

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [\[help\]](#)

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. Background [\[help\]](#)

1. Name of proposed project, if applicable: [\[help\]](#)
Conboy Lake National Wildlife Refuge Wetland Enhancement Project
2. Name of applicant: [\[help\]](#)
U.S. Fish and Wildlife Service (USFWS)
3. Address and phone number of applicant and contact person: [\[help\]](#)

Trevor Sheffels, Refuge Manager
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Glenwood, WA 98619
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Trevor_sheffels@fws.gov

4. Date checklist prepared: [\[help\]](#)
April 27, 2018

5. Agency requesting checklist: [\[help\]](#)
Washington Department of Fish and Wildlife

6. Proposed timing or schedule (including phasing, if applicable): [\[help\]](#)
Three week construction window between September 1 and September 30, 2018

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [\[help\]](#)
No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [\[help\]](#)
Wetland delineation and ratings of project area (Ducks Unlimited 2018); USFWS 2016 Programmatic Biological Opinion for Management and Maintenance Activities on the Conboy Lake National Wildlife Refuge; NHPA Section 106 assessment of project; Comprehensive Conservation Plan and NEPA EA for Conboy Lake National Wildlife Refuge (USFWS 2015)

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [\[help\]](#)
No other government approvals are pending for work proposed within the project area.

10. List any government approvals or permits that will be needed for your proposal, if known. [\[help\]](#)
CWA 404 Permit (USACE); CWA 401 Certification (Ecology); HPA (WDFW); USFWS Biological Opinion (Existing Programmatic BO for impacts on Oregon spotted frog).

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [\[help\]](#)

The project proposes to improve water delivery to and conveyance between four managed seasonal wetland units within the Refuge – Conboy Lake and the Swan, Arena, and Oxbow Units. These wetlands collectively encompass about 260 acres within the 7,000 acre Refuge. The improvements are proposed to maintain surface water longer and more reliably in targeted wetlands to benefit breeding populations of Oregon spotted frog and to improve nesting habitat for greater sandhill crane. Proposed enhancement activities under the project include installation of an inverted siphon under Outlet Creek to deliver water from Conboy Lake to the wetland unit to the east (Swan Unit); excavation of one new swale and removal of vegetation and sediment from two existing swales to improve conveyance between the Swan, Arena, and Oxbow Units; replacement of existing water control structures in the

Arena and Oxbow Units, and removal of an existing water control structure in the Swan Unit; and fill of a small depression in the Swan Unit to prevent stranding of Oregon spotted frog tadpoles as water levels within the wetland recede.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [\[help\]](#)

The project is located entirely within the 7,000-acre Conboy Lake National Wildlife Refuge (Refuge) in Klickitat County, near Glenwood, WA (Figure 1). The physical address of the USFWS offices on the Refuge is 100 Wildlife Refuge Road, Glenwood, WA 98619. Project activities would be located in Township 6 North, Range 12 E, Sections 24 and 26. Figure 2 illustrates the locations with the Refuge where enhancement activities are proposed.

B. ENVIRONMENTAL ELEMENTS [\[help\]](#)

1. Earth [\[help\]](#)

a. General description of the site: [\[help\]](#)

Habitat in the project area is primarily emergent seasonal marsh / wet prairie associated with Conboy Lake and the Swan, Arena, and Oxbow Units. The project area is bisected by Outlet Creek, a perennial stream that travels east and north towards its confluence with the Klickitat River. The wetland associated with Conboy Lake are located to the west of Outlet Creek; the remaining wetland units are located to the east of Outlet Creek. The site is generally flat.

(circle one): **Flat**, rolling, hilly, steep slopes, mountainous, other _____

b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

Approximately 3%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [\[help\]](#)

The U.S. Geological Survey (USGS) has mapped Segidal sandy loam (0 to 2 percent slopes) within all areas where project-related ground disturbance is proposed. This soil type is described as a somewhat poorly drained soil that is not frequently flooded but occasionally ponded. It is typical of terraces and derived from alluvium found in volcanic ash. It is not rated as hydric and not classified as prime farmland.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [\[help\]](#)

No.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [\[help\]](#)

Fill would be associated with installing the siphon and outlet protection in Outlet Creek; replacing and removing water control structures; filling the low depression in the Swan Unit; and disposing of

excavated soils in an upland area and along an existing road. Excavation would be required to install the siphon; construct and clean new and existing swales; and to remove and replace water control structures. In total, about 435 CY of soil would be excavated and reused on site as backfill or placed in an upland disposal area. All soil used as fill would be sourced onsite. About 70 CY of sandbags would be used as temporary fill in Outlet Creek to dewater the work area around the trench. Rock (8 CY) and concrete (5 CY) would be installed on top of and at the outlet of the siphon, respectively, and new water control structures would replace two existing structures. The sandbags, rock, concrete and water control structures would be imported to the site.

