing for project operations. This includes:
    - o Mulching cleared areas
    - o Utilizing existing roads
    - o Choosing native plant species that match surrounding area
    - o Enhancing planting success by mulching and watering
    - o Replacing soil, brush, rocks, etc. over disturbed area
    - o Selecting colors for structures that blend in with the landscape
    - o Avoiding excess cut or fill, avoid side-casting
    - o Retaining existing rock formations, vegetation, drainage, etc. wherever possible
    - o Avoiding disturbing soil types that will generate strong contrasts
    - o Using scalloped, irregular cleared edges (avoid straight lines)
    - o Using irregular clearing shapes
    - o Feathering/thinning edges of the cleared edges so they blend in with existing vegetation
    - o Using natural appearing forms to complement landscape character
    - o Recontouring and roughening slopes to blend in with existing earth form
- Designs, materials, and colors that blend with or complement the surrounding landscape would be selected.
    - Examples include seeding and planting - selecting native species that match the

surrounding landscape and using mulching to reduce visual contrast.

- Watershed Stabilization/Erosion Control – recontouring slopes, avoiding excess cut/fill, and using design or construction techniques that mimic the natural shapes, contours, and textures found in the surrounding landscape.
- In-channel Treatments – minimizing visual disruption by retaining natural features and using materials that match the surrounding environment.
- Facility Repair/Replacement and Safety Actions – selecting colors and materials that blend with the landscape and avoiding stark contrasts in design.

Health and Safety

- Employees or contractors applying herbicides shall hold application licenses and follow standard operating procedures.

ures for use, storage, and disposal, see Section 3.01 in Reclamation Safety and Health Standards.

- Employees or contractors shall develop and conform to a pesticide use plan, which contains information on the use of herbicides.
- Employees or contractors applying herbicides shall use protective equipment as directed by the herbicide label and Reclamation standards outlined in Reclamation Safety and Health Standards Section 1.07.
- Herbicide containers shall be secured during transport. Product labels shall be followed for use and storage of chemicals.
- Material Safety Data Sheets (MSDSs) shall be kept at work sites.
- Public access to areas sprayed with herbicides shall be controlled and temporarily closed.
- Treated areas shall be posted with appropriate signs at common public access areas.
- Notify adjacent landowners prior to herbicide treatment; establish a 100-foot buffer min. between treatment areas and private residences.
- Areas identified post-fire as posing public health and safety risks shall be temporarily closed to the public.
- Aerial spraying of herbicides shall not be applied.
- Broadcast and boom spraying of herbicides shall be restricted to periods of calm (<10 mph) or no winds.
- Only US EPA-approved herbicides will be used. Product label directions and "advisory" statements shall be followed.

Air Quality

- After a wildfire, soils are hydrophobic, vegetation is gone, and surfaces are extremely dry and powder-like. Heavy equipment and vehicle traffic can generate dust, affecting workers, communities, and downstream recovery efforts. The goal is to stabilize disturbed surfaces quickly, protect newly installed treatments, and minimize repeated soil disturbance.
    - Schedule high-dust activities (hauling, grading, tree felling) for mornings or cooler, higher-humidity periods.

Prioritize rapid stabilization of high-traffic corridors and staging areas.

Attachment 2 – Chemical Weed Control

Reclamation intends to use only WSDOT-approved herbicides, with site-specific evaluations determining the type of herbicide and required EPMs. Precautions, restrictions, and buffers for each chemical are outlined in Table 1 and 2 below, based on guidance from Bureau of Land Management (BLM)(2018, 2020), NMFS (2024) and WSDOT (2025).

Reclamation Proposed Herbicide List

When making herbicide applications:

1. Always read and follow product labels

2. Always use personal protective equipment when mixing, loading, and applying

3. Limit vegetation treatment to manual application when adjacent to ESA Critical Habitat streams (Salmon and Crab creeks and Columbia River)

Table 1. Reclamation Proposed Herbicide List (WDFW 2025) (from Appendix G of the PEA)

Chemical Name	**Product Names**	**Mode of Action (WSSA Class)**	**Where Used**	**How/Why Used**	**Notes/Recommendations**
2,4-D	Weedar 64, Amine 4, Veteran 720 Curtail WeedDestroy Platoon Crossbow Escalade Weedmaster Solution Savage Weedone LV4	Growth regulator - phenoxy synthetic auxin (4)	Noxious and nuisance weed control, tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Ester and acid formulations of 2,4-D may provide a good alternative to amine formulations. Several of the 2,4-D products come premixed with other herbicides
Aminocyclopyrachlor	Method 240SL	Growth regulator - mimics plant hormones, synthetic auxin (4)	Nuisance and noxious weed control Zones 2 and 3, Plainview is a bare-ground mixture	Depending on which mixture, can be either selective broadleaf or non-selective pre-emergent control	Each product is premixed with other herbicide to achieve either selective or non-selective control
Aminopyralid	Milestone VM	Growth regulator - mimics plant hormones, synthetic auxin (4)	Nuisance and noxious weed control	Selective broadleaf treatment	Effective on many perennial weed species due to some amount of soil residual

Chemical Name	Product Names	Mode of Action (WSSA Class)	Where Used	How/Why Used	Notes/Recommendations
			Zones 2 and 3		activity on suppressing seed germination
Bromacil	Krovar 1 DF Hyvar	Photosynthetic inhibitor - photosystem II, site A (5)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control	Krovar is premixed with diuron
Bromoxynil	Buctril 2EC BroClean Brox 2E	Photosynthetic inhibitor - photosystem II, site C (6)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Effective broadleaf weed control without grass seed suppression
Chlorsulfuron	Telar XP Landmark XP	Amino acid synthesis inhibitors - ALS inhibitor (2)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Product highly effective on difficult perennials such as Canadian thistle and horsetail. Landmark is premixed with Oust
Clethodim	Envoy Plus	Lipid biosynthesis inhibition – acetylCoA carboxylase (ACCase) inhibitor	Noxious and nuisance weed control, Zones 2 and 3	selective post-emergence control of annual and perennial grasses	Postemergence control of annual and perennial grasses
Clopyralid	Transline Curtail	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Cutail is premixed with 2,4-D, Pathfinder is premixed with triclopyr
Dicamba	Vanquish Veteran 720	Growth regulator - benzoic acidsynthetic auxin (4)	Noxious and nuisance weed control, and tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Vanquish is the dicamba formulation without 2,4-D
Dichlobenil	Norosac 4G Casoron	Cell wall (cellulose) synthesis inhibitor (20)	Ornamental planting beds	Pre-emergent weed control in ground cover beds. Post emergent control of grasses	Highly effective for preemergent control of unwanted weeds in ornamentals
Diflufenzopyr	Overdrive	Auxin transport inhibitor (19)	Noxious and nuisance weed control,	Selective broadleaf treatment	

