Appendix A – Wallowa-Whitman Forest Plan

Wallowa-Whitman Forest Plan Management Direction

Hells Canyon National Recreation Area Direction

Wilderness Minimum Requirements Decision Guide Worksheet

Wallowa-Whitman Forest Plan (LRMP) Management Direction (USDA 1990)

This appendix has management direction from the 1990 Wallowa-Whitman Forest Land and Resource Management Plan (LRMP) (USDA 1990) as amended by the Pacific Northwest Region Invasive Plant Program, Record of Decision 2005 and other amendments. The 1990 LRMP goals and objectives that broadly govern the management of National Forest System lands are listed below. The LRMP has a section called "Desired Future Condition." This section acknowledges that noxious weeds will be part of forest even under desirable conditions; therefore, even under the best scenarios it is understood that noxious weeds will be contained or controlled but in some areas cannot be eradicated completely.

The Wallowa-Whitman LRMP identified management areas for 2,349,215 acres included in the planning area for the 1990 LRMP FEIS. Direction is provided for each individual management area (LRMP pages 4-56 through 4-98). A list of management areas, management area maps showing their distribution across the Forest, and acreages for each management area are presented in the LRMP and available on request. The LRMP has been amended several times since 1990, references to the LRMP herein include those amendments.

Selected Standards and Guidelines relevant to invasive plant management are listed in this appendix. First, selected Forest-wide and specific management area LRMP standards and guidelines specifically relevant to the planning of this project are listed. Next, the noxious weed standards from HCNRA 2003 which amended the LRMP in 2003 are listed. Finally, the invasive plant standards from the R6 2005 ROD are listed. The activities outlined for treatment of invasive plant species under Alternatives A, B, C and D are consistent with these standards.

Diversity-Chapter 4 pg 2

Goal: To maintain native and desirable introduced or historic plant and animal species and communities. Provide for all seral stages of terrestrial and aquatic plant associations in a distribution and abundance to accomplish this goal. Maintain or enhance ecosystem function to provide for long-term integrity and productivity of biological communities.

Project Analysis: Develop, during project planning, site-specific management prescriptions the goals for diversity and ecosystem function

Vegetation Manipulation: Provide and maintain developing an ecologically sound distribution and abundance of plant and animal communities and species at the forest stand, basin, and Forest level. This distribution should contribute to the goal of maintaining all native and desirable introduced species and communities. Base tree species used in planting harvest units on the potential of the site as indicated by plant associations Consideration should be given to regenerating and maintaining a mixture of tree species, where appropriate for the site Retain, through precommercial and commercial thinning, a diversity of tree species based on site potential Allow for all natural species to function following vegetation manipulation. None should be eliminated from the site

Threatened, Endangered, and Sensitive Species

Goal: To protect and manage habitat for the perpetuation and recovery of plants and animals which are listed as threatened, endangered, or sensitive. (A list of these species can be found in

the Forest Plan EIS) To assure that management activities do not jeopardize the continued existence of sensitive species or result in adverse modification of their essential habitat.

Reviews Biological Evaluations: Review all actions and programs, authorized, funded, or carried out by the Forest Service, to determine their potential effects on threatened, endangered, and sensitive species. Conduct these reviews, including biological evaluations, per direction in **FSM 2670 and appropriate R-6 manual supplements**: Prepare a biological evaluation during the environmental analysis of each project to determine possible effects of the proposed activity on threatened, endangered, and sensitive species.

Other Activities: Restrict or prohibit other activities (e g , off road vehicles impacting plants or habitats) and monitor activities where necessary to protect threatened, endangered, or sensitive species.

Cooperation: Cooperate with the States of Oregon, Washington, and Idaho in all aspects of sensitive plant management under the auspices of the Master Memoranda of Understanding The Oregon Natural Heritage Data Base and the Washington Natural Heritage Program will be contacted regarding sensitive species information.

Cooperate with the US Fish and Wildlife Service, the States of Oregon, Washington, and Idaho and the Oregon Natural Heritage Data Base and the Washington Natural Heritage Program in the development of Species Management Guides for sensitive species adversely affected by standard management practices.

Cooperate with the same agencies/organizations in the development and implementation of recovery plans for threatened and endangered species. Corrective measures to avoid possible adverse effects on recovery of populations will be implemented.

Monitoring: Monitor known populations of sensitive species and their habitats in accordance with the Forest Monitoring Plan.

Table 1. Selected standards and guidelines from the 1990 LRMP

MA	STANDARD AND GUIDELINE
Forestwide Direction	Integrated Pest Management. Use of integrated Pest Management (IPM) strategies for early detection, suppression and prevention of forest pests and to manage pests within the constraints of laws and regulations. IPM strategies include manual, mechanical, cultural, biological, chemical, prescribed fire, and regulatory means. Strategy selection will be based on environmental analysis.
Forestwide Direction	Plans for control of competing vegetation and noxious weed control (including use of herbicides) will be tiered to the programmatic FEIS for Managing Competing and Unwanted Vegetation, USDA Forest Service, Pacific Northwest Region, December 1988 or subsequent NEPA documents
Forestwide Direction	Control of Noxious Weeds. Aggressively pursue control of identified noxious weeds on lands where such activities are not precluded by management area direction. This will be accomplished through Forest activities and through coordination with county, State and other Federal agencies as funds permit.
Forestwide Direction	Control of Noxious weeds. Aggressively pursue control of identified noxious weeds on lands where such activities are not precluded by management area direction. This will be accomplished through Forest activities and through coordination with county, State and other Federal agencies as funds permit.
Forestwide Direction	When the need to control noxious weeds or competing vegetation is identified, the selection of any particular treatment method will be made at the project level based on a site-specific analysis of the relative effectiveness, environmental effects

