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*:** [help]
This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:
Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [help]
For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

A. BACKGROUND

1. Name of proposed project, if applicable:

Douglas County PUD Okanogan River Paddlers Campground

2. Name of applicant:

Public Utility District No. 1 of Douglas County
Attention: Scott Kreiter

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

Scott Kreiter

Public Utility District No. 1 of Douglas County
1151 Valley Mall Parkway
East Wenatchee, WA 98802
(509) 884-7191
scottk@dcpud.org

4. Date checklist prepared:

February 9, 2017

Prepared By: Larry Lehman; Grette Associates
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5. Agency requesting checklist:

Public Utility District No. 1 of Douglas County

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

All in-water work would be timed to avoid the annual outmigration of juvenile salmonids to the extent possible. The in-water work is scheduled to occur the first work window following receipt of all permits. No phasing is proposed. Upland work will occur within a year of receipt of required permits and would not be subject to work window restrictions.

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

No.

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

As part of the USACE permitting process, a Biological Assessment was completed for the project.

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.

There are no applications pending that will affect this proposed project.

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

SEPA Determination (Public Utility District No. 1 of Douglas County)
Shoreline Substantial Development (Okanogan County)
U.S. Army Corps of Engineers Section 10/404 Permit
WDFW Hydraulic Project Approval
Washington Department of Ecology Water Quality Certification

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).

PUD #1 of Douglas County proposes to develop a boat-in campground for paddlers that includes four campsites, a trail system, and a non-motorized boat landing (Sheets 1-12). The site is currently undeveloped. Most of the trail system and the campsites would be within the 200 ft shoreline zone, but the restroom and maintenance road would be outside of the shoreline zone. An existing access road from Hwy 97 would be maintained. Specific aspects of the project are discussed in more detail below.

Vehicle Turnaround

The vehicle turnaround would be served by an existing dirt road off of Hwy 97 (Sheets 3-5) and would be used primarily for facility maintenance vehicles. The turnaround would be approximately 360 ft down the road from Hwy 97. The access road would be improved with crushed rock and would include a vehicle turnaround. A pre-cast concrete vault toilet would be constructed near the turnaround at the head of the trail system. To create the turnaround, fill would be placed outside of the 200 ft shoreline zone to form a wider flat space (Sheets 4-5).

Trail System

The campground would include a gravel trail system between the proposed launch (discussed below) and the gravel access road from Hwy 97, and serving each of the campsites. The trail system would be a total of approximately 570 ft long by 6 ft wide (360 linear ft in the 200-ft shoreline zone) and include a large staging area just above the launch (Sheet 5). The trail bed would consist of an approximately 6 inch thick layer of 5/8" minus crushed rock gravel (Sheet 9). Fill would be placed at the landward end of the trail system to create a flat area, in which a pre-cast concrete vault toilet would be constructed. The access road from Hwy 97 would be maintained and improved sufficiently to preserve PUD access, provide maintenance vehicle parking, and provide a turnaround for the toilet pump truck. The vault toiled and vehicle turnaround would be outside of the 200 ft shoreline zone.

Camping Areas

Four campsites would be installed off of the trail system. The four campsites would be located within the 200-ft shoreline setback, but outside of the 75-ft wetland buffer (Sheets 4, 5, and 10). Each campsite would encompass approximately 900 sq ft and consist of crushed rock gravel with a 15 ft by 15 ft pea gravel pad, surrounded by 4x4 timber/concrete edging, and a picnic table.

Boat Landing

A small boat landing would be constructed at the shoreline, entirely within the 75-ft wetland buffer (Sheets 4, 5, 7, and 9). The landing would be approximately 6 ft wide by 48 ft long, approximately 18 ft of which would be below OHWM. The landing would continue off of the trail system and staging area. To install the landing, the bank would be cut back to make a more gradually-sloping approach. Excavation would encompass 360 sq ft (43 cyds) below OHWM and 1,441 sq ft (105 cyds) between OHWM and the 75 ft wetland buffer. This would create a slope of approximately 4H:1V for the landing stairs.

Geotextile fabric would be placed on top of the excavated surface, then covered with a crushed rock gravel base. The landing surface would be pre-cast concrete steps laid on top of the gravel, leading down to a small pre-cast concrete platform below the OHWM. The concrete landing surface would encompass 144 sq ft (3 cyds) below OHWM and an additional 228 sq ft between OHWM and the 75 ft wetland buffer.