In total, fill activities would temporarily or permanently impact about 0.29 acres. Excavation of swales would impact an additional 0.27 acre.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

[\[help\]](#)

Temporary erosion from exposed soils may occur after construction is complete and prior to reestablishment of vegetation on site.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [\[help\]](#)

Less than 1% would be associated with water control structures.

- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)

Standard construction best management practices (BMP) would be implemented to control and reduce erosion and prevent contamination of surface waters, as needed. Representative BMPs include:

- Use of filter bags, sediment fences, sediment traps or catch basins, leave strips or berms to prevent movement of soil into waterways and wetlands.
- Staging construction materials that may leak petroleum products, fuel, lubricants, or other hazardous materials in designated upland areas, away from water and sensitive natural communities.
- Washing vehicles and equipment offsite.
- Seeding and mulching temporarily disturbed areas after construction is complete.

2. Air [\[help\]](#)

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [\[help\]](#)

Air emissions would be limited to heavy equipment and worker vehicle trips during a 3-week construction window. The quantities of emissions are not known. No operational emissions would occur, and maintenance-related emissions would be limited to periodic site inspections by USFWS staff (which would be minimal).

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)

No. The project site is located adjacent to active cattle grazing areas and timber harvest operations. However, this portion of the Refuge is generally not open to public access and would not be affected by off-site emissions or odors, should they occur.

- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)

All heavy equipment would be outfitted with appropriate emission control measures, and would not be allowed to idle for extended periods of time.

3. Water [\[help\]](#)

a. Surface Water:

- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [\[help\]](#)
- Outlet Creek runs north and east through the project area to its confluence with the Klickitat River. It is a perennial stream that was channelized in the early 1900s to support agricultural uses. The creek drains water from the Glenwood Valley, although there are no diversions on Outlet Creek that provide water to Refuge wetlands within the project area.

Seasonal emergent wetlands are located within and adjacent to the project area. Within the Refuge boundaries, seasonal wetlands are passively managed by USFWS as wildlife habitat. A 2018 Wetland Rating completed by Ducks Unlimited found the wetlands to be Type III Depressional Wetlands.

- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [\[help\]](#)

Yes. The following describes work proposed in Outlet Creek and within seasonal wetlands in the project area. Plans illustrating the location and design contemplated for each activity are attached.

- Inverted Siphon – a 122-foot long inverted siphon would be installed under Outlet Creek to deliver water from Conboy Lake to the Swan Unit. The siphon would be located about 2-feet below the bottom of the creek channel. A 6-inch thick concrete slab would be installed over the siphon (but also buried under the channel bed) to protect the siphon from inadvertent damage during future dredging operations in Outlet Creek. A screw gate and trash rack would be installed on the upstream end of the siphon to facilitate water delivery from Conboy Lake to the Swan Unit. The siphon would be installed in an open trench, in the dry. Sandbag cofferdams would be used to isolate the work area in Outlet Creek, if needed, with water pumped to a downstream location. Heavy equipment, such as an excavator, would be used to create the trench for the siphon and install the infrastructure.
- Water Control Structures – Two existing water control structures at the northern ends of the Arena and Oxbow Units would be removed and replaced with in-line water control structures (including new inlet and outlet pipes) to allow USFWS to control water levels within the wetland units. The existing water control structure at the northern end of the Swan Unit would be removed. Removal and replacement of water control structures would be completed using heavy equipment (e.g., excavators).
- Swales – A 435-foot long swale would be constructed from the siphon outlet into the Swan Unit. Two existing swales – including a 402-foot long swale between the Swan and Arena Units and a 586-foot long swale between the Area and Oxbow Units – would also be cleaned of dirt and vegetation to improve the hydrologic connection between wetland units. Swale improvements would be implemented using wide-track heavy equipment.
- Soil Disposal - Excavated soil from the siphon and swales would be used to fill a low depression in the Swan Unit that has a high potential to strand Oregon spotted frog tadpoles as water levels recede. Excess soils would be placed in an upland spoils area on the east side of Outlet Creek or placed in low areas along the tops of the levee adjacent to Outlet Creek to repair the damaged surface.

- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [\[help\]](#)

Permanent fill material placed in wetlands would include soil (143 CY) and rock (8 CY). Pre-cast structures associated with the siphon and replacement water control structures would be

buried, or would replace existing structures in kind and are considered temporary fill. Rock used as riprap at the siphon outlet would be imported to the site; soil used as fill would be derived onsite.

Fill material placed in Outlet Creek would include a siphon (5 CY), concrete (5 CY) and backfilled soil (140 CY). An additional 70 CY in sandbags would be used to create a temporary cofferdam around the work area in Outlet Creek. The siphon, concrete, and sandbags would be obtained from off-site sources. Backfilled soil would be obtained from the work area.

- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

No.

- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [\[help\]](#)

The project area is located within the historical floodplain of Outlet Creek. However, Outlet Creek was ditched to support agricultural uses in the early 1900s and is now contained within a berm/levee system. None of the proposed activities are located with the FEMA-mapped 100-year floodplain.

- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [\[help\]](#)

The project does not involve any discharge of waste materials to surface waters.

b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

No groundwater would be withdrawn under the project.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [\[help\]](#)

No waste material would be discharged into the ground under the project.

c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [\[help\]](#)

Storm and irrigation runoff flows to the project area from the foothills that surround the Glenwood Valley and from adjacent agricultural parcels that abut the project area on the south and east. Runoff generally flows towards Outlet Creek and to the north. There may be limited opportunities for runoff to drain back to Outlet Creek (although it is not actively pumped from the project area).

- 2) Could waste materials enter ground or surface waters? If so, generally describe. [\[help\]](#)

It is possible that waste material could enter Outlet Creek if spilled on or near the levee system.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. [\[help\]](#)

Yes. The purpose of the project is to maintain surface water longer within managed wetland units to benefit breeding populations of Oregon spotted frog and to improve nesting habitat for greater Sandhill crane. The desired improvements in water conveyance between managed wetland units would be accomplished by installing a siphon under Outlet Creek and water control structures and swales within seasonal wetlands. By design, these improvements would affect drainage patterns.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: [\[help\]](#)

Refer to the representative BMPs provided Section 1h above.

4. Plants [\[help\]](#)

a. Check the types of vegetation found on the site: [\[help\]](#)

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrubs

grass

pasture

crop or grain

Orchards, vineyards or other permanent crops.

wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other

other types of vegetation

b. What kind and amount of vegetation will be removed or altered? [\[help\]](#)

About 0.42 acre of emergent wetland vegetation would be directly impacted by fill and excavation activities. With the exception of 0.01 acre of emergent wetland vegetation that would be impacted by the placement of rock at the outlet siphon, all other areas would be restored to pre-construction conditions and would revegetate with wetland plants similar in composition to current conditions.

c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

There are no threatened or endangered plant species known to the project area. State-listed plants that occur in other parts of the Refuge include:

- Oregon Coyote-thistle (*Eryngium petiolatum*) - State Threatened
- Rosy Owl-clover (*Orthocarpus bracteosus*): State Endangered
- Kellogg's Rush (*Juncus kelloggii*): State Threatened
- Dwarf Rush (*Juncus hemiendytus* var. *hemiendytus*): State Threatened
- Suksdorf's Milk-vetch (aka Ames' Milk-vetch) (*Astragalus pulsiferae* var. *suksdorfii*): Federal Species of Concern, State Endangered

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

Areas temporarily disturbed during construction would be seeded with native seed stock to facilitate revegetation, as needed.

e. List all noxious weeds and invasive species known to be on or near the site. [\[help\]](#)

Reed canarygrass

5. **Animals** [\[help\]](#)

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. [\[help\]](#)

Examples include:

birds: hawk, heron, eagle, songbirds, other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other _____

The Refuge provides important stopover, refuge, forage and breeding habitat for a variety of terrestrial and aquatic species, including core breeding habitat for Oregon spotted frog, nesting habitat for greater sandhill crane, and wintering habitat for migrating waterfowl and other shorebirds (e.g., Canada geese, tundra swans, various species of ducks). Thirty-two species of mammals have been confirmed on the Refuge, including beaver, badgers, Rocky mountain elk, western gray squirrels, black bear, black-tailed deer, bobcat, coyote, various species of bats, and river otter. In addition to Oregon spotted frog, the Refuge supports populations of long-toed salamander, northwestern salamander, rough-skinned newt, western toad, northwestern garter snake, and Pacific tree frog, among others. A variety of raptor species forage in the area, including bald eagle, golden eagle, and peregrine falcon. Outlet Creek supports populations of native fish, including both cutthroat trout and rainbow trout.

