

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: [\[help\]](#)

South Fork Cowlitz Creek Floodplain Restoration Project

2. Name of applicant: [\[help\]](#)

Yakama Nation (YN) through the Yakima/Klickitat Fisheries Project (YKFP)

3. Address and phone number of applicant and contact person: [\[help\]](#)

Primary

Kelly Clayton-YN YKFP Habitat Biologist
PO Box 151
Toppenish, WA 98948
(509) 945-7195
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Secondary

Ross Huffman-WDFW – Oak Creek Wildlife Area Manager
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(509) 653-2390
ross.huffman@dfw.wa.gov

4. Date checklist prepared: [\[help\]](#)
July 24, 2015

5. Agency requesting checklist: [\[help\]](#)
WDFW

6. Proposed timing or schedule (including phasing, if applicable): [\[help\]](#)
The project will be implemented for up to five years, beginning in 2015.

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 future plans.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [\[help\]](#)

- Stream Habitat Restoration Guidelines (Washington State Aquatic Habitat Guidelines Program 2004)
- Design Considerations for Large Woody Debris Placement in Stream Enhancement Projects (Hilderbrand et al 1998 North American Journal of Fisheries Management 18: 161-167)
- Haring, D. 2001. Habitat limiting factors: Yakima River watershed water resource inventory areas 37-39, final report. Washington State Conservation Commission.
- Oregon Department of Forestry/Oregon Department of Fish & Wildlife. 2010. Guide to Placement of Wood, Boulders and Gravel for Habitat Restoration
- Yakima Basin Fish & Wildlife Recovery Board. 2009. Yakima Steelhead Recovery Plan. Extracted from the 2005 Yakima Subbasin Salmon Recovery Plan with Updates.
- Oak Creek Floodplain Restoration DNS 14-048
- Gina McCoy, P.E., WDFW engineer. South Fork Cowiche Creek Risk Assessment. E-mail communication April 29, 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. [\[help\]](#)
None

10. List any government approvals or permits that will be needed for your proposal, if known. [\[help\]](#)

- FPA-DNR (completed)
- SEPA Determination-WDFW
- Hydraulic Project Approval – WDFW

- Endangered Species Act– Programmatic Section 7 Consultation - Habitat Improvement Program (HIP)/Biological Opinion III (HIP BO III). US Department of Energy – Bonneville Power Administration – National Marine Fisheries Service (NMFS) and US Fish and Wildlife Service (USFWS).

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

South Fork Cowiche Creek Floodplain Restoration Project

The YKFP proposal for South Fork Cowiche Creek identified approximately 2 miles for wood replenishment and riparian enhancement on the Cowiche unit of WDFW's Oak Creek Wildlife Area (Figures 1 and 2). Restoration measures are to reverse channel incision and restore floodplain function. The goals of the project are to enhance instream habitat complexity and groundwater storage, which will in turn contribute toward improved flows. This project will provide additional benefits to fish and wildlife by increasing minimum stream flows, restoring the density and species composition of riparian vegetation, increasing the availability of pool habitat and cool water refugia during periods of high temperature, and providing suitable habitat for beaver re-colonization.

Wood is a critical component of stream ecosystems. The project will install wood structures to restore in-channel complexity, reverse channel incision and reengage Cowiche Creek with its floodplain. Log structures can be cost-effective applications that reduce stream velocities at high flows, thereby trapping sediment to help reverse channel incision. Wood will also be placed on the floodplain to promote roughness during floods. Fine material will be trapped which will promote seed germination, and provide microclimate heterogeneity for riparian re-vegetation. Floodplain roughness also helps avoid rapid channel avulsions that would otherwise hamper floodplain restoration.

Floodplain and aquatic restoration will require 882 logs to be placed in the channel and floodplain. Wood for the project will be harvested in the Oak Creek watershed. Timber harvest sites were previously identified in the Oak Creek Floodplain Restoration Project (DNS 14-048), however the method of harvest and tree removal has changed. Timber harvest operations will be conducted with ground based equipment on slopes < 45%. Trees will be whole tree logged and processed at the landings. Normal ground disturbance from a tractor yarder will occur. Logging slash at landings will be piled and burned and/or distributed along skid trails. Trees will be left in lengths as long as possible and hauled via truck to the Cowiche worksite. After construction, the Washington Conservation Corps (WCC) will install cuttings along disturbed banks and broadcast native grass-seed.

