

# 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 decisionmaking 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:

W.T. Wooten Wildlife Area: Tucannon River and Floodplain Restoration Project Area 13 (PA-13).

2. Name of applicant:  
David Karl, WDFW Habitat Program
3. Address and phone number of applicant and contact person:  
1340 N. 13<sup>th</sup> Ave Walla Walla, WA 99362 (509) 527-4138

4. Date checklist prepared:  
November 1, 2018
5. Agency requesting checklist:  
WDFW
6. Proposed timing or schedule (including phasing, if applicable):  
**Project Area 13 is scheduled for implementation starting in 2019. In 2019, access and staging areas will be set up and project permitting finalized. Project construction will be done in two phases, starting with the downstream half of the project in 2020, and finishing the upper half in 2021.**
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.  
**No not at this time, this SEPA is for implementation of the PA-13 project.**
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.  
**The Tucannon River Geomorphic Assessment and Conceptual Design Report (Anchor, 2011). LIDAR 2010 & Green LIDAR 2017. The Tucannon River Habitat Restoration Program is funded by Bonneville Power Administration and administered by the Snake River Salmon Recovery Board. Annual reports and monitoring documents for the Tucannon River Habitat Restoration Program can be found on the Snake River Salmon Recovery Board Webpage.**  
<http://snakeriverboard.org/wpi/library/reports/>
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.  
**WDFW is currently working on consultation for Cultural Resources (106) and will start ESA consultation through BPA HIP 3. Other permits needed are WDNR FPA, USACE 404 Permit, WDOE Water Quality, and WDFW HPA.**

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.)

**Restoration objectives for Project Area 13 focuses on aggrading the channel in strategic areas to re-connect floodplain and improve in-stream habitat. This will be accomplished using four large plug areas designed to lift the bed approximately 3 feet in key locations. The plugs are engineered logjams buried with designed streambed mix, and then topped with 3 inch minus gravel. Restoration actions also involve removing levees that restrict natural floodplain connectivity and channel migration. Although some LW is present, little is being recruited within the project area or transported from upstream; therefore, LW will be placed throughout the channel. The intent of the LW is to provide areas of channel aggradation and improve bedload "residence time" throughout the reach. Additionally, LW structures will increase channel complexity and roughness, resulting in a more natural pool and riffle stream channel. Some of the LW structures will also cause channel bank erosion and provide additional bedload and large wood recruitment over time.**

**Levee removal and logjams will allow the channel to adjust via bank erosion and channel migration, establishing a more natural configuration that allows for retention of LW and sediment. These conditions will decrease channel velocities during high flows and allow pools to form and spawning gravels to collect. Reconnecting low-lying floodplain will allow dispersion of floodwaters, decreasing velocities in the main channel and allowing for dispersion of overbank sediments and mobile debris. LW placement in the project area will force pools and hydraulic variability in this dominantly plane-bed, simplified channel in the short term. Placing ELJs in strategic locations will promote side channel development through the low-lying areas in the floodplain, increasing channel complexity.**

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. **The project is located in Columbia County. The project will occur within the boundaries of the Washington State Wooten Wildlife Area. Township 10N, Range 41E, Section 27. The top end of the project starts at the Tucannon Hatchery Intake Dam and ends at the Hatchery access Bridge.**

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

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

a. General description of the site:

**Blue Mountains South Eastern Washington State. Mountains and canyons**

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

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

**2 to 1 slope**

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.

**The general soil types are Loess and river sediments, silts; however, the floodplain is generally sediments mixed with river cobbles.**

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.

**There are two types of fill that will be used in PA-13 construction. First, large boulders will be utilized to ballast LW features and Plugs. In most cases, the logs will be excavated below the riverbed, boulders will be placed on top of the log for ballasting, and the logs and boulders will be buried with river cobbles. Some boulders will be on the surface and used as buttressing for a log structure. In some cases, the logs will be tied to surface boulders with natural fiber rope. The overall estimate for boulder fill for the project is 300 cu yds. The second type of fill is gravel/cobble replenishment or "augmentation". The hatchery intake dam has influenced bedload movement through the project reach by blocking natural bedload transport and from maintenance activities that removed bedload material from the river. Additionally, the river channel, from the intake dam downstream past the hatchery, was channelized using bulldozers and levees after the 1964 flood, causing further erosion of the bedload material in the project reach. The project will replace bedload removed from the river by removing levees and restoring that material to the river from whence it came. The gravel augmentation is designed to rebuild the natural bed in the project reach and restore floodplain connection. Additionally, the log structures and plugs will improve bedload residence time, and help develop habitat complexity needed for ESA listed salmon and steelhead in the Tucannon River. PA-13 gravel fill estimates are 3000 cu. yds.**

