



— BUREAU OF —
RECLAMATION

Environmental Assessment

Columbia Basin Wildlife Area

Prescribed Fire Project

Grant County, Washington

Columbia-Pacific Northwest Region



Mission Statements

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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.

Cover photograph: view of the Columbia Basin Wildlife Area, Grant County, Washington.

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Acronyms and Abbreviations

Acronym or Abbreviation	Definition
BA	Biological Assessment
CAA	Clean Air Act
CCT	Confederated Tribes of the Colville Reservation
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
DAHP	Washington Department of Archaeology and Historic Preservation
DOE	Washington State Department of Ecology
EA	Environmental Assessment
EPA	Environmental Protection Agency
ESA	Endangered Species Act of 1973
°F	Degrees Fahrenheit
FONSI	Finding of No Significant Impact
IPM	Integrated Pest Management
ITA	Indian Trust Asset
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966
Potholes RMP	Potholes Reservoir Resource Management Plan
Reclamation	Bureau of Reclamation
SHPO	State Historic Preservation Office
SMP	Smoke Management Plan
TEV	Tall Emergent Vegetation
USFWS	U.S. Fish and Wildlife Service
WA DNR	Washington Department of Natural Resources
WDFW	Washington Department of Fish and Wildlife
Wildlife Area	Columbia Basin Wildlife Area

Chapter 1 Purpose and Need

1.1 Introduction

The Bureau of Reclamation (Reclamation) has prepared this Environmental Assessment (EA) pursuant to the National Environmental Policy Act of 1969 (NEPA). This EA analyzes potential effects associated with a northern leopard frog and waterfowl habitat improvement project proposed by the Washington Department of Fish and Wildlife (WDFW) on Reclamation-owned lands within the Columbia Basin Project. The proposed action uses prescribed burns and herbicide applications to modify shoreline vegetation to conditions favorable to northern leopard frog.

1.2 Background

In 2003, Reclamation and WDFW entered into a Management Agreement (Reclamation 2003) which allows WDFW to manage invasive weeds and wildlife habitat on Reclamation-owned lands as part of the Columbia Basin Wildlife Area (Wildlife Area). While most management actions are implemented by WDFW on these lands, Reclamation is responsible for analyzing projects under NEPA to ensure that management is consistent with applicable federal laws and that appropriate consultation and public review is completed.

Wildlife Area lands are managed for upland and wetland wildlife habitat. The Potholes Reservoir Resource Management Plan (Potholes RMP) identifies vegetation and weed control management goals that include the identification and reduction of undesirable weed species and allows for limited herbicide applications to enhance wildlife habitat (Reclamation 2002). Invasive tall emergent vegetation (TEV) is overgrowing shallow wetland areas within the North Potholes Unit and the Frenchman Unit of the Wildlife Area. This encroachment limits the growth of native wetland vegetation and fills in shoreline areas that once had open water; limiting access by recreationists such as hunters, anglers, and birdwatchers. Native wetland plant communities and open shorelines provide essential habitat for the northern leopard frog (*Lithobates pipiens*; Washington State Endangered Species and Species of Special Concern) as well as for waterfowl and other migratory birds.

The project area is centrally located within the Columbia Basin Physiographic Province. The province is defined by steep river canyons, extensive plateaus, and, in some places, tall and sinuous ridges (WA DNR 2020). The project area consists of the North Potholes Unit and the Frenchman Unit of the Wildlife Area. The North Potholes Unit is located north of Potholes Reservoir and the Frenchman Unit is located west of Potholes Reservoir along the Frenchman waterway. Habitat within the project area is primarily shoreline, riparian, and wetland habitat. Precipitation as rainfall varies from year to year; however, the average at Moses Lake, Washington, a city located north of the project area, averages about 9 inches per year. The average high temperature at Moses Lake is 62.5°F and the average low temperature at this

location is 38.6°F (U.S. Climate Data 2020). The average elevation for the project is approximately 1,200 feet above mean sea level. Potholes Reservoir State Park is located near the proposed burn areas and is open year-round. Also located near the burn areas are the Columbia Basin Wildlife Refuge, managed by the U.S. Fish and Wildlife Service (USFWS), and the Desert Unit of the Wildlife Area, managed by WDFW. These areas are at the base of O’Sullivan Dam, which creates Potholes Reservoir. Moses Lake is the closest city (see Map 1 in Appendix A).

Prescribed fire is a land management tool that can enhance wildlife habitat by reducing the fuel load of accumulating dead and live vegetation. Prescribed fires are typically applied during the late fall, winter, and early spring months to take advantage of higher vegetation moisture and cooler air temperatures; this timing makes it easier to control the behavior of the fire.

The proposed action is to grant approval for WDFW to use prescribed fire and herbicide to improve breeding and foraging habitat in the North Potholes Unit for northern leopard frog and improve nesting habitat in the Frenchman Unit for waterfowl and other migratory birds. This action would increase access to shoreline area for hunters, anglers, and bird watchers in both units. These habitat improvements would be completed through prescribed fire and herbicide application targeted to reduce the presence of TEV in shallow wetland areas within the two units. Maps showing the project locations are included in Appendix A.

1.3 Purpose and Need for Action

Reclamation’s purpose is to facilitate WDFW’s continuing management of Wildlife Area lands by approving prescribed fire and herbicide application within the North Potholes Unit and the Frenchman Unit in order to remove TEV from northern leopard frog habitat. The need for the action is to ensure management consistent with the Potholes RMP by improving nesting, foraging, and breeding habitat for the northern leopard frog and waterfowl and other migratory birds, and to increase access for recreationists.

1.4 Regulation and Guidance

The major laws, executive orders, and secretarial orders listed below apply to the proposed project, and compliance with their requirements is documented in this EA.

- Clean Air Act: The Clean Air Act of 1970, as amended, was established to protect public health and welfare from different types of air pollution caused by a diverse array of pollution sources. Oversight is given to the State of Washington to authorize emissions permits, including burn permits. Reclamation has the responsibility to evaluate the potential impacts of its decision on air quality.
- Clean Water Act: The Clean Water Act employs a variety of regulatory and nonregulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. These tools are employed to achieve the broader goal of restoring and maintaining the chemical,

physical, and biological integrity of the Nation's waters so that they can support the protection and propagation of fish, shellfish, and wildlife, as well as recreation in and on the water.

- **Endangered Species Act:** The Endangered Species Act (ESA) requires federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Section 7 of the ESA (16 United States Code Section 1536[a][2]) requires all federal agencies to consult with the National Marine Fisheries Service for marine and anadromous species, or the U.S. Fish & Wildlife Service (USFWS) for freshwater and wildlife species, if an agency is proposing an action that may affect listed species or their designated habitat. If such species may be present, the federal agency must conduct a biological assessment (BA) for analyzing the potential effects of the project on listed species and critical habitat to establish and justify an effect determination. Agencies must use their authorities to conserve listed species and ensure their actions do not jeopardize the continued existence of listed species.
- **Federal Noxious Weed Act:** The Federal Noxious Weed Act of 1974 ((7 USC §§ 2801-2814, January 3, 1975, as amended in 1988 and 1994) provides for the control and eradication of noxious weeds and the regulation of the movement in interstate or foreign commerce of noxious weeds.
- **Federal Insecticide Fungicide and Rodenticide Act:** The Federal Insecticide, Fungicide, and Rodenticide Act of 1947 directs all federal agencies to use an Integrated Pest Management (IPM) approach to manage pests. The goal of IPM is to manage pests and invasive species, with consideration to the environment to balance cost, benefits, public health, and environmental quality.
- **NEPA:** Reclamation is responsible for determining if the proposed action might have significant effects to the human environment under NEPA. If Reclamation determines that effects are not significant, a finding of no significant impact (FONSI) will be prepared. A FONSI would allow Reclamation to proceed with the proposed action without preparation of an Environmental Impact Statement.
- **National Historic Preservation Act:** The National Historic Preservation Act (NHPA) of 1966 (16 USC 470, Public Law 89-665) requires that federal agencies complete inventories and site evaluation actions to identify historic resources that may be eligible for inclusion on the National Register of Historic Places (National Register) and ensure those resources, “are not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.” Regulations titled, “Protection of Historic Properties,” Code of Federal Regulations (CFR) 36-800, define the process for implementing requirements of the NHPA, including consultation with the appropriate State Historic Preservation Office (SHPO) and the Advisory Council on Historic Preservation.