Proposed restoration includes the construction of unanchored log jams in the stream channel (with and without rootwads) and placed via cable yarder (Link Belt 98 or equivalent – a tracked, lattice crane with 54-foot boom). Pilings (vertical logs) will be driven into the bank using a 100-class tracked excavator with hydraulic hoepack to encourage flows into disconnected wide floodplain areas where riparian vegetation is absent. Logs may be positioned individually or in small groupings. Small diameter woody material will be placed by laborers as racking material upstream of and within each jam. In addition, logs will be placed in the floodplain to enhance roughness and trap fine material during floods, in turn rejuvenating soil health and promoting native plant germination. All wood placements will be consistent with the Oregon State Guide to Placement of Wood, Boulders and Gravel for Habitat Restoration (2010) and Stream Habitat Restoration Guidelines (2012).

A site visit was conducted by Gina McCoy, P.E., WDFW engineer, in April 2015. Gina believed that the large wood installations pose no risk to downstream property, infrastructure or public safety. The proposal will follow WDFW's Stream Restoration Guidelines and will use material at least 1.5 times bankfull width. The size of this material will ensure if any of it mobilizes, it will move only a short distance downstream before lodging on an obstruction. Furthermore, the downstream end of the project area has an expansive riparian zone with robust, dense woody vegetation that will function to trap floating debris at high flow. The topography of the valley bottom in this area creates a constriction that ensures that all flood flows will be routed through this riparian zone (McCoy, 2015).

This proposal is in coordination with WDFW, Mid-Columbia Fisheries Enhancement Group (MCFEG), and Yakima County. The YKFP and MCFEG conducted a habitat survey July 7, 2015 of the proposed reach to establish a

baseline, and monitor the project over time.

Background

Habitat Condition

South Fork Cowiche Creek is a fish-bearing tributary, approximately 12 miles from its confluence with the Naches River. Cowiche Creek supports Middle Columbia River Steelhead Trout and is in the potential/historic range of Bull Trout, which are listed "threatened" under the Endangered Species Act, Coho, occasional Chinook, and Cutthroat Trout now that downstream barriers have been removed. Aerial photographs suggest South Fork Cowiche Creek was braided and likely supported multiple side channels, beaver dams, backwater ponds, and other off-channel habitat features. Much of this off-channel complexity has been lost as the valley has been converted for agricultural production.

Riparian Condition

This area of Cowiche Creek was purchased by WDFW in the 1970's, after historic agricultural use. Historic aerial photos and field reconnaissance indicate that the stream was likely pushed to the south end of the valley, with a majority of the riparian/floodplain vegetation removed to make way for agriculture. Within the project reach, Cowiche Creek has degraded/down-cut and is isolated from its floodplain, with areas of severe bank erosion. The creek flows through a large floodplain area almost devoid of any instream wood.

Water Quality

The Yakima Steelhead Recovery Plan (2009)) identified the following management strategies for Cowiche Creek: 1) Improve riparian, 2) floodplain, and 3) temperature conditions.

References

Oregon Department of Forestry/Oregon Department of Fish & Wildlife. 2010. Guide to Placement of Wood, Boulders and Gravel for Habitat Restoration

Yakima Basin Fish & Wildlife Recovery Board. 2009. Yakima Steelhead Recovery Plan. Extracted from the 2005 Yakima Subbasin Salmon Recovery Plan with Updates.

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. [\[help\]](#)

Cowiche Creek is a right bank tributary to the Naches River (Figure 3). The project reach is located on the Cowiche unit of the WDFW's Oak Creek Wildlife Area. The geographic coordinates are 120° 47' 58" W and 46° 39' 26" N and is located in T14 R16 S35 and T14 R16 S34 within WRIA 38 of Yakima County.