- b. List any threatened and endangered species known to be on or near the site. [\[help\]](#)
Oregon spotted frog (federally threatened, state endangered) and greater sandhill crane (state endangered) are known to the project area, and are the two species targeted by the wetland enhancement actions proposed under the project. Mardon skipper butterfly (state endangered) has been observed within the Refuge (but not within the project area). Western gray squirrel (state threatened) is known to occur outside of the Refuge but may use ponderosa pine stands in the vicinity. A variety of state candidate or sensitive bird species, including western grebe, bald eagle, golden eagle, peregrine falcon, Lewis woodpecker, pileated woodpecker, white-headed woodpecker, loggerhead shrike, purple martin, and sage thrasher, have also been observed on the Refuge.
- c. Is the site part of a migration route? If so, explain. [\[help\]](#)

The Refuge is an important wintering and migration area for waterfowl and shorebirds travelling between the Central Valley of California and Alaska / Canada. Common migrating waterfowl species include Canada geese, tundra swans, and various species of ducks.

Greater sandhill cranes migrate to and breed on the Refuge. The Refuge is the last known breeding location for greater sandhill cranes in Washington state.

- d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)
In accordance with the terms and conditions provided in the 2016 Programmatic Biological Opinion (BO) for maintenance and management activities at the Refuge (01EWF00-2016-F-0439), a qualified biologist will monitor the project area for Oregon spotted frogs prior to and during construction, and will relocate any frogs found in the work area to a nearby ditch or wetland.
- e. List any invasive animal species known to be on or near the site. [\[help\]](#)
Bullfrogs and brown bullhead catfish are both present in Outlet Creek.

6. Energy and Natural Resources [\[help\]](#)

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [\[help\]](#)

The project has no long-term energy needs.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [\[help\]](#)

The project would have no effect on the potential use of solar energy by adjacent properties.

- c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: [\[help\]](#)

The project would not require any energy and does not include any energy reduction or control features.

7. Environmental Health [\[help\]](#)

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [\[help\]](#)

- 1) Describe any known or possible contamination at the site from present or past uses.

[\[help\]](#)

The project site was historically in agricultural production, where fertilizers or other chemicals may occur in soils onsite. No specific areas of contamination are known to occur.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity. [\[help\]](#)

No existing hazardous chemicals / conditions are known to the project area.

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project. [\[help\]](#)

Petroleum products (fuel, lubricants) would be used to operate heavy machinery during construction. No other toxic or hazardous chemical would be stored, used, or produced during project development, construction, or operation.

- 4) Describe special emergency services that might be required. [\[help\]](#)

No special emergency services would be required.

- 5) Proposed measures to reduce or control environmental health hazards, if any: [\[help\]](#)

Standard worker and environmental health protection measures would be employed during construction, including use of appropriate safety gear (hard hats, ear protection) and dust suppression (as required). No other environmental health hazards are anticipated.

- b. Noise [\[help\]](#)

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)
Limited noise associated with adjacent agricultural and timber practices. Those noise sources are not anticipated to affect the project.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [\[help\]](#)
Limited construction-related noise from use of heavy equipment would occur during construction. This noise would be short-term, and would only occur during daylight hours.

3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)
Work would only be completed during daylight hours. In addition, there are few (if any) sensitive noise receptors located in the vicinity of the project area.

