

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 Habitat Restoration Project

2. Name of applicant:

Kitititas Conservation Trust (KCT)

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

David Gerth-Executive Director KCT

PO Box 428

Roslyn, WA 98941

(509) 649-2951

kct@inlandnet.com

4. Date checklist prepared:

March 26, 2009

5. Agency requesting checklist:
WA Dept. of Fish & Wildlife

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

Material staging: July 2009

Construction: September-November 2009

Revegetation: September 2009-May 2010

Post construction Monitoring: November 2009 – October 2010

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

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.

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

- Technical Memorandum: Cle Elum River Restoration Project Preliminary Design Report (ENTRIX: January 2008)
- A Section 106 Archaeological Review and Inventory at the Proposed Cle Elum River Engineered Log Jam Project, Kittitas County, Washington (Reiss – Landreau Research)
- Joint Application for Aquatic Resources
- Specific Project Information Form (ESA Consultation for USFWS species 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

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.

None known

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

- Access Agreement 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
- Hydraulic Project Approval from Washington State Dept. of Fish and Wildlife
- Shoreline, Critical Areas, and Floodplain Permits/Exemptions from Kittitas County
- Stormwater Construction Permit from 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.)

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 Cle Elum River (Figure 1). The proposed project is intended to enhance instream, floodplain, and riparian function by distributing and maintaining perennial flow in the right bank Domerie Creek side channel complex (Table 1 & Figure 2) that is 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 3). 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 Domerie Side Channel Complex.

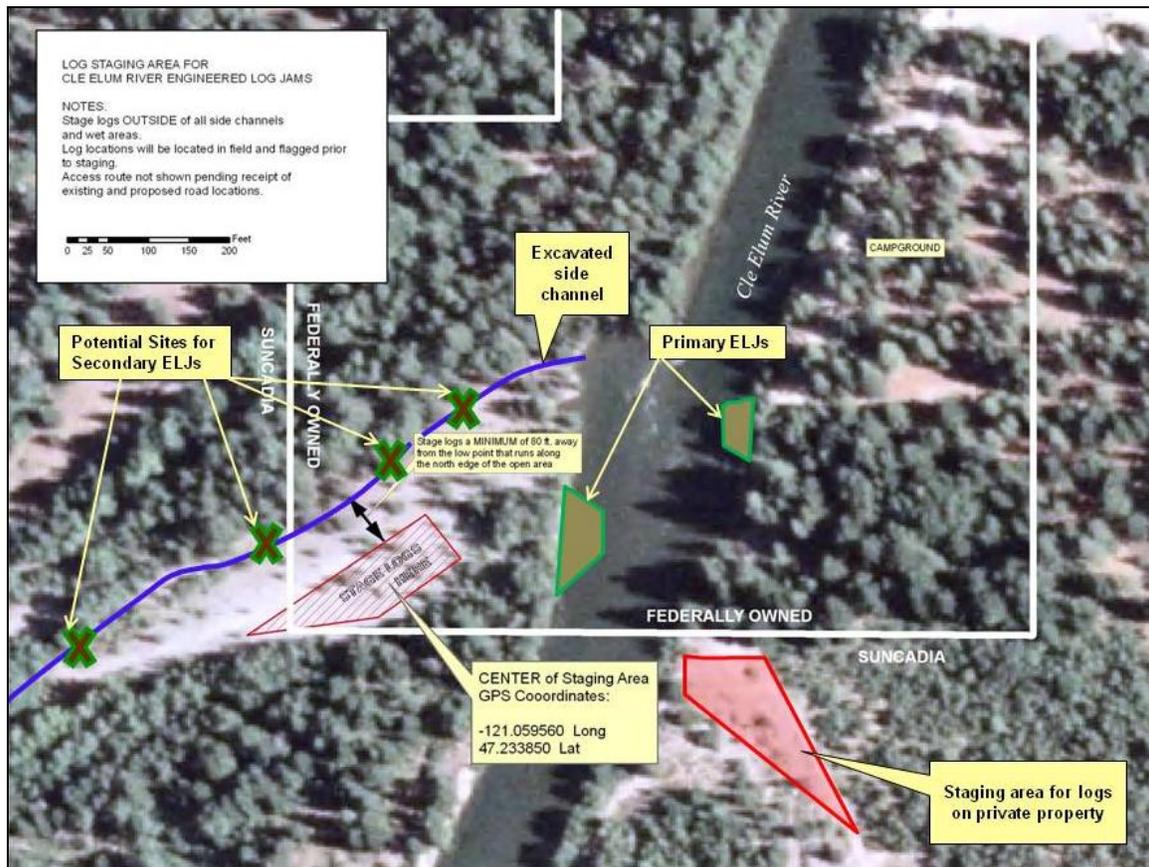


Figure 1. Proposed actions associated with restoration of nearly 3 miles of the Domerie side channel complex in the Lower Cle Elum River.