MA	STANDARD AND GUIDELINE
	(including human health), and a cost of the feasible alternatives. Herbicides will be selected only if their use is essential to meet management objectives.
Forestwide Direction	Cooperate with the Animal and Plant Health Inspection Service (APHIS) in accord with the Memorandum of Understanding between Aphis and the USDA Forest Service.
Forestwide Direction	Municipal Watersheds: Use of Chemicals. Use fertilizers and pesticides (chemical or biological) within the watersheds only in emergency situations, and then only following close coordination with the City.
Mgmt. Area 4 - Wilderness	Suppression activities for insect and disease outbreaks may be permitted with approval (Chief of the Forest Service) to prevent loss within wilderness and/or unacceptable resource damage to resources in adjacent areas. Favor biological methods when available.
Mgmt. Area 6 - Backcountry	Noxious weeds may be controlled where cost effective.
Mgmt. Area 7 - Wild and Scenic Rivers	Control forest pests in a manner compatible with the intent of the Act and management objectives of contiguous National Forest System lands (FSM 3400).
Mgmt. Area 12 - Research Natural Areas	The decision on treatment of Forest pests will be made on a case-by-case basis. Where pest management activities are prescribed, they shall be as specific as possible against target organisms and induce minimal impact to other components of the ecosystem.
Mgmt. Area 15 - Old Growth	Control of pests is encouraged where pests threaten destruction of an old-growth stand. Where destruction of the old growth is not likely, artificial control of pests will occur only when this can be accomplished without adverse effects on old-growth values.
Mgmt. Area 16 - Administrative and Recreation Site Retention	Prevent insect and disease outbreaks including noxious weeds, with a minimum of disturbance to developments or users.
Mgmt. Area 16 - Administrative and Recreation Site Retention	Favor biological and silvicultural treatments.
Mgmt. Area 18 - Anadromous Fish Emphasis	Practice high intensity prevention activities such as monitoring pest populations to be forewarned of outbreaks, stump removal for root rots, stocking control, species selection for plantings, timely salvage of weather damaged timber, etc., where cost effective and consistent with fish habitat objectives.
Mgmt. Area 18 - Anadromous Fish Emphasis	Use pesticides only where this use can occur without adversely affecting fish habitat.

Hells Canyon National Recreation Area Direction

Direction from HCNRA Management Plan (Forest Plan Amendment # 29, USDA 2003)

Biologically Unique Species, Habitats, and Ecosystems Definition of Biologically Unique Species, Habitats, and Ecosystems

Establishes criteria for identifying biologically unique species, habitats, and ecosystems as those that are: (1) limited in distribution solely or principally to the HCNRA; or (2) limited in distribution within the HCNRA, but may be relatively common within the neighboring ecoregions; or (3) relatively abundant in the HCNRA, but limited in distribution within the three neighboring ecoregions.

Identifies biologically unique species, habitats, and ecosystems as rare plant species (including 'disjunct' populations in the HCNRA that are geographically separated from the main distribution of a species); endemic plant species; rare combinations of aquatic, terrestrial, and atmospheric habitats; and rare combinations of outstanding and diverse ecosystems and parts of ecosystems.

Rare plant species (137) are threatened, endangered, or proposed plants listed by U.S. Fish and Wildlife Service; sensitive species in Regions 1, 4, and 6; or disjunct plant species (separated geographically from the main range of species).

Endemic plant species (9) are restricted to the HCNRA or immediate vicinity (defined as the Snake River Canyon from Oxbow Dam downriver to the Washington State border, the lower Salmon River, the middle and lower portions of the Imnaha River including the tributaries of these river reaches).

Rare combinations of aquatic, terrestrial and atmospheric habitats (6) principally reflect physical environmental features of the landscape that are produced from a unique combination of soils, climate, precipitation, and aspect. Rare combinations of outstanding and diverse ecosystems are plant community types and associations (16) that are biologically unique because they occur in the HCNRA and nowhere else or occur in limited amounts within the HCNRA.

Management Direction Manages the HCNRA as an area of high biological diversity and endemism to ensure the maintenance and/or restoration of ecological function and sustainability of species, habitats, and ecosystems that contribute to its biological uniqueness. Provides specific direction for identification, protection, and mitigation of effects for biologically unique species, habitats, and ecosystems through identification, protection, and mitigation of effects during project-level planning. RNAs will continue to be managed under existing direction in the Forest Plan (MA 12) to preserve significant natural ecosystems for comparison with those influenced by humans; for provision of ecological and environmental studies; for preservation of gene pools for typical and rare and endangered plants and animals. In addition, RNAs will also be managed to protect rare combinations of outstanding and diverse ecosystems that occur within RNAs. Fuelwood cutting, commercial mushroom harvesting, and commercial collection of special forest products in proposed and established RNAs will be prohibited.

Nox-O1: Manage noxious weeds to reduce negative impacts to native plants, wildlife, and other resources. Use all reasonable and feasible integrated weed management processes available under existing decisions and direction to prevent, restore, eradicate, control, contain, or otherwise reduce negative impacts of noxious weeds.

Nox-O2: Evaluate extent of nonnative invasive plants, their relative impacts and potential for restoration.

Nox-O3: Evaluate the factors contributing toward the spread of nonnative invasive plants and implement appropriate prevention strategies.

Nox-G1: Conduct restoration activities on grassland sites in mid-seral or earlier status to improve the ability of native vegetation on site to resist invasion and occupancy by noxious weeds.

Nox-G2: Develop a public information and education program on preventing the introduction and spread of noxious weeds. Provide a reporting method for and encourage the public to report new weed sites. (New) Nox-G3: Provide for natural restoration of degraded sites by modifying management activities as necessary.

Nox-G3: Consider quarantine or closure of some areas, trails, and/or roads to prevent the spread of noxious weeds to adjacent areas.

Nox-G3: Consider quarantine or closure of some areas, trails, and/or roads to prevent the spread of noxious weeds to adjacent areas.

Nox-G6: When planning PF projects, identify sites of known noxious weeds and/or invasive species of concern. Avoid burning through identified weed sites and/or prescribe management actions that will minimize the potential for creation of site conditions favorable to the spread of invasive weeds.

Nox-G7: Contain and/or control aggressive noxious weeds and other nonnative plants that reduce ground cover, reduce perennial plant cover, and accelerate erosion.

Rec-S23: Outfitters and guides will be provided with simple noxious weed and invasive species identification handbooks and forms on which to report changes in the location or presence of noxious weeds and invasive species along their outfitting and guiding routes. As a condition of their permit, the permittee will complete and submit an HCNRA noxious weed form each month in which outfitting and guiding services are provided.

Rec-S24: Noxious weed identification sheets/reporting forms will be offered to visitors in all visitor centers and trailheads.