Chemical Name	Product Names	Mode of Action (WSSA Class)	Where Used	How/Why Used	Notes/Recommendations
			Zones 2 and 3		
Diuron	Karmex Diuron 4 L, Diuron 80 DF	Photosynthetic inhibitor - photosystem II, site B (7)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control	Cost effective weed control for Zone 1 in Eastern Washington
Flumioxazin	Payload Lock Down SC	Cell membrane disrupter - PPO inhibitor (14)	Zone 1 bare-ground	Nonselective pre-emergent weed control	Requires constant agitation to keep in suspension
Fluroxypyr	Vista	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Highly effective on Kochia
Fluozifop-p-butyl	Fusilade DX	Lipid biosynthesis inhibition – ACCase inhibitor	Noxious and nuisance weed control, Zones 2 and 3	annual and perennial grasses, particularly those that have developed herbicide resistance	
Fosamine	Krenite S	Growth regulator - inhibits bud and leaf formation (27)	Tree and brush control in Zones 2 & 3	Selective broadleaf treatment	Effective broadleaf tree control without visual impacts
Glyphosate	Roundup Pro Razor Pro Buccaneer Aquaneat Rodeo Aquamaster	Amino acid synthesis inhibitor - EPSP sythase inhibitor (9)	Zone 1, spot spray around shrub and tree plantings, aquatic weed control (Rodeo, Aquamaster)	Nonselective control of all vegetation	Rodeo, Aquamaster and Aquaneat are approved for use in or over water.
Imazamox	Clearcast	Amino acid synthesis inhibitor –acetolactate synthase (ALS) inhibitor	Group 2	Broadcast post-emergence application for both terrestrial and aquatic species	
Indaziflam	Rejuvra	Cellulose biosynthesis inhibitor – inhibition of	Noxious and nuisance weed control, Zones 2 and 3	Broadcast preemergence active ingredient that is registered for both ground and aerial applications	

Chemical Name	Product Names	Mode of Action (WSSA Class)	Where Used	How/Why Used	Notes/Recommendations
		cellulose biosynthesis		to manage downy brome, other invasive annual grasses, and broadleaf species	
Metsulfuron-methyl	Escort XP Metsulfuron Methyl 60 DF	Amino acid synthesis inhibitors - ALS inhibitor (2)	Noxious and nuisance weed control, and tree and brush control, Zones 2 and 3	Selective broadleaf and conifer treatment	Good control on many difficult perennials
Picloram	Tordon	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Highly effective for conifer and broadleaf weed control in Eastern Washington
Triclopyr Ester	Garlon 4 Crossbow Pathfinder	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Works well for cut-stump or basal treatments applications. Crossbow is premixed with 2,4-D, Pathfinder with clopyralid
Oryzalin	Surflan AS Specialty	Seedling root growth inhibitor – microtubule inhibitor	Noxious and nuisance weed control, Zones 2 and 3	Oryzalin is a preemergence active ingredient that, like flumioxazin, requires moisture to activate	adverse health effects on aquatic TEP fish species from acute exposure in aquatic habitats
Oryzalin	Surflan AS Specialty	Adverse effects are not likely.	Adverse effects to aquatic invertebrates may occur after exposure via drift and runoff. Chemical fate characteristics will limit the		

Chemical Name	Product Names	Mode of Action (WSSA Class)	Where Used	How/Why Used	Notes/Recommendations
			duration of this exposure		
Oxadiazon	Ronstar G Ronstar WSP	Cell membrane disrupter – PPO inhibitor (14)	Turf & Ornamental	Pre-emergent weed control in ground cover beds	Works well by itself or with Gallery
Pendimethalin	Pendulum 2G Pendulum Aqua	Seedling growth inhibitor - microtubule assembly inhibitor (3)	Zone 1 Turf & Ornamental	Nonselective/Selective depending on rate, Pre-emergent grass and weed control	
Picloram	Tordon	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Highly effective for conifer and broadleaf weed control in Eastern Washington
Rimsulfuron	Laramie Matrix SG	Amino acid synthesis inhibitors - ALS inhibitor (2)	Zone 1 bare-ground	Nonselective pre-emergent weed control	Effective control of annual weeds such as marestail, crab grass, cheat, and
Sulfentrazone	Portfolio	Cell membrane disrupter - PPO inhibitor (14)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control	Use caution in sandy soils
Sulfometuron-methyl	Oust Landmark XP	Amino acid synthesis inhibitors - ALS inhibitor (2)	Zone 1 bare-ground	Nonselective pre/post emergent grass and weed control	Landmark is a premix with Oust and Telar
Tebuthiuron	Spike 80DF	Photosynthetic inhibitor-photosystem II, site B (7)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control	Ornamental pre-emergent weed control
Topramezone	Frequency	Bleaching - carotenoid biosynthesis inhibitor (12)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control	Use in combination with another bare-ground chemical
Triclopyr Amine	Garlon 3A	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Works well for scotch broom control and seedling trees

Chemical Name	Product Names	Mode of Action (WSSA Class)	Where Used	How/Why Used	Notes/Recommendations
Triclopyr Ester	Garlon 4 Crossbow Pathfinder	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Works well for cut-stump or basal treatments applications. Crossbow is premixed with 2,4-D, Pathfinder with clopyralid
Triclopyr Choline	Vastlan	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Works well in combination with Milestone or Method for tree and brush control

Table 2. Herbicide use cautions, restrictions, and buffers outlined by NMFS (2024) and WSDOT (2025). (from Appendix G of the PEA)

Chemical Name	*Product Names*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 300m buffer*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 25 ft. Ground, 10 ft handheld*	*WSDOT (2025) Restrictions*	*Cautions*
2,4-D	Weedar 64 Amine 4 Veteran 720 Curtail WeedDestroy Platoon Crossbow Escalade Weedmaster Solution Savage Weedone LV4		Adverse effects are likely to both fish and invertebrates via drift and /or runoff from terrestrial applications of the 2,4-D ester. Adverse effects are likely to both fish and invertebrates from direct application to water.	Amine formulations of 2,4-D are restricted for use within 60' of all water	Amine formulations cause irreversible eye damage and are highly toxic to rainbow trout. All 2,4-D products pose risks when applied near grapes and other sensitive crops
Aminocyclopyrachlor	Method 240SL	Adverse effects are not likely.	Adverse effects are not likely.	No WSDOT use restrictions beyond those specified on product labels	May cause damage to nearby mature trees through root uptake
Aminopyralid	Milestone VM	Adverse effects are not likely.	Adverse effects are not likely.	No WSDOT use restrictions beyond those specified on product labels	Refer to product label
Bromacil	Krovar 1 DF Hyvar	Adverse effects are not likely.	Adverse effects are likely to fish via runoff from terrestrial applications.	Westside - Restricted use Eastside - Krovar restricted for use within 60' of all water	Bromacil is potentially mobile in soil, use caution if rain is possible.

Chemical Name	*Product Names*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 300m buffer*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 25 ft. Ground, 10 ft handheld*	*WSDOT (2025) Restrictions*	*Cautions*
Bromoxynil	Buctril 2EC BroClean Brox 2E			Westside - Restricted use Eastside - Restricted for use within 60' of all water	Can cause irreversible eye damage, highly toxic to freshwater fish
Chlorsulfuron	Telar XP Landmark XP	Adverse effects are not likely.	Adverse effects are not likely.	No WSDOT use restrictions beyond those specified on product labels	Refer to product labels
Clethodim	Envoy Plus	Adverse effects are not likely.	Adverse effects are likely to fish via runoff and drift, but only when considering chronic exposures.		
Clopyralid	Transline Curtail	Adverse effects are not likely.	Adverse effects are not likely.	Curtail and Pathfinder are restricted for use within 60' of all water because of mixture with other restricted herbicides.	Curtail contains 2,4-D amine which causes irreversible eye damage and is highly toxic to rainbow trout
Dicamba	Vanquish Veteran 720	Adverse effects are not likely.	Adverse effects may occur when exposures occur on a chronic basis.	Veteran 720 is restricted for use within 60' of all water because of 2,4-D amine content	Veteran 720 contains 2-4-D amine which causes irreversible eye damage and is highly toxic to rainbow trout
Dichlobenil	Norosac 4G Casoron			Restricted for use within 60' of all water	Dichlobenil is highly toxic to aquatic insects