- Migratory Bird Treaty Act: The Migratory Bird Treaty Act of 1918 (16 USC 703-712, as amended) and Executive Order 13186 - Responsibilities of Federal Agencies to Protect Migratory Birds, require federal agencies to protect and conserve migratory bird species.
- Executive Order 12898 - Environmental Justice: Executive Order 12898, dated February 11, 1994, instructs federal agencies, to the greatest extent practicable and permitted by law, to make achieving environmental justice part of its mission by addressing, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations. Environmental justice means the fair treatment of people of all races, income, and cultures with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental impacts resulting from the execution of environmental programs.
- Executive Order 13007 – Indian Sacred Sites: Executive Order 13007, dated May 24, 1996, instructs federal agencies to promote accommodation of access to and protect the physical integrity of American Indian sacred sites. A “sacred site” is a specific, discrete, and narrowly delineated location on federal land. An Indian Tribe or an Indian individual determined to be an appropriately authoritative representative of an Indian religion must identify a site as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion, provided that the tribe or authoritative representative has informed the agency of the existence of such a site.
- Secretarial Order 3157- Responsibilities for Indian Trust Assets: Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States with the Secretary of the Interior acting as trust for Indian Tribes or Indian individuals. Examples of ITAs are lands, minerals, hunting and fishing rights, and water rights. In many cases, ITAs are on-reservation; however, they may be found off-reservation.
- The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian Tribes or Indian individuals by treaties, statutes, and executive orders. These rights are sometimes further interpreted through court decisions and regulations. This trust responsibility requires that officials from federal agencies, including Reclamation, to take all reasonable actions necessary to protect ITAs when administering programs under their control.

Chapter 2 Description of Alternatives, Including the Proposed Action

Since this EA analyzes an externally-generated project, developed by WDFW in coordination with USFWS, this section is limited to: a No Action Alternative; and the Proposed Action Alternative, as it was presented to Reclamation.

2.1 Alternative A – No Action Alternative

Under Alternative A, Reclamation would not authorize the use of prescribed fire and herbicide applications on Reclamation lands within the North Potholes and Frenchman Units of the Wildlife Area. TEV would continue to encroach in shoreline areas. The quality of habitat for the northern leopard frog and waterfowl would continue to decline, and access by recreationists would continue to be restricted.

2.2 Alternative B – Proposed Action Alternative

Under Alternative B, Reclamation would authorize WDFW to use prescribed fire and herbicide applications to remove TEV in shoreline areas on Reclamation lands within the North Potholes Unit and Frenchman Unit of the Wildlife Area beginning late winter 2020. The burned areas would be maintained through subsequent applications of herbicide and prescribed burns for up to 5 years.

2.2.1 General Project Goals

The prescribed burns would be implemented in late winter 2021, followed by herbicide applications in August and September to prevent regrowth of TEV. Repeat burns and herbicide application may be required over the following 5 years. The prescribed fires would remove standing dead TEV to allow for better herbicide contact when applied during the growing season. The goal is to achieve 75 to 90 percent consumption of TEV stems in order to allow suitable habitat for northern leopard frog egg mass attachment.

The proposed action is divided into two distinct units on opposite sides of the Potholes reservoir. Each unit is described below.

- North Potholes Unit: This prescribed fire unit is approximately 0.5 miles south of Highway I-90 and 2.0 miles west of the city of Moses Lake (see Map 2 in Appendix A). The treatment prescription includes a winter prescribed fire, followed by an application of herbicide the following late summer to early fall (late August or early September 2021). There will be a minimum of 100 acres of shoreline in 31 ponds treated to remove TEV.

- Frenchman Unit: This unit is located approximately 1.0 mile north of Frenchman Hill Road and 1.5 miles west of Road 5C SE (see Map 3 in Appendix A). Prescribed fire and herbicide applications would treat roughly 152 acres of wetland habitat.

2.2.2 Prescribed Fire

To mitigate any negative effects to wildlife in the area, the prescribed fire would be implemented during the winter when water levels are at their lowest, vegetation is dormant, amphibians are overwintering, and waterfowl and shoreline birds are not nesting. The total wetland area affected would be approximately 252 acres.

Prescribed burning would take approximately 15 working days, but given limitations with weather, high wind, stagnant air, etc., burning could take up to 45 days to complete. The prescribed fire would be conducted by trained wildland firefighters that have current applicable certifications. A 200-gallon fire engine, one marsh tractor, and one utility trailer would be present during all prescribed burning. All staging would occur on established roadways.

A burn plan would be drafted per federal fire standards and be approved by Reclamation. The burn plan would incorporate the goals as described in the proposed action. The prescribed burns would only move forward under optimum conditions for burning as described in the burn plan. WDFW would obtain all applicable permits from the State of Washington prior to burning.

2.2.3 Herbicide Treatment

Herbicide applications would be completed in late August to early September. WDFW would use a helicopter outfitted with herbicide spraying equipment. Aquatically labeled imazapyr (e.g., Polaris AC Complete®) would be applied at a maximum rate of 8 pints per acre per year, across two applications, with ammonium sulfate (Bronc Max EDT®) as a surfactant. All applications of imazapyr would adhere to the EPA-approved instructions on the label for a specified product. All herbicide applications would be performed by trained personnel that hold State Applicators Licenses. Herbicide application would take about 8 working hours to complete. WDFW would be responsible for providing appropriate public notice in advance of aerial applications. Working hours would be dependent on weather conditions (wind speed, temperature, etc.).

2.2.4 Monitoring

WDFW would continue to monitor and manage the project areas for noxious weeds and invasive plants as part of the Management Agreement and as outlined the Potholes RMP.

Chapter 3 Affected Environment and Environmental Consequences

3.1 Introduction

Project discussions and design considerations were coordinated with resource specialists with Reclamation's Ephrata Field Office, WDFW, and USFWS. Through this effort, the following resources were identified for further analysis in this EA: Air Quality, Recreation, Vegetation, and Wildlife.

3.2 Issues Considered but Not Carried Forward for Analysis

It was determined that the resource areas listed below would not be evaluated in this EA because no discernable impact would result from the proposed action.

- **Climate:** Prescribed fires produce CO₂ and other greenhouse gases, but the effects are short term and dispersed in time and space compared to a large-scale wildfire. In addition, prescribed burns would adhere to air quality and emission standards.
- **Cultural Resources:** A reconnaissance cultural resource survey was completed in late fall 2019. No chemical or fire-sensitive cultural resources were identified in the project area; therefore, the proposed project would have no effect on historic properties. Reclamation consulted with the Washington Department of Archaeology and Historic Preservation (DAHP), the Confederated Tribes of the Colville Reservation (CCT), and the Yakama Nation regarding the inventory findings and project effects in early 2020 and the tribes and DAHP concurred with Reclamation's determination of No Historic Properties Affected. WDFW prepared an inadvertent discovery plan to address the discovery of cultural resources during project implementation and is committed to working with the CCT on a post-burn inventory to identify culturally important plants and cultural resources exposed through vegetation removal. DAHP's concurrence letter and the inadvertent discovery plan are provided in Appendix B.
- **Environmental Justice:** The proposed action would not have a disproportionately high or adverse human health or environmental effect on minority and low-income populations.
- **Indian Trust Assets:** In order to determine the presence of trust lands within the project area, Reclamation queried its geospatial database that identifies these lands. No lands were identified within 25 miles of the project area.
- **Migratory Birds:** The proposed action would be completed before nesting season for migratory birds; therefore, there would be no impact on this resource.

