

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:

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:

Golden Doe Large Wood Enhancement Project

2. Name of applicant:

Confederated Tribes and Bands of the Yakama Nation

3. Address and phone number of applicant and contact person:

PO Box 151, Toppenish, WA, 98948

(509) 865-5121

Contact: Madeleine Eckmann

4. Date checklist prepared:

January 12, 2021

5. Agency requesting checklist:

Washington Department of Fish and Wildlife

6. Proposed timing or schedule (including phasing, if applicable):

Milestone	Target Date
Cultural Resources Consultation Complete	3/1/2021
Project permits acquired	5/1/2021
Large wood transported to stockpile area	6/1/2021
Restoration Started (mobilization/clearing/grubbing)	6/1/2021
In-water work completed	8/15/2021
Revegetation complete	11/15/2021

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Under the guidance of the 2007 Salmon Recovery Plan and the 2017 Twisp to Carlton Reach Assessment we are working with WDFW to develop additional salmon habitat restoration projects in the reach that will benefit ESA listed salmon. The current Alder Creek Floodplain Restoration Project has been designed to work collectively with a project immediately upstream, the Golden Doe Large Wood Restoration project, to benefit ESA listed salmon. The Golden Doe Large Wood Restoration project will be constructed at the same time as the Alder Creek project and by the same contractor.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Twisp to Carlton Reach Assessment (CCFEG, 2017), Golden Do Concepts Report (2020), 2007 Upper Columbia Salmon Recovery Plan (UCSRB), 2017 Upper Columbia Biological Strategy (UCSRB RTT), Methow Sub-basin Geomorphic Assessment (USBR 2008), Golden Doe Wetland Assessment (2018), Golden Doe Botanical Report (2018), Report for the Methow River, Twisp to Carlton, Recreation and Safety Assessment (2018), Golden Doe Cultural Resource Survey and Report DRAFT (2020; Final expected March 2021)

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.

No

10. List any government approvals or permits that will be needed for your proposal, if known.

Section 107 Historic Preservation Act consultation (Tribes and SHPO), Section 7 ESA consultation (USFWS and NOAA), County Shorelines and Critical Areas Permits (Okanogan County), State Hydraulic Project Approval (WDFW), US Clean Water Act Sections 401 and 404 permits (Army Corps of Engineers and State Department of Ecology)

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.)

This is a salmon habitat restoration project consistent with the Upper Columbia Salmon Recovery Plan (UCSRB, 2007) to assist in recovery of native run ESA listed spring Chinook and steelhead stocks. The project seeks to restore and enhance mainstem rearing and spawning habitats used by endangered fish stocks in the Methow River system and to restore floodplain connectivity and natural processes that create and sustain quality fish habitat. This project was developed under the guidance of priority restoration actions recommended by the Updated Salmon Recovery Plan Biological Strategy (RTT, 2017) and the 2017 Twisp to Carlton Reach Assessment. Within the Twisp to Carlton Reach Assessment, this reach presented one of the greatest opportunities to recover interactions between the channel, side channels and riparian vegetation creating increased habitat complexity and restoring natural processes that sustain salmon habitat over time.

This project is located along the mainstem Methow River in the Middle Methow Assessment Unit (Methow River- Alder Creek) between river miles 34.5 and 35. This reach of the river is unconfined and depositional, with broad valley bottom floodplains, in contrast to the naturally confined bedrock valley that occurs just downstream, to the mouth of the Methow River. Within this lower section of the Middle Methow Assessment Unit substantial groundwater upwelling is present on the floodplain as observed in the spring channels present in the adjacent Silver Side Channel floodplains.

In the project reach, the extensive perennial side channels, wood structure induced pools, and peripheral wetlands that once provided excellent cover, thermal refuge, and nutrient production have been dramatically reduced. Similarly, adult holding habitat and steelhead spawning habitat has been lost in the project area due to the loss of wood structure induced pools and the loss of sediment sorting and gravel retention dynamics.

The primary goals of this project include recreating these large bar apex wood structures in a wide anabranching channel segment of Methow River to facilitate the development of mature floodway islands which will provide better riparian cover over the channel; encourage the splitting of the channel into multiple threads and; increase hydraulic complexity at a range of flows. In addition, these large bar apex wood structures will help create and maintain pool habitats with excellent groundwater connectivity providing thermal refuge for rearing juvenile salmonids. Imported Douglas-fir logs placed in the mainstem will emulate natural wood accumulation processes restoring and sustaining habitat conditions for steelhead, spring Chinook and bull trout.