Chemical Name	*Product Names*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 300m buffer*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 25 ft. Ground, 10 ft handheld*	*WSDOT (2025) Restrictions*	*Cautions*
Diflufenzopyr	Overdrive	Adverse effects are not likely.	Adverse effects are not likely.	No WSDOT use restrictions beyond those specified on labels	Refer to product label
Diuron	Karmex Diuron 4 L Diuron 80 DF	Adverse effects are not likely.	Adverse effects to aquatic invertebrates are likely via drift and runoff, when applications are made within 100 ft of aquatic habitats.	Westside - Restricted use Eastside - Restricted for use within 60' of all water	Highly toxic to fish.
Flumioxazin	Payload Lock Down SC	Adverse effects are likely to fish and aquatic invertebrates when aquatic applications are made directly upstream of species or designated critical habitats.	Adverse effects to fish and aquatic invertebrates are likely when aquatic applications are made directly upstream of species or designated critical habitats.	Restricted for use within 60' of all salt water	Highly toxic to estuarine invertebrates
Fluozifop-p-butyl	Fusilade DX	Adverse effects are likely to fish and aquatic invertebrates	Adverse effects are likely to fish and aquatic invertebrates	No application within WSDOT-designated no-spray buffers adjacent to wetlands, open water, or fish-bearing streams	Highly toxic to fish.
Fluroxypyr	Vista	Adverse effects are not likely.	Adverse effects are not likely.	No WSDOT use restrictions beyond those specified on product labels	Highly toxic to Eastern Oyster, high surface runoff potential

Chemical Name	*Product Names*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 300m buffer*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 25 ft. Ground, 10 ft handheld*	*WSDOT (2025) Restrictions*	*Cautions*
Fosamine	Krenite S			No WSDOT use restrictions beyond those specified on labels	Refer to product labels
Glyphosate	Roundup Pro Razor Pro Buccaneer Aquaneat Rodeo Aquamaster	Potential for adverse effects to aquatic invertebrates via drift. In general, adverse effects are not likely.	Adverse effects are likely to fish and aquatic invertebrates via runoff and drift from terrestrial applications, as well as resulting from aquatic applications.	No WSDOT use restrictions beyond those specified on product labels	Refer to product labels
Imazamox	Clearcast	Adverse effects are not likely.	Adverse effects are not likely.		
Indaziflam	Rejuvra	Adverse effects are not likely.	Adverse effects to fish (via acute exposure) and invertebrates (via chronic exposure) are possible. However, EECs suggest the associated percent mortality is less than one percent.		
Metsulfuron-methyl	Escort XP Metsulfuron Methyl 60 DF	Adverse effects are not likely.	Adverse effects are not likely.	No WSDOT use restrictions beyond those specified on product labels	Refer to product labels

Chemical Name	*Product Names*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 300m buffer*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 25 ft. Ground, 10 ft handheld*	*WSDOT (2025) Restrictions*	*Cautions*
Picloram	Tordon	Adverse effects are not likely.	Adverse effects to fish may occur, based on the existence of incident data.	Westside - Restricted use Eastside - Restricted for use within 60' of all water	Highly mobile in soil and readily adsorbed through roots of desirable trees
Triclopyr Ester	Garlon 4 Crossbow Pathfinder	Adverse effects to fish and invertebrates are possible. However, EECs equate to less than 1% mortality.	Adverse effects to fish and invertebrates are likely following acute exposures via drift. Adverse effects are likely when aquatic applications are made directly upstream of species or designated critical habitats.	Restricted for use within 60' of all water	Highly toxic to fish
Oryzalin	Surflan AS Specialty	Adverse effects are not likely.	Adverse effects to aquatic invertebrates may occur after exposure via drift and runoff. Chemical fate characteristics will limit the duration of this exposure.		
Oxadiazon	Ronstar G Ronstar WSP			Restricted for use within 60' of all water, gardens, plants bearing edible fruit	Highly toxic to fish
Pendimethalin	Pendulum 2G Pendulum Aqua			Westside - Restricted use Eastside - Restricted for use within 60' of all water	Highly toxic to fish, high potential for loss on eroded soil

Chemical Name	*Product Names*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 300m buffer*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 25 ft. Ground, 10 ft handheld*	*WSDOT (2025) Restrictions*	*Cautions*
Picloram	Tordon	Adverse effects are not likely.	Adverse effects to fish may occur, based on the existence of incident data.	Westside - Restricted use Eastside - Restricted for use within 60' of all water	Highly mobile in soil and readily adsorbed through roots of desirable trees
Rimsulfuron	Laramie Matrix SG	Adverse effects are not likely.	Adverse effects are not likely.	Restricted for use within 60' of all water	Can move off target in porous soils with heavy rainfall, potential damage to nearby vegetation or aquatic ecosystems. Site-specific soil conditions and weather forecasts will be carefully evaluated before application to minimize environmental impact.
Sulfentrazone	Portfolio			Westside - Restricted use Eastside - Restricted for use within 60' of all water	High surface runoff potential, potentially mobile in soil if rain is possible.
Sulfometuron-methyl	Oust Landmark XP			No WSDOT use restrictions beyond those specified on product labels	Oust has been proven to move with wind if not watered in to the ground
Tebuthiuron	Spike 80DF	Adverse effects are not likely.	Adverse effects to aquatic invertebrates may occur if exposed on a chronic basis. In general, adverse effects are not likely.	Westside - Restricted use Eastside - Restricted for use within 60' of all water	High surface runoff potential, potentially mobile in soil if rain is possible.
Topramezone	Frequency			No WSDOT use restrictions beyond those specified on product labels	Refer to product label

Chemical Name	*Product Names*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 300m buffer*	*NMFS Potential Impacts to Species and Habitats (NMFS 2024) 25 ft. Ground, 10 ft handheld*	*WSDOT (2025) Restrictions*	*Cautions*
Triclopyr Amine	Garlon 3A			No WSDOT use restrictions beyond those specified on product labels	Can cause irreversible eye damage
Triclopyr Ester	Garlon 4 Crossbow Pathfinder			Restricted for use within 60' of all water	Highly toxic to fish
Triclopyr Choline	Vastlan			No WSDOT use restrictions beyond those specified on product labels	Refer to product label

Attachment 3: Conservation Measures

Attachment 3 provides a summary of all conservation measures incorporated into the proposed action, including both program-wide measures and species-specific actions designed to avoid or minimize effects on threatened and endangered species. These measures complement the environmental protection measures in Attachments 1 and 2 and guide the implementation of ES&R activities to ensure resource protection across the project planning area.

Conservation Measures to Apply to All Threatened, Endangered, and Sensitive Plant Species

In order to avoid or minimize potential effects to the T&E plants resulting from the proposed ES&R treatments, Reclamation would implement the same CMs identified in BLMs existing PEIS/PEA/BA's (BLM 2007a, BLM 2015, BLM 2020) listed below. These mitigation measures should be considered for treatments throughout the species' entire range and implemented as appropriate.

- Prevention measures during project planning, development, and revegetation phases to minimize the risk of introducing or spreading noxious weeds.
- Procedures specific to site revegetation after treatments to promote establishment and/or recovery by the native plant community.
- Special precautions to minimize impacts to special status species, including a survey of each project site for listed and proposed species prior to vegetation treatment activities and associated consultation with the Service.
- Survey special status species before treating an area. Consider effects to special status species when designing herbicide treatment programs.
- Use selective herbicide and a wick or backpack sprayer to minimize risks to special status plants.
- Avoid treating vegetation during time-sensitive periods (e.g., nesting and migration, sensitive life stages) for special status species in an area to be treated.
- In areas where wind erosion is likely, do not apply within 1.2 miles of T&E plant species (an alternative suitable buffer may be developed at the local level based on an analysis of site conditions).
- Do not use rimsulfuron in watersheds where annual precipitation exceeds 50 Inches
- In watersheds where annual precipitation exceeds 10 inches, prior to use of rimsulfuron conduct a local-level analysis of site conditions and develop suitable CMs for protection of T&E plant species from surface runoff.
- Survey all proposed action areas within potential habitat using a botanically qualified biologist, botanist, or ecologist to determine the presence/absence of the species.
- Establish site-specific no activity buffers using a qualified botanist, biologist, or ecologist in areas of occupied habitat within the proposed project area. To protect occupied habitat, do not conduct treatment activities within these buffers.