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

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

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

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

Flat

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

N/A

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

LOGY SILT LOAM, 0-2 PERCENT SLOPES

LOGY COBBLY SILT LOAM, 0 TO 5 PERCENT SLOPES

WENAS SILT LOAM

WEIRMAN SANDY LOAM, CHANNELED

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

Soils appear stable. There are areas of erosion where the creek has removed the toe of the bank. These areas typically have LWD in the channel and seem to be natural processes.

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

None, there will be no filling or grading associated with this project.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [\[help\]](#)

There will be no clearing or excavation. There may be temporary and minor increases in erosion caused by placing trees in the channel, but these impacts will be minor and mitigated using best management practices.

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

There will be no new impervious surfaces associated with this project.

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

Logs will be placed via cable yarder (Link Belt 98 or equivalent – a tracked, lattice crane with 54-foot boom). The Washington Conservation Corps (WCC) will install cuttings along disturbed banks and broadcast native grass-seed in disturbed areas.

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. [\[help\]](#)

Source wood was identified on the Oak Creek Floodplain Restoration Project (DNS 14-048). There will be minor emissions caused by logging 882 logs on Oak Creek that will then be transported to SF Cowiche Creek. Transportation of logs via logging truck will cause temporary dust on roads. The logs will be placed in SF Cowiche Creek and adjacent floodplain using heavy equipment, such as an excavator. Pickups driving to and from the work site will also cause some minor emissions. There will be no additional air emissions upon completion of the project.

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

None known

c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)
Project personnel will carpool to the work areas as much as possible and vehicles will be turned off when not in use.

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. [\[help\]](#)
Yes, the trees will be placed across South Fork Cowiche Creek, a tributary to the Naches River.

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, trees will be placed directly in or across South fork Cowiche Creek following recommendations for wood replenishment in the Washington Department of Fish and Wildlife's Stream Habitat Restoration Guidelines (2004) and the Oregon Department of Forestry/Oregon Department of Fish & Wildlife, 2010, Guide to Placement of Wood, Boulders and Gravel for Habitat Restoration. Habitat biologists will determine the exact wood placement in the field based on site conditions. Trees will not be sourced from the riparian buffer zone. Trees will be placed in locations where 1) crews and equipment have access to the creek with little disturbance; and 2) at points in the stream where pool habitat as well as stream braiding will benefit fish and wildlife habitat as well as riparian and wetland function.

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. [\[help\]](#)
None, there will be no fill or dredge material associated with this project.

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. [\[help\]](#)
Yes, all of the trees will be placed within the 100-year floodplain of South Fork Cowiche Creek.

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. [\[help\]](#)

No, there may be minor increases in turbidity from walking across the stream and pulling trees into place, but are not expected to result in measurable impacts to water quality.

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

- 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

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. [\[help\]](#)

This project is not likely to impact the amount or material associated with runoff, including storm water runoff events. Ground disturbance will be minimal and there will be no excavation or impervious surfaces that might impact runoff and/or storm water management.

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

There is a chance that petroleum products could leak from the excavator or vehicles onto the ground. All equipment will be kept in good working condition to minimize this risk. Refueling will occur at least 150 feet away from the ordinary high water mark.

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

No

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

The project is planned to enhance habitat, and best management practices will be applied to eliminate negative impacts to water quality. There will be no heavy machinery near the streambanks or in wetland areas, there will be no excavation or ground disturbance, and there will be no addition of unnatural material. The project will simply jump start the natural processes associated with the recruitment of trees into the stream channel and the hydrologic changes that result from such large wood structures being placed within the stream. By increasing pool frequency and floodplain

function, stream temperatures in South Fork Cowiche Creek will likely remain cooler during the warm, dry summer months. Skid trails will be water barred and seeded with native vegetation to prevent invasion of noxious weeds.