Approximately 24 cyds of riprap would be placed around the sides of the landing (216 s ft/12 cyds below and 210 sq ft/12 cyds between OHWM and the 75 ft wetland buffer). Thus, the entire 360 sq ft excavated area below OHWM (144 sq ft plus 216 sq ft) would be converted to non-native substrate (concrete or riprap). Of the excavated area between OHWM and the 75 ft wetland buffer (1,441 sq ft), 804 sq ft would be

permanently converted to non-native substrate (riprap or crushed gravel surface). The remaining 637 sq ft that is not converted would be revegetated with native shrubs and herbaceous species.

Additionally, the launch would pass through an existing low-quality lake-fringe wetland at the shoreline. The wetland is approximately 2 ft wide at this location. The total width of the launch, including concrete blocks and riprap, would be approximately 11 ft, resulting in approximately 22 sq ft of impacts and approximately 1.2 cyd of fill.

Impacts

In total, the project would result in approximately 360 sq ft of non-native substrate below OHWM and 804 sq ft of non-native substrate between OHWM and the 75 ft wetland buffer. Including the area landward of OHWM and within the 75 ft wetland buffer, the total substrate conversion within the 200 ft shoreline zone is 11,580 sq ft. Table 1 below presents the proposed impacts by zone.

Table 1. Impacts to substrate, by zone

	Below OHW		Wetland		75' Wetland Buffer		Total for 200' Shoreline Zone[1]	
Substrate Conversion	**Volume (cy)**	**Area (sf)**	**Volume (cy)**	**Area (sf)**	**Volume (cy)**	**Area (sf)**	**Volume (cy)**	**Area (sf)**
Concrete	3	144	0.2	12	4	228	4	228
Type I Rip Rap	12	216	0.6	10	12	210	12	210
Crushed Surfacing	0	0	0.4	0	9	366	611	11,142
Total	**15**	**360**	**1.2**	**22**	**25**	**804**	**627**	**11,580**

[1] Includes totals for the wetland and the 75' wetland buffer

Overall, the proposed project would include approximately 360 sq ft of permanent substrate conversion impacts below the OHWM of the Okanogan River, 804 sq ft of permanent substrate conversion impacts within the wetland buffer, a total of 11,580 sq ft of permanent substrate conversion impacts within the 200 ft shoreline zone, and 22 sq ft of impacts to the wetland. Impact avoidance and minimization measures would include revegetation of the area excavated for the launch and not converted to non-native substrate, encompassing 637 sq ft. Thus, unavoidable permanent impacts would total 360 sq ft below OHWM, 22 sq ft of wetlands, and 804 sq ft within the wetland buffer.

Compensatory mitigation for these impacts would be accomplished by planting native riparian vegetation on the site, downstream of the camping area (Sheet 8).Compensatory mitigation is discussed in Section 4d below.

12. Location of the proposal. Give sufficient information for a person to under-stand 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 location of the proposal is east of the City of Brewster. The project will occur on parcel 3025170036 and the Okanogan River, in Section 17, Township 30 Range 25; 48.101534° N Lat. / -119.711887° W

Long. Driving north on SR 97, continue through Brewster. Approximately 3.5 miles past Old Bridge Road in downtown Brewster, turn right onto a dirt road just prior to crossing the bridge over the Okanogan River. The site is at the bottom of the dirt road.

B. ENVIRONMENTAL ELEMENTS

1. Earth

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

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

17%

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]

Soil mapped for the property on the USGS soil survey website (http://websoilsurvey.nrcs.usda.gov) are Okanogan loam, 0-5% slopes (431).

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

Some indications of minor shoreline erosion are evident at the proposed landing location. Minor erosion of the shoreline exists where the landing excavation will occur.