- Collect baseline information on the existing condition of T&E plant species and their habitats in the post wildfire treatment area.
- Establish pre-treatment monitoring programs to track the size and vigor of T&E populations and the state of their habitats. These monitoring programs would help in anticipating the future effects of vegetation treatments on T&E plant species.
- Assess the need for site revegetation post-treatment to minimize the opportunity for noxious weed invasion and establishment.
- Include the following in management plans: Off Highway Vehicle use of motorized vehicles associated with treatments should be avoided in suitable or occupied habitats. Post-treatment monitoring should be conducted to determine the effectiveness of the project.
- Do not conduct herbicide treatments in areas where T&E plant species may be subject to direct spray by herbicides during treatments.
- To avoid negative effects to T&E plant species from off-site drift, surface runoff, and/or wind erosion, establish suitable buffer zones between treatment sites and populations (confirmed or suspected) of T&E plant species, and take site-specific precautions.
- Follow all instructions and EPMs to avoid spills and direct spray scenarios into aquatic habitats that support T&E plant species.
- Treated areas that are prone to downy brome or noxious weed invasions should be seeded with an appropriate seed mixture to reduce the probability of noxious weeds or other undesirable plants becoming established on the site.
- In suitable habitat for T&E plant species, do not use non-native species, when possible, for revegetation. Vehicles and other equipment used during treatment activities should be washed prior to arriving at a new location to avoid the transfer of noxious weeds.
- Avoiding herbicide treatments during climatic conditions would increase the likelihood of spray drift or surface runoff.

Herbicide Conservation Measures

Reclamation intends to implement herbicide CMs in accordance with the 2007 BLM Final Biological Assessment: Vegetation Treatments on Bureau of Land Management Lands in 17 Western States, which is incorporated below as well as the WSDOT herbicide use guidance (.https://wsdot.wa.gov/construction-planning/protecting-environment/maintaining-vegetation-along-our-highways/using-herbicides). These CMs are applicable to all threatened, endangered, and proposed T&E plant species and are designed to minimize direct and indirect impacts from herbicide applications, site access, and soil disturbance. Compliance with these measures includes the use of site-specific buffers, timing applications to avoid sensitive phenological stages, limiting access to existing roads or previously burned areas where feasible, and monitoring treated sites to confirm intended purposes have been successful and detect any unintended effects on T&E species or their habitats

The buffer distances provided below are conservative estimates, based on the information provided by BLM Emergency Response Areas (ERA), and WSDOT herbicide use guidance and are designed to provide protection to T&E plants. Some ERAs used regression analysis to predict the smallest buffer distance to ensure no risks to T&E plants. In most cases, where regression analyses were not performed, suggested buffers extend out to the first modeled distance from the application site for which no risks were predicted. In some instances, the jump between modeled distances was quite large (e.g., 100 feet to 900 feet). Regression analyses could be completed at the local level using the interactive spreadsheets developed for the ERAs, using information in ERAs and for local site conditions (e.g., soil type, annual precipitation, vegetation type, and treatment method), to calculate more precise, and possibly smaller buffers for some herbicides.

WSDOT's conservation measures for herbicide use emphasize environmental protection and compliance with the ESA. They follow an Integrated Vegetation Management approach, using herbicides only when necessary and promoting native plant restoration to reduce long-term chemical reliance. To protect sensitive habitats and listed species, WSDOT enforces strict ESA-related buffer zones: 300 meters for aerial spraying, 25 feet for ground equipment, and 10 feet for handheld applications near ESA-listed streams and critical habitats. Herbicides are applied during dry conditions to prevent runoff, and selection is based on risk assessments, with higher-risk chemicals restricted or phased out. Additional measures include adherence to label instructions, use of PPE, and monitoring herbicide use through annual reviews to adapt practices. WSDOT also reduces non-safety mowing to enhance pollinator habitat and lower emissions, ensuring roadside ecosystems remain safe and sustainable while meeting regulatory requirements.

2,4-D

- Because the risks associated with this herbicide were not assessed, do not spray within ½ mile of terrestrial plant species or aquatic habitats where T&E aquatic plant species occur.
- Do not use aquatic formulations in aquatic habitats where T&E aquatic plant species occur.
- Assess local site conditions when evaluating the risks from surface water runoff to T&E plants located within ½ mile downgradient from the treatment area.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Bromacil

- Do not apply within 1,200 feet of terrestrial T&E plant species.
- If using a low boom at the typical application rate, do not apply within 100 feet of an aquatic habitat in which T&E plant species occur.
- If using a low boom at the maximum application rate or a high boom, do not apply within 900 feet of an aquatic habitat in which T&E plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Chlorsulfuron

- Do not apply by ground methods within 1,200 feet of terrestrial T&E species.

- Do not apply by aerial methods within 1,500 feet of terrestrial T&E species.
- Do not apply by ground methods within 25 feet of aquatic habitats where T&E plant species occur.
- Do not apply by aerial methods at the maximum application rate within 300 feet of aquatic habitats where T&E plant species occur.
- Do not apply by aerial methods at the typical application rate within 100 feet of aquatic habitats where T&E plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Clopyralid

- Since the risks associated with using a high boom are unknown, use only a low boom during ground applications of this herbicide within ½ mile of terrestrial T&E plant species or aquatic habitats in which T&E plant species occur.
- Do not apply by ground methods at the typical application rate within 900 of terrestrial T&E species.
- Do not apply by ground methods at the typical application rate within ½ mile of terrestrial T&E species.
- Do not apply by aerial methods within ½ mile of terrestrial T&E species.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Dicamba

- If using a low boom at the typical application rate, do not apply within 1,050 feet of terrestrial T&E plant species.
- If using a low boom at the maximum application rate, do not apply within 1,050 feet of terrestrial T&E plant species.
- If using a high boom, do not apply within 1,050 feet of terrestrial T&E plant species.
- Do not apply within 25 feet of aquatic habitats where T&E plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Diflufenzopyr

- If using a low boom at the typical application rate, do not apply within 100 feet of terrestrial T&E plant species.
- If using a high boom, or a low boom at the maximum application rate, do not apply within 900 feet of terrestrial T&E plant species.
- If using a high boom, do not apply within 500 feet of terrestrial T&E plant species.
- Do not apply within 25 feet of aquatic habitats where T&E plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Diquat

- Do not use in aquatic habitats where T&E aquatic plant species occur.
- Do not apply by ground methods within 1,000 feet of terrestrial T&E species at the maximum application rate.
- Do not apply by ground methods within 900 feet of terrestrial T&E species at the typical application rate.
- Do not apply by aerial methods within 1,200 feet of terrestrial T&E species.

Diuron

- Do not apply within 1,100 feet of terrestrial T&E species.
- If using a low boom at the typical application rate, do not apply within 900 feet of aquatic habitats where T&E aquatic plant species occur.
- If using a high boom, or a low boom at the maximum application rate, do not apply within 1,1000 feet of aquatic habitats where T&E aquatic plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Fluridone

- Since effects on terrestrial T&E plant species are unknown, do not apply within ½ mile of terrestrial T&E species.