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. Minor erosion may occur but the project goals are to manage and minimize fine sediments. **Erosion is a natural part of the river process; every stream restoration project will have some fine sediment inputs. We intend to use Best Management Practices (BMP's) to minimize erosive fine sediments during construction and methods (i.e. planting native grasses and wooded species) to eliminate future (unwanted) erosion that could be caused by the projects. Process based projects promote other variables like natural sediment management (logjams and bar formation) and floodplain connection that also minimize negative impacts of fine sediment.**

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: **Generally accepted practices such as silt fencing, straw bales, super sacks. Most of the practices are done to keep erosive fine sediments out of the river. Disturbed areas will be planted with native grasses and woody tree species (e.g. Ponderosa Pine, Black Cottonwood, and Willow).**

## 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.  
**Emissions may include chainsaw, large construction equipment and assorted vehicles, and water pumps. Typical construction emissions that will last for several weeks during project construction.**
- 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: **None**

## 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.  
**Yes, the Tucannon River and small springs, seeps, and associated 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.  
**Yes, the stream restoration project proposed in this SEPA involve process based river restoration that includes in-stream work. PA-13 requires extensive work in the channel because the project goals include aggrading the channel and reconnecting adjacent floodplain.**
  - 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.

**There will not be dredging involved with the project. However, many of the log structures and plugs designed include excavation for stability. The structures will be backfilled with the existing material and in many cases additional gravel and cobble. Overall fill for the project including basalt boulders and river cobble/gravel is estimated to be approximately 3300 cu. Yds.**

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

**No.**

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. Yes, All of the projects will be within the 100 year floodplain.

**Yes, the project will improve interaction between river and 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. **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, none.**

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. c. Water runoff (including stormwater): **None NA**

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. **NA None**

2) Could waste materials enter ground or surface waters? If so, generally describe. **No**

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:

\_X\_ deciduous tree: alder, maple, aspen, other

\_X\_ evergreen tree: fir, cedar, pine, other

\_X\_ shrubs

\_X\_ grass

\_\_\_ pasture

\_\_\_ crop or grain

\_\_\_ Orchards, vineyards or other permanent crops.

\_X\_ 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?

**Some vegetation will be removed for access to the project. The minimum necessary to get access. Past projects include planting native trees and grass, so we have respect for all existing vegetation. All disturbed areas are re-planted.**

c. List threatened and endangered species known to be on or near the site. **None**

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: **All disturbed areas will be planted with a native grass mix for the Blue Mountains and woody tree species (e.g. willows, cottonwood, and p. Pine). The projects are designed to reconnect floodplain and therefore raise the water table and improve conditions for riparian health.**

e. List all noxious weeds and invasive species known to be on or near the site.

Reed Canary Grass, blackberry.

## 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.

Examples include:

birds: hawk, heron, eagle, songbirds, other:                      mammals:  
deer, bear, elk, beaver, other.  
fish: bass, salmon, trout, herring, shellfish, other \_\_\_\_\_

The Tucannon River watershed supports ESA-listed Snake River summer steelhead (*Oncorhynchus mykiss*), Snake River Spring and Fall Chinook salmon (*O. tshawytscha*), Columbia River bull trout (*Salvelinus confluentus*), resident redband rainbow trout (*O. mykiss*), and western brook lamprey (*Lampetra richardsoni*).

- b. List any threatened and endangered species known to be on or near the site.

**Snake River Spring Chinook, Snake River Steelhead, Bull trout, Wolf**

- c. Is the site part of a migration route? If so, explain.

