WAC 197-11-960 Environmental checklist.

ENVIRONMENTAL CHECKLIST

Purpose of checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decide whether an EIS is required.

Instructions for applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

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.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer," and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:
Cle Elum River Side Channel Restoration Project-Phase 2

2. Name of applicant:
Kittitas Conservation Trust (KCT)

3. Address and phone number of applicant and contact person:
Kittitas Conservation Trust (KCT)
PO Box 428
Roslyn, WA 98941
David Gerth, Executive Director
(509) 649-2951
kct@inlandnet.com
Mitch Long, Project Manager
(509) 649-2352
brooksideprojectmanagement@gmail.com

Washington Department of Fish and Wildlife (WDFW)
1701 S. 24th Avenue

Yakima, WA 98902
Jennifer Nelson
(509) 457-9307
Jennifer.Nelson@dfw.wa.gov

4. Date checklist prepared:
January 21, 2014

5. Agency requesting checklist:
Washington Department of Fish and Wildlife

6. Proposed timing or schedule (including phasing, if applicable):
Construction is planned to occur in 2014, but depending on funding, weather, and equipment availability construction may occur in following years up to 2019.

Material staging: March-September 2014-2019
Construction: August-November 2014-2019
Revegetation: September-June in year following construction, maintenance for three following years
Post construction Monitoring: Monthly and after high flow events for two years following construction

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
There are no current plans for additional work in this reach of the river. The habitat structures, vegetation, habitat complexity, water temperatures and water quality will be monitored over time. These data will be available upon request from KCT and may indicate that additional actions would be beneficial.

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

- Cle Elum Phase 2 Hydrology and Hydraulic Assessment (Natural Systems Design: May 2013)
- Final Cle Elum Phase 2 Basis of Design Report (Natural Systems Design: June 2013)
- Final Cle Elum Phase 2 Risk Assessment (Natural Systems Design: May 2013)
- Final Cle Elum Phase 2 Design Drawings (Natural Systems Design: July 2013)
- An Archaeological Survey and Inventory for the Kittitas Conservation Trust Cle Elum River Restoration Project, Phase II, Kittitas County, Washington (Reiss – Landreau Research)
- Joint Application for Aquatic Resources
- Specific Project Information Form (ESA Consultation for through the Corps Programmatic BiOp)
- NEPA documentation prepared by United States Forest Service, Wenatchee National Forest, Cle Elum Ranger District
- Cle Elum River Corridor Conservation Easement documentation
- Final Water Quality Report for Phase 1 restoration

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.

Scoping has begun for raising the Cle Elum Dam but that project will not impact this proposal if it is implemented or not.

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

- Special Use Permit and NEPA documentation from USFS

- ESA Section 7 Concurrence from NMFS and USFWS
- NHPA Section 106 Concurrence from THPO and SHPO
- CWA Section 404 Permit from US Army Corps of Engineers
- CWA Section 401 Permit from Ecology
- General Construction Stormwater Permit from Ecology
- Hydraulic Project Approval from Washington State Dept. of Fish and Wildlife
- Shoreline Exemption/Permit and Floodplain Permit from Kittitas County

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.)

Kittitas Conservation Trust (KCT) through the Yakima Tributary Access and Habitat Program (YTAHP) proposes to introduce large woody debris in the form of engineered log jams at specific locations in the lower Cle Elum River between river miles 5.25-7.2. The proposed project is intended to enhance instream, floodplain, and riparian function by distributing and maintaining perennial flow in five miles of side channel habitat that are predominately de-watered after irrigation storage releases from Lake Cle Elum are discontinued each fall. Flows in the lower Cle Elum River are controlled by irrigation releases from Lake Cle Elum Dam. The resulting regulated flow scenario delivers an annual hydrograph that is radically skewed from a natural flow scenario (Figure 1). The "flip flop" flow regime in the lower Cle Elum River, coupled with the presence of Cle Elum Dam, negatively impacts sediment and organic debris transport. Over time, the stream and floodplain processes have been degraded. The proposed project is designed to help restore these processes while increasing and enhancing salmonid habitat. Implementation of this project will reduce stranding of fish and other aquatic species when irrigation releases from Lake Cle Elum are reduced, resulting in the annual dewatering of the side channels.