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

The trail system would use 4 cyds below OHWM and 270 cyds above OHWM within the Shoreline zone of crushed gravel backfill, 3 cyds below OHWM and 4 cyds above OHWM within the Shoreline zone of pre-cast concrete, 12 cyds below OHWM and 12 cyds above OHWM within the Shoreline zone of 12-inch minus riprap, 602 cyds above OHWM within the Shoreline zone of crushed rock gravel surfacing, and 8 cyds above OHWM within the Shoreline zone (and landward of the 75-ft wetland buffer) of pea gravel. All materials would be select material imported from offsite sources. Concrete panels for the steps would be pre-cast concrete. The covered shelter above OHW would be ~~cast-in-place~~pre-cast concrete.

The proposed project will entail excavation of native soils to construct the facilities. All excavation would be accomplished using land-based excavators. Excavation would remove 43 cyds from below OHWM and 599 cyds above OHWM within the Shoreline zone. Excavated material would either be reused as fill in the portion of the project outside of the 200-ft shoreline zone, or disposed of at an appropriate offsite location.

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

Erosion is not expected to occur, but the proposed construction would contain stormwater runoff and erosion protection measures that will be implemented.

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

The entire trail and campground system would be impervious surfacing (concrete or compacted gravel surface), a total of 360 sq ft below OHWM, 11,142 sq ft within the 200-ft shoreline zone and 2,800 sq ft landward of the shoreline zone for a site total of 14,246. However, this amounts to only 2.5% of the two parcels on which the project would occur. The remainder of the site will be left in a natural state.

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

Silt curtains would be used to address erosion.

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, describe and give approximate quantities if known.

Minimal, short-term emissions will occur as a result of gas-powered construction machinery used to complete the project. Long-term, the project may result in very small increases in emissions through increased site use by car and boat.

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 proposed.

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 property is located on and adjacent to the Okanogan River.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.

Yes. Much of the proposed project would occur within 200 ft of the Okanogan River, some of which would be below OHWM (Sheets 1-12). See A.11 for description.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name[1]	Impact location[2]	Duration of impact[3]	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Excavation (landing)	Okanogan River	In Water	Permanent	43 cyds	360 sq ft
Excavation (landing, trail)	Okanogan River	75' Wetland Buffer	Permanent	28 cyds	511 sq ft
Excavation (trail, campsites)	Okanogan River	Shoreline Zone (total; incudes wetland buffer totals)	Permanent	599 cyds	10,776 sq ft
Gravel backfill landing)	Okanogan River	In Water	Permanent	4 cyds	144 sq ft
Gravel backfill (landing)	Okanogan River	75' Wetland Buffer	Permanent	6 cyds	228 sq ft
Gravel backfill (trail, campsites)	Okanogan River	Shoreline Zone (total; incudes wetland buffer totals)	Permanent	249 cyds	5,388 sq ft
Geotextile fabric	Okanogan River	In Water	Permanent	--	360 sq ft
Geotextile fabric	Okanogan River	75' Wetland Buffer	Permanent	--	594 sq ft
Geotextile fabric	Okanogan River	Shoreline Zone (total; incudes wetland buffer totals)	Permanent	--	11,370 sq ft
Concrete	Okanogan River	In Water	Permanent	3 cyds	144 sq ft
Concrete	Okanogan River	75' Wetland Buffer	Permanent	4 cyds	228 sq ft
Concrete	Okanogan River	Shoreline Zone (total; incudes wetland buffer totals)	Permanent	0 cyds	0 sq ft
Type 1 (12-inch minus) Riprap	Okanogan River	In Water	Permanent	12 cyds	216 sq ft
Type 1 (12-inch minus) Riprap	Okanogan River	75' Wetland Buffer	Permanent	12 cyds	210 sq ft

Type 1 (12-inch minus) Riprap	Okanogan River	Shoreline Zone (total; incudes wetland buffer totals)	Permanent	0 cyds	0 sq ft
Crushed rock surfacing	Okanogan River	In Water	Permanent	0 cyds	0 sq ft
Crushed rock surfacing	Okanogan River	75' Wetland Buffer	Permanent	9 cyds	366 sq ft
Crushed rock surfacing	Okanogan River	Shoreline Zone (total; incudes wetland buffer totals)	Permanent	602 cyds	10,776 sq ft
Pea gravel (tent pads)	Okanogan River	In Water	Permanent	0 cyds	0 sq ft
Pea gravel (tent pads)	Okanogan River	75' Wetland Buffer	Permanent	0 cyds	0 sq ft
Pea gravel (tent pads)	Okanogan River	Shoreline Zone (total; incudes wetland buffer totals)	Permanent	8 cyds	900 sq ft

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.