Wil-S4: Noxious weeds would be managed within the Wilderness using the minimum management tool to insure the most compatible, but effective means of meeting objectives. (INWMP Plan)

Acc-G8: Manage roads and trails in coordination with the Integrated Noxious Weed Management Plan. Where roads or trails are to be maintained, ensure an up to date inventory of all noxious weed sites within the right-of-way and plan for appropriate treatment to prevent the spread of weeds during maintenance activities. Strive to maintain an effective ground cover on all adjacent disturbed surfaces, consistent with safety, to provide a degree of protection against the spread or invasion of noxious weeds. Where roads or trails are to be closed, ensure that pre-planning provides for an inventory of noxious weeds sites and for continued treatment of those sites. During closure activities, ensure that on-site or seeded native plant species are considered with the focus on minimizing bare ground. (INWMP Plan)

Veg-S1: Follow the Integrated Noxious Weed Management Plan (USDA 1992) and the USFS Yellow Starthistle Management proposal to manage noxious weeds in the HCNRA. (INWM Plan)

TES-O4: Conduct habitat improvement projects for federally listed species. These may include fencing, burning, closing roads, treatment of noxious weeds, plant propagation, or other actions.

Standards from the R6 2005 ROD

Table 2. Standards adopted into the 1990 LRMP from the R-6 2005 ROD

Standard #	Text of Standard
1	Prevention of invasive plant introduction, establishment and spread will be addressed in watershed analysis; roads analysis; fire and fuels management plans, Burned Area Emergency Recovery Plans; emergency wildland fire situation analysis; wildland fire implementation plans; grazing allotment management plans, recreation management plans, vegetation management plans, and other land management assessments.
2	Actions conducted or authorized by written permit by the Forest Service that will operate outside the limits of the road prism (including public works and service contracts), require the cleaning of all heavy equipment (bulldozers, skidders, graders, backhoes, dump trucks, etc.) prior to entering National Forest System Lands. This standard does not apply to initial attack of wildland fires, and other emergency situations where cleaning would delay response time.
3	Use weed-free straw and mulch for all projects, conducted or authorized by the Forest Service, on National Forest System Lands. If State certified straw and/or mulch is not available, individual Forests should require sources certified to be weed free using the North American Weed Free Forage Program standards (see Appendix O) or a similar certification process.
4	Use only pelletized or certified weed free feed on all National Forest System lands. If state certified weed free feed is not available, individual Forests should require feed certified to be weed free using North American Weed Free Forage Program standards or a similar certification process. This standard may need to be phased in as a certification processes are established.
6	Use available administrative mechanisms to incorporate invasive plant prevention practices into rangeland management. Examples of administrative mechanisms include, but are not limited to, revising permits and grazing allotment management plans, providing annual operating instructions, and adaptive management. Plan and implement practices in cooperation with the grazing permit holder.
7	Inspect active gravel, fill, sand stockpiles, quarry sites, and borrow material for invasive plants before use and transport. Treat or require treatment of infested sources before any use of pit material. Use only gravel, fill, sand, and rock that is judged to be weed free by District or Forest weed specialists.
8	Conduct road blading, brushing and ditch cleaning in areas with high concentrations of invasive plants in consultation with District or Forest-level invasive plant specialists, incorporate invasive plant prevention practices as appropriate.
11	Prioritize infestations of invasive plants for treatment at the landscape, watershed or larger multiple forest/multiple owner scale.
12	Develop a long-term site strategy for restoring/revegetating invasive plant sites prior to treatment.
13	Native plant materials are the first choice in revegetation for restoration and rehabilitation where timely natural regeneration of the native plant community is not likely to occur. Non-native, non-invasive plant species may be used in any of the following situations: 1) when needed in emergency conditions to protect basic resource values (e.g., soil stability, water quality and to help prevent the establishment of invasive species), 2) as an interim, non-persistent measure designed to aid in the re-establishment of native plants, 3) if native plant

Standard #	Text of Standard
	materials are not available, or 4) in permanently altered plant communities. Under no circumstances will non-native invasive plant species be used for revegetation.
14	Use only APHIS and State-approved biological control agents. Agents demonstrated to have direct negative impacts on non-target organisms would not be released.
15	Application of any herbicides to treat invasive plants will be performed or directly supervised by a State or Federally licensed applicator. All treatment projects that involve the use of herbicides will develop and implement herbicide transportation and handling safety plan.
16	Select from herbicide formulations containing one or more of the following 10 active ingredients: chlorsulfuron, clopyralid, glyphosate, imazapic, imazapyr, metsulfuron methyl, picloram, sethoxydim, sulfometuron methyl, and triclopyr. Mixtures of herbicide formulations containing 3 or less of these active ingredients may be applied where the sum of all individual Hazard Quotients for the relevant application scenarios is less than 1.0. [1] All herbicide application methods are allowed including wicking, wiping, injection, spot, broadcast and aerial, as permitted by the product label. Chlorsulfuron, metsulfuron methyl, and sulfometuron methyl will not be applied aerially. The use of triclopyr is limited to selective application techniques only (e.g., spot spraying, wiping, basal bark, cut stump, injection). Additional herbicides and herbicide mixtures may be added in the future at either the Forest Plan or project level through appropriate risk analysis and NEPA/ESA procedures.
17	No standard.
18	Use only adjuvants (e.g. surfactants, dyes) and inert ingredients reviewed in Forest Service hazard and risk assessment documents such as SERA, 1997a, 1997b; Bakke, 2003.
19	To minimize or eliminate direct or indirect negative effects to non-target plants, terrestrial animals, water quality and aquatic biota (including amphibians) from the application of herbicide, use site-specific soil characteristics, proximity to surface water and local water table depth to determine herbicide formulation, size of buffers needed, if any, and application method and timing. Consider herbicides registered for aquatic use where herbicide is likely to be delivered to surface waters.
20	Design invasive plant treatments to minimize or eliminate adverse effects to species and critical habitats proposed and/or listed under the Endangered Species Act. This may involve surveying for listed or proposed plants prior to implementing actions within unsurveyed habitat if the action has a reasonable potential to adversely affect the plant species. Use site-specific project design (e.g. application rate and method, timing, wind speed and direction, nozzle type and size, buffers, etc.) to mitigate the potential for adverse disturbance and/or contaminant exposure.
21	Provide a minimum buffer of 300 feet for aerial application of herbicides near developed campgrounds, recreation residences and private land (unless otherwise authorized by adjacent private landowners).
22	Prohibit aerial application of herbicides within legally designated municipal watersheds.
23	Prior to implementation of herbicide treatment projects, National Forest system staff will ensure timely public notification. Treatment areas will be posted to inform the public and forest workers of herbicide application dates and herbicides used. If requested, individuals may be notified in advance of spray dates.