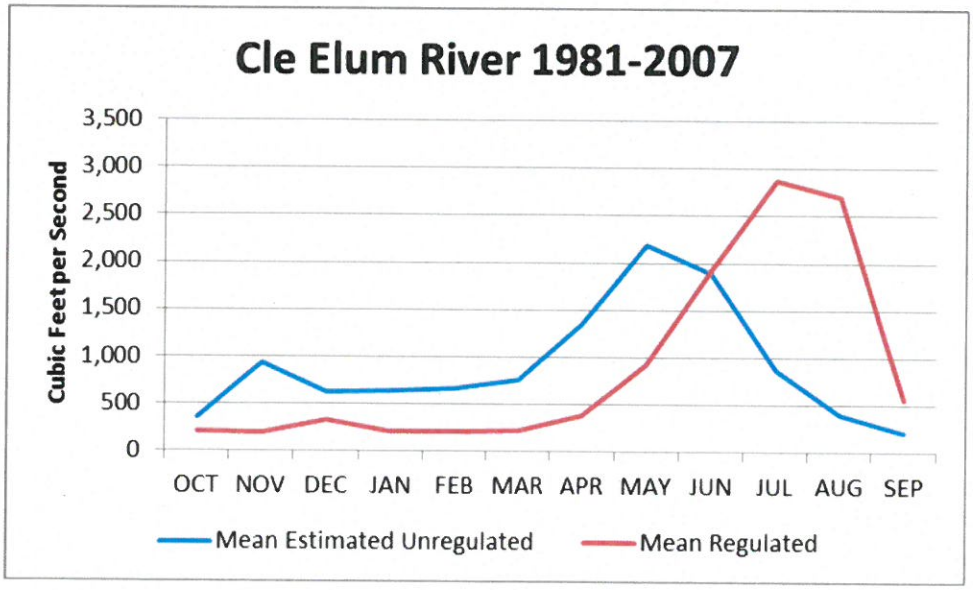

Figure 1. Regulated vs. estimated unregulated hydrograph for lower Cle Elum River based on BOR data (http://www.usbr.gov/pn/hydromet/yakima/yakwebarcread.html).

The overall project includes constructing 10 Engineered Log Jams, 5 gravel nourishment bars and installing 55 ballasted and un-ballasted logs with rootwads in the Cle Elum River downstream of the Lake Cle Elum Dam. These instream structures are flow obstructions that will be strategically placed to divert mainstem flow into relic side channel systems. Excavation of the inlets to 5 side channels will facilitate restoring perennial flow

and simultaneously supply native river materials for 5 gravel nourishment bars. The project will use helicopter assisted construction techniques and establish perennial flow in 5 miles of complex side channels to improve habitat for salmonids.

Project Purpose

The purpose of the project is to increase populations of anadromous and resident fish in the upper Yakima River system. A primary project objective is to expand and enhance salmon and steelhead spawning and rearing habitat by introducing perennial flow into 5 miles of ephemeral side channels in the lower Cle Elum River system. This project will increase the spatial availability of high-quality rearing habitat for juvenile salmon and steelhead, as well as expand spawning habitat for returning adults. Scarcity of rearing habitat is the primary limiting factor for restoration of populations of anadromous salmonids in the project reach. Restoration project work will increase the number of pools, instances of complex cover, channel length, area of spawning gravels and floodplain connectivity. This project has been proposed, designed, and funded to improve fish and wildlife habitat in this protected reach of the lower Cle Elum River.