- **Noise:** Noise generated by the helicopter during herbicide application would be temporary, limited to the time while the helicopter is in the air applying the herbicide. The application would be done in the late summer or early fall, outside of waterfowl and shoreline bird nesting seasons.
- **Socioeconomics:** The project is too small to have socioeconomic impacts.
- **Threatened and Endangered Species:** Because the USFWS provided funding for the portion of the project associated with northern leopard frog habitat improvement, it completed a BA for the proposed action in October 1, 2019. The USFWS determined that suitable habitat is not present for any listed, proposed, or candidate species except for the gray wolf and pygmy rabbit. The USFWS issued a No Effect determination for these species in October 2019. The BA is attached as Appendix C.
- **Water Quality:** No long-term effects on water quality would occur during or after the implementation of the prescribed burn. Application of pesticides would be per label instructions. Application would be completed by trained and qualified personnel that hold aquatic and terrestrial applicator's licenses.
- **Wild and Scenic Rivers:** There are no Wild and Scenic Rivers in the project area; therefore, no effect would occur with the proposed action.

3.3 Issues Carried Forward for Analysis

3.3.1 Air Quality

Affected Environment

The Potholes Reservoir, Frenchman Wasteway, and surrounding areas typically have good air quality and are in attainment for all National Ambient Air Quality Standards set by the Environmental Protection Agency (EPA 2019). Smoke is generally considered a nuisance and can cause health concerns for some members of the public. Carbon monoxide and particulate matter are produced in wood smoke and are regulated by the Clean Air Act (CAA). The Washington State Department of Ecology (DOE) monitors and enforces regulations that all state and federal agencies must follow before a prescribed fire can be ignited. Smoke is created in both prescribed fire and wildfire events.

Nearby communities such as Moses Lake and McDonald, Washington experience temporary air quality degradation from wood fires used to heat homes, campfires at Potholes Reservoir State Park, private pile burns, and agricultural burns.

Class I airsheds are established by the CAA and are areas where visibility contributes to the aesthetic quality of the area. Class I airsheds are the National Parks and wilderness areas located to the southwest, west, and northwest of the project area in the Cascade Mountain Range. All Class I airsheds are more than 100 miles away from the proposed project area.

Environmental Consequences

Alternative A – No Action

Under Alternative A, Reclamation would not authorize the use of prescribed fire on Reclamation lands within the North Potholes and Frenchman Units of the Wildlife Area. Air quality would remain unchanged.

Alternative B – Proposed Action

Under Alternative B, Reclamation would authorize WDFW to use prescribed fire to remove TEV in shoreline areas within the North Potholes and Frenchman Units of the Wildlife Area for up to a 5-year period beginning late winter 2021. There would be no long-term effect on air quality due to the proposed action; however, short-term effects are anticipated. Emissions from the prescribed fire would be released during burning. Notification to and coordination with the DOE Air Quality program would occur before burning. The Burn Boss (qualified WDFW representative) would determine if conditions meet standards set by the agreement. Personnel would monitor weather conditions in the area and ignition operations would be modified or halted if these conditions are deemed to result in excessive emissions per the DOE Smoke Management Plan (SMP).

The project area is not within an area of non-attainment or areas where total suspended particulates or other criteria pollutants exceed air quality standards. For each prescribed burn, the WDFW would draft a burn plan that meets federal standards for prescribed fire. This burn plan would be approved by Reclamation and would comply with the State Smoke Management Plan (WA DNR 1998).

Due to the project's distance from Class I airsheds, the effects to the airshed as a result of prescribed fire are expected to be negligible. The proposed fire areas are small and localized, and fires would be of short duration. Smoke in Potholes Reservoir State Park and the wildlife areas below O'Sullivan Dam would be a temporary nuisance for the duration of the fire.

Cumulative Impacts

The only past and present actions in the Potholes Reservoir and surrounding areas are activities related to camping and boating at Potholes Reservoir State Park and day-to-day activities related to farming of private lands. From an air quality standpoint; past and present actions include smoke generated from woodstoves, fireplaces, campfires, pile burning on private land, and agricultural burns. Because Reclamation does not have any proposals in or near the project area, there are no reasonably foreseeable actions. The proposed project would be completed during the time of year where most of the smoke in the area is generated from wood fires used to heat homes and campfires at the State Park. The smoke generated by the project would add slightly to the existing smoke levels and would be short in duration.

3.3.2 Recreation

Affected Environment

Recreation activities along the shoreline and wetland areas of the North Potholes and Frenchman Units of the Wildlife Area include hiking, hunting, fishing, and birdwatching. Access to the shoreline areas is impeded by TEV because its density makes navigation on foot or by boat extremely difficult. TEV also blocks the access to open water that is needed by anglers to cast lines and by birdwatchers and hunters to see game and wildlife.

Environmental Consequences

Alternative A – No Action

Under Alternative A, Reclamation would not authorize the use of prescribed fire on Reclamation lands within the North Potholes and Frenchman Units of the Wildlife Area. Recreationists would continue to have difficulty in accessing the area for purposes of fishing, hunting, and bird watching.

Alternative B – Proposed Action Alternative

Under Alternative B, Reclamation would authorize the use of prescribed fire to remove TEV in shoreline areas within the North Potholes and Frenchman Units of the Wildlife Area. The prescribed burn would be performed outside of hunting season for waterfowl. Anglers, birdwatchers, and other recreational users in the area would be temporarily displaced during burning and aerial herbicide applications for safety reasons, but these users would be allowed to access the area shortly thereafter. The prescribed fire would provide a net benefit to recreation in the area by expanding access and enhancing natural resources through removal of TEV.

Cumulative Effects

The past and present actions in the Potholes Reservoir and surrounding area include the recreation activity that occurs at Potholes Reservoir State Park, WDFW areas surrounding Potholes Reservoir, and the Columbia Basin Wildlife Refuge; and day-to-day farming activities that occurs on private lands. Because Reclamation does not have any proposals in or near the project area, there are no reasonably foreseeable actions. The proposed project would be implemented during the time of year where there are fewer recreational visitors in the area. Recreationists would be temporarily displaced from the areas of the prescribed fire. It is expected that the number of people moved to recreate in other areas during the fire would be small, and the associated temporary increases in use are not expected to impact other areas to a noticeable degree.

3.3.3 Vegetation

Affected Environment

The area of proposed action is composed of riparian vegetation and wetlands. Within both the North Potholes and Frenchman Units, these habitats are dominated by TEV; which is comprised of native and non-native invasive plants including common reed (*Phragmites*

australis), cattail (*Typha latifolia* and *T. angustifolia*), and bulrush (*Schoenoplectus acutus* and *S. tabernaemontani*). In order to maintain habitat for northern leopard frog and waterfowl, management is required to address shallows dominated by TEV. Current herbicide application for habitat improvement is limited to only 20 to 30 acres of TEV per year with the focus primarily on non-native, invasive common reed. Current vegetation management strategies last about 1 to 3 years before conditions return to pre-treatment levels.

Non-native, invasive plant species occur in an area beyond their natural range and cause harm to either economic or biotic systems within those areas. Once introduced and established, non-native species can outcompete native species, leading to the degradation of ecosystem function and economic sustainability. Noxious weeds, a subset of non-native invasive plants, are regulated by state and federal laws because of their known adverse effects to agricultural, economic, and natural resource systems. One element of the TEV found in the project area, common reed, is listed as a Class B weed by the Washington State Noxious Weed Board and the Noxious Weed Control Board of Grant County. Non-native invasive cattail, another species targeted by the proposed action, is listed as a Class C weed by the state.

Riparian areas and wetlands are susceptible to noxious weeds and invasive plant invasions because of frequent natural disturbance associated with availability of water. Wetlands in the Wildlife Area support populations of these species, which are currently being managed by use of herbicides. The environmental baseline (existing conditions) for noxious weeds and invasive plants in the area of proposed action includes numerous Class B and C noxious weed populations; it also includes invasive plants as a component of the wetland plant community.

Environmental Consequences

Alternative A – No Action

Under Alternative A, Reclamation would not authorize the use of prescribed fire on Reclamation lands within the North Potholes and Frenchman Units of the Wildlife Area. Management of wetland vegetation, including noxious weeds and invasive plants, would remain unchanged. A minimal number of acres of TEV would be treated with herbicide in accordance with past practice, i.e., approximately 20 to 30 acres of TEV treated annually. Treatment of noxious weeds would continue.