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. **Within the WDFW Methow Wildlife Area, along the Twisp-Carlton Road and Okanogan County River Mile 34 of the Methow River approximately 4 miles SE of Twisp**

¼ Section	Section	Township	Range
SE	34	33	22

48°18'51" N/ 120°3'56" W

Parcel Numbers: 5130510000, 3222030040, 3322340232, 3322340231, 3222030041, 3322340233, 3322340211, 3222030029, 5130500000, 5130490000, 3222030029, 3322340213, 3322340263, 3322342001, 3322340010, 3322340215, 3322340262, 3322340261

Please see the attached planset for more details

B. Environmental Elements [\[HELP\]](#)

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

a. General description of the site:

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

b. What is the steepest slope on the site (approximate percent slope)?

The site consists of very flat floodplain valley bottom. Access onto the floodplain from the county road is a steep slope for a short distance (~ 30% grade, for 50 feet).

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.

475 – Riverwash; Farmland Classification – Not prime farmland.

433 – Owhy ashy fine sandy loam, 0 to 3 percent slopes (Staging area and access route only); Farmland Classification – Prime Farmland if irrigated.

In this case the site is not used for agriculture and is not irrigated. No soils will be removed in this project.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

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.

Approximately 2,070 cubic yards of cobble will be temporarily excavated to install the large wood structures. However, this material will be replaced back on top of the tail ends of the rootwads to help ballast the structures in place. No fill will be imported.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Erosion is not likely to occur as a result of clearing, construction, or use because the site has very little slope.

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

None

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
During construction an Erosion/Sedimentation Control Plan will be enacted which will include protecting construction zones from potential erosion produced during construction or in the event of heavy rain storms. After construction plantings and mulch applications, including hogfuel, weed-free straw, and/or hydromulch will help stabilize disturbed soils to control erosion.

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.

Construction dust will occur during excavation, although the quantity is not known. Consumed fuel emissions from all heavy equipment and pump engines will occur during construction as well. This quantity is not known. After construction no further emissions will result from this proposal.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No

c. Proposed measures to reduce or control emissions or other impacts to air, if any:
We will use a water truck to spray down dusty areas during construction to keep dust impacts limited.

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

a. Surface Water: [\[help\]](#)

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.

Surface Water Body: Methow River – a perennial flowing river

Wetlands: There are some small unnamed wetlands on the floodplain but these will not be impacted by construction or access routes

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.

Yes. Installing the log structures will require working directly within the river and on the riverbank in multiple locations. See the project plans for additional details.

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.

Activity and Location	Amount of material (cubic yards) to be removed (or placed) from waterbody	Area (SF) and/or Length (LF) to be impacted	Duration of impact
Floodplain Roughness log structures	48 Logs (120 CY) - Placed	200 linear feet	Permanent
North Bar Apex Log structures	104 Logs (300 CY) – Placed	80 linear feet	Permanent
North Excavation/Fill for Log Structure Ballast	River alluvium (800 CY) – Temporarily removed	140 linear feet	Temporary – 2 days
North Log Structure cofferdams	N/A	180 linear feet	Temporary - 10 days
South Log Structure Logs	89 Logs (260 CY) – Placed	160 linear feet	Permanent
South Excavation/Fill for Log Structure Ballast	River alluvium (1270 CY) – Temporarily removed	2500 square feet	Temporary – 2 days

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No withdrawals or diversions are proposed.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes. The entire proposal lies within the 100-year floodplain of the Methow River.

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.

No

b. Ground Water: [\[help\]](#)

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.

No withdrawals or discharges to groundwater are planned under this 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.

None

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.

The project will not significantly change stormwater runoff dynamics at the site. Any runoff would still flow into the Methow River.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Yes, however to mitigate for the risk, the contractor is required to produce a spill containment plan and have emergency materials accessible on-site in the immediate area of construction.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

None

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

a. Check the types of vegetation found on the site:

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?

Since the installation of the large wood structures occurs entirely on cobble bars below the ordinary high water level, vegetation impacts will be limited to access routes between the staging area and the river. Some very minor vegetation impacts (small shrubs) may occur along this excavator access route. In addition, some grasses may be impacted at the staging area and along the access route between the staging area and the river.

- c. List threatened and endangered species known to be on or near the site.
A vegetation survey was done for the entire project area and no state or federally listed plant species were found in the project area.
- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:
A native plant restoration plan will be developed for this project to mitigate any damage cause along the access routes. Any shrubs that are damaged beyond survival will be replaced. Furthermore, all access routes (excluding those across cobble bars) will be re-seeded with native grasses.
- e. List all noxious weeds and invasive species known to be on or near the site.
A vegetation survey was done for the entire project area and some noxious weeds were found to occur in frequently disturbed areas near the project site. For a detailed list of noxious weeds please refer to the Botanical Report for the Golden Doe Restoration Project (2018).