Project Need

Flows in the lower Cle Elum River are controlled by releases from Lake Cle Elum Dam. The dam is a 165 foot earthfill structure completed in 1933 at the outlet of the natural Lake Cle Elum as part of the federal Yakima Project. The resulting regulated flow scenario delivers an annual hydrograph that is radically skewed from a natural flow scenario. This artificial flow regime in the lower Cle Elum River, over time, has reduced the complexity of the channel - impacting aquatic and riparian habitat diversity and floodplain functions. The first 3 miles of the main channel below the Cle Elum Dam have been transformed from a complex and dynamic aquatic system to a simplified, shorter and static channel with few pools, almost no cover, and little connectivity to the floodplain and historic side channels. Flow regulation has eliminated peak flows capable of bank erosion, sediment transport and channel modification. Refuge habitat for juvenile salmonids has been greatly reduced from pre-dam conditions. The spatial capacity of the lower Cle Elum River for supporting the fresh water life cycle stages of spring chinook, coho, sockeye, steelhead and other priority species far surpasses the current production levels of these populations.

The project has been designed to address the salmonid habitat limiting factors by using the natural fluvial processes available in the project reach. Project design elements focus on the deflection of flows from the main channel Cle Elum River into side channels, as well as large woody debris (LWD) loading in the main channel. The design calls for strategic placement of main channel ELJs to deflect year round flows into enhanced side channel inlets to meet the restoration project goals. Excavation of wider and deeper side channel inlets to introduce flow from the main channel will also produce native material for gravel nourishment bars. These gravel nourishment bars will be constructed immediately downstream of accessible ELJs to provide mitigation from sediment starvation caused by the Cle Elum Dam.

The proposed project will be implemented using conservation measures and best management practices to reduce temporary impacts on the environment. This project is proposed and funded to enhance habitat for aquatic and riparian species, specifically steelhead and bull trout, and will be implemented such that environmental impacts are minimized. Disturbance to existing vegetation and soils will be avoided as much as possible such that soil compaction, erosion, and the overall project footprint are kept to a minimum.

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.

- Lower Cle Elum River—River Miles 5.25-7.2
- No street address, travel north on Hwy 903, turn left on Morel Road, project area is at the end of this road, near Ronald, WA 98940, Kittitas County
- Sections 11, 13, & 14, Township 20 N, Range 14 E
- Upstream extent: 47.238; -121.057; Downstream Extent: 47.221; -121.032
- Parcel Numbers: 542534, 830134, 11839, 11840, 11841, 11842, 11836, 16212, 950056, 11827, 951842
- WRIA 39—Upper Yakima River Watershed