Glyphosate

- Since the risks associated with using a high boom are unknown, use only a low boom during ground applications of this herbicide within ½ mile of terrestrial T&E plant species.
- Do not apply by ground methods at the typical application rate within 50 feet of terrestrial T&E plant species.
- Do not apply by ground methods at the maximum application rate within 300 feet of terrestrial T&E plant species.
- Do not apply by aerial methods within 300 feet of terrestrial T&E plant species.

Hexazinone

- Since the risks associated with using a high boom or an aerial application are unknown, only apply this herbicide by ground methods using a low boom within ½ mile of terrestrial T&E plant species and aquatic habitats that support aquatic T&E species.
- Do not apply by ground methods at the typical application rate within 300 feet of terrestrial T&E plant species or aquatic habitats that support aquatic T&E plant species.
- Do not apply by ground methods at the maximum application rate within 900 feet of terrestrial T&E plant species or aquatic habitats that support aquatic T&E plant species.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Imazapic

- Do not apply by ground methods within 25 feet of terrestrial T&E species or aquatic habitats where T&E plant species occur.
- Do not apply by helicopter at the typical application rate within 25 feet of terrestrial T&E plant species.
- Do not apply by helicopter at the maximum application rate, or by plane at the typical application rate, within 300 feet of terrestrial T&E plant species.
- Do not apply by plane at the maximum application rate within 900 feet of terrestrial T&E species.
- Do not apply by aerial methods at the maximum application rate within 300 feet of aquatic

T&E species.

- Do not apply by aerial methods at the typical application rate within 100 feet of aquatic T&E species.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Imazapyr

- Since the risks associated with using a high boom are unknown, use only a low boom for ground applications of this herbicide within ½ mile of terrestrial T&E plant species or aquatic habitats in which T&E plant species occur.
- Do not apply at the typical application rate, by ground or aerial methods, within 900 feet of terrestrial T&E plant species or aquatic habitats in which aquatic T&E species occur.
- Do not apply at the maximum application rate, by ground or aerial methods, within ½ mile of terrestrial T&E plant species or aquatic habitats in which aquatic T&E species occur.
- Do not use aquatic formulations in aquatic habitats where T&E aquatic plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Metsulfuron Methyl

- Since the risks associated with using a high boom are unknown, use only a low boom for ground applications of this herbicide within ½ mile of terrestrial T&E plant species or aquatic habitats in which T&E plant species occur.
- Do not apply at the typical application rate, by ground or aerial methods, within 900 feet of terrestrial T&E plant species or aquatic habitats in which aquatic T&E species occur.
- Do not apply at the maximum application rate, by ground or aerial methods, within ½ mile of terrestrial T&E plant species or aquatic habitats in which aquatic T&E species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Overdrive®

- If using a low boom at the typical application rate, do not apply within 100 feet of terrestrial T&E plant species.
- If using a low boom at the maximum application rate, do not apply within 900 feet of terrestrial T&E plant species.
- If using a high boom, do not apply within 900 feet of terrestrial T&E plant species.
- Do not apply within 25 feet of aquatic habitats where T&E plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Picloram

- Do not apply by ground or aerial methods, at any application rate, within ½ mile of

terrestrial T&E plant species.

- Assess local site conditions when evaluating the risks from surface water runoff to T&E plants located within ½ mile downgradient from the treatment area.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Sulfometuron Methyl

- Do not apply by ground or aerial methods within 1,500 feet of terrestrial T&E species.
- Do not apply by ground methods within 900 feet of aquatic habitats where T&E plant species occur, or by aerial methods within 1,500 feet of aquatic habitats where T&E plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Tebuthiuron

- If using a low boom at the typical application rate, do not apply within 25 feet of terrestrial T&E plant species.
- If using a low boom at the maximum application rate or a high boom at the typical application rate, do not apply within 50 feet of terrestrial T&E plant species.
- If using a high boom at the maximum application rate, do not apply within 900 feet of terrestrial T&E plant species.
- Do not apply within 25 feet of aquatic habitats where T&E plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Triclopyr Acid

- Since the risks associated with using a high boom are unknown, use only a low boom during ground applications of this herbicide within ½ mile of terrestrial T&E plant species.
- Since the risks associated with using a high boom are unknown, use only a low boom during ground applications at the maximum application rate of this herbicide within ½ mile of aquatic habitats in which T&E plant species occur.
- Do not apply by ground methods at the typical application rate within 300 feet of terrestrial T&E plant species.
- Do not apply by aerial methods at the typical application rate within 500 feet of terrestrial T&E plant species.
- Do not apply by ground or aerial methods at the maximum application rate within ½ mile of terrestrial T&E plant species or aquatic habitats in which T&E plant species occur.
- If applying to aquatic habitats in which aquatic T&E plant species occur, do not exceed the targeted water concentration on the product label.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Triclopyr BEE

- Since the risks associated with using a high boom are unknown, use only a low boom

for ground applications of this herbicide within ½ mile of terrestrial T&E plant species or aquatic habitats in which T&E plant species occur.

- Do not apply by ground methods at the typical application rate within 300 feet of terrestrial T&E plant species or aquatic habitats in which T&E plant species occur.
- Do not apply by aerial methods at the typical application rate within 500 feet of terrestrial T&E plant species or aquatic habitats in which T&E plant species occur.
- Do not apply by ground or aerial methods at the maximum application rate within ½ mile of terrestrial T&E plant species or aquatic habitats in which T&E plant species occur.
- Do not use aquatic formulations in aquatic habitats where T&E aquatic plant species occur.
- In areas where wind erosion is likely, do not apply within ½ mile of T&E plant species.

Aminocyclopyrachlor

- Do not apply within 1 mile of terrestrial T&E plant species.
- Do not apply within ½ mile of aquatic habitats supporting T&E species.
- Within 1 mile, restrict to ground-based spot treatments only.
- Do not apply in areas with high-leaching potential soils or shallow groundwater connected to T&E habitats.
- Do not apply where treated biomass could be transported (hay, mulch, manure) into areas supporting T&E species.
- Rate restrictions: Do not apply at the typical application rate within 300 ft of T&E habitats; do not apply at the maximum application rate within 900 ft of T&E habitats.
- Wind/erosion restrictions: Do not apply in areas where wind erosion or dust transport could carry residues to T&E habitats.

Clethodim

- Do not apply directly to water or to areas where surface water is present.
- Do not apply within 100 feet of aquatic habitats supporting T&E species.
- Within 300 feet of terrestrial T&E plant species, apply only by ground methods using a low boom.
- Do not apply under meteorological conditions that promote spray drift toward T&E habitats.
- Avoid application during pollinator activity periods when flowering vegetation is present.
- Rate restrictions: Do not apply at the typical rate within 100 ft of T&E habitats; do not apply at maximum rate within 300 ft.
- Wind/erosion restrictions: Avoid applications in areas with high wind potential or loose soils that could move herbicide off-site.

Fluozifop-p-butyl

- Do not apply within 100 feet of aquatic habitats supporting T&E species.
- Do not apply within 300 feet of terrestrial T&E plant species.
- Within ½ mile of T&E habitats, restrict to ground application only.
- Do not apply during temperature inversions or high wind conditions.

- Avoid application to flowering vegetation when pollinators are active.
- Rate restrictions: Do not apply at the typical rate within 300 ft of T&E habitats; do not apply at maximum rate within 900 ft.
- Wind/erosion restrictions: Do not apply when conditions favor drift or soil particle transport.