Alternative B – Proposed Action Alternative

Under Alternative B, Reclamation would authorize the use of prescribed fire to remove TEV in shoreline areas within the North Potholes and Frenchman Units of the Wildlife Area for up to a 5-year period beginning late winter 2021. The proposed action would remove standing dead material for better herbicide contact during the growing season, with the goal of achieving 75 to 90 percent consumption of TEV stems in order to allow northern leopard frogs to have suitable habitat for egg mass attachment.

Noxious weeds and invasive plants are often colonizers of disturbed areas, including areas affected by fire. As competing TEV is removed from the ecosystem, it is likely that the proposed action would result in a short-term increase in abundance of noxious weeds and invasive plants. However, WDFW would monitor for these undesirable species and would continue to manage

these species as necessary. In the long term, removal of TEV using prescribed fire would decrease total acreage in the area that is infested with noxious weeds and invasive plants.

Cumulative Effects

The past and present actions in the Potholes Reservoir and surrounding area include regular herbicide treatment of TEV and noxious weeds and invasive plants by WDFW. Beyond the continuation of this regular maintenance, Reclamation does not have any proposals in or near the project area.

3.3.4 Wildlife

Affected Environment

The Wildlife Area covers roughly 165,000 acres of shrub steppe and wetland habitat. Many of these wetlands have been degraded by excessive growth of TEV, homogenization of shoreline habitat, and encroachment of invasive species. This degradation has limited habitat use by many native wildlife species in the area.

The project area provides habitat for many native wildlife species, either seasonally or permanently. The species that are known to use the area of proposed action include the birds, mammals, herpetofauna, and fish listed below.

- Birds: American white pelican, 9 hawk species, 5 owl species, great-blue herons, 19 duck species, Canada geese, grebes, swans, double-crested cormorants, terns, gulls, killdeer, rails, doves, and many songbird species.
- Mammals: deer, coyote, muskrat, beaver, raccoons, small rodents and insectivores, bats, mink, skunks, and weasels.
- Herpetofauna: northern leopard frogs (state endangered), bullfrogs (non-native), tiger salamanders, painted turtles, garter snakes, gopher snakes, Pacific chorus frogs, and spadefoot toads.
- Fish: non-natives including carp, largemouth bass, bluegill, and mosquitofish.

No federally listed threatened or endangered species are established in the area of proposed action, and the northern leopard frog is the only Washington State endangered species that occurs in the area (USFWS BA; Appendix C). The North Potholes Unit is a part of WDFW's Northern Leopard Frog Management Area, an area specifically managed for the persistence of the northern leopard frog. This is the last known self-sustaining population of northern leopard frogs in Washington. Due to encroachment of TEV, habitat quality for northern leopard frog is relatively poor. A specific habitat requirement of northern leopard frog is TEV coverage of no more than roughly 20 percent of the shoreline, in order to provide adequate breeding and foraging habitat (Germaine and Hayes 2009). Northern leopard frogs begin breeding around April when water temperatures consistently reach 50°F (Lawrence et al. 2005).

In addition to northern leopard frog, the area of proposed action provides mid-winter and nesting refuge to several high-priority waterfowl species including mallard, northern pintail, and scaup. Other waterfowl that frequent the habitat include gadwall, Canada goose, greater white-

fronted goose, and green-winged, blue-winged, and cinnamon-winged teal. During mid-winter surveys completed by WDFW, waterfowl counts typically range from 10,000 to 40,000 birds. Waterfowl prefer semi-open to open vegetative sites for nesting and may be exposed to higher risk of predation in wetlands with dense shoreline emergent vegetation, such as the current condition of wetlands in the project area (Kantrud 1990). In addition to waterfowl, the area is used by several species of shorebirds including terns, sandpipers, killdeer, and rails in the late summer and fall.

Environmental Consequences

Alternative A – No Action

Under Alternative A, Reclamation would not authorize the use of prescribed fire on Reclamation lands within the North Potholes and Frenchman Units of the Wildlife Area. Fish and wildlife would remain unchanged, but habitat quality would likely continue to decrease for both amphibians and waterfowl because of continuing TEV growth. The last known population of northern leopard frog in Washington could experience population declines as a result of lack of breeding and foraging habitat due to the presence of TEV.

Alternative B – Proposed Action Alternative

Under Alternative B, Reclamation would authorize the use of prescribed fire to remove TEV in shoreline areas within the North Potholes and Frenchman Units of the Wildlife Area for up to a 5-year period beginning late winter 2021. There would likely be positive effects to native wildlife that inhabit the area and these effects could be seen within a few months of burning.

Utilizing prescribed fire as a tool to decrease coverage of TEV would improve the habitat for species that use these areas. The intention is that the prescribed fire would achieve 75 to 90 percent consumption of TEV and expose shoreline. This would provide northern leopard frogs suitable habitat for adequate breeding (egg mass attachment) and foraging. The winter timing for the prescribed fire would avoid any incidental mortalities and allow herbaceous shoreline vegetation to recover for amphibian breeding in the spring. Ultimately, the treatments applied to the proposed areas should result in greater species richness by opening the shoreline and increasing accessibility for various wetland species (Kantrud 1990). The exposure of shoreline habitat would also benefit waterfowl and shorebirds by providing increased access to greatly improved foraging and nesting habitat. Several species of native mammals (listed above) would also benefit from the proposed action, because it would allow for easier access to water and improved mobility when traveling through wetlands.

Cumulative Effects

The past and present actions in the Potholes Reservoir and surrounding area include regular herbicide treatment of TEV by WDFW for purposes of wildlife and waterfowl habitat improvement. Beyond continuation of this regular maintenance, Reclamation does not have any proposals in or near the project area.

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Chapter 4 Consultation and Coordination

4.1 Consultation

4.1.1 Section 106 Consultation – National Historic Preservation Act of 1966

A cultural resource survey was completed in September 2019 for the areas of proposed action. No cultural resources were found during the survey. Based on this survey, Reclamation made a No Effect on Historic Properties determination for the proposed action. If the project is implemented, an inadvertent discovery plan is stipulated with procedures to follow in case there is an inadvertent discovery of a cultural resource or of human remains. Reclamation consulted with the DAHP and received concurrence with its No Effect on Historic Properties determination on April 13, 2020. Appendix B includes the DAHP concurrence and the Inadvertent Discovery Plan.

Consultation letters and a copy of the survey report were sent to the CCT and the Yakama Nation on January 27, 2020. The tribes concurred with Reclamation's determination of No Effect on Historic Properties and requested a post-burn inventory to identify culturally-important plants and cultural resources exposed through vegetation removal. WDFW has committed to completing the post-burn inventory.

4.1.2 Section 7 Consultation – Endangered Species Act of 1973

Reclamation and WDFW consulted with the USFWS on the proposed action. USFWS completed an Intra-Service Section 7 Biological Assessment Form for the proposed action and determined that suitable habitat is not present for any listed, proposed, or candidate species except for the gray wolf and pygmy rabbit. The USFWS determined these species would not be impacted by the proposed action. The BA is attached as Appendix C.

4.2 Coordination

Reclamation used an interdisciplinary approach to prepare this EA to comply with the NEPA mandate to, "...utilize a systematic, interdisciplinary approach which would ensure the integrated use of the natural and social sciences and the environmental design areas in planning and in decision-making which may have an impact on man's environment" (40 CFR 1501.2(a)). Reclamation worked with WDFW and USFWS during the development of this EA.