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

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

___deciduous tree: alder, willow, cottonwood, oak

___evergreen tree: pine

___shrubs: sagebrush, rabbitbrush, wild's rose

___grass: cheatgrass, tall wheat, reed canarygrass

___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? [\[help\]](#)

882 logs will be harvested from the Oak Creek Floodplain Restoration Project (DNS 14-048) and transported to SF Cowiche Creek. During the Oak Creek timber harvest, ground disturbance from logging equipment will occur. Logging slash at landings will be piled and burned and/or distributed along skid trails. Skid trails will be seeded with native vegetation to prevent invasion of noxious weeds. Minimal disturbance to shrubs and ground vegetation will occur during log placement in SF Cowiche Creek and adjacent floodplain. The creek will be accessed where riparian vegetation is limited or absent. Following construction, the WCC will install cuttings along disturbed banks and broadcast native grass-seed. A more extensive re-vegetation plan will be developed and implemented over time after high flows have been observed to assess channel response to augmented wood. This will enable properly identifying planting zones by directly observing changes in soil characteristics and plant species from an elevating water table and/or periodic flooding.

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

Ute ladies'-tresses are federally listed as threatened, but are not known to be present in the Cowiche Creek watershed. Wenatchee mountain checker mallow are federally and state listed as endangered, but are not known to be present in the Cowiche Creek watershed.

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

The addition of large wood to the creek channel will create new braided channels, thereby enhancing the wetland/riparian buffer around South Fork Cowiche Creek. Disturbed and/or un-vegetated areas will be live staked with native species.

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

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 _____

Species observed or assumed to utilize the site: hawks, heron, eagle, songbirds, quail, deer, elk, bear, beaver, salmon, and trout.

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

Mardon skipper-butterfly-State listed as Endangered
Bull trout-fish-Federally listed as Threatened, State listed as Candidate
MCR Steelhead-fish- Federally listed as Threatened, State listed as Candidate
Northern leopard frog-amphibian-State listed as Endangered
Bald eagle-bird-State listed as Threatened
Northern Spotted Owl-bird-Federally listed as Threatened, State listed as Endangered
Western gray squirrel-mammal-State listed as Threatened
Fisher-mammal- State listed as Endangered
Gray Wolf-mammal-Federally listed as Endangered, State listed as Endangered
Grizzly Bear-mammal-Federally listed as Threatened, State listed as Endangered
Canada Lynx-mammal-Federally listed as Threatened, State listed as Threatened

None of the above animals are likely to be negatively impacted due to implementation of this project.

The project is in the elk winter closure area and some work may occur during the closure period.

- c. Is the site part of a migration route? If so, explain. [\[help\]](#)

Yes, South Fork Cowiche Creek supports steelhead that migrate through the project reaches to spawn. Additionally, migratory birds and mammals use the watershed for seasonal habitats. The surrounding public land ownership provides adequate habitat for a variety of animals throughout the year.

- d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)

As proposed, the project will increase the amount of large wood in the channel and will also increase the vigorous riparian thicket that is present along the streambanks, providing additional cover for many songbirds and other wildlife species. The increased pool frequency and channel complexity due to the large wood will greatly enhance the instream habitat for threatened salmonids such as steelhead and bull trout. The project is designed as a habitat enhancement project and no long-term negative impacts to wildlife are anticipated.

- e. List any invasive animal species known to be on or near the site. [\[help\]](#)

none known

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. [\[help\]](#)

Upon completion, there will be no need for an energy source at the project site.

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

Not applicable; the project area is surrounded by public lands, unlikely to need solar energy capabilities. Regardless, the proposed project would not likely affect the potential use of solar energy.

- 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: [\[help\]](#)

Upon completion, there will be no consumptive uses of energy or natural resources. Most of the trees will be placed using manual winches and hand-held pulleys. Diesel tractors are fueled with a combination of diesel and bio-diesel.

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. [\[help\]](#)

The excavator poses a potential risk of a petroleum spill during refueling or if the gas tank leaks. All equipment will be kept in good working condition to reduce the risks of a chemical spill or sparks causing a fire. Crews will comply meet DNR forest practice requirements for fire suppression equipment.

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

[\[help\]](#)

No known contamination

- 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 known hazardous conditions

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

N/A

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

Due to the nature of the activity, there is a chance that emergency personnel such as EMT, fire fighters, and sheriff's deputies may need to respond to the project area during implementation.

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

All equipment using petroleum products will be in good working condition and kept away from the creek and creek bed as much as possible to prevent any contamination of the water.