MINIMUM REQUIREMENTS DECISION GUIDE

WORKSHEET

Non-native Invasive Plants Treatment
Hells Canyon Wilderness, Eagle Cap Wilderness and Monument Rock Wilderness

---

Step 1: Determine if any administrative action is necessary.

Description:

The Hells Canyon Wilderness area on the Wallowa-Whitman National Forest in northeast Oregon and Central Idaho is experiencing a rapidly increasing outbreak of yellow star-thistle, a non-native invasive species (NNIS). Factors such as the lack of treatment on adjacent public and private lands, seed transport via recreation users along trails, wind and wildlife have all contributed to the outbreak. As observed in the Salmon River drainage east of the Wallowa-Whitman NF, yellow star-thistle has rapidly spread, creating monocultures in many areas. At this time, the mapped infestations of yellow star-thistle in the Hells Canyon Wilderness are the only known infestations of these noxious weeds. None of the infestations are currently within active grazing allotments.

As part of the Hells Canyon National Recreation Area, the wilderness area was established, in part, for its ecological values. One of its key features is the presence of one of the largest contiguous areas of native bunchgrass grasslands in the Western United States. In order to manage the area to preserve its wilderness character and protect these natural conditions, NNIS need to be treated.

Over the last few years, a limited number of the approximately 530 infested acres of yellow star-thistle have been treated by hand pulling. This had limited success. Herbicide use via back packs and mule packs along the main trail corridors have also been used. These treatments were aimed at reducing the cover of yellow star-thistle or reducing seed production to limit its spread beyond infested areas. Many other yellow star-thistle infestations have not been treated because of their remote and rugged locations. Treatments in remote areas require more logistical support, safety mitigations and expense.

In addition, to the Hells Canyon Wilderness, the Eagle Cap Wilderness and Monument Rock Wilderness have know populations of NNIS which would require occasional use of stock mounted spray pumps as a treatment method.

A. Describe Valid Existing Rights or Special Provisions of Wilderness Legislation

Are there valid existing rights or is there a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws) that allows consideration of action involving Section 4(c) uses? Cite law and section.

Yes: ☒ **No:** ☐ **Not Applicable:** ☐

Explain:
There are no special provisions that apply in The Wilderness Act (1964).

The Wilderness Act (1964)
Section 2 (a) Wilderness "shall be administered ... in such manner as will leave them unimpaired for future use as wilderness, and so as to provide for the protection of these areas [and] the preservation of their wilderness character..."

Section 2 (c) An area of wilderness is...an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable..."

Section 4 (c) Prohibition of certain uses
"...except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act...there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area."

The Hells Canyon National Recreation Area Act (1975)
Sec. 2. (a) "The lands depicted as the "Hells Canyon Wilderness" on the map referred to in subsection 1(b) of this Act are hereby designated as wilderness.

(b) The wilderness designated by this Act shall be administered by the Secretary in accordance with the provisions of this Act or in accordance with the provisions of the Wilderness Act (78 Stat. 890), whichever is the more restrictive, except that any reference in such provisions of the Wilderness Act to the effective date of that Act shall be deemed to be a reference to the effective date of this Act. "

Sec 7 (3) " preservation, especially in the area generally known as Hells Canyon, of all features and peculiarities believed to be biologically unique including but not limited to, rare and endemic plant species...rare combinations of outstanding and diverse ecosystems anti parts of ecosystems associated therewith..."

No additional provisions apply

B. Describe Requirements of Other Legislation

Do other laws require action?

Yes: ☒ **No:** ☐ **Not Applicable:** ☐

Explain:

The Noxious Weeds Act of 1974 designates the FS as the lead agency for noxious weed coordination for USDA and requires establishment of integrated management.

The Hells Canyon National Recreation Area Act (HCNRA) of 1975 states "the Secretary shall administer the recreation area in accordance with the laws, rules, and regulations applicable to the national forests for public outdoor recreation in a manner compatible with the following objectives: . . . (3) preservation . . .

of all features and peculiarities believed to be biologically unique including, but not limited to, rare and endemic plant species, rare combinations of aquatic, terrestrial, and atmospheric habitats, and the rare combinations of outstanding and diverse ecosystems and parts of ecosystems associated therewith."

The Executive Order of February 3, 1999 titled *Invasive Species* requires federal agencies to detect NNIS and respond quickly to infestations.

C. Describe Other Guidance

Does taking action conform to and implement relevant standards and guidelines and direction contained in agency policy, unit and wilderness management plans, species recovery plans, tribal government agreements, state and local government and interagency agreements?

Yes: ☒ **No:** ☐ **Not Applicable:** ☐

Explain:

The Wallowa-Whitman National Forest Land and Resource Management Plan (LRMP) as amended by the Regional Invasive Plant EIS ROD:
Goal 1 - Protect ecosystems from the impacts of invasive plants through an integrated approach that emphasizes prevention, early detection, and early treatment.
Objective 1.5: Control new invasive plant infestations promptly, suppress or contain expansion of infestations where control is not practical, conduct follow up inspection of treated sites to prevent reestablishment.

HCNRA Comprehensive Management Plan
Objective Nox O-1: Manage noxious weeds to reduce negative impacts to native plants, wildlife, and other resources. Use all reasonable and feasible integrated weed management processes available under existing decisions to prevent, restore, eradicate, control, contain, or otherwise reduce negative impacts of noxious weeds

Forest Service National Weed Management Strategy
– Four primary goals of Integrated Weed Management are: 1) increase the understanding and awareness, 2) develop and implement integrated weed management at all levels, 3) institutionalize consideration of noxious weeds during the planning phase of projects, 4) develop strong partnerships.

FS policy on Environmental Management – FSM 2150

2150.3 (3) – Use pesticides in wilderness only when necessary to protect or restore significant resource values within wilderness or on public or private lands bordering wilderness after receipt of the public or private landowner's permission.

2151.04a (1) – Regional Foresters. Regional Foresters are responsible for reviewing and approving or disapproving all proposed pesticide uses on National Forest System lands. The Regional Forester may delegate this authority to other line officers on a case-by-case basis or by supplement to this code, except for the following:

1. Any pesticide use in Wilderness, which includes Wilderness study areas.

Forest Service Policy on Wilderness Management - FSM 2320

2320.3 - Policy
1. Where there are alternatives among management decisions, wilderness values shall dominate over all other considerations except where limited by the Wilderness Act, subsequent legislation, or regulations.
2. Manage the use of other resources in wilderness in a manner compatible with wilderness resource management objectives.