FEMA does not have flood data on this portion of the Okanogan River.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

No waste material will be discharged.

b. Ground

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]

No.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals...., agricultural: etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged.

c. Water Runoff (including storm water):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

The proposed project will not impact water runoff.

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

No waste materials will enter ground or surface waters.

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 proposed.

4. Plants

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

_x_deciduous tree: alder, maple, aspen, other:_____
___evergreen tree: fir, cedar, pine, other:_____
_x_shrubs
_x_grass
___pasture crop or grain
___wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other:_____
_x_water plants: water lily, eelgrass, milfoil, other:_____
___other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

Vegetation on the subject property consists primarily of grasses and forbs, with scattered shrubs and trees. As mentioned above, a narrow lake-fringe wetland is present along the entire shoreline at the toe of the bank. At the proposed project site, the wetland is approximately 3 ft wide or less and is dominated by non-native species such as yellow-flag iris (*Iris pseudacorus*) and reed canary grass (*Phalaris arundinacea*). Downstream of the project site, the wetland widens considerably and included shrubs and emergent species such as bulrush (*Schoenoplectus acutus*) and cattail (*Typha latifolia*). Coyote willow (*Salix exigua*) is also common in this area. The upland of the site above the top of the bank is dominated by grasses and forbs such

as Russian knapweed (*Acroptilon repens*) and quackgrass (*Elymus repens*). Scattered or patchy shrubs, such as Woods rose (*Rosa woodsii*) and big sagebrush (*Artemisia tridentata*). Russian olive (*Elaeagnus angustifolia*) is scattered throughout the site, and Pacific willow (*Salix lucida var. lasiandra*) is present in the western extent of the site away from the proposed project site.

All vegetation within the footprint of the project would be removed. This would include approximately 12 sq ft of wetland, 11,142 sq ft within the 200 ft shoreline zone and 2,700 sq ft landward of the 200-ft shoreline zone.

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

Species listed under the ESA that may be present in Okanogan County include Ute ladies'-tresses (*Spiranthes diluvialis* – threatened); however, it has not been identified within the project boundaries.

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

Wetland and Wetland buffer Mitigation

Mitigation is intended to replace the functions lost due to trail and landing construction. A very narrow, low-quality lake-fringe wetland is present along the entire shoreline of the parcel. The wetland encompasses the entire shoreline, and thus avoiding wetland impacts is not possible. However, impacts to the wetland have been minimized to the extent possible by locating the tail and landing at the point where the wetland is narrowest—approximately 2 ft wide. The shoreline at this location is somewhat eroded and drops off sharply at the riverward edge of the wetland. The wetland at this location also consists almost entirely of noxious weeds (reed canary grass and yellow-flag iris).

Compensatory mitigation for the 22 sq ft of wetland impacts would be achieved through enhancement of the existing wetland downriver of the proposed landing location. The mitigation ratio for Category II wetlands through enhancement is 12:1 per Ecology 2006. Thus, 264 sq ft of plantings are proposed within the wetland. These planting will be installed adjacent to the riparian plantings proposed as mitigation for aquatic impacts associated with the landing (discussed in Section 8 below).

The proposed project will also result in the disturbance of 804 sq ft of the 75 ft wetland buffer. (Impacts within the 200-ft shoreline zone but outside of the wetland buffer are not impacts to critical areas or other special habitat features, and are thus presented in Section 6 only for information purposes). Mitigation for these permanent impacts would entail the installation of native riparian trees and shrubs along the shoreline at the site (Sheet 8). This proposed location is owned by the PUD and is adjacent to the mitigation planting area established in 2011 as part of the PUD improvements to the Columbia Cove Boat Launch and the Marina Park handling float project. The proposed planting area is located within the 75 ft wetland buffer and is currently devoid of native trees and shrubs. This location was selected because it is at an elevation that receive natural hydrology for the plantings. The proposed planting area is adjacent to a lake-fringe wetland vegetated primarily by herbaceous, non-native invasive species such as reed canarygrass (*Phalaris arundinacea*) and purple loosestrife (*Lythrum salicaria*); little shrub or tree vegetation is present. The installation of shrubs and trees at this location will increase the functions and values of the wetland/riparian habitat and adjacent aquatic habitat in a location that will be used by the same fish species that may be impacted by the proposed Water Trails project. Further, the proposed riparian plantings will greatly improve wildlife habitat at the site.