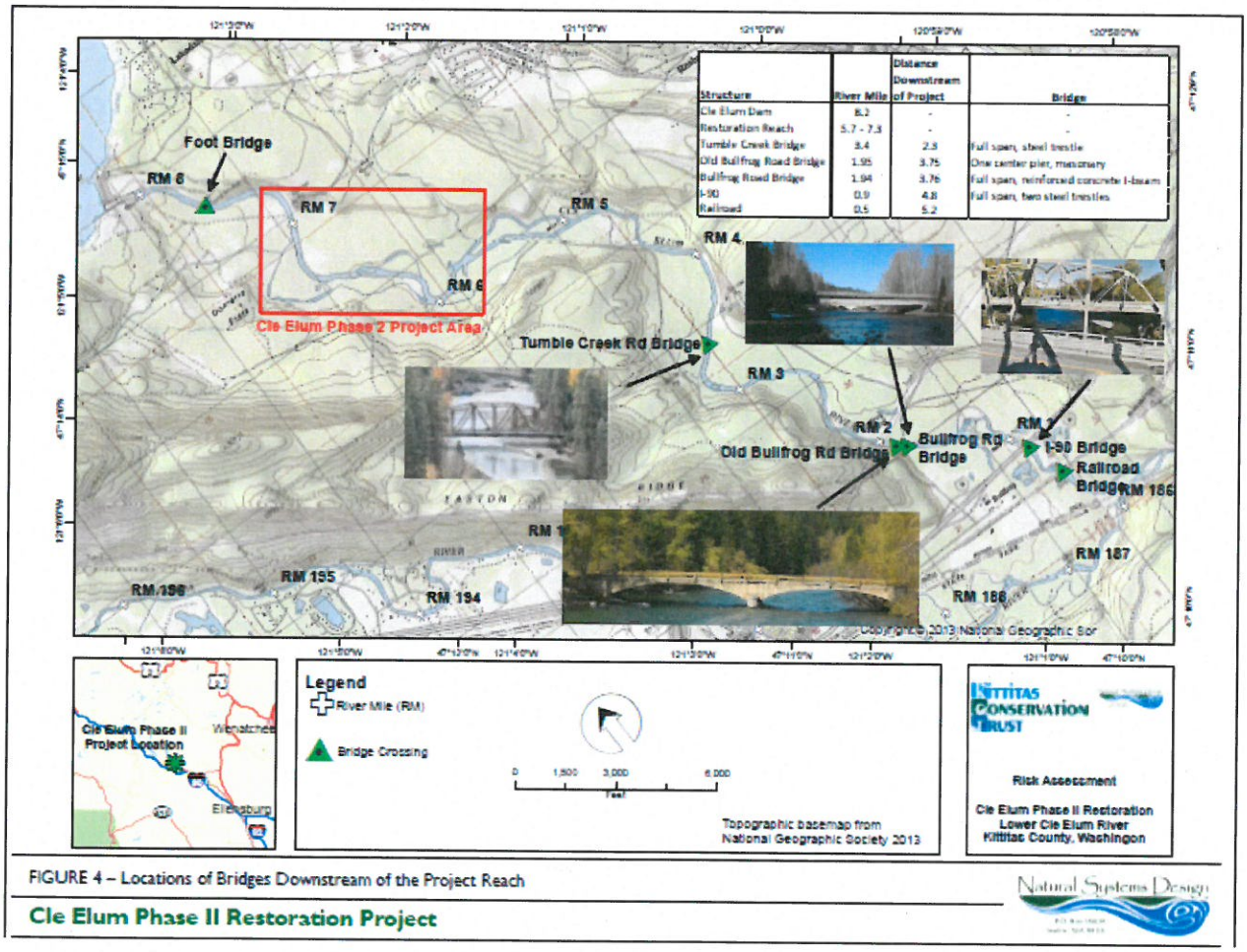

Figure 2. The red box on this map indicates the project area. Existing structures are shown relative to the proposed work area downstream of Lake Cle Elum Dam.

TO BE COMPLETED BY APPLICANT

EVALUATION FOR
AGENCY USE ONLY

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other . . . . . .

Flat, floodplain habitat

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

There are no slopes steeper than 3% within the project footprint.

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 prime farmland.

Xerofluvents and Racker Ashy Sandy Loam—floodplain sediments and alluvium

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

There is evidence of an active floodplain and meandering/braiding channels in aerial photos; typical of a functional floodplain.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Approximately 6000 cubic yards of native alluvial material will be excavated from the five side channel inlets for a total of 4000 linear feet. This will allow the gradient necessary for perennial flows through the side channel complexes upon project completion. This material will be used as backfill/ballast into the ELJs and to construct the gravel nourishment bars. About 2500 cubic yards of large boulders will be used for rock ballast for the helicopter constructed ELJs and ballasted snags. This rock will be acquired from onsite sources and nearby quarries.

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

There is a chance that erosion caused by runoff could occur during a storm event. Access roads currently exist to the project sites on the left bank, but about 1200 square feet of the road has been abandoned and will require removal of small trees (25) and shrubs. Access for the right bank structures will require about 2200 square feet of disturbance and removal of 40 small trees. Construction worksites and any temporary access points will be decompacted, erosion control measures applied and revegetated with locally native plants. All vegetation removed for access will be incorporated into the project by either replanting trees and shrubs or using material for racking pieces in the log jams. Excavation of the side channels will occur in the dry, further reducing the chances that erosion will occur due to a storm event.