Flumioxazin

- Do not apply within ¼ mile of aquatic habitats supporting T&E species.
- Do not apply within 300 feet of terrestrial T&E plant species.
- Within ½ mile of T&E habitats, prohibit aerial and high boom applications.
- Do not apply to soils with high potential for runoff or erosion into aquatic systems.
- Avoid application when rainfall is forecast that could transport residues.
- Rate restrictions: Do not apply at typical rate within 300 ft; do not apply at maximum rate within 900 ft of T&E habitats.
- Wind/erosion restrictions: Do not apply in areas with high wind potential that could move residues off-site.

Imazamox

- Do not apply within 100 feet of aquatic habitats supporting T&E species.
- Do not apply within 300 feet of terrestrial T&E plant species.
- Within ½ mile of T&E habitats, restrict to ground-based, low boom application.
- Do not apply during conditions that promote off-site movement (drift/runoff).
- Avoid application to flowering plants during pollinator activity.
- Rate restrictions: Do not apply at the typical rate within 300 ft; do not apply at maximum rate within 900 ft.
- Wind/erosion restrictions: Avoid application during high wind or potential dust conditions.

Indaziflam

- Do not apply within ½ mile of terrestrial T&E plant species.
- Do not apply within 300 feet of aquatic habitats supporting T&E species.
- Within 1 mile of T&E plant species, restrict to spot treatments only.
- Do not apply in areas prone to soil movement (erosion, dust transport).
- Do not apply where persistent soil residues could migrate to T&E habitats.
- Rate restrictions: Do not apply at the typical rate within ½ mile; do not apply at maximum rate within 1 mile of T&E habitats.
- Wind/erosion restrictions: Do not apply when wind or erosion conditions could carry herbicide to T&E habitats.

Oryzalin

- Do not apply within 100 feet of aquatic habitats supporting T&E species.
- Do not apply within 300 feet of terrestrial T&E plant species.
- Within ½ mile of T&E habitats, prohibit aerial application.

- Do not apply to soils with high potential for runoff into aquatic habitats.
- Avoid application during conditions that promote spray drift.
- Rate restrictions: Do not apply at the typical rate within 300 ft; do not apply at maximum rate within 900 ft.
- Wind/erosion restrictions: Do not apply in areas prone to wind drift or soil particle movement.

Threatened and Endangered Plant Species Conservation Measures

Ute ladies'-tresses (Spiranthes diluvialis)

To avoid or minimize potential effects to the Ute ladies'-tresses resulting from the proposed ES&R treatments, Reclamation would implement the same CMs identified in BLMs existing PEIS/PEA/BA's (BLM 2007a, BLM 2015, BLM 2020) listed below. These mitigation measures should be considered for treatments throughout the species' entire range and implemented as appropriate. Chemical CMs for all T&E species are detailed in section 2.3.4.

- Prior to treatments, survey all suitable habitat for these species
- Mechanical treatments will not be used in potential Ute ladies'-tresses habitat, as mapped in Appendix A, Map 3
- Herbicides will not be used within 300ft of potential of Ute ladies'-tresses habitat, as mapped in Appendix A, Map 3.
- Long-lived herbicides will not be used within 300 feet of known occurrences: aminopyralid, clopyralid, tebuthiuron, imazapic, and diquat.
- To avoid negative effects to T&E plant species from off-site drift, surface runoff, and/or wind erosion, suitable buffer zones should be established between treatment sites and populations (confirmed or suspected) of T&E plant species, and site-specific precautions should be taken (refer to the guidance provided below).
- Manual treatments may be used inside the no spray buffer if an agency botanist has identified individual plants for that treatment or is on site during treatment.
- Applicators would be trained in sensitive plant identification for those habitats being treated.
- Given the high risk for damage to Ute ladies'-tresses plants and their habitat from use of domestic animals to contain weeds, none of this treatment methods should be utilized within 300 feet of sensitive plant populations.
- Prior to use of biological control agents that affect target plants in the same family as T&E species, the specificity of the agent with respect to factors such as physiology and morphology should be evaluated, and a determination as to risks to the Ute ladies'-tresses species made.

Spalding's Catchfly (Silene Spaldingii) Conservation Measures

Although the Catchfly are currently not known to exist on Reclamation lands, Reclamation plans to implement CMs on the 1,219 acres of the species range that have been identified on Reclamation lands. CMs being implemented by Reclamation are the same as those incorporated by the BLM and noted below. To avoid or minimize potential effects to the catchfly resulting from the proposed ES&R treatments, Reclamation would implement the same CMs identified in BLMs existing PEIS/PEA/BA's (BLM 2007a, BLM 2015, BLM 2020) listed below. These mitigation measures should be considered for treatments throughout the species' entire range and implemented as appropriate. Chemical CMs for all T&E species are detailed in section 2.3.4.

- Prior to treatments, survey all suitable habitat for these species.
- Mechanical treatments will not be used in potential Spalding's catchfly habitat, as mapped in Appendix A, Map 4.
- Herbicides will not be used within 300ft of potential of Spalding's catchfly habitat, as mapped in Appendix A, Map 4..
- Manual treatments may be used inside the no spray buffer if an agency botanist has identified individual plants for that treatment or is on site during treatment.

*White Bluffs Bladderpod (***Physaria Douglasii Subsp. Tuplashensis***) Conservation Measures*

To avoid or minimize potential effects to the *Physaria douglasii subsp. tuplashensis* resulting from the proposed ES&R treatments, Reclamation would implement the same CMs identified in BLMs existing PEIS/PEA/BA's (BLM 2007a, BLM 2015, BLM 2020) listed below. These mitigation measures should be considered for treatments throughout the species' entire range and implemented as appropriate. Chemical CMs for all T&E species are detailed in section 2.3.4.

- Mechanical treatments will not be used in White Bluffs bladderpod critical habitat, as mapped in Appendix A, Map 5.
- Herbicides will not be used within ½ mile of potential of White Bluffs bladderpod critical habitat, as mapped in Appendix A, Map 5.
- Prior to treatments, survey all suitable habitat within 1/2 mile of critical habitat for these species where treatment is expected to occur.
- Manual treatments may be used inside the no spray buffer if an agency botanist has identified individual plants for that treatment or is on site during treatment.

Threatened and Endangered Wildlife Conservation Measures

Columbia Basin Pygmy Rabbit (Brachylagus Idahoensis)

In order to avoid or minimize potential effects to the pygmy rabbit resulting from the proposed ES&R treatments, Reclamation would implement the same CMs identified in BLMs existing PEIS/PEA/BA's (BLM 2007a, BLM 2015, BLM 2020) listed below. Although only the Columbia Basin Distinct

Population Segment of the pygmy rabbit is currently listed, these mitigation measures should be considered for treatments throughout the species' entire range and implemented as appropriate.

- Prior to treatments, survey all suitable habitat for pygmy rabbits.
- Address pygmy rabbits in all management plans prepared for treatments within the range of the species' historical habitat.
- Do not burn, graze, or conduct mechanical treatments within 1 mile of known pygmy rabbit habitat.
- Do not use 2,4-D, diquat, or diuron in pygmy rabbit habitats; do not broadcast spray these herbicides within ¼ mile of pygmy rabbit habitat.
- Where feasible, avoid use of the following herbicides in pygmy rabbit habitat: bromacil, clopyralid, fluridone, glyphosate, hexazinone, imazapyr, metsulfuron methyl, picloram, tebuthiuron, and triclopyr.
- Where feasible, spot treat vegetation in pygmy rabbit habitat rather than broadcast spraying.
- Do not broadcast spray clopyralid, glyphosate, hexazinone, picloram, or triclopyr in pygmy rabbit habitat; do not broadcast spray these herbicides in areas adjacent to pygmy rabbit habitat under conditions when spray drift onto the habitat is likely.
- If broadcast spraying bromacil, imazapyr, fluridone, metsulfuron methyl, or tebuthiuron in or near pygmy rabbit habitat, apply at the typical, rather than the maximum, application rate.
- If conducting manual spot applications of bromacil, glyphosate, hexazinone, tebuthiuron, or triclopyr to vegetation in pygmy rabbit habitat, utilize the typical, rather than the maximum, application rate.