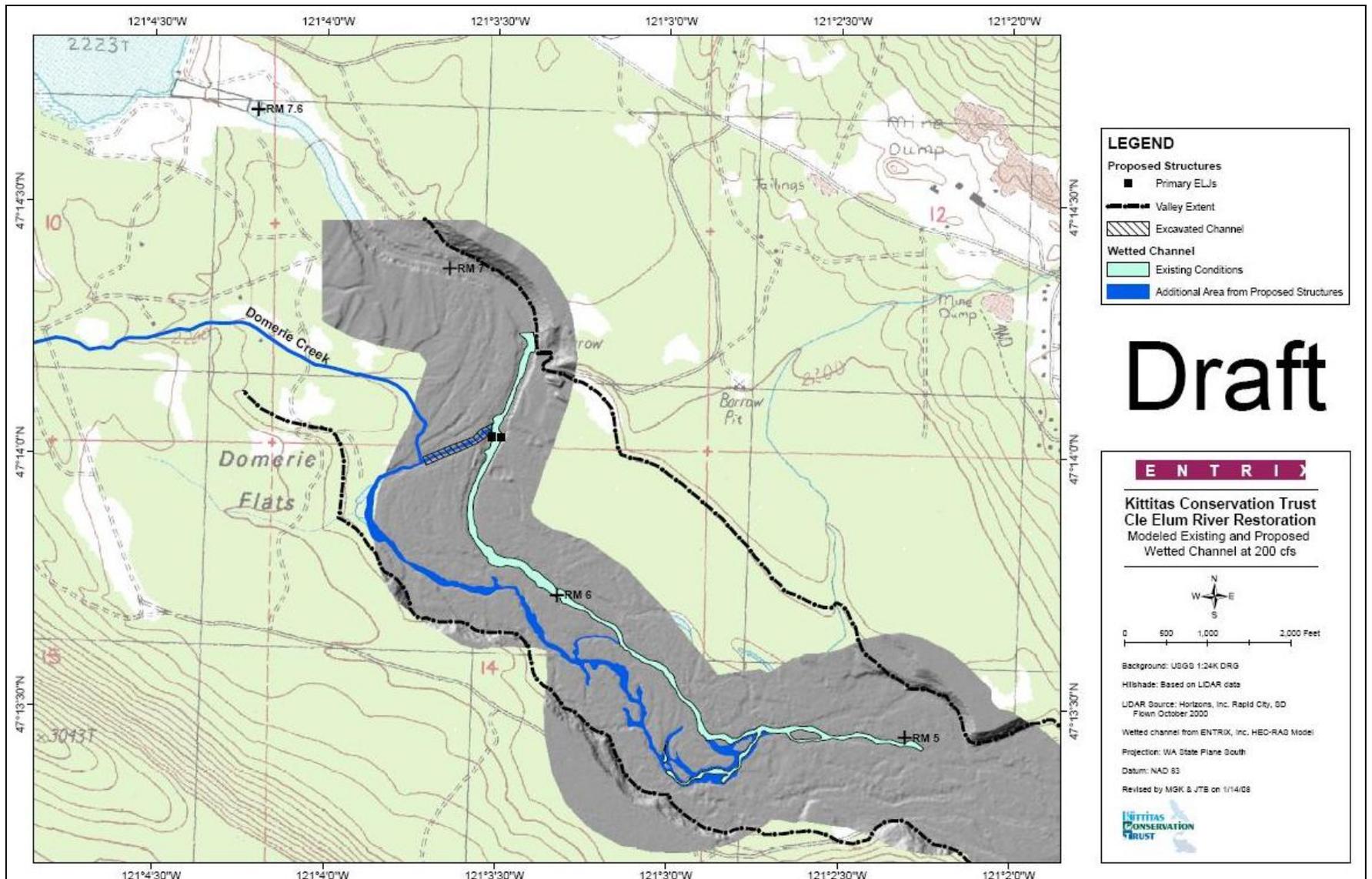


Figure 2. This map shows the approximate location of the 2 apex jams and the portion of side channel that will be excavated. This map also illustrates the amount of side channel habitat that will receive perennial flow upon project completion; as modeled at 200 cfs.