2320.2 - Objectives

2. Maintain wilderness in such a manner that ecosystems are unaffected by human manipulation and influences so that plants and animals develop and respond to natural forces.

2320.5 - Definitions

10. Indigenous Species. Any species of flora or fauna that naturally occurs in a wilderness area and that was not introduced by man.

11. Native Species. Any species of flora or fauna that naturally occurs in the United States and that was not introduced by man.

12. Naturalized Species. Any non-indigenous species of flora or fauna that is close genetically or resembles an indigenous species and that has become established in the ecosystem as if it were an indigenous species.

13. Exotic Species. Any species that is not indigenous, native, or naturalized.

2323.04c – Regional Forester. Unless specifically reserved to the President (FSM 2323.04a_ or the Chief (FSM 2323.04b) or assigned to the forest Supervisor (FSM 2323.04d) or the District Ranger (FSM 2323.04e), the Regional Forester is responsible for approving all measures that implement FSM direction on the use of other resources in wilderness. Specific responsibilities include but are not limited to:

9. Approving the use of pesticides within wilderness.

Note – The Federal Insecticide, Fungicide, and Rodenticide Act of 1947 definition of 'pesticide' includes 'herbicides.'

Non-native invasive species are one of the Chief's 4 Threats to the health of the national forest system.

D. Describe Options Outside of Wilderness

Can this situation be resolved by an administrative activity outside of wilderness?

Yes: ☐ **No:** ☒

Explain:
Control or containment activities outside the wilderness are important, but will not be sufficient to prevent the spread of existing infestations within the wilderness. These infestations are spreading farther into the wilderness each year. The area inside the wilderness must be treated in order to curtail or reduce the spread of the NNIS.

E. Wilderness Character

Is it necessary to take administrative action to preserve wilderness character, as described by the qualities listed below?

Untrammeled: **Yes:** ☒ **No:** ☐

Explain: Whether any action is taken or not, the untrammeled quality of the wilderness is threatened. The spread of noxious weeds will reduce the plant and animal diversity of the wilderness, a key component of why the wilderness was created. The spread of invasive species into the wilderness has at least, in part, been inadvertently aided by human actions (seed introduction, spread along trails and into campsites, etc. To not interfere in some way to "correct" the problem would be a manipulation of the natural processes, because these species are exotic and, without natural or artificial controls, are capable of creating monocultures of non native plants that further impede the untrammeled quality of wilderness.

Undeveloped: **Yes:** ☐ **No:** ☒

Explain: Treatment of NNIS will not increase or decrease any developments in the wilderness areas.

Natural: **Yes:** ☒ **No:** ☐

Explain: The presence of non-native invasive plants (noxious weeds) interferes with the natural conditions of the wilderness resource. Natural, native plant communities can become displaced by exotic species. These, in turn, impact habitat for native fish and wildlife, including invertebrate wildlife.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation:
Yes: ☐ **No:** ☒

Explain: Solitude and primitive types of recreation will not be changed. The unconfined aspect of recreation may be affected since the wilderness recreation experience is in part dependent on the wilderness setting representing a natural and native ecosystem. If non- native invasive species (NNIS) are allowed to spread and eventually replace native vegetation the human experience in wilderness will be effected. The effects include changes in vegetation type and also habitat and the fish and wildlife species that depend on the natural conditions. In turn visitors may choose to avoid areas of NNIS infestations and choose sites not currently impacted

Other unique components that reflect the character of this wilderness:
Yes: ☒ **No:** ☐ **Not Applicable:** ☐

Explain: The Hells Canyon Wilderness Area, in particular, is noteworthy for its extensive stands of native grasslands. These bunchgrass plant communities are among the most vulnerable to invasion by non-native, invasive plant species.

F. Describe Effects to the Public Purposes of Wilderness

Is it necessary to take administrative action in support of the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act) of recreation, scenic, scientific, education, conservation, and historical use?

Recreation: **Yes:** ☒ **No:** ☐ **Not Applicable:** ☐

Explain: The presence and spread of NNIS in the wilderness will degrade the quality of the recreation experience as native species are replaced. This may happen due to the changes in vegetation and effects on scenery, habitat, and capacity for grazing of recreational livestock.

Scenic: **Yes:** ☒ **No:** ☐ **Not Applicable:** ☐

Explain: Noxious weeds have the potential to lower the scenic quality of an area. This would occur with the displacement of diverse native species and replacement of monocultures of plants such as yellow star thistle as seen along the Salmon River.

Scientific: **Yes:** ☒ **No:** ☐ **Not Applicable:** ☐

Explain: The wilderness contains many long-term monitoring plots in native plant communities that serve as benchmarks, against which change to more intensively managed areas of the same community types, can be measured. If these native plant benchmarks change due to invading exotic plants, the ability to measure "natural change" is lost and comparisons of natural "pristine" conditions with managed sites become impossible.

Education: **Yes:** ☒ **No:** ☐ **Not Applicable:** ☐

Explain: The goals and standards as stated in the Region Plant EIS ROD provide direction for the protection of our native vegetation. The Wallowa-Whitman NF has been actively integrating this direction in it's invasive plant programs. Prevention standards are included in the various management plans for activities that occur within or affect wilderness values. These include but are not limited to: range, fire, outfitter and guides, contractors. As of 2007, all wilderness trailheads have been posted with

certified weed free feed requirements. Educational training products have been developed or obtained for fire crews, local fairs and activities, local visitor centers, as well as special group presentations. Invasive Plant management is done as a collaborative effort with various partners in order to manage on a larger landscape scale with long term strategies utilizing integrated weed management tools, including reseeding of natives to prevent encroachment of invasive species.

Conservation: **Yes:** ☒ **No:** ☐ **Not Applicable:** ☐

Explain: NNIS (Noxious weeds) compete with and can displace native plant species further degrading the habitat for native fish and wildlife species. The Eagle Cap and Hells Canyon Wilderness areas are important refuges for rare and endemic plants, some listed threatened under the Endangered Species Act (ESA), where invasion by non-native species is listed as a principal threat to their survival. This is true for both Mirabilis macfarlanei and Silene spaldingii, which both inhabit or have habitat in the Hells Canyon Wilderness. The spread of NNIS can imperil these rare plants. Furthermore, the diversity of other native plants, including less rare, but endemic, plants, as well as the more abundant native grasslands are significantly threatened by the invasion of non-native species. The Salmon River canyon, a short distance from the Hells Canyon Wilderness, has experienced significant alteration of native plant communities by non-native invasive species.