Western Yellow-Billed Cuckoo (Coccyzus americanus occidentalis) Conservation Measures

To avoid or minimize potential effects to the yellow-billed cuckoo resulting from the proposed ES&R treatments, Reclamation would implement the same CMs identified in BLMs existing PEIS/PEA/BA's (BLM 2007a, BLM 2015, BLM 2020) listed below. These CMs should be considered for treatments throughout the species' entire range and implemented as appropriate.

- If potential for cuckoo habitat, Reclamation would conduct pre-treatment surveys for cuckoo presence.
- When developing vegetation treatment projects, no ground-based application of herbicides would occur from May 1 to August 31 within 200 feet of occupied yellow billed cuckoo habitat.
- Aerial application of chemicals would not occur from May 1 to August 31 within 0.5 miles of occupied, yellow-billed cuckoo habitat.
- Use existing trails; avoid creating new routes in riparian corridors
- Equipment staging, refueling, and material storage will occur outside of riparian corridors.
- If a yellow-billed cuckoo is detected during project implementation, work will cease in the area,

and appropriate avoidance measures will be implemented in coordination with USFWS.

- Only approved species-specific biological control agents will be used. Biological control treatments will target invasive plant species and avoid impacts to native riparian vegetation. Monitoring will be conducted to ensure no unintended effects to habitat structure or prey availability occur.

Gray Wolf (Canis Lupus) Conservation Measures

Although the proposed vegetation treatments would not be likely to have negative effects on wolves or their habitat, the following programmatic-level CMs are recommended to ensure protection of the species. All CMs identified for gray wolves in the existing BAs (BLM 2007a, BLM 2015, BLM 2020) apply to this proposed action.

Wolf pack dens and rendezvous sites will be protected as follows:

- For collared wolf packs with known den or rendezvous sites, no project activities will occur within one (1) mile of wolf dens or rendezvous sites from April 1 through July 15; however, site-specific conditions may necessitate a larger and/or irregular shaped buffer. With written approval from the USFWS, adjustments may be made to the one-mile den and rendezvous buffer distance based on site-specific conditions that allow for adjustments without exposing dens or rendezvous locations to adverse effects.
- For wolf packs that are collared and not denning or using rendezvous sites, there are no activity or timing restrictions; however, Reclamation will communicate the location of all project activities that occur in known territories with the USFWS prior to beginning work.
- For uncollared packs, no project activities will occur within the estimated wolf pack territory (see territory polygons on the WDFW wolf website) from April 1 through July 15 because of uncertainty around den locations. If a collar is deployed in these packs and data is available, the previous measures supersede this measure, and the seasonal restriction is reduced to one mile around den and rendezvous sites. Where projects are more than one mile from den and rendezvous sites, projects may proceed without wolf related restrictions.
- If a den is discovered during implementation of project activities, the one-mile seasonal restriction will be implemented and coordination with WDFW and the USFWS will be pursued.
- Reclamation will work with WDFW and USFWS each year to obtain current information on wolf packs, territories, wolf den and rendezvous sites. References include WDFW wolf website and most recent WDFW et al. Washington Gray Wolf Conservation and Management Annual Report (e.g. WDFW et al 2024).

Canada Lynx (Lynx Canadensis) Conservation Measures

In order to avoid or minimize potential effects to the Canada Lynx resulting from the proposed ES&R treatments, Reclamation would implement proposed CMs below.

- Prior to vegetation treatments, map lynx habitat within areas in which treatments are proposed

to occur. Identify potential denning and foraging habitat, and topographic features that may be important for lynx movement (major ridge systems, prominent saddles, and riparian corridors).

- Design vegetation treatments in lynx habitat to approximate historical landscape patterns and disturbance processes.
- Avoid the construction of permanent firebreaks on ridges or saddles in lynx habitat.
- Where possible, keep linear openings out of mapped potential habitat and away from key habitat components, such as denning areas.
- When planning vegetation treatments, minimize the creation of linear openings (fire lines, access routes, and escape routes) that could result in permanent travel ways for competitors and humans. • Obliterate any linear openings constructed within lynx habitat in order to deter future uses by humans and competitive species.
- If deemed necessary, defer livestock grazing following vegetation treatments to ensure the re-establishment of key plant species.
- Do not use 2,4-D in Canada lynx habitat; do not broadcast spray 2,4-D within ¼ mile of Canada lynx habitat.
- Where feasible, avoid use of the following herbicides in Canada lynx habitat: bromacil, clopyralid, diquat, diuron, glyphosate, hexazinone, imazapyr, metsulfuron methyl, picloram, and triclopyr.
- Do not broadcast spray clopyralid, diuron, glyphosate, hexazinone, picloram, or triclopyr in Canada lynx habitat; do not broadcast spray these herbicides in areas adjacent to Canada lynx habitat under conditions when spray drift onto the habitat is likely.
- If broadcast spraying bromacil, diquat, imazapyr, or metsulfuron methyl in or near Canada lynx habitat, apply at the typical, rather than the maximum, application rate.
- If conducting manual spot applications of glyphosate, hexazinone, or triclopyr to vegetation in Canada lynx habitat, utilize the typical, rather than the maximum, application rate.

North American Wolverine (Gulo Gulo Luscus) Conservation Measures

In order to avoid or minimize potential effects to the North American Wolverine resulting from the proposed ES&R treatments, Reclamation would implement proposed CMs below.

- Prior to vegetation treatments, map wolverine habitat within areas in which treatments are proposed to occur. Identify potential denning and foraging habitat, and topographic features that may be important for lynx movement (major ridge systems, prominent saddles, and riparian corridors). No work would occur during the winter or spring in areas suitable for wolverine denning (elevations above 8,000 feet in areas that would have persistent spring snow).
- Design vegetation treatments in wolverine habitat to approximate historical landscape patterns and disturbance processes.
- Equipment required and access will occur on existing roads/access points and any trees removed or felled would be for public safety reasons.

- Where possible, keep linear openings out of mapped potential habitat and away from key habitat components, such as denning areas.
- When planning vegetation treatments, minimize the creation of linear openings (fire lines, access routes, and escape routes) that could result in permanent travel ways for competitors and humans.
- Obliterate any linear openings constructed within wolverine habitat in order to deter future uses by humans and competitive species.
- If deemed necessary, defer livestock grazing following vegetation treatments to ensure the re-establishment of key plant species.
- Do not use 2,4-D in Canada lynx habitat; do not broadcast spray 2,4-D within ¼ mile of wolverine habitat.
- Where feasible, avoid use of the following herbicides in wolverine habitat: bromacil, clopyralid, diquat, diuron, glyphosate, hexazinone, imazapyr, metsulfuron methyl, picloram, and triclopyr.
- Do not broadcast spray clopyralid, diuron, glyphosate, hexazinone, picloram, or triclopyr in wolverine habitat; do not broadcast spray these herbicides in areas adjacent to wolverine habitat under conditions when spray drift onto the habitat is likely.
- If broadcast spraying bromacil, diquat, imazapyr, or metsulfuron methyl in or near wolverine habitat, apply at the typical, rather than the maximum, application rate.
- If conducting manual spot applications of glyphosate, hexazinone, or triclopyr to vegetation in wolverine habitat, utilize the typical, rather than the maximum, application rate.