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Chapter 5 List of Preparers

Preparer	Title	Agency/Affiliation
Rebecca Doolittle	Land Resources Manager	Reclamation – Ephrata Field Office
Emily Orling	Natural Resource Specialist	Reclamation – Ephrata Field Office
Karina Bryan	Archaeologist	Reclamation – Ephrata Field Office
Sean Dougherty	Project Manager	WDFW
Emily Grabowsky	Northern Leopard Frog Biologist	WDFW
Elizabeth Heether	Environmental Protection Specialist	Reclamation – Columbia-Cascades Area Office
Joel Miner	Environmental Protection Specialist	Reclamation – Columbia-Cascades Area Office

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Chapter 6 References

Parenthetical Reference	Bibliographic Citation
EPA 2019	U.S. Environmental Protection Agency (EPA). 2019. Current Nonattainment Counties for All Criteria Pollutants, Available online at: https://www3.epa.gov/airquality/greenbook/ancl.html (last accessed January 14, 2020).
Germaine and Hayes 2009	Germaine, S. and D. Hayes. 2009. "Distribution and Post-Breeding Environmental Relationships of Northern Leopard Frogs (<i>Rana</i> [Lithobates] pipiens) in Washington." <i>Western North American Naturalist</i> , 69:537-547.
Kantrud 1990	Kantrud, H. A. 1990. "Effects of Vegetation Manipulation of Breeding Waterfowl in a Prairie Wetlands- a Literature Review." <i>Can Livestock be Used as a Tool to Enhance Wildlife Habitat?</i> (93-123). U.S. Department of Agriculture. Fort Collins, Colorado.
Lawrence et al. 2005	Lawrence, L. C., W. P. Leonard, and D. H. Olson (eds.). 2005. <i>Amphibians of the Pacific Northwest</i> . Audubon Society. Seattle, Washington.
Reclamation 2002	Bureau of Reclamation (Reclamation). 2002. <i>Potholes Reservoir Resource Management Plan</i> . U.S. Department of the Interior, Bureau of Reclamation, Pacific Northwest Regional Office. Boise, Idaho. August 2002.
Reclamation 2003	Bureau of Reclamation (Reclamation). 2003. <i>Management Agreement – Potholes Reservoir, Banks Lake and Columbia Basin Lands</i> . Agreement with Washington Department of Fish and Wildlife, No. 03-05488. April 23, 2003.
U.S. Climate Data 2020	U.S. Climate Data. 2020. Available online at: https://www.usclimatedata.com/climate/moses-lake/washington/united-states/uswa0762 (last accessed January 15, 2020).
WA DNR 2020	Washington Department of Natural Resources (WA DNR). 2020. Geological Survey, 2019; Columbia Basin Province. Available online at: https://www.dnr.wa.gov/programs-and-services/geology/explore-popular-geology/geologic-provinces-washington/columbia-basin (last accessed January 15, 2020).
WA DNR 1998	Washington Department of Natural Resources (WA DNR). 1998. <i>Smoke Management Plan</i> . 25 pp. plus appendices.

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APPENDICES

Appendix A – Project Maps

**Appendix B – Determination of Eligibility and Effect; DAHP
Concurrence; Inadvertent Discovery Plan**

Appendix C – Biological Assessment

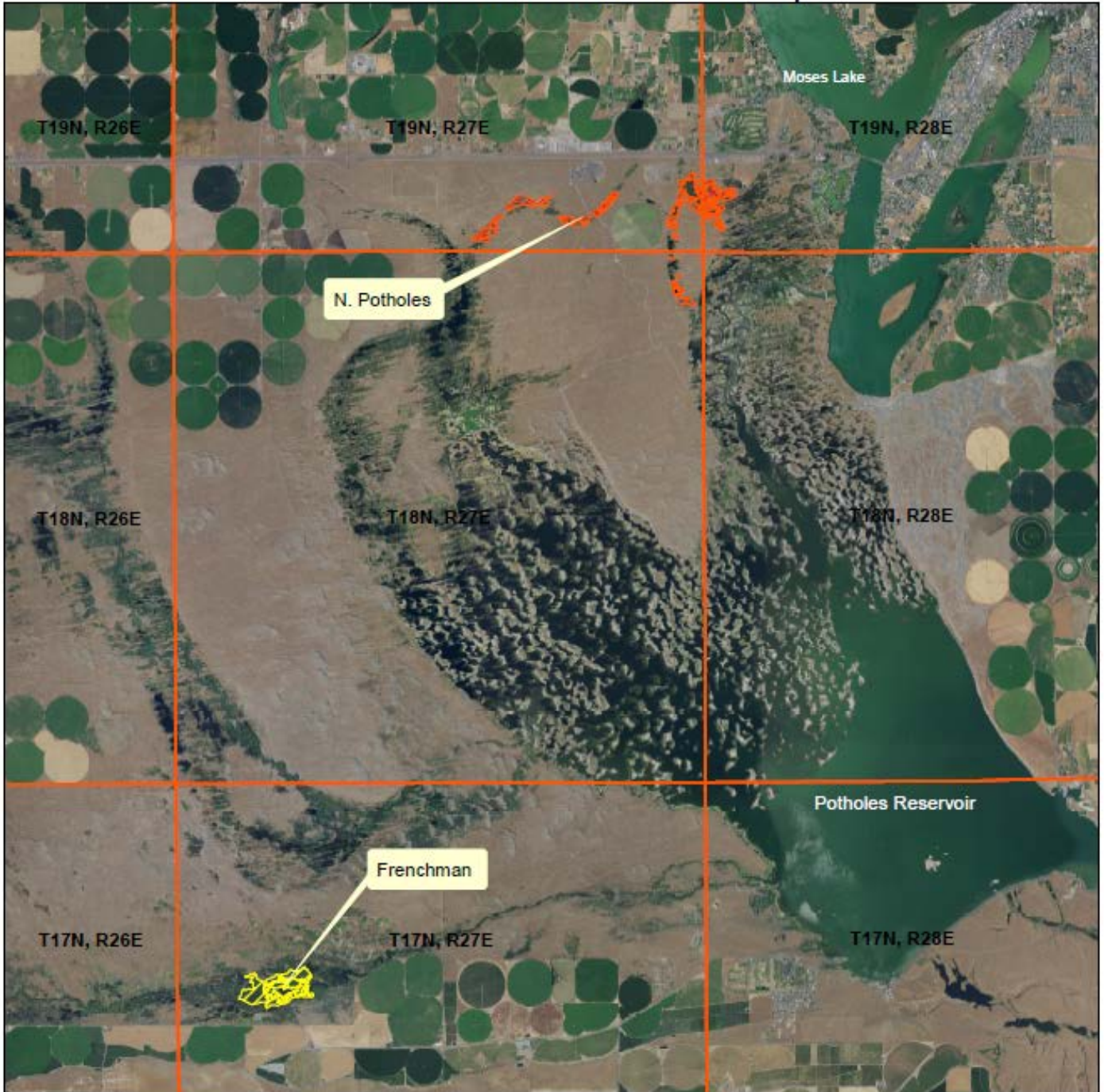
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Appendix A – Project Maps



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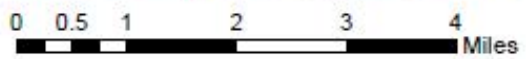
Date: 11/14/2019
Prepared By: David Dodds
County: Grant

Map 1: Columbia Basin Wildlife Area Prescribed Fire Project PN-EA-20-1 General Location Map