Historical use: **Yes:** ☒ **No:** ☐ **Not Applicable:** ☐

Explain:

- Humans have occupied the HCNRA for at least 7,100 years and probably as long as 10,000 years. Populations increased in the canyon in the late 1800s during the gold-rush and homesteading eras. This era was short-lived and many ranch properties reverted to federal ownership. Some of these sites are still working ranches today.

- Livestock grazing has occurred in the HCNRA for hundreds of years, first by American Indian horses as early as the 1730s. Homesteads and small ranches dotted the landscape in the late 1800s, with cattle and sheep grazing beginning in the latter half of the 19th century. In 1905, over 300,000 domestic sheep grazed Wallowa County, most grazing on NFS lands some part of the year. By 1920 when permits peaked at 108,000 animal unit months, historical photos indicate the range was in very poor condition, especially near homesteads.

- From 1920 to the present, photos indicate gradual improvement of range condition as livestock numbers have decreased, grazing systems have been applied, and range improvements have been developed. In 1995, domestic sheep grazing ceased on the Oregon side of the HCNRA and, by 1998 only 38,620 cattle AUMs were permitted. Some limited areas remain in poor condition because of persistent noxious weed invasion. Improvement in management standards for livestock grazing and riparian management have improved vegetative cover and retained soil-protecting vegetation. In vacant allotments, similar or even greater recovery has resulted except where big-game animal impacts have caused localized problems.

- Three hydropower dams (Hell Canyon Complex) built on the Snake River in the 1960s and 1970s have contributed to altering river flow amounts and time, sediment delivery, water temperature, fish and invertebrate production, and waterfowl use. Other hydropower dams on the Snake River outside the HCNRA above and below these dams have also contributed to these cumulative effects.

- Jet boat use started in the early 1960s and became popular in the late 1970s. Use steadily increased until the early 1990s when the Wild and Scenic *Snake River Recreation Management Plan* (1999 rev) limited jet boat use in the primary season from late May to early September.

- The HCNRA designation in 1975 changed management emphasis from commodity production to providing quality recreation opportunities and meeting the objectives of the *HCNRA Act*. Designation of the Hells Canyon Wilderness at the same time formalized emphasis on primitive settings for over one third of the HCNRA. Wild and Scenic River designation (1975) also emphasized protecting outstandingly remarkable values for the Snake, Imnaha and Rapid rivers.

- Watershed conditions have improved throughout much the HCNRA, but natural events including wildfire, heavy rainfall from summer thunderstorms, winter rain-on-snow events, and related

flooding (including records floods in 1997) have worsened watershed conditions with some localized areas across the HCNRA. Several streams have limited water quality due to sediment. Historic fire exclusion has created a build up of fuels in both grasslands and forestlands. Approximately 325, 000 acres have burned across the HCNRA in the last 16 years.

- Approximately 23,000 acres of forest was harvested for timber by various methods before the creation of the HCNRA in 1975. An estimated 31,472 acres has been harvested since using selective harvest methods. Approximately 20 percent of the forested areas have received some type of vegetative treatment to improve vigor. Ponderosa pine, western larch, and white pine have decreased across their range in the Interior Columbia Basin and transitioned to Douglas fir and grand/white fir, Engelmann spruce, and subalpine fir. Generally, mid-seral forest structures have increased in dry and moist forests with a loss of large, scattered trees that prefer open areas.

Step 1 Decision: Is any administrative action necessary?

Yes: ☒ **No:** ☐ **More information needed:** ☐

Explain: Yes. Treatment of NNIS in the wilderness area is a non-emergency administrative action which has been delegated to the Forest Supervisor upon meeting national requirements. The threats to the wilderness and adjacent lands from non-native invasive species are significant. These infestations are still relatively small, can be contained and, in some cases, eradicated. Without the use of herbicides to control these NNIS the natural quality of the wilderness character action is threatened. Therefore, action is necessary.

If action is necessary, proceed to Step 2 to determine the minimum activity.

Step 2: Determine the minimum activity.

Description of Alternatives

For each alternative, describe what methods and techniques will be used, when the activity will take place, where the activity will take place, what mitigation measures are necessary, and the general effects to the wilderness resource and character.

Actions common to all alternatives:
Herbicide treatment of non-native invasive species covering 874 acres in the three wilderness areas. A total of 348 acres are accessible to ground-based packstock or backpack spray methods; and 526 acres are inaccessible to packstock due to rough terrain or remote distance from trailheads.

Alternative # A

Description: Hand pump-sprays mounted on backpack or livestock on 348 acres (265 ac. -Hells Canyon, 81 ac.- Eagle Cap, 2 ac. - Monument Rock). Manual methods would be used on 5 acres.

Herbicide use by backpack and horseback spraying would occur at the appropriate time of the year to maximize the effectiveness of the treatment be it a manual hand pulling/ cutting treatment or herbicide treatment.

Effects:

Wilderness Character

"Untrammeled" – Work crews would have small effect on the untrammeled quality of wilderness. Temporary dead or dying vegetation from herbicide application on 348 acres would have an effect on the "untrammeled" quality of the wilderness. This would last during the growing season when herbicides were applied.

"Undeveloped" – There is no effect on the undeveloped quality of wilderness character.

"Natural" – Effective NNIS treatment would enhance the natural quality by restoring native vegetation and reducing the influence of non-native species on all components of the wilderness resource. Inability to access 526 remote acres by livestock would allow for the spread of invasive plant populations to other areas, thereby decreasing "natural" quality of the wilderness.

"Outstanding opportunities for solitude or a primitive and unconfined type of recreation" – In the short term- the presence of treatment crews may adversely affect the wilderness experience of those in the area. In the long-term the restoration of native vegetation will serve to enhance the wilderness recreation experience.

Heritage and Cultural Resources – No effect

Maintaining Contrast and Skills – No effect

Special Provisions –

Safety of Visitors, Personnel, and Contractors – The remoteness and extreme topography of 60% of the sites to be treated adds significant risks to personnel and contractors conducting spray operations. Some sites may not be accessible. Because of greater time involved in transporting herbicides (days as opposed to minutes) there is greater exposure to herbicide spills.