Impacts to the wetland and wetland buffer will result in the enhancement of approximately 1,068 sq ft of the existing wetland and wetland buffer (804 sq ft within the wetland buffer and 264 sq ft within the wetland). The mitigation planting areas will be located on the site, downstream of the proposed camping area (Sheet

8). The mitigation planting area will be planted with native riparian trees and shrubs (see Sheet 8 for species). Mitigation for the impacts of the proposed project will entail the installation of 11 trees and 85 shrubs (a ratio of 8 shrubs and 1 tree per 100 sq ft). The native plants will be planted both within and adjacent (within the wetland buffer) to the lake-fringe wetland on site. Species that will be installed will include black cottonwood, mountain alder, nootka rose, red osier dogwood, and coyote willow. Trees will be planted at a spacing of 10 ft on-center and shrubs will be planted at a spacing of 3-5 ft on-center. The planting will be protected from deer and beaver. Mitigation is intended to replace the habitat function that may be impaired or lost by the Project, including productivity of aquatic habitat. The Project's mitigation is designed to increase productivity and habitat quality by installing native riparian trees and shrubs near the OHWM.

Aquatic Habitat Mitigation

As discussed above, the project will result in 360 sq ft of impacts below OHWM and impacts to the riparian buffer (50 ft). However, since the wetland buffer (75 ft) at the proposed project location encompasses the entire riparian buffer the impacts to the riparian buffer are addressed in the wetland section. Mitigation for these permanent impacts would entail the installation of native riparian trees and shrubs along the shoreline at the site (Sheet 8). This proposed location is owned by the PUD and is adjacent to the mitigation planting area established as part of the PUD improvements to the Columbia Cove Boat Launch and the Marina Park handling float project. The proposed planting area is currently devoid of native trees and shrubs and the site is at an elevation that will provide hydrology for the plantings. The proposed planting area is adjacent to a lake-fringe wetland vegetated primarily by herbaceous, non-native invasive species such as reed canarygrass (*Phalaris arundinacea*) and purple loosestrife (*Lythrum salicaria*); little shrub or tree vegetation is present. The installation of shrubs and trees at this location will increase the functions and values of the wetland/riparian habitat and adjacent aquatic habitat in a location that will be used by the same fish species that may be impacted by the proposed Water Trails project. Further, the proposed riparian plantings will greatly improve wildlife habitat at the site.

Impacts to the aquatic environment would total 360 sq ft. These elements will be mitigated at a 1:1 ratio by the installation of 360 sq ft of native riparian vegetation. The mitigation planting area will be located on the site, downstream of the proposed camping area (Sheet 8). The mitigation planting area will be planted with native riparian trees and shrubs (see Sheet 8 for species). Mitigation for the impacts of the proposed project will entail the installation of 4 trees and 29 shrubs (a ratio of 8 shrubs and 1 tree per 100 sq ft). The native plants will be planted adjacent to the lake-fringe wetland on site. Species that will be installed will include black cottonwood, mountain alder, nootka rose, red osier dogwood, and coyote willow. Trees will be planted at a spacing of 10 ft on-center and shrubs will be planted at a spacing of 3-5 ft on-center. The planting will be protected from deer and beaver. Mitigation is intended to replace the habitat function that may be impaired or lost by the Project, including productivity of aquatic habitat. The Project's mitigation is designed to increase productivity and habitat quality by installing native riparian trees and shrubs near the OHWM.

Planting efforts would be completed in the first planting season following project completion. Planting would be completed before the first April 15 following construction. Post-project monitoring of the planting areas would occur annually to ensure that they are providing the intended functions. Specifically, monitoring and contingency plantings (as needed) would be implemented to achieve 100 percent survival after one year, and 80 percent survival or 80 percent ground cover after 5 years (including both plantings and natural recruitment). Beaver protection will be installed to protect the plants from wildlife.