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

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)

None

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. [\[help\]](#)

The short-term noise associated with this project will include a logging truck and heavy equipment for log placement, as well as 2-5 additional vehicles bringing work crews to the project sites during implementation. There will be no long-term increase in noise due to this project.

3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

Equipment will be operated during normal working days during the daylight hours. Traffic noise will be reduced by carpooling as much as possible to the project sites.

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 property throughout the project area is owned and managed by Washington Department of Fish and Wildlife as part of the Oak Creek Wildlife Area. Adjacent private land inholdings downstream are undeveloped or rural residential.

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? [\[help\]](#)

This area of Cowiche Creek was purchased by WDFW in the 1970's, after historic agricultural use. Historic aerial photos and field reconnaissance indicate that the stream was likely pushed to the south end of the valley, with a majority of the riparian/floodplain vegetation removed to make way for agriculture.

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: [\[help\]](#)

No

c. Describe any structures on the site. [\[help\]](#)

No structures.

d. Will any structures be demolished? If so, what? [\[help\]](#)

No

e. What is the current zoning classification of the site? [\[help\]](#)

Valley Rural

f. What is the current comprehensive plan designation of the site? [\[help\]](#)

Rural - Self Sufficient

g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)

Conservancy

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)

Yes, South Fork Cowiche Creek and its associated riparian wetlands are considered environmentally sensitive. Additionally, the project area provides fish and wildlife habitat for several culturally and ecologically important species.

i. Approximately how many people would reside or work in the completed project? [\[help\]](#)

Not applicable

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: [\[help\]](#)

Collaborating agencies include: WDFW Area Habitat Biologist, WDFW Oak Creek Wildlife Area Manager, Mid-Columbia Fisheries Enhancement Group, Yakima County, Salmon Recovery Technical Advisory Group.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any: [\[help\]](#)

N/A

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

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)

Not applicable

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)

Not applicable

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? [\[help\]](#)

The tallest large wood structure would not be likely to exceed six feet above the ordinary high water line.

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

Temporary during construction

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

There will be no new human-made material associated with this project. The project is planned to expedite the natural processes of large wood recruitment into the creek and the associated hydrological changes with such structures. Using hand tools and maintaining a small project footprint will minimize ground disturbance.

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

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

Not applicable.

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

No

- 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: [\[help\]](#)

None, not applicable

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

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

The project area is within public lands that are heavily used throughout most of the year. Hunters, anglers, hikers, birdwatchers, mountain bikers, and campers use the Oak Creek Wildlife Area and Cowiche Canyon Conservancy hiking trails of the proposed project area throughout the year.

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

No, the project will have no long-term impact on the existing recreational users. Noise associated with project implementation may impact wildlife movement during the short-term. Project implementation will cease during modern firearm hunting seasons for deer and elk to ensure crewmember safety and fair hunting opportunities.

- 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 is proposed for implementation during the time when there will be the least environmental impacts and the least impacts on recreational uses.

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 located on or near the site? If so, specifically describe. [\[help\]](#)

No structures, no known sites

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

There are some relict irrigation structures on the property and the area was used for agriculture.

A Yakama Nation cultural survey and report is being completed and will identify any areas of historic or cultural significance before project implementation occurs. The report will also be reviewed by the WDFW Archeologist.

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

Consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, and/or construction monitoring, with an inadvertent discovery plan.

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

Ground disturbance will be minimized during project implementation and a cultural resources specialist from the Yakama Nation will survey the area. Any identified sites will be avoided and an inadvertent discovery plan will be developed and followed.

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. [\[help\]](#)

Cowiche Mill Rd is adjacent to the project site and will be used to access each treatment area.

- 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? [\[help\]](#)

No, there is no public transit available in this remote area.

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

None, not applicable

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

No. Treatment areas will be accessed through existing roadways and access points as much as possible. Some off road access may occur as approved by wildlife area manager.

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

No

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? [\[help\]](#)

None, not applicable

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. [\[help\]](#)

No, not applicabile

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

N/A

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. [\[help\]](#)

Not applicable

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

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

None

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. [\[help\]](#)

None

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: _____

Name of signee Ross Huffman

Position and Agency/Organization Oak Creek WLA Manager/WDFW

Date Submitted: 8/6/15