Legend

-  North Potholes Unit
-  Frenchman Unit



1 inch = 8,333 feet



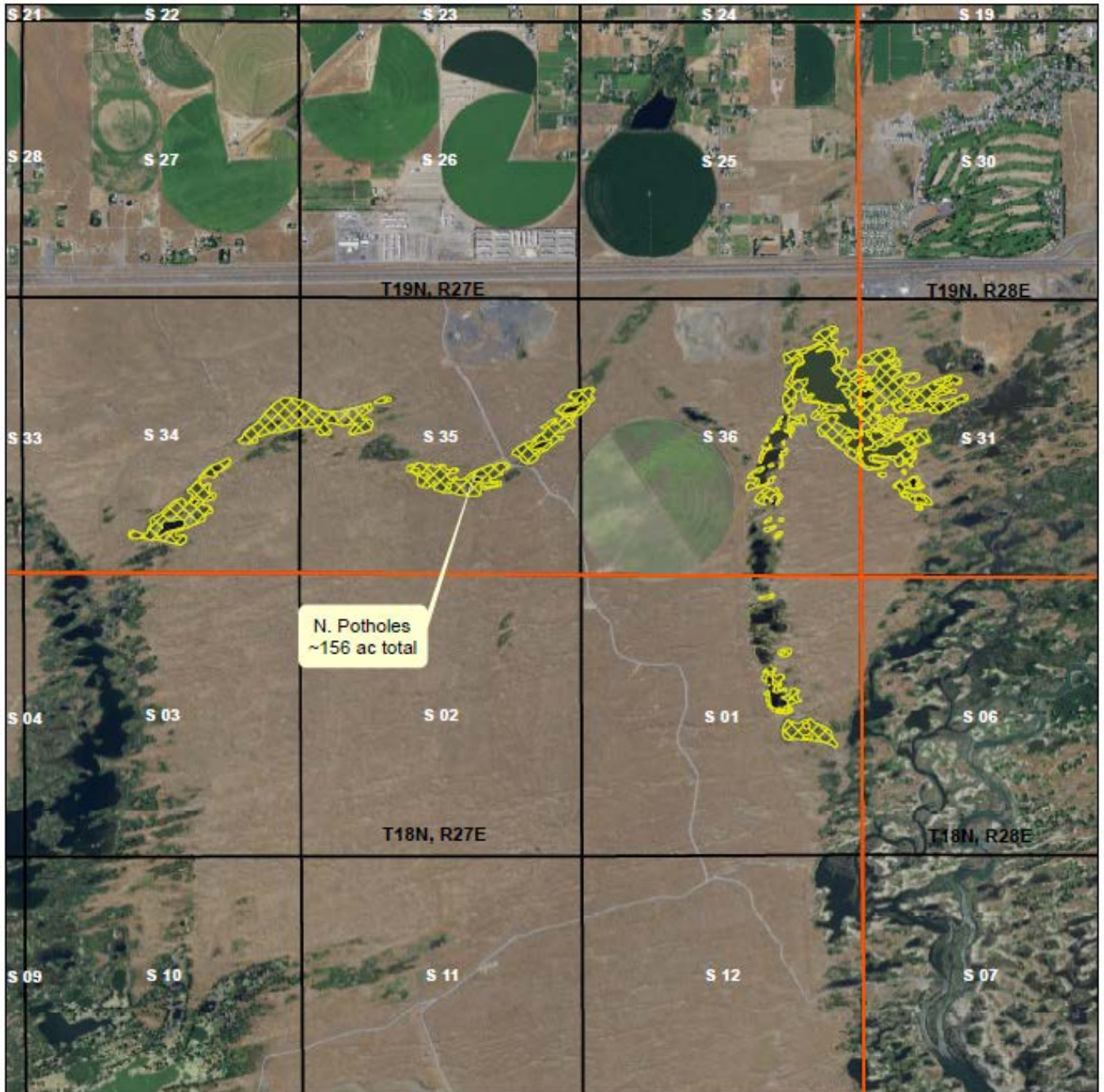
Date: 11/14/2019

Prepared By: David Dodds

County: Grant

Map 2: Columbia Basin Wildlife Area Prescribed Fire Project PN-EA-20-1 North Potholes Unit

Legal: Sec 31 T19N 28E
Sec 34, 35, 36 T19N R27E
Sec 1, 3 T18N R27E



Legend

 North Potholes Unit

0 0.2 0.4 0.8 1.2 1.6 Miles

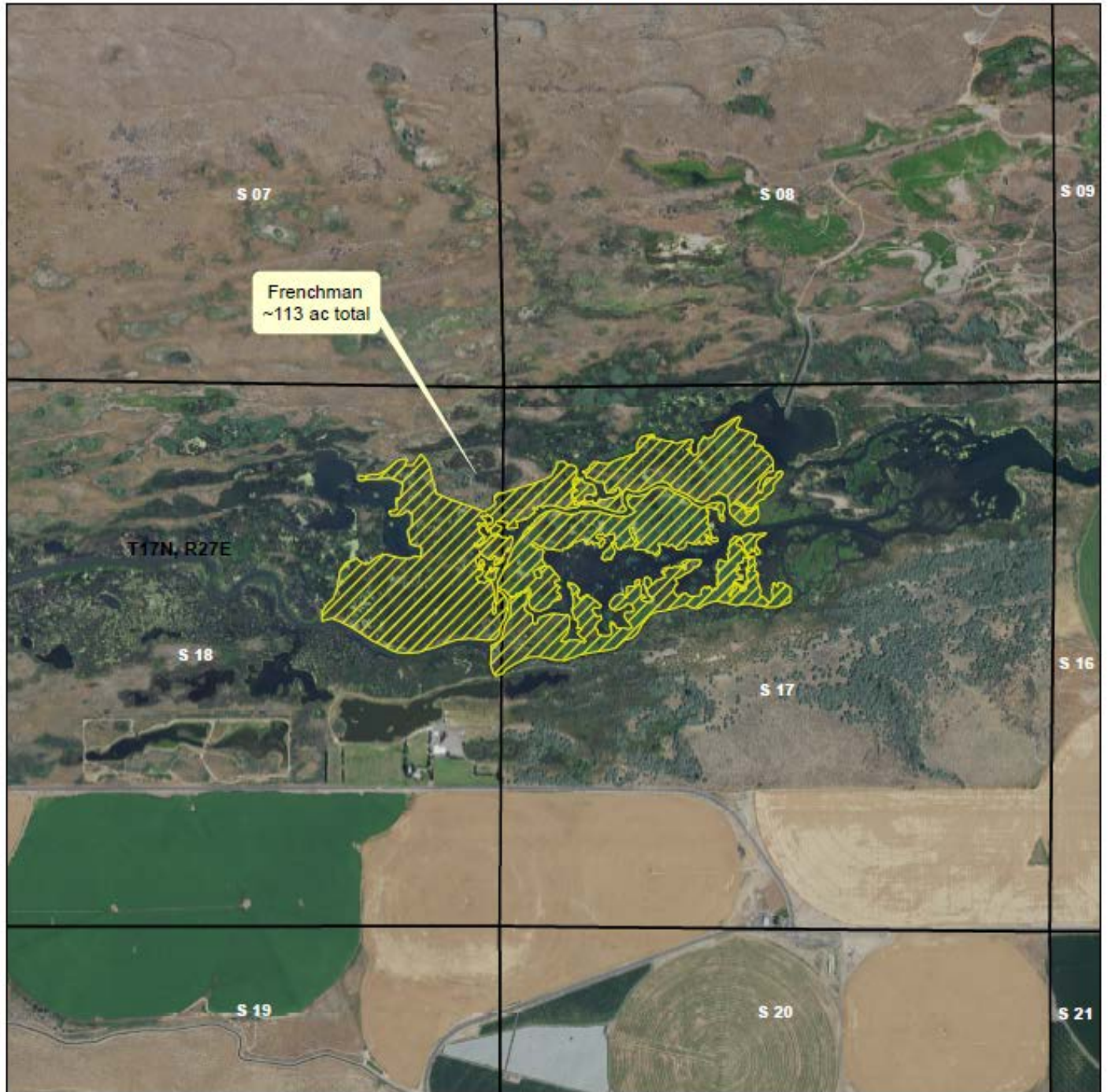
1 inch = 2,640 feet



Date: 11/14/2019
Prepared By: David Dodds
County: Grant

Map 3: Columbia Basin Wildlife Area Prescribed Fire Project PN-EA-20-1 Frenchman Unit

Legal: Sec 17, 18
T17N R27E



Legend

 Frenchman Unit

0 0.1 0.2 0.4 0.6 0.8 Miles

1 inch = 1,320 feet



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Appendix B – Determination of Eligibility and Effect; DAHP Concurrence; Inadvertent Discovery Plan

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DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
EPHRATA FIELD OFFICE

BOR Cultural Report No.:
EPH-2020-014

TO: Marc Maynard, Ephrata Field Office Manager
FROM: Karina Bryan, Ephrata Field Office Archaeologist
DATE: April 13, 2020
SUBJECT: Results of a Cultural Resource Inventory for the **Washington Department of Fish & Wildlife**.

In September of 2019, the **Washington Department of Fish & Wildlife** conducted a Reconnaissance inventory of the proposed **Columbia Basin Weed Control and Habitat Improvement Project, Grant County, Washington** (Report No. **EPH-2020-014**).

Justification for level of inventory conducted: No ground disturbance is proposed for this habitat improvement project. The Washington Department of Fish & Wildlife (WDFW) proposes to control weeds and improve habitat through aerial herbicide applications and controlled burns designed to remove non-native species from wetland margins. Existing roads will be used for access and staging areas. Since no ground disturbance is proposed, a reconnaissance inventory was conducted to determine if any chemical or fire-sensitive cultural resources are located in the project area. No previously recorded sites are within or near the area of potential effect, and no cultural resources were encountered during the reconnaissance inventory.