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

Reed canarygrass, yellow flag iris, and milfoil

5. Animals

a. Circle any birds and animals which has been observed on or near the site or are known to be on or near the site:

_x_Birds: hawk, heron, eagle, songbirds, other: _migratory waterfowl

_x_Mammals: deer, bear, elk, beaver, other:_____

_x_Fish: bass, salmon, trout, herring, shellfish, other:_____

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

Species listed under the ESA that may be present in the vicinity of the Project site include the Upper Columbia River steelhead (*O. mykiss* – endangered) and Columbia River bull trout (*Salvelinus confluentus* – threatened).

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

Yes. The river is used by a number of salmonids, including the federally listed species described above as well as pacific lamprey and other fish moving between the reservoirs. The area is also used as a migration route by migratory waterfowl.

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

The proposed project will have minimal impacts on water quality, water supply, recreation, or aesthetics of the Columbia River. The proposed project will install a small boat landing (hand landing) on the Okanogan River. Potential impacts to fish and aquatic life have been avoided and minimized to the extent possible through the following avoidance and minimization measures:

- Project construction below OHWM would occur during the approved in-water work window (July 16 through February 28) for the protection of migrating juvenile salmonids.
- A floating silt curtain/debris boom would be installed around the aquatic work area to contain suspended sediment to the extent possible. The debris boom would include 12 inches of freeboard above the water surface, and extend up to 4 ft below the water surface.
- A silt fence would be placed in the upland between excavation work and the edge of the Okanogan River to prevent soil from entering the river.
- Extreme care would be taken to prevent any petroleum products, chemicals, or other toxic or deleterious materials from entering the water. If a spill were to occur, work would be stopped immediately, steps would be taken to contain the material, and appropriate agency notifications would be made.
- All equipment operating waterward of the OHWM would be inspected daily for fluid leaks. Leaking equipment would be repaired prior to resuming operation.
- Only pre-cast concrete would be used to construct the landing; no cast-in-place concrete would be used ~~within 75 ft of the shoreline~~on this project.
- The Contractor would develop and implement a site-specific spill prevention, containment, and control (SPCC) plan, and is responsible for containment and removal of any toxicants released.

- All exposed or disturbed areas, including upland staging areas, would be stabilized to prevent erosion.
- All erosion control devices would be inspected during construction to ensure that they are working adequately.
- Shoreline planting efforts would be completed in the first planting season following float installation. Planting would be completed no later than the first April 15 following construction.
- No herbicides, fertilizer, or pesticides would be applied to the mitigation planting areas.

In addition to these measures, compensatory mitigation for the proposed project will be accomplished by the installation of native riparian vegetation (discussed in 4d above). Overall, the proposed project will result in no adverse impacts to the Columbia River.

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

None known.

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.

None.

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

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

None proposed.

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.

Heavy machinery operating near or below OHWM has the potential to spill hazardous chemicals into the water, though this potential is low.

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

None known.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

None known

4) Describe special emergency services that might be required.

None required.

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

No wood preservatives or paints and only approved construction materials will be used in construction of this project.

b. Noise

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

No noise exists in the surrounding area that would affect the project.

2) What types and levels of noise could 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.

There will be short-term noise associated with construction of this project. However, this noise will typically occur only between the hours of 7:00 AM and 6:00 PM Monday through Saturday. Long-term, noise associated with the recreational use of the property would increase at the site, with a corresponding decrease in noise at other local launches. The work is proposed to meet the demand of the current use of launches in the vicinity.

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

No measures to reduce or control noise impacts are proposed.

8. Land and shoreline use

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]

The site is currently used a residential / recreational property, and the adjacent properties are currently used as residential and recreational properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]

The property formerly was used for agriculture. The subject property is in residential use and the proposed project will not convert agricultural lands.

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 are no structures on site.

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

No structures will be demolished.

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

Rural 1

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

Rural

g. If applicable, what is the current shoreline master program designation of the site?

Rural

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

Shoreline riparian vegetation and wetland habitat could be considered environmentally sensitive. Riparian, shallow aquatic areas and wetlands are considered priority habitat and are protected as critical areas.

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

None.

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

None.

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

None proposed.

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

The surrounding area is undeveloped and is owned by Douglas County PUD.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

None proposed.

9. Housing

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

None.

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

None.

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

None proposed.