**Anadromous fish like Salmon and Steelhead are migratory fish and so the river is a migratory route, if you will. However, there is not a known terrestrial migratory route in the project location.**

- d. Proposed measures to preserve or enhance wildlife, if any:

**The project will be a benefit to fish and wildlife. Riparian habitat is utilized by more than 90% of the animal species in the Blue Mountains at one life phase or another.**

- e. List any invasive animal species known to be on or near the site. **None**

## 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. **NA none**

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



- 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: **NA**

## 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.

**No**

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

**None**

- 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**

- 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.

**Equipment related fluids will be managed appropriately, fueling areas are off-site and equipment will be checked daily for leaks**

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

**NA**

- 5) Proposed measures to reduce or control environmental health hazards, if any: BMP's will be applied to heavy equipment used for construction of the projects. **Equipment will be checked daily for leaks, fueling areas will be located outside of the floodplain. Pumps will have contained areas. Spill kits and emergency spill equipment will be available on-site during construction.**

- b. *Noise*

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? **Heavy equipment and chainsaws will be used during daylight hours 8AM to 6PM.**

- 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.

**The noise created by the project will be short-term and consist of normal construction noise.**

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.

**Current land use is a state wildlife area and recreation. The projects are restoration of river process and habitats. The goals are to improve river processes by removing levees and by augmenting large wood and gravel/cobble. The results will include reconnecting the floodplain and therefore will encourage more frequent flooding of the floodplain and riparian areas along the river. Improved river process will increase the diversity of the stream habitat and benefit water quality by improving channel geometry, increasing hyporheic exchange, and promoting a healthier riparian.**

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?

**Historically it had been used as both agriculture and forest practices, however, the land has been designated as a State Wildlife Area since the 1950's.**

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 a lake and hatchery intake at the upstream end of the project and a bridge (to hatchery) at the downstream end. Rainbow Lake is on the east floodplain and is used as a water source for the hatchery. Downstream there is a hatchery with several buildings and residents.**

d. Will any structures be demolished? If so, what? **No**

e. What is the current zoning classification of the site? **Recreational**

f. What is the current comprehensive plan designation of the site? **Recreational**

- g. If applicable, what is the current shoreline master program designation of the site?  
Designated a Shorelines: **Natural, Conservancy, Recreation**
- h. Has any part of the site been classified as a critical area by the city or county? If so, specify. **Yes, shorelines and wetlands are classified as critical area. Shoreline permits covers both for the projects.**
- i. Approximately how many people would reside or work in the completed project? **15**
- j. Approximately how many people would the completed project displace? **0**
- k. Proposed measures to avoid or reduce displacement impacts, if any: **NA**
- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: **None**
- m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any: **NA**

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

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. **NA**
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. **NA**
- c. Proposed measures to reduce or control housing impacts, if any: **NA**

## **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? **NA**

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

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

**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?  
**The project is located on a State Wildlife Area Camping, hunting, fishing, and wildlife viewing, and hiking.**

b. Would the proposed project displace any existing recreational uses? If so, describe.  
**No, the project will enhance existing recreational uses.**

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.

**The hatcher was built in 1949. No other structures or sites identified at this time. A full cultural resource consultation is currently underway.**

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.  
**Native people used the area for subsistence purposes, but no burial sites have been identified in the area. Cultural Resource consultation is currently underway.**

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.  
**Consultation with SHPO and Tribes will be completed for any projects that may occur. CTUIR and Nez Perce Tribes have bordering ceded lands at the Tucannon River; both tribes are partners in restoration efforts being completed for the river.**

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.  
**After coordination and consultation, all efforts will be made to maintain cultural resources and avoid disturbances.**

#### **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.  
**Tucannon Road is the closest road to the project it is a US Forest Service Road managed by the Umatilla National Forest. The road will not be impacted by the project other than short-term traffic to import materials and construction equipment.**

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? **NA**

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 be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?  
**The project will generate less than five trips per day during construction. Peak volumes will occur during summer work window July 15 to August 20.**
  
- 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. **No**
  
- h. Proposed measures to reduce or control transportation impacts, if any: **None**

**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. **No**
  
- b. Proposed measures to reduce or control direct impacts on public services, if any. **None**

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

- a. Circle utilities currently available at the site:  
 electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,  
 other \_\_\_\_\_
  
- c. 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. **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 David Karl

Position and Agency/Organization WDFW Habitat Biologist

Date Submitted: October 1, 2018