Table 1. The modeled flow regime of the Cle Elum River and Domerie Side Channel (Upper Side Channel in this table) under the existing conditions and proposed conditions upon project completion are shown in this table.

HEC-RAS Flow Rates (cfs)	Cle Elum River Flow Splits (cfs)			
	Main Channel		Upper Side Channel	
	Existing	Proposed	Existing	Proposed
200	200	107	-	93
500	500	364	-	136
800	800	636	-	164
1600	1600	1381	-	219
2000	1997	1758	3	242
4000	3849	3227	151	773

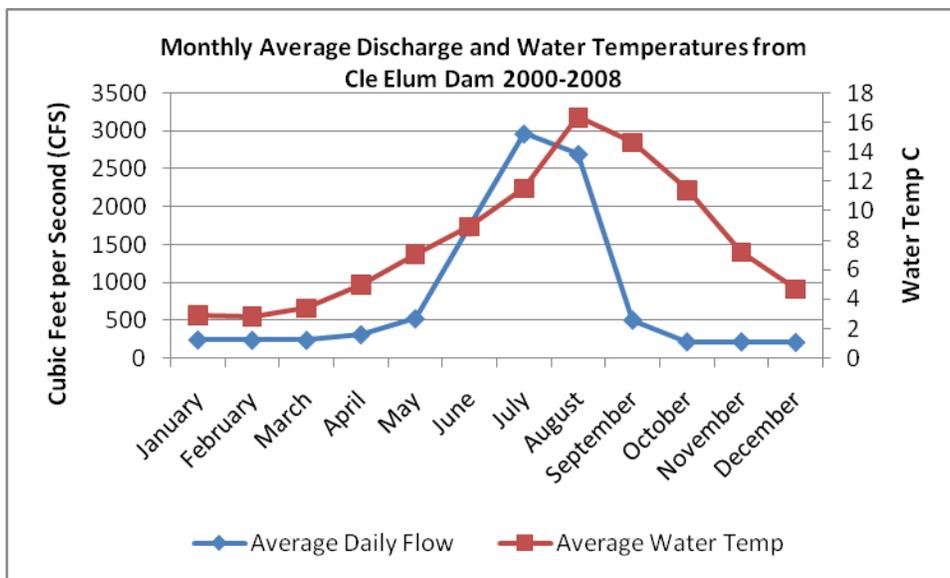


Figure 3. The average daily discharge and water temperature as measured by the US Bureau of Reclamation and their releases from Cle Elum Dam, approximately one mile upstream from the proposed project area. The proposed construction will occur during low flows between September and November 2009.

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.

- Located in the Cle Elum River, approximately 1 mile downstream of Cle Elum Dam
- No street address, travel north on Hwy 903, turn left on Winston Road, project area is at the end of this road, near Ronald, WA 98940, Kittitas County
- SW ¼ Section 11, Township 20 N, Range 14 E
- 47.23417°N; -121.05722°W
- Parcel Numbers: 542534, 11898, 830134, 11839
- WRIA 39