We will conduct vegetation maintenance activities at the project site for at least 3 years post construction to ensure establishment of the planted native vegetation, and to control noxious weed occurrences in the project zone.

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.
birds: hawk, heron, eagle, songbirds
mammals: deer, bear, beaver, bobcat, cougar, coyote
fish: salmon, trout
- b. List any threatened and endangered species known to be on or near the site.
UC Steelhead, UC Spring Chinook, Bull Trout, Gray Wolf, Lynx
- c. Is the site part of a migration route? If so, explain.
The site is known as a migration route for terrestrial wildlife, including mule deer, white tail deer, black bear, coyote, cougar, and bobcat. The Methow River is a migration corridor for anadromous fish and bull trout, and for water fowl.
- d. Proposed measures to preserve or enhance wildlife, if any:

Extensive replanting of disturbed habitat will occur. We will be introducing new large woody debris into existing habitats which will also enhance the site's habitat value.

- e. List any invasive animal species known to be on or near the site.

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.

None

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No

- 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:

None

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.

There are no abnormal risks. Risks are constrained to on-site construction activities during the construction phase. As always, construction equipment could spark a fire, or temporarily spill contaminants via equipment leaks or broken hoses.

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

None known

- 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.

None known

- 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.

None

- 4) Describe special emergency services that might be required.

No special emergency services will be required for this project

- 5) Proposed measures to reduce or control environmental health hazards, if any:

A hazardous materials spill prevention plan will be created and followed by the construction contractor to ensure construction equipment leaks and spills do not create environmental health hazards.

b. Noise

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

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.

In-water work window for this project is July 1- July 31 and WDFW has granted an extension through August 15. Work within the ordinary high water mark will be completed within this timeframe. We anticipate less than two months of construction related noises will be generated through this project. Noise will be caused by truck traffic and heavy equipment operations during the day, including running of trash pumps used to dewater work zones. Most noise associated with the project will occur between 6 am and 9 pm on normal work days, however some weekend days may have construction activities occurring during the construction phase. No long-term noise will occur as a result of this project.

3) Proposed measures to reduce or control noise impacts, if any:

None

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.

The site is currently used as recreational waterfront, wildlife habitat, and natural river corridor. The proposal will not affect current land uses on nearby or 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?

No

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:

No

c. Describe any structures on the site.

There is one barn on the WDFW owner parcel adjacent to where the log staging area is located.

- d. Will any structures be demolished? If so, what?
No structures will be demolished
- e. What is the current zoning classification of the site?
Methow Review District-Valley Floor 5
- f. What is the current comprehensive plan designation of the site?
Rural
- g. If applicable, what is the current shoreline master program designation of the site?
Conservancy
- h. Has any part of the site been classified as a critical area by the city or county? If so, specify.
Yes- 100 yr floodplain, wetland and shorelines
- i. Approximately how many people would reside or work in the completed project?
None
- j. Approximately how many people would the completed project displace?
None
- k. Proposed measures to avoid or reduce displacement impacts, if any:
None
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
Direct coordination with land management agencies in the area
- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:
None

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

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None
- c. Proposed measures to reduce or control housing impacts, if any:
None

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?

None

- b. What views in the immediate vicinity would be altered or obstructed?

None

- b. Proposed measures to reduce or control aesthetic impacts, if any:

None

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

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None

- b. Could light or glare from the finished project be a safety hazard or interfere with views?

No

- c. What existing off-site sources of light or glare may affect your proposal?

None

- d. Proposed measures to reduce or control light and glare impacts, if any:

None

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

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Hiking, fishing, rafting, hunting

- b. Would the proposed project displace any existing recreational uses? If so, describe.

No

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None

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.

After conducting a cultural resources inventory of the entire project area, no known buildings, structures, or sites eligible for the National Register of Historic Places (NRHP) or state and local preservation registers were recorded.

- 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.

Archaeologists from the Yakama Nation and Archeological Services, LLC conducted a literature review and field survey of the entire APE and submitted a report to BPA for section 106 compliance. No items of cultural importance were identified.

- 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.

A full federal Section 106 consultation has been conducted through BPA as the lead agency. Cultural Resource staff has surveyed the project site and written a cultural resource report for the consultation.

- 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.

A full cultural resource survey and consultation with SHPO and affected federally recognized tribes is expected to be completed in February, 2021. This consultation has closely involved all tribes and consulting parties throughout the process and any concerns about research designs or potential impacts have been thoroughly addressed. No sensitive resources were discovered and we do not expect any new concerns to be brought forward. Regardless, we will follow the recommendations provided by SHPO and the tribes.

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.

Site access is provided directly off of the Twisp-Carlton County Rd.

- 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?

No

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate?

None

- 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).

No

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

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