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

There will be no impervious surfaces within the project site upon completion of the proposed project. The goal of the project is to promote natural stream and floodplain processes to enhance instream and riparian habitat.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

All construction will occur during low flow conditions (as regulated by Cle Elum Dam) and much of the earthmoving work will occur in the dry. Aerial construction methods are proposed for many of the structures to minimize the disturbance to the land, river bed and banks, and native vegetation. The project footprint will be

minimized as much as possible and disturbance will occur in areas already disturbed to the greatest extent possible. Erosion control measures will be applied to disturbed areas during implementation and for short term control upon completion of construction. Disturbed areas will be decompacted and planted with suitable native vegetation for long term erosion control.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

There will be emissions from equipment and vehicles accessing the project site during project implementation as well as dust associated with construction.

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

None known

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Vehicles and equipment will be kept in good working order and turned off when not in use. Upon completion of this project, there will be no additional emissions to the air associated with this project.

3. **Water**

a. Surface:

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.

All work will occur in and around the mainstem Cle Elum River and its side channels. The Cle Elum River is a left bank tributary to the Yakima River at river mile 185.6.

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, nearly all work will occur within 200 feet of the mainstem Cle Elum River or its Side Channels.

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.

Approximately 2550 cubic yards of boulders will be used as ballast for the helicopter constructed log jams and ballasted snags in the mainstem. Boulders used will be between 3-4 feet in diameter. Boulders will be obtained from nearby quarries and hauled to the site.

Approximately 5750 cubic yards of streambed alluvium will be excavated from the inlets of side channels that are dewatered under low flow conditions. The native streambed material will be sorted onsite and used to construct five gravel nourishment bars and ballast for log jams created using land based equipment.

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

There will be no water withdrawals or diversions associated with this project, but the flow in the Cle Elum River will be divided into the side channels and mainstem channel to provide perennial flow to five miles of side channel habitat. This project will enable the side channel complexes to flow year round which will not only enhance instream habitat, but will maintain the hyporheic connection with surface water to

provide water quality benefits as well. This project will result in enhanced floodplain and riparian function as well, benefitting not only aquatic species, but terrestrial and avian as well. The Cle Elum Phase 2 Hydrology and Hydraulic Assessment (Natural Systems Design: May 2013) details the modeling that was completed to determine flow splits and the predicted water surface changes in the mainstem to ensure minimal dewatering of Spring Chinook salmon redds.

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

Yes, the entire project area is within the 100 year floodplain of the Cle Elum 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.

The only discharges of waste material would be caused by an accidental spill of a petroleum product during refueling and/or equipment failure.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

There will be no ground water withdrawals or discharges to ground water. By reactivating the side channel complexes on a year round basis, there will be increased interaction between surface and ground water as is typical on a functional riverine floodplain.

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.

Accidental spills of petroleum products during construction are the only potential discharges anticipated that would impact ground water. However, spill prevention techniques, containment of accidental spills, and other best management practices will reduce the risk of ground and surface water contamination.

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.

Precipitation will be the main cause of stormwater runoff if there is a large storm event during implementation. Runoff around the freshly excavated inlet channel will flow through the side channel complexes. Due to the habitat complexity through the side channels, suspended sediments will settle out prior to reentering the Cle Elum River. Runoff near the ELJs will likely flow directly into the Cle Elum River, but there will be minimal disturbance associated with ELJ construction as most will be constructed by helicopter. Gravel nourishment bars will be constructed in isolation from flowing water to minimize turbidity. Certified weed free straw bales, straw wattles, and/or silt fencing may be used to help capture suspended sediments associated with stormwater runoff.

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

During construction, accidental spills of materials and fuels are a possibility. However, spill prevention techniques, containment of accidental spills, and other best management practices will reduce the risk of ground and surface water contamination.

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

The implementation phase of the proposed project will occur during low flow conditions in the Cle Elum River and when the side channels are dewatered due to low flows. The inlet channels will be excavated in the dry, with no need to construct a bypass system thereby decreasing the amount of ground disturbance and potential for runoff. Gravel nourishment bars will be constructed in isolation of flowing water to minimize turbidity within the Cle Elum River. Additionally, there will be no excavation within the main channel of the Cle Elum River and using aerial construction techniques will minimize the disturbance necessary for access for land based construction techniques to many of the sites. KCT is working with the Bureau of Reclamation, who manages the releases from Cle Elum Dam, to help maintain low flows through the project area as much as possible during project implementation. Certified weed free straw bales, straw wattles, and/or silt fencing will be used as necessary to ensure water quality criteria are met during implementation. Upon completion, all disturbed areas will be planted to native vegetation to help stabilize disturbed areas.