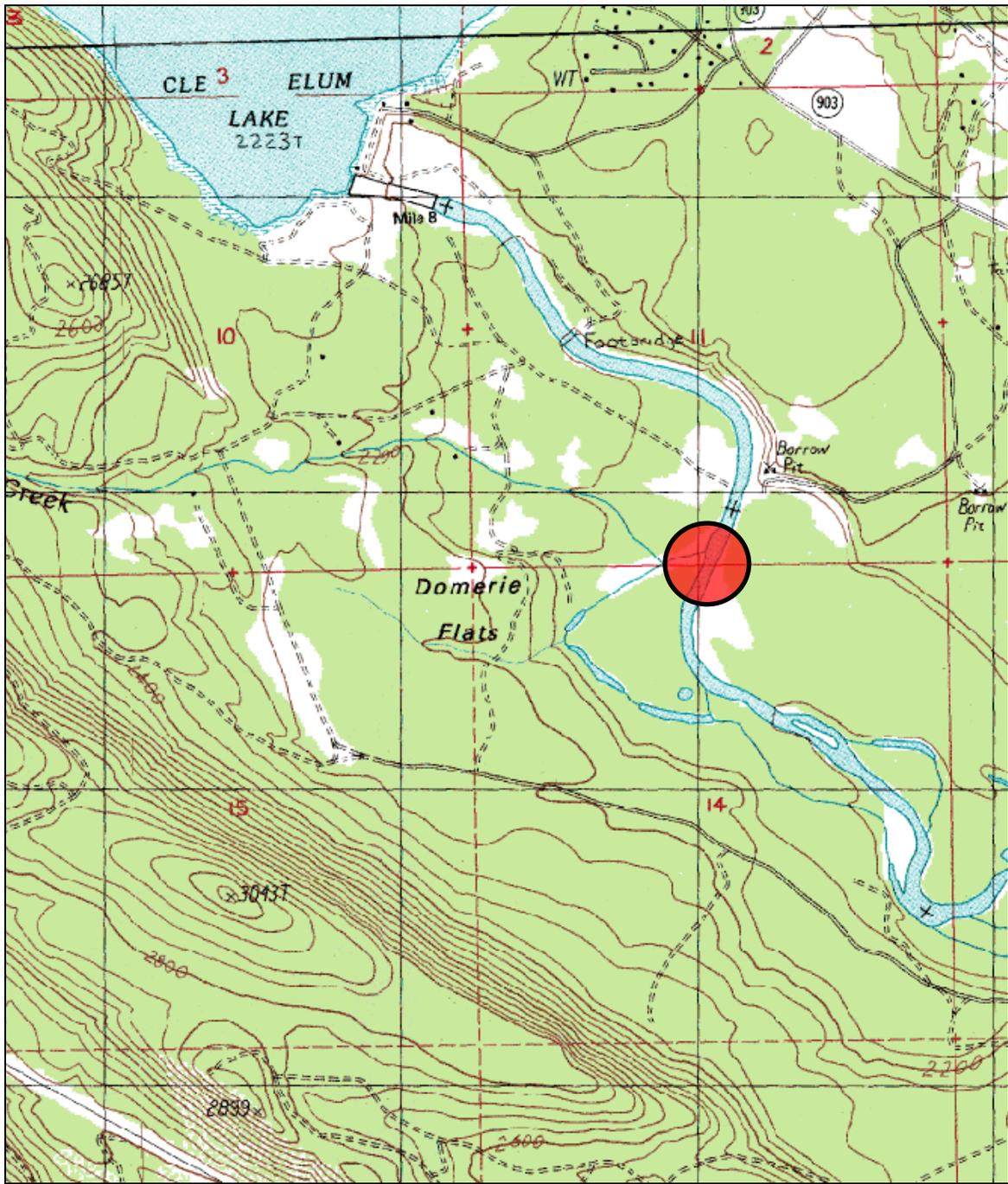


Figure 4. The red circle on this map indicates the project area. This map does not show all of the unimproved access roads that currently exist to reach the project site.

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, 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. Just downstream of the proposed left bank apex ELJ, there is an unimproved boat launch that has some eroding banks associated with it.

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

Approximately 2000 cubic yards of native alluvial material will be excavated from the side channel inlet for about 1000 linear feet. This will allow the gradient necessary for perennial flows through the side channel complex upon project completion. This material will be used as backfill into the ELJs and to construct the gravel nourishment bars associated with each primary ELJ. About 3000 cubic yards of large boulders will be used for rock ballast in the core box for each primary ELJ. 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. The access roads for construction already exist to the project site, and only small saplings will need to be removed or run over to provide construction access. Excavation of the side channel will occur in the dry side channel, 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 work will occur in the dry. The amount of excavation necessary for project implementation is minimal and will be performed in a dry channel. The project footprint will be minimized as much as possible and disturbance will occur in areas already disturbed to the greatest extent possible. Disturbed areas will be restored upon project completion and will be planted with suitable native vegetation.

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.