8. Land and Shoreline Use [\[help\]](#)

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [\[help\]](#)
The project area is located entirely within a National Wildlife Refuge and is managed by the USFWS as wildlife habitat. It is bound to the south and east by private agricultural lands, and to the north by private timberland.
The project would improve habitat conditions for wetland dependent and obligate species, which is consistent with the management objectives and land use of the Refuge properties. The project would have no effect on adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [\[help\]](#)
Prior to acquisition by the federal government, the project area was in agricultural production as pasture. Most of the Refuge, including the project area, has been managed as wildlife habitat for over 30 years. The project would not convert any land to nonfarm or nonforest uses.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how: [\[help\]](#)
Irrigation runoff from adjacent pasture lands periodically enters the project area. However, irrigation runoff may benefit wetland habitats, particularly in the summer months when precipitation levels are low and water may improve conditions for wetland dependent species.

c. Describe any structures on the site. [\[help\]](#)
Infrastructure in the project area are limited to culverts and water control structures that provide passive control over water delivery between managed wetland units. Berms run along both sides of Outlet Creek and provide maintenance vehicle access. Limited fencing separates Refuge property from private property.

d. Will any structures be demolished? If so, what? [\[help\]](#)
Three water control structure will be removed – two will be replaced.

- e. What is the current zoning classification of the site? [\[help\]](#)
Extensive Agriculture
- f. What is the current comprehensive plan designation of the site? [\[help\]](#)
Government Services
- g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)
Not applicable
- h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)
The project area includes wetlands, which are critical areas.
- i. Approximately how many people would reside or work in the completed project? [\[help\]](#)
None.
- j. Approximately how many people would the completed project displace? [\[help\]](#)
None.
- k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)
Not applicable.
- L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)
The project is consistent with the continued management of federal land as a National Wildlife Refuge.
- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any: [\[help\]](#)
Not applicable.

9. Housing [\[help\]](#)

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)
None.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)
None.
- c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)
Not applicable.

10. Aesthetics [\[help\]](#)

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [\[help\]](#)

All proposed structures would either be buried underground or aligned with the top height of low elevation berms (e.g., less than 5 feet high).

- b. What views in the immediate vicinity would be altered or obstructed? [\[help\]](#)

None.

- b. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)

Not applicable.

11. Light and Glare [\[help\]](#)

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)

None.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)

No light or glare would be generated by the project.

- c. What existing off-site sources of light or glare may affect your proposal? [\[help\]](#)

None.

- d. Proposed measures to reduce or control light and glare impacts, if any: [\[help\]](#)

Not applicable.

12. Recreation [\[help\]](#)

- a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)

Public recreational opportunities on the Refuge include hiking, fishing, wildlife viewing and seasonal waterfowl hunting. Cross country skiing and snowshoeing are allowed in the winter.

- b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)

No.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [\[help\]](#)

The project would have no impact on recreation or recreational opportunities.

13. Historic and cultural preservation [\[help\]](#)

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe. [\[help\]](#)

No. The USFWS Regional Historic Preservation Officer (RHPO) completed a NHPA Section 106 assessment for the project in April 2018, which included outreach to the Confederated Tribes and Bands of the Yakama Nation. No historic or archaeological resources were identified within the project area / area of potential effect.

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [\[help\]](#)

No. Please refer to the attached report prepared by the RHPO.

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.

[\[help\]](#)

The RHPO completed a records search, site survey, and corresponded with Native American Tribes regarding the project. Please refer to the attached report prepared by the RHPO.

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required. [\[help\]](#)
As required by the RHPO, an archaeological monitor will be onsite during all excavation work.

14. Transportation [\[help\]](#)

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [\[help\]](#)

The project area is accessible from Lakeside Road on the east and Wildlife Refuge Road on the west. From these public streets, construction equipment would access work areas using existing berms along the west and east sides of Outlet Creek.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [\[help\]](#)

Public transit is not available at the Refuge or within the city limits of Glenwood.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)

The project would not create or eliminate any parking spaces.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [\[help\]](#)

The project would not require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities.

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [\[help\]](#)

The project would not occur in the vicinity of water, rail, or air transportation.

- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

No additional vehicle trips per day would be attributed to or generated by the completed project.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe. [\[help\]](#)

The project would not interfere with or be affected by the movement of agricultural or forest products on roads or streets in the area.

h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

None proposed.

15. Public Services [\[help\]](#)

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)

No.

b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

None proposed.

16. Utilities [\[help\]](#)

a. Circle utilities currently available at the site: [\[help\]](#)
electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,
other _____

There are no utilities available at the site.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [\[help\]](#)

No utilities are proposed under the project.

C. Signature [\[help\]](#)

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Trevor R. Sheffels

Name of signee Trevor Sheffels

Position and Agency/Organization Refuge Manager, Conboy Lake NWR, US Fish & Wildlife Service

Date Submitted: May 8, 2018

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