4. **Plants**

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

X_____ deciduous tree: **alder**, maple, aspen, other **cottonwood**

X_____ evergreen tree: **fir, cedar, pine**, other

X_____ **shrubs**

X_____ **grass**

_____ pasture

_____ crop or grain

_____ 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?

Access roads currently exist to the project sites along the left bank. Approximately 1,200 square feet of existing abandoned logging road will require limbing of existing trees encroaching onto the right of way and removal of approximately 25 coniferous trees less than 6" DBH. The right bank access road foot print measures 2,200 square feet and will require the removal of approximately 40 coniferous saplings < 6' dbh and approximately 100 shrubs which will be salvaged and replanted on site or trimmed such that they will have vigorous re-growth in the next growing season. All access roads will be temporary and will be decommissioned and restored using native, locally adapted plants upon completion of the project.

c. List threatened or endangered species known to be on or near the site.

Ute Ladies'-tresses are federally listed as threatened, but there are no known populations in Kittitas County.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The areas of disturbance will be minimized to the greatest extent possible. Cuttings from existing vegetation will be used and trees and/or shrubs that are removed for access will be replanted within the project area or

incorporated into the habitat restoration components of the project. If necessary, other native vegetation from local sources will be used to help restore the disturbed areas.

5. **Animals**

a. Circle any birds and 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**, other: **other raptors, kingfishers, herons**
mammals: **deer, bear, elk, beaver**, other: **furbearers, small mammals**
fish: bass, **salmon, trout**, herring, shellfish, other: **native minnows, suckers, sculpin, whitefish**

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

Middle Columbia River Steelhead and Columbia River Bull Trout are both listed as threatened on the Endangered Species List. Terrestrial species listed on the Endangered Species List in Kittitas County include Northern Spotted Owls, Marbled Murrelet, Grizzly Bear, Canada Lynx, and Gray Wolf.

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

Yes, Spring Chinook salmon and sockeye salmon spawn upstream of the proposed project area and other fishes migrate through this reach to access rearing, forage, refuge, and spawning habitat as well. Terrestrial and avian species may migrate through this area to find refuge in the protected riparian and forested areas adjacent to the project area.

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

The proposed project has been funded, planned, and designed to enhance fish and wildlife habitat and floodplain function. The log jams and individual logs will provide instream habitat within the mainstem and provide scour pools to provide resting habitat for spring Chinook salmon prior to spawning, as well as other aquatic species. The existing side channel complexes have high quality salmonid rearing habitat throughout and upon completion of this project, aquatic life will no longer be entrained in the side channels when irrigation flows are reduced from Lake Cle Elum. The project will improve instream complexity in the mainstem, increase "edge" habitat with perennial side channel connections, and improve spawning habitat with gravel nourishment bars. In addition to the direct benefits to fish life by providing perennial flow through five miles of side channels and adding large woody debris for enhanced instream habitat, the processes associated with a functional floodplain will be restored. A more functional floodplain will enhance the water quality instream and riparian areas associated with the channels. The area of disturbance will be minimized as much as possible and the existing vegetation will be avoided to the greatest extent possible. Any vegetation that is removed associated with implementation will be incorporated into the design and/or replanted on site.

6. **Energy and natural resources**

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.

Not applicable

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

No, the project area will remain in a natural state that is unlikely to be used to produce solar energy because the project is on federal lands and private lands covered by a conservation easement to protect fish and wildlife.

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:

Construction equipment will be kept in good working order and will be turned off when not in use. Upon completion, there will be no energy consumption associated with this project.

7. **Environmental health**

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.

The use of petroleum based fuels and lubricants may be used for equipment operation. Accidental spills and/or ignition of these materials are a possibility. Using best management practices will reduce risks associated with project implementation.