The two primary ELJs will be within the mainstem of the Cle Elum River. Excavation of the side channel inlet and secondary ELJs will be within the side channel of the Cle Elum River, known as Domerie Side Channel because Domerie Creek flows into this side channel (please see Figures 2 and 4). The Cle Elum River is a major 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 occur within 200 feet of the mainstem Cle Elum River, Domerie Side Channel, or Domerie Creek (See Figure 2).

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.

Please see B.1.e above.

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 channel complex and mainstem channel (see Table 1) to provide more than twice the amount of "edge" habitat for rearing salmonids. This project will enable the side channel complex 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.

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. Most of the work will not occur within a wetted channel; further minimizing the risks associated with an accidental spill into surface waters.

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 complex 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 complex. Due to the habitat complexity through the side channel, suspended sediments will settle out prior to reentering the Cle Elum River. Runoff near the primary ELJs will likely flow directly into the Cle Elum River. Certified weed free straw bales 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 channel is dewatered due to low flows. The inlet channel 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. Additionally, there will be no excavation within the main channel of the Cle Elum River. 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 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:

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

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

shrubs

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?

Approximately 30 small saplings will be removed from the temporary access road and replanted within the project footprint. Most of these are evergreen trees. Shrubs may be grubbed to allow site access, but they should have vigorous growth in the next growing season. Approximately 10 trees will be removed during excavation of the side channel inlet; these trees will be incorporated into the design and will remain onsite.

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**

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, Grizzly Bear and Gray Wolf.

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

Yes, Spring Chinook 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 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 will provide instream habitat within the mainstem and provide large scour pools to provide resting habitat for spring Chinook salmon prior to spawning, as well as other aquatic species. The existing side channel complex has high quality salmonid rearing habitat throughout and upon completion of this project, aquatic life will no longer be entrained in this side channel when irrigation flows are reduced from Lake Cle Elum. In addition to the direct benefits to fish life by providing perennial flow through the side channel 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.

There will be no energy needs upon project completion.

- 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 placed in a conservation easement.

- 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 Department of Ecology 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. 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. 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 downstream of the proposed left bank ELJ.

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

No, but 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.

The only structure on site is the abandoned City of Cle Elum water diversion. This is a concrete structure that is no longer used.

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

The abandoned diversion structure will be incorporated into the left bank primary ELJ and buried within the new structure. The existing unimproved launch downstream of this structure may also be buried by the gravel nourishment bar upon project completion.

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

Forest and Range, Rural 3, and Mater Planned Resort

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

Rural and Mountain Star Subarea

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 complex, Domerie Creek, 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. Downstream of the ELJs, 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 tops of the primary ELJs will be approximately 25 feet above the existing grade of the bed in the Cle Elum River. These will be constructed such that they conform to the banks surrounding them and they are expected to settle overtime, but the tops are designed to remain higher than the 100 year flood elevation.

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 primary ELJs are designed to restore floodplain function and provide enhanced fish and wildlife habitat under more natural conditions.

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 users 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 is in operation or while structures are in an unstable state. 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 discouraging boaters from using the Cle Elum River due to the 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.

The primary ELJs will provide large scour pools in the mainstem that will provide good holding habitat for fish, especially salmonids. Angling opportunities and/or success rates may increase upon project completion.

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

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 primary ELJs in the mainstem pose the greatest potential threat to recreational users, although they've been designed to minimize risks to boaters and swimmers. The structures will have approximately 60 feet between them and will be staggered, with the left bank jam further upstream than the larger right bank jam. This will provide additional room for boaters to navigate through the project area. The ELJs will be placed along the banks such that they are visible for boaters drifting downstream because there is not a sharp bend in the river directly upstream of the project area. Neither ELJ will be constructed in the thalweg of the channel. Their primary purposes are to increase the water surface elevation in the mainstem and provide some instream scour. While it is expected that the thalweg will change upon project completion, the distance between structures and their solid design will prevent a "straining" situation in which recreational users would be impinged on either structure. The upstream faces of each ELJ will have raked material and it is designed to collect additional debris. This raked material will not extend into the thalweg at high or low flows such that risks to recreational users are minimized.

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 Winston 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 location of the left bank primary ELJ.

There is no public access to the right bank ELJ.

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 right bank 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: On File(Gerth for KCT)

Date Submitted: 3/30/2009