Mount Rainier White-Tailed Ptarmigan (Lagopus Leucura Rainierensis) Conservation Measures

In order to avoid or minimize potential effects to the Mount Rainier white-tailed ptarmigan resulting from the proposed ES&R treatments, Reclamation would implement the same CMs identified in BLMs existing PEIS/PEA/BA's (BLM 2007a, BLM 2015, BLM 2020) listed below. These CMs should be considered for treatments throughout the species' entire range and implemented as appropriate.

- If potential habitat is present, conduct pre-treatment surveys for ptarmigan presence.
- When developing vegetation treatment projects, no ground-based application of herbicides would occur from May 1 to August 31 within 200 feet of occupied Mount Rainier white-tailed ptarmigan
- Aerial application of chemicals would not occur from May 1 to August 31 within 0.5 miles of occupied, Mount Rainier white-tailed ptarmigan habitat.
- Use existing trails; avoid creating new routes in riparian corridors
- Equipment staging, refueling, and material storage will occur outside of riparian corridors.
- If a Mount Rainier white-tailed ptarmigan is detected during project implementation, work will cease in the area and appropriate avoidance measures will be implemented in coordination with

USFWS.

- Only approved species-specific biological control agents will be used. Biological control treatments will target invasive plant species and avoid impacts to native riparian vegetation. Monitoring will be conducted to ensure no unintended effects to habitat structure or prey availability occur.

Bull Trout (Salvelinus Confluentus) and Bull Trout Critical Habitat Conservation Measures

- Watershed Stabilization and Erosion Control Treatments, In-channel Treatments, or other in-water work will not be used in bull trout critical habitat or within 300ft upstream of bull trout critical habitat as mapped in Appendix A, Maps 12-14.
- Herbicides will not be used within 300ft of bull trout critical habitat, as mapped in Appendix A, Maps 12-14.
- Where feasible, access work site only on existing roads, and limit all travel on roads when damage to the road surface will result or is occurring.
- Within riparian areas, do not use vehicle equipment off of established roads.
- Within 150 feet of wetlands or riparian areas, do not fuel/refuel equipment, store fuel, or perform equipment maintenance (locate all fueling and fuel storage areas, as well as service landings outside of protected riparian areas).
- For mechanical treatments, lessen impacts by minimizing the use of heavy equipment in riparian areas, avoiding treatments that create bare soil in large or extensive areas, reseeding and mulching following treatments, and avoiding work when soils are wet and subject to compaction.
- Outside riparian areas, avoid hydro-mulching within buffer zones established at the local level. This precaution will limit adding sediments and nutrients and increasing water turbidity.
- Within riparian areas, ensure that revegetation activities incorporate knowledge of site-specific conditions and project design.
- Maintain equipment used for transportation, storage, or application of chemicals in a leak-proof condition.
- Use herbicides only in an integrated weed or vegetation management context where all treatments are considered and various methods are used individually or in concert to maximize the benefits while reducing undesirable effects.
- Carefully consider herbicide impacts to fish, wildlife, non-target native plants, and other resources when making herbicide choices.
- Treat only the minimum area necessary for effective control. Herbicides may be applied by selective, hand-held, backpack, or broadcast equipment in accordance with state and federal law and only by certified and licensed applicators to specifically target invasive plant species.
- Herbicide application rates will follow label direction, unless site specific analysis determines a lower maximum rate is needed to reduce non-target impacts.

- An herbicide safety/spill response plan is required for all projects to reduce the likelihood of spills, misapplication, reduce potential for unsafe practices, and to take remedial actions in the event of spills. Spill plan contents will follow agency direction.
- Herbicide carriers (solvents) are limited to water or specifically labeled vegetable oil.
- Herbicides will be mixed more than 150 feet from any natural waterbody to minimize the risk of an accidental discharge. Impervious material will be placed beneath mixing areas in such a manner as to contain any spills associated with mixing/refilling.
- Spray tanks shall be washed further than 300 feet away from surface water. All hauling and application equipment shall be free from leaks and operating as intended.
- When using mechanical methods, lessen impacts by minimizing the use of heavy equipment in riparian areas, avoiding treatments that create bare soil in large or extensive areas, reseeding and mulching following treatments, and avoiding work when soils are wet and subject to compaction.
- Dyes or colorants, (e.g., Hi-Light, Dynamark) will be used to assist in treatment assurance and minimize over-spraying within 100 feet of live water.
- Do not spray when wind speeds exceed 10 miles per hour to reduce the likelihood of spray/dust drift. Winds of 2 mph or less are indicative of air inversions. The applicator must confirm the absence of an inversion before proceeding with the application whenever the wind speed is 2 mph or less.
- Do not broadcast spray within 100 feet of open water when wind velocity exceeds 5 mph.
- Be aware of wind directions and potential for herbicides to affect aquatic habitat area downwind. • Keep boom or spray as low as possible to reduce wind effects.
- Avoid or minimize drift by utilizing appropriate equipment and settings (e.g., nozzle selection, adjusting pressure, drift reduction agents). Select proper application equipment (e.g., spray equipment that produces 200–800-micron diameter droplets [Spray droplets of 100 microns or less are most prone to drift]).
- Follow herbicide label directions for maximum daytime temperature permitted (some types of herbicides volatilize in hot temperatures).
- Do not spray during periods of adverse weather conditions (snow or rain imminent, fog, etc.). Wind and other weather data will be monitored and reported for all pesticide applicator reports.
- Herbicides shall not be applied when the soil is saturated or when a precipitation event likely to produce direct runoff to fish-bearing waters from a treated site is forecasted by NOAA National Weather Service or other similar forecasting service within 48 hours following application. Soil-activated herbicides can be applied as long as label is followed. Do not conduct any applications during periods of heavy rainfall.
- Herbicide active ingredients are restricted to the following: aminopyralid (e.g., terrestrial: Milestone VM); aminocyclopyrachlor, chlorsulfuron (e.g., terrestrial: Telar, Glean, Corsair); clethodim, clopyralid (e.g., terrestrial: Transline); dicamba (e.g., terrestrial: Vanquish, Banvel);

diflufenzopyr + dicamba (e.g., terrestrial: Overdrive); fluozifop-p-butyl, flumioxazin, glyphosate (e.g., aquatic: Aquamaster, AquaPro, Rodeo, Accord); imazamox, indaziflam, imazapic (e.g., terrestrial: Plateau); imazapyr (e.g., aquatic: Habitat; terrestrial: Arsenal, Chopper); metsulfuron methyl (e.g., terrestrial: Escort); picloram (e.g., terrestrial: Tordon, Outpost 22K); sethoxydim (e.g., terrestrial: Poast, Vantage); sulfometuron methyl (e.g., terrestrial: Oust, Oust XP); triclopyr (e.g., aquatic: Garlon 3A, Tahoe 3A, Renovate 3, Element 3A; terrestrial: Garlon 4A, Tahoe 4E, Pathfinder II); 2,4-D (e.g., aquatic: 2,4-D Amine, Clean Amine; terrestrial: Weedone, Hi-Dep), oryzalin

- Herbicide buffer distances will be observed during herbicide applications. Herbicide applications based on a combination of approved herbicides will use the most conservative buffer for any herbicide included. Buffer widths are measured as map distance perpendicular to the bankfull for streams, the upland boundary for wetlands, or the upper bank for roadside ditches.