Economic and Time Constraints – Because of the long distances from wilderness trailheads to the project sites, there would be significant costs in transporting project materials. Ground based herbicide treatments in Hells Canyon wilderness are estimated at $310 per acre. This would total about $271,000 for 874 acres, assuming all sites could be accessed and treated with these methods.

Additional Wilderness-specific Comparison Criteria – None identified

Alternative # B

Description: Backpack or Packstock Herbicide Use 348 acres using battery-power pump sprayers (265 ac. - Hells Canyon, 81 ac. - Eagle Cap, 2 ac.- Monument Rock). Manual methods would be used on 5 acres.

This alternative is identical to Alternative A except that power-pump sprayers would be used instead of hand-pump sprayers.

Effects:

Wilderness Character

"Untrammeled" – Work crews would have small effect on the untrammeled quality of wilderness. Temporary dead or dying vegetation from herbicide application on 348 acres would have an effect on the "untrammeled" quality of the wilderness. This would last during the growing season when herbicides were applied.

"Undeveloped" – There is no effect on the undeveloped quality of wilderness character.

"Natural" – Effective NNIS treatment would enhance the natural quality by restoring native vegetation and reducing the influence of non-native species on all components of the wilderness resource. The inability to access 526 remote acres by livestock would allow for the spread of invasive plant populations to other areas, thereby decreasing "natural" quality of the wilderness.

"Outstanding opportunities for solitude or a primitive and unconfined type of recreation" – In the short term- the presence of treatment crews may adversely affect the wilderness experience of those in the area. In the long-term the restoration of native vegetation will serve to enhance the wilderness recreation experience. The use of battery-powered pump sprayers may add slightly more noise than hand-powered pumps, but these style pumps are relatively quiet. Any noise generated by these sprayers would be restricted to the immediate area. Few visitors, if any, would have their experience disrupted by the noise of these sprayers. The pumps appear more or less the same as hand-powered pump sprayers. The use of battery-powered sprayers would decrease the amount of time spraying compared to hand-powered pumps, thus decreasing the amount of time crews spend in the wilderness and thereby reducing impacts to the opportunities for solitude and primitive recreation.

Heritage and Cultural Resources – No effect

Maintaining Contrast and Skills – N/A

Special Provisions – N/A

Safety of Visitors, Personnel, and Contractors – The remoteness and extreme topography of 60% of the sites to be treated adds significant risks to personnel and contractors conducting spray operations. Some sites may not be accessible. Because of greater time involved in transporting herbicides (days as opposed to minutes) there is greater exposure to herbicide spills.

Economic and Time Constraints – Because of the long distances from wilderness trailheads to the project sites, there would be significant costs in transporting project materials. Ground based herbicide treatments in Hells Canyon wilderness are estimated at $310 per acre. This would total about $271,000 for 874 acres, assuming all sites could be accessed and treated with these methods. Using battery powered sprayers would decrease project costs, though this is difficult to quantify.

Additional Wilderness-specific Comparison Criteria – None identified

Alternative # C

Description: Packstock and backpack sprayers would be used to apply herbicides on 348 acres (265 ac. - Hells Canyon, 81 ac.- Eagle Cap, and 2 ac.- Monument Rock) and **a helicopter would be used to apply herbicides on 526 acres in the Hells Canyon Wilderness.** Manual methods would be used on 5 acres.

Herbicide application would be by backpack and packstock using battery-powered sprayers and would occur at the appropriate time of the year to maximize the effectiveness of the treatment (depending on the species, late spring or fall). Non-mechanical transport methods (foot and stock travel) would be used to move herbicide, people, and supplies to treatment areas. Helicopter landings in the wilderness would not occur.

Effects:

Wilderness Character

"Untrammeled" – Treatment of invasive weed infestations within wilderness can be viewed as human manipulation. There will be short-term evidence of weed treatments including dead or wilting plants. These effects would persist only during the same growing season as the invasive plant treatment. Only 874 acres would be treated by both ground and aerial based methods out of a total 586,779 wilderness acres). In the Hells Canyon Wilderness, 796 acres of 214,994 acres would be treated.

"Undeveloped" – There is no effect on the undeveloped quality of wilderness character.

"Natural" – Using helicopters would enable 526 acres to be treated effectively. This would enhance the natural quality of the wilderness by restoring native vegetation and reducing the impacts of non-native invasive species on all other components of the wilderness resource.

"Outstanding opportunities for solitude or a primitive and unconfined type of recreation" – In the short term, the presence of treatment crews may adversely affect the wilderness experience of visitors in the area. The use of helicopters would adversely affect the experience of solitude and unconfined recreation. Most sites proposed for aerial application are within 1.5 miles of the Wild and Scenic Snake River corridor, an area authorized for jet boat use by permit: visitors in the Hells Canyon Wilderness in areas near the river (up to 2 miles) already experience noise from jetboats. However, the use of helicopters would probably occur over far fewer days than in alternatives A or B. An analysis showed that the estimated time of helicopter flight time to treat 526 acres would not exceed 4 hours. Aerial application operations would probably occur over a one or two-day period during midweek. Trailheads leading to treatment areas would be posted with the dates of herbicide treatment, affording potential visitors to select another portion of the wilderness to recreate.

Heritage and Cultural Resources – None identified

Maintaining Contrast and Skills – N/A

Special Provisions - Section 4(d): "...the use of aircraft... may be permitted...subject to such restrictions as the Secretary of Agriculture deems desirable..."

Safety of Visitors, Personnel, and Contractors - There is a risk to crews from working with herbicides, tools, and stock and from travelling over rugged terrain. Effects on visitors can be minimized by posting trailheads and visitor centers alerting them to the areas and dates of herbicide treatments.

Economic and Time Constraints – Using helicopters for herbicide spraying would decrease project time considerably. The cost estimates for aerial herbicide treatments are $42/acre. This would total about $22,000 for 526 acres. Ground based herbicide treatments in Hells Canyon wilderness are estimated at $310 per acre. This would total about $108,000 for 348 acres. Implementing the treatment using only traditional non-motorized skills to deliver materials to the ground-based job sites would increase the project time and costs. For the wilderness cost estimates for Alternative C would total about $130,000, a figure less than half the costs estimated for Alternatives A and B.

Additional Wilderness-specific Comparison Criteria – None identified.

Alternative # __D_

Description: Packstock and backpack sprayers would be used to apply herbicides on 348 acres (265 ac. Hells Canyon, 81 ac. Eagle Cap, and 2 ac. Monument Rock) and **a helicopter would be used to apply herbicides on 526 acres in the Hells Canyon Wilderness.** Manual methods would be used on 5 acres.