1) Describe special emergency services that might be required.

If there were a chemical spill, the Washington Departments of Ecology, Military, and Fish & Wildlife might need to respond. The Kittitas County Sheriff's Department and/or fire districts would need to respond to any emergencies that might occur on site during implementation.

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

Safety practices required by federal, state, and local regulations will apply to all construction activities.

b. **Noise**

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

The project area is in a fairly remote and undeveloped area with little traffic or other noise.

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.

Short-term increases in noise will be associated with trucks, heavy equipment operation, and increased vehicular traffic during construction. Approximately one week during construction will include noise associated low flying helicopter operations. Construction will be limited to daylight hours. There will be no long term changes in noise associated with project implementation.

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

Equipment and vehicles will be turned off when not in use and construction activities will not occur outside daylight hours. The project is planned for a time when there are not likely to be any sensitive terrestrial species at a vulnerable phase.

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties?

The Bureau of Reclamation owns the property at the upstream limits of the project area and this property is managed by the US Forest Service. Some private development, including a golf course, is located near the downstream extent of the project work area. The private property surrounding the project area is in the Cle Elum River Corridor Conservation Easement and has been protected from development in perpetuity. The project is located in a natural area with little development. An unimproved parking area, camp ground, and boat launch is located along the left bank near the upstream extent of the project area.

b. Has the site been used for agriculture? If so, describe.

The site has been logged historically and there is an abandoned diversion structure that was previously used as the City of Cle Elum's water diversion.

c. Describe any structures on the site.

Surface or subsurface structures on the property of note are the remnants of a water conveyance pipe that has been abandoned by the City of Cle Elum. The pipe was installed in the early 20th century as part of the city's domestic water supply infrastructure. The city's Cle Elum River surface water diversion and related conveyance infrastructure was abandoned about 1960 when its Yakima River diversion was developed to supply Cle Elum's domestic water needs. There will be no changes to this abandoned infrastructure.

In 2009 KCT constructed two ELJ's with gravel nourishment bars at the upstream extent of the project reach (Phase 1). Phase 2 includes proposals to enhancement the inlet and additional gravel nourishment bar construction on the left bank ELJ.

d. Will any structures be demolished? If so, what?

No.

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

Forest and Range and Master Planned Resort

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

Rural Working Land Use and Rural Recreation Land Use

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 an "environmentally sensitive" area? If so, specify.

The entire floodplain, side channel complexes, and the Cle Elum River are all environmentally sensitive areas. This area supports numerous species of fish and wildlife as well as native vegetation and warrants protection.

i. Approximately how many people would reside or work in the completed project?

None, not applicable

j. Approximately how many people would the completed project displace?

None, not applicable

k. Proposed measures to avoid or reduce displacement impacts, if any:

None, not applicable

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Numerous local, state, and federal entities have been incorporated into the planning and design phases of this project and the applicable permits and authorizations will be acquired prior to implementation. Through the project area and downstream, the entire geomorphic floodplain of the Cle Elum River is protected in a Conservation Easement prohibiting development and providing fish and wildlife habitat. The proposed project implements the goals of the conservation easement and will help to enhance floodplain function and processes essential to high quality fish and wildlife habitat.

9. **Housing**

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None, not applicable

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None, not applicable

c. Proposed measures to reduce or control housing impacts, if any:

None, not applicable

10. **Aesthetics**

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

The proposed log jams and gravel nourishment bars will deform over time due to natural riverine processes. These structures will blend with the natural environment.

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

None, the structures are designed to have a natural log jam appearance that will blend in with the natural setting.

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

The project will minimize the areas of disturbance as much as possible and all disturbed areas will be planted with native vegetation upon completion. Overtime, the project is designed to restore floodplain function and provide enhanced fish and wildlife habitat under more natural conditions given the altered flow regime and previous disturbances.

11. **Light and glare**

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

None, not applicable

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

No, not applicable

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

None, not applicable

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

None, not applicable

12. **Recreation**

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

The public and private property surrounding the project site and Cle Elum River are open to the public. Recreation activities may include boating, angling, hiking, snow shoeing, and wildlife watching. Access to the area is relatively unimproved.