WDFW developed an Inadvertent Discovery Plan (IDP) for this project with procedures to follow should any cultural resources be identified during project implementation. In coordination with the Confederated Tribes of the Colville Reservation (CCT), WDFW also developed a post-burn inventory plan to identify culturally important plants and cultural resources exposed through vegetation removal. With the IDP and post-burn inventories, the proposed project will have No Effect upon historic properties.

Recommendations: Based upon the cultural resources inventory findings and DAHP and Tribal consultation, the project will have No Effect upon historic properties. Therefore, I recommend that you authorize the proposed project with the stipulations listed below attached.

Legal Description: **T17N R27E Section 17, 18**
T18N R27E Section 1, 3
T19N R27E Section 34, 35, 36
T19N R28E Section 31

Quad(s): **Mae, Moses Lake South, Royal Camp 7.5'**

Cultural resources found? No Yes / /, #'s: _____

N.R. Eligible resources found? No Yes / /, #'s: _____

N.R. Eligible resources affected? No Yes / /, #'s: _____

SHPO Concurrence with above granted?

Not necessary / / No / / Yes , DAHP Ref. #: **2020-01-00213-BOR**

Cultural clearance recommended? No / / Yes, with stipulations /**X**/

Recommended Stipulations:

1. **CULTURAL RESOURCES, INADVERTENT DISCOVERIES PLAN.** WDFW must adhere to the provisions of the Inadvertent Discoveries Plan during project implementation (see archaeologist's inventory report for details). Violation of this stipulation may result in WDFW being subject to penalties and actions contained in the 43 CFR 7 regulations.
2. **CULTURAL RESOURCES, POST-BURN INVENTORIES.** WDFW must implement the post-burn inventories for culturally important plants and cultural resources exposed through vegetation removal that were developed in coordination with the Confederated Tribes of the Colville Reservation.
3. **CULTURAL AND PALEONTOLOGICAL RESOURCES STIPULATION.** WDFW must immediately report to Reclamation's authorized officer any cultural and/or paleontological resource (historic or prehistoric site, object, human remains, funerary object, artifact, or fossil) discovered on the area of use by WDFW, or any person working on their behalf. WDFW must suspend all activities in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. WDFW is responsible for the cost of evaluation. The authorized officer will make any decision as to proper mitigation measures after consulting with WDFW.

KARINA
BRYAN

Digitally signed by KARINA
BRYAN
Date: 2020.04.13 13:32:01
-07'00'

Archaeologist, Ephrata Field Office



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

April 13, 2020

Ms. Dawn A. Wiedmeier
Columbia-Cascades Area Office
Bureau of Reclamation
1917 Marsh Road
Yakima, Washington 98901-2058

RE: Columbia Basin Weed Control & Habitat Improvement Project
Log No.: 2020-01-00213-BOR

Dear Ms. Wiedmeier:

Thank you for contacting our Department. We have reviewed the professional archaeological survey report you provided for the proposed Columbia Basin Weed Control and Habitat Improvement Project, Grant County, Washington.

We concur with your Determination of No Historic Properties Affected with the stipulation for an unanticipated discovery plan.

We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4).

In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and this department notified

These comments are based on the information available at the time of this review and on the behalf of the State Historic Preservation Officer in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Should additional information become available, our assessment may be revised. Thank you for the opportunity to comment and a copy of these comments should be included in subsequent environmental documents.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Whitlam', with a long horizontal line extending to the right.

Robert G. Whitlam, Ph.D.
State Archaeologist
(360) 586-3080
email: rob.whitlam@dahp.wa.gov



APPENDIX A

**INADVERTENT DISCOVERY PLAN
For
Columbia Basin Weed Control and Habitat Improvement Project
January 10, 2020**

This Inadvertent Discovery Plan (IDP) provides guidance for responding to the unexpected discovery or unearthing of cultural artifacts, archaeological features or other evidence of cultural materials and/or of skeletal material of human or unknown origin during projects initiated by Washington State Department of Fish and Wildlife (WDFW), or occurring on WDFW-managed land not governed by a Washington State Department of Archaeology and Historic Preservation (DAHP)-issued excavation permit; by a Monitoring or Site Protection Plan for a specific area or activity; or a federal permit.

This plan is to be implemented without exception whenever such discoveries occur, and applies to WDFW staff, contractors, subcontractors, volunteers, and others who may be involved with projects initiated by WDFW, or occurring on WDFW-managed land. This plan does not supersede or satisfy requirements for monitoring, site protection, or other plans developed to address concerns at known archaeological and historic sites. The Project Manager (PM) is responsible for implementation of the IDP and must sign the following to indicate that she/he has read and acknowledges this responsibility.

As the Project Manager (PM), I acknowledge that I am responsible for implementation of the IDP.

1. It is my responsibility to ensure that all site crew on all phases of project excavation and construction understand the requirements of this IDP. *initials*

2. A complete copy of this signed document will be maintained at all times on the project site for the duration of the project for site crew training and available for inspection by DAHP, the WDFW Archeologist, or others as authorized. *initials*

3. I will follow the actions in the IDP in the event that site crew uncover any archaeological object and/or other cultural resource as a result of project actions, including but not limited to ground-disturbing activities such as excavation, boring, and concrete removal. *initials*

4. I understand failure to follow the actions in this IDP is a breach of WDFW policy and that according to 27.53.060 RCW, knowingly disturbing an archaeological site is a Class C Felony and that, _____, as the project proponent, will be responsible for the costs related to one or more of the following (a) reasonable investigative costs incurred by a mutually agreed upon independent professional archaeologist investigating the alleged violation; (b) reasonable site restoration costs; and (c) civil penalties, as determined by the director [DAHP], in an amount of not more than five thousand dollars per violation (27.53.0295 RCW). *Initials*

Signature

Name (Printed)

Date

Pre-Field Actions

Prior to ground disturbance, the Project Manager (PM) will notify work crews/machine operators that they are obligated to suspend work in the immediate area and notify supervisory personnel upon discovery of any bones or objects of human manufacture, particularly suspected Native American artifacts. This action will be repeated prior to commencement of work in new locations, after significant changes in field staff, and if work is re-started after a hiatus. Field supervisors will be made aware of their responsibilities for interim protection and notification as detailed below.

Field Actions

Specific Procedures for the Inadvertent Discovery of Archaeological Resources

In the event that cultural resources (not including human remains) are encountered during project implementation, the following actions will be taken:

All work within the discovery area and a surrounding buffer adequate and sufficient to prevent further disturbance will cease. The PM will be notified immediately.

The PM will immediately contact WDFW Archaeologist or Bureau of Reclamation (BOR) Archaeologist.

If the WDFW or BOR Archaeologist determines that potentially significant archaeological materials or historic sites are present, the PM will be advised of interim protective measures. Work may resume outside the buffer, unless the Archaeologist directs otherwise.

The WDFW or BOR Archaeologist will initiate Tribal and DAHP consultation regarding evaluation of the find's significance, potential for effects caused by the project, and subsequent treatment plans. Wherever possible, the preferred treatment of significant archaeological resources and historic sites will be in situ preservation. If a treatment plan requires that such resources be excavated or removed, an agreement must first be reached between WDFW, BOR, and the consulting parties.

Specific Procedures for the Inadvertent Discovery of Human Remains

Inadvertent finds of what appear to be human remains introduce cultural concerns and legal requirements that initiate a different response than cultural resources. Human remains must be treated with utmost respect. Four presumptions regarding identification guide the treatment of possible human remains:

- Unidentified bones will be considered human until there is evidence that they are not.
- Human remains will be considered non-forensic until and unless the County Coroner (or Medical Examiner) has determined them to be forensic.
- Non-forensic human remains will be treated as Native American until and unless the State Physical Anthropologist, in consultation with interested Tribes, has determined that they are not.
- Only the Coroner (or Medical Examiner) and State Physical Anthropologist may handle human remains until a burial treatment plan developed with the WDFW, BOR, and consulting parties

has been established. Examination and recording beyond that required to make the legally required determination is not authorized except through a burial treatment plan developed by WDFW, BOR, and the consulting parties.