Herbicide application would be by backpack and packstock using battery-powered sprayers and would occur at the appropriate time of the year to maximize the effectiveness of the treatment (late spring or fall). Both non-mechanical and helicopters would be used to transport supplies. Helicopter landings in the wilderness would not occur.

Effects:

Wilderness Character

"Untrammeled" – Treatment of invasive weed infestations within wilderness can be viewed as human manipulation. There will be short-term evidence of weed treatments including dead or wilting plants. These effects would persist only during the same growing season as the invasive plant treatment. Only Only 874 acres would be treated by both ground and aerial based methods out of a total 586,779 wilderness acres). In the Hells Canyon Wilderness, 796 acres of 214,994 acres would be treated.

"Undeveloped" – There is no effect on the undeveloped quality of wilderness character.

"Natural" – Using helicopters would enable 526 acres to be treated effectively. This would enhance the natural quality of the wilderness by restoring native vegetation and reducing the impacts of non-native invasive species on all other components of the wilderness resource.

"Outstanding opportunities for solitude or a primitive and unconfined type of recreation" – In the short term, the presence of treatment crews may adversely affect the wilderness experience of visitors in the area. The use of helicopters would adversely affect the experience of solitude and unconfined recreation. Most sites proposed for aerial application are within 1.5 miles of the Wild and Scenic Snake River corridor, an area authorized for jet boat use by permit: visitors in the Hells Canyon Wilderness in areas near the river (up to 2 miles) already experience noise from jet boats. However, the use of helicopters would probably occur over far fewer days than in alternatives A or B. An analysis showed that the estimated time of helicopter flight time to treat 526 acres would not exceed 4 hours. Aerial application operations would probably occur over a one or two-day period during midweek.

Additional helicopter flight time would occur from the transport of materials closer to the job sites in the wilderness. It's difficult to quantify the flight time for this, but given the short distances from lift-off locations outside the wilderness to the job sites, the flights are not likely to exceed 30 minutes, probably less. Furthermore, trailheads leading to treatment areas would be posted with the dates of herbicide treatment, affording potential visitors to select another portion of the wilderness to recreate to avoid interruptions of solitude.

Heritage and Cultural Resources – None identified

Maintaining Contrast and Skills -

Special Provisions - Section 4(d): "...the use of aircraft... may be permitted...subject to such restrictions as the Secretary of Agriculture deems desirable..."

Safety of Visitors, Personnel, and Contractors - There is a risk to crews from working with tools and stock and from travelling over steep, rugged terrain with slopes exceeding 120%. The risk to employees and contractors would likely be less than other alternatives because the use of helicopters to transport materials to the job sites would reduce the exposure of crews to the hazards of haluling supplies over treacherous terrain. Effects on visitors can be minimized by notifying the public of the areas and times of treatment.

Economic and Time Constraints - Using helicopters for herbicide spraying would decrease project time considerably. The cost estimates for aerial herbicide treatments are $42/acre. This would total about $22,000 for 526 acres. Ground based herbicide treatments in Hells Canyon wilderness are estimated at $310 per acre. This would total about $108,000 for 348 acres. These costs may be reduced using helicopters to transport supplies to the job site, though this would be difficult to quantify. This alternative would probably cost less than alternative C.

Additional Wilderness-specific Comparison Criteria – None identified.

Alternative	Acres treated	Non-motorized methods	Motorized/mechanized transport methods
A	348 acres: Hells Canyon = 265 Eagle Cap = 81 Monument Rock = 2 (5 acres = hand treatment)	All acres = herbicide application via backpack and horseback hand-pump spraying	N/A
B	348 acres: Hells Canyon = 265 Eagle Cap = 81 Monument Rock = 2 (5 acres = hand treatment)	N/A	All acres - herbicide application via power-pump backpack and horseback sprayers
C	348 acres: Hells Canyon = 265 Eagle Cap = 81 Monument Rock = 2 (5 acres = hand treatment) 526 acres = Hells Canyon	Non-mechanical transport methods (foot and stock travel) would be used to move herbicide, people, and supplies to treatment areas No wilderness landings/transport	348 acres - herbicide application via battery-pump backpack and horseback sprayers 526 acres - aerial helicopter
D	348 acres: Hells Canyon = 265 Eagle Cap = 81 Monument Rock = 2 (5 acres = hand treatment) 526 acres = Hells Canyon	No helicopter landings in the wilderness	348 acres - herbicide application via battery-pump backpack and horseback sprayers 526 acres - aerial helicopter Both non-mechanical and helicopters would be used to transport supplies.

Step 2 Decision: What is the Minimum Activity?

The selected alternative is: Alternative #D

Herbicide use by backpack, horseback spraying and helicopter aerial application would occur at the appropriate time of the year to maximize the effectiveness of the treatment. When possible, high use periods of recreation will be avoided. The Forest will follow the Regional Guidelines and forest plan standards for effective public notification and all herbicide use applications.

Describe the rationale for selecting this alternative:

This alternative provides effective control with the minimum use of herbicide and mechanical transport and aerial application methods.

- Alternative D will effectively access and treat all invasive plant infestations in the wilderness thereby promoting and sustaining natural conditions for which the wilderness was established.
- Alternative D reduces the exposure of forest crews and contractors to hazards associated with hauling supplies for great distances over rough terrain.
- Alternative D will halve approximately the costs for managing invasive plants in the wilderness.
- Alternative D will not substantially impact the untrammeled, natural, undeveloped, or outstanding opportunities for solitude or a primitive and unconfined type of recreation of the wilderness character of the Hells Canyon, Eagle Cap or Monument Rock Wilderness areas.

Describe any monitoring and reporting requirements:

Monitoring of all treatment areas will be conducted, as outlined in the EIS, in all areas to determine treatment effectiveness and to minimize future treatments.

Please check any Wilderness Act Section 4(c) uses approved in this alternative:

☒ Mechanical transport	☐ landing of aircraft
☒ Motorized equipment	☐ temporary road
☐ Motor vehicles	☐ structure or installation
☐ Motorboats	

Be sure to record and report any authorizations of Wilderness Act Section 4(c) uses according to agency procedures.

Approvals	Signature	Name	Position	Date
Prepared by:		Eugene H. Yates	Forest Botanist	
Recommended:		Dan Ermovick	Recreation Program Manager	
Approved:		Steven A. Ellis	Forest Supervisor	