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

In the interest of public safety, recreational access would not be allowed within the project area during implementation. The construction area will be flagged off and unauthorized personnel will not be allowed to

access this area while heavy equipment and helicopter operations are taking place. There will likely be very little recreational access to the immediate project area from September thru December 2009 due to project mobilization, implementation, and demobilization activities.

Upon completion, no recreational users will be permanently displaced, but signs will be posted informing boaters about number of natural and engineered log jams and the high flows released during the summer months. In the interest of public safety, alternative boating/rafting locations may be recommended.

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

Comprehensive hydraulic modeling and a risk assessment was completed based on the proposed designs to ensure sufficient sight distance for boaters. These assessments also evaluated risks of dewatering redds from fall spawning trout and salmon once low flows are split into side channels from the mainstem. The modeling indicates that there will not be dewatering in previously known spawning locations. Signs will be posted upstream of the project area describing the restoration efforts and the potential dangers of recreating in a river system, specifically with log jams (both engineered and natural). The project will improve fish habitat in the river by maintaining perennial flow to five miles of productive side channel habitat. The habitat improvements are likely to lead to improved survival for juvenile salmonids and increased spawning habitat which will ultimately lead to additional fishing opportunities for the public.

Although the project has been designed as a fish and wildlife restoration project, the potential for human interactions with these structures has not gone unanalyzed. While the KCT does not recommend boating or swimming in the Cle Elum River, the project has been designed to minimize potential risks to the public associated with placing large wood in river systems.

13. **Historic and cultural preservation**

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

The cultural resources survey and report did not find any sites within the Area of Potential Effect for this project. There have been several sites noted within 2 miles that include debris or refuse scatters or dumps, lithic scatter, and abandoned bridge abutments. None of these will be impacted with project implementation.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

The abandoned City of Cle Elum water diversion structure is the most notable structure near the project area in addition to the Cle Elum Dam approximately 1 mile upstream. There are no other known landmarks that will be impacted associated with project implementation.

c. Proposed measures to reduce or control impacts, if any:

A cultural resources survey and report have been completed. Databases from the USFS, DAHP, and the Yakama Nation were queried along with previous reports from the nearby vicinity. The project is designed to have no effect on cultural resources. Specific protocols will be followed as directed in NHPA Section 106 and the cultural resources report completed for this project.

14. **Transportation**

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

Traveling north on State Route 903, turn left onto Morel Road and follow it down a winding hill (turns into Bakers Road) until it stops near the river. At this point, you are very close to the proposed staging area near the upstream extent of the project area.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No, the site is not near public transit as it is in a remote location.

c. How many parking spaces would the completed project have? How many would the project eliminate?

There will be no additional parking spaces upon project completion and parts of the unimproved parking area along the left bank will likely be incorporated into the material staging area. No more than 20 parking spaces are currently available and this project may temporarily eliminate all of them during construction. Upon completion, all of the current parking spaces will likely remain.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

There will be no new roads constructed during implementation of this project. Some sapling trees will be removed from the existing, untraveled access road to access the work sites. The roads will not need any additional work and will be abandoned upon project completion.

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

There is no formal water, rail, or air transportation in the project vicinity. Recreational boaters may use the Cle Elum River but it is not a formal transportation route.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

There is not expected to be any change in vehicular traffic associated with project completion.

g. Proposed measures to reduce or control transportation impacts, if any:

Not applicable

15. **Public services**

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

It is not likely that this project will result in an increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

The project has been planned and designed to minimize risks to humans and existing infrastructure. The careful design and planning phases will result in minimal impacts on public services.

16. **Utilities**

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

There are no known utilities on site.

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

There are no new utilities proposed for project implementation or completion.

C. SIGNATURE

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: Dan Gerth .....(Gerth for KCT)

Date Submitted: FEB. 1, 2014

Signature: Jennifer Nelson .....(Nelson for WDFW)

Date Submitted: Feb. 4, 2014