If human remains are found within the project area, the following actions will be taken, consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) and Washington State RCWs 68.50.645, 27.44.055, and 68.60.055:

- If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains.
- The area of the find will be secured and protected from further disturbance. The PM or Archaeologist will cover the remains with a tarp or other fabric when available, notify workers that the area is off limits, and will maintain a watch to ensure that the area is not disturbed. The remains will be treated respectfully at all times. News of the discovery is not to be communicated beyond the people who need to know.
- The finding of human skeletal remains will be reported to the County Coroner (or Medical Examiner) local law enforcement, and the WDFW and BOR Archaeologists in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed.

The County Coroner (or Medical Examiner) will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the County Coroner (or Medical Examiner) determines the remains are non-forensic and likely Native American, then they will report that finding to BOR, which will then take jurisdiction over the remains under the NAGPRA procedures at 43 CFR 10.4. The BOR will notify any appropriate cemeteries and all affected tribes of the find.

The BOR Archaeologist will serve as federal agency lead for Tribal and DAHP consultation process should the remains be determined non-forensic.

The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to BOR and any appropriate cemeteries and the affected tribes by certified letter within two business days of examination.

Interim protective measures will be maintained until the required determinations have been made and a burial treatment plan has been finalized. The WDFW and BOR will develop the plan in cooperation with all consulting parties and lineal descendants (if any). Parties defined in the burial treatment plan will implement its provisions.

Under no conditions are WDFW or BOR staff or other project personnel to make the location or contents of inadvertent human remains finds public, unless specifically authorized to do so in the burial treatment plan.

Contacts

Washington State Department of Fish & Wildlife

Archaeologists

Maurice Major, Cultural Resource Specialist	360-522-0966
Alternate 1, Katherine Kelly, Lands Archaeologist	360-688-0676
Alternate 2, Paul Dahmer, Wildlife Area Access Manager	360-902-2480

Project Manager

Sean Dougherty	509-754-4624 Ext 252
----------------	----------------------

Bureau of Reclamation

Archaeologists

Karina Bryan, Archaeologist	509-754-0213
Alternative 1, Sharla Luxton, Archaeologist	509-754-0225

Resource Management Supervisor

Rebecca Doolittle	509-754-0231
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Washington State Department of Archaeology and Historic Preservation

Dr. Allyson Brooks, State Historic Preservation Officer	360-586-3066
Dr. Lance Wollwage, Assistant State Archaeologist	360-586-3536
Dr. Guy Tasa, State Physical Anthropologist	360-586-3534

Grant County

Tom Jones, Sheriff	509-654-2011
Craig Morrison, Coroner	509-765-7601
24-hour dispatch (Sheriff & Coroner)	509-762-1160

Appendix C – Biological Assessment

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INTRA-SERVICE SECTION 7 BIOLOGICAL ASSESSMENT FORM

Originating Person: Barb Behan
Telephone Number: 503.231.2066
Date: October 1, 2019
Dates of Validity: October 1, 2019 – June 30, 2021

- I. Region:** 1, Pacific
- II. Service Activity (Program):** U.S. Fish and Wildlife Service, Wildlife and Sport Fish Restoration Program, Competitive State Wildlife Grant Program (CSWG), Grant WA F18AP00947, Advancing Northern Leopard Frog Recovery in Washington, Idaho, and British Columbia through Reintroduction and Habitat Management
- III. Pertinent Species and Habitat**
- A. Listed species:** Gray wolf, pygmy rabbit (Columbia Basin distinct population segment), yellow-billed cuckoo, bull trout
- B. Proposed species:** None
- C. Candidate species:** None
- IV. Geographic area or station name and action:**
Action agency/office: U.S. Fish and Wildlife Service, Regional Office, Portland, OR.
Applicant is the Washington Department of Fish and Wildlife (WDFW).
- V. Location:**
- A. County and State:** Grant County, WA
- B. Section, township, and range:** T19N, R27E, Sec. 34 - 36; T18N, R27E, Sec. 1, 3; T19N, R28E, Sec. 31; T17N, R27E, Sec. 17, 18
- C. Nearest town:** Moses Lake, WA
- D. Species/habitat occurrence:** There are no known occurrences of listed, proposed, or candidate species or habitats in the project area.
- VI. Description of proposed action:**
WDFW will enhance habitat at the single extant northern leopard frog site in Washington near Moses Lake – the Columbia Basin Wildlife Area, Potholes Unit. Enhancement objectives are to reduce tall emergent vegetation (TEV), prioritizing the northern shorelines of ponds at the sites. The treatment prescription is winter prescribed fire (January-February when conditions are conducive to burning), followed by an application of herbicide in the following fall (late-August or early September 2020). There will be a minimum of 100 acres of shoreline in 31 ponds treated to remove TEV to expand and improve habitat for the species.

Herbicide application will take about 8 working hours to complete. Working hours will be dependent on weather conditions (wind speed, temperature, etc.). Prescribed burning will take approximately 15 working days, but given limitations with weather, high wind, stagnate air, etc., burning could take up to 45 days to complete.

A helicopter outfitted with herbicide spraying equipment will apply the herbicide for all applications. There will be a 200-gallon fire engine, one marsh tractor, and one utility trailer present during all prescribed burning. All staging will occur on established roadways.

The prescribed fire project consists of several units to burn TEV (cattail, bulrush, phragmites) during the winter to achieve 75-90% consumption of stems to allow leopard frogs to have suitable habitat for egg mass attachment. They will remove standing dead material (mostly phragmites) for better herbicide contact during the growing season.

Aquatically-labeled glyphosate (Aqua Neat®) and imazapyr (Polaris AC Complete®) will be applied aerially with ammonium sulfate (Bronc Max EDT®) as a surfactant.

VII. Determination of Effects:

Suitable habitat is not present for any listed, proposed, or candidate species except for the gray wolf and pygmy rabbit.

While the project habitat and adjacent areas may be suitable for gray wolves, they are not known to occur there and there have been no sightings. Potential effects would include disturbance during the preparation and burning, causing displacement from some of their normal hunting activities, although this would be short-term. Given the size of territories wolves require, and the small size of the project areas, it is highly unlikely that wolves would be disturbed by the activities and the determination is no effect.

Pygmy rabbits are typically found in habitat that includes tall, dense stands of sagebrush with soils that are relatively deep and loose in order to dig burrows. With the exception of a Benton County record, Columbia Basin pygmy rabbits have only been found in southern Douglas and northern Grant Counties since the mid-20th century (WDFW 2001a cited in USFWS 2012). Surveys of this last known subpopulation have not detected any animals in the wild since before July 2004 (B. Patterson, WDFW, pers. comm. 2004), indicating that the Columbia Basin pygmy rabbit may have been extirpated from the wild (USFWS 2012). However, due to other priorities and limited access to private lands, not all potentially suitable lands have been surveyed so other wild but as yet unknown pygmy rabbit subpopulations may still be present within the Columbia Basin (USFWS 2012).

The project occurs in an area that consists of shrub steppe and pothole marshlands. The units consist of predominately cattails, phragmites, and bulrush. All proposed activities are centered around the wetland areas that would not be considered suitable habitat for the pygmy rabbit, and while the adjacent habitat may be suitable for the species, it is not known to occur on the Columbia Basin Wildlife Area, Potholes Unit. The determination is no effect for this species.

VIII. Grant Provisions: None

IX. Effect determination(s) and response(s) requested:

A. Listed species/designated critical habitat:

<u>Species</u>	<u>Determination</u>
Gray wolf	No effect
Pygmy rabbit	No effect
Yellow-billed cuckoo	No effect
Bull trout	No effect

B. Proposed species/proposed critical habitat: None

C. Candidate species: None

X. Literature cited:

U.S. Fish and Wildlife Service. 2012. Recovery plan for the Columbia Basin distinct population segment of the pygmy rabbit (*Brachylagus idahoensis*). Portland, OR. 120 pp.

XI. Signatures:

Barb

Behan

Digitally signed
by Barb Behan
Date: 2019.10.01
13:55:43 -07'00'

WSFR Section 7 Coordinator

Date _____