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 tallest height of a proposed structure will be approximately 12 ft tall covered shelter (within the 200-ft shoreline zone) and an approximately 12-ft tall vault toilet (outside the 200-ft shoreline zone).

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

No views in the immediate vicinity will be altered or obstructed as a result of the proposed project.

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

None proposed.

11. Light and Glare

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?

No off-site sources of light that will affect the proposal currently exist.

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

None proposed.

12. Recreation

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

Informal recreational opportunities in the immediate vicinity include fishing, boating, water skiing, and other typical water sports.

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

No. The proposed project would significantly increase the usability and safety of the shoreline through the development of designated campsites and a small hand landing at a site that is already used for recreation.

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

No measures to reduce or control impacts on recreation are proposed. The proposed project would improve recreation and will not result in a negative impact to the public.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [help]

No. An archaeological survey was conducted for this project and that no archaeological resources were observed. Consultation took place between the applicant, the DAHP, and the Colville Tribes with a finding of No Historic Properties Affected.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]

None.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]

None proposed.

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.

None proposed.

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:

The site is accessed from Hwy 97.

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]

Okanogan County Transit Authority provides some public transit service at the site.

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

The proposed project would not provide any new parking spaces.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]

The existing dirt road from Hwy 97 to the proposed campsite would be improved for maintenance personnel use only.

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

The site is located on the Okanogan River, which is used by private recreational boats. No rail or air transportation occurs in the immediate vicinity.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help]

None.

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 proposed.

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.

The proposed project is not expected to result in an increased need for public services.

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

None proposed.

16. Utilities

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

None are available.

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.

None proposed.

C. SIGNATURE

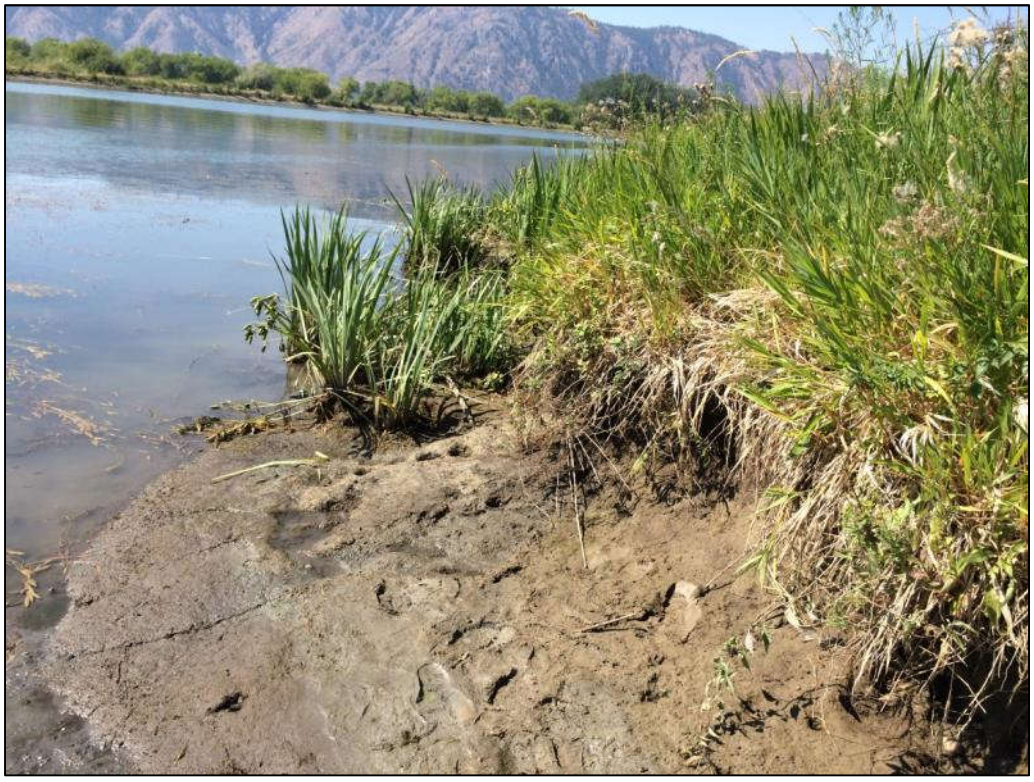
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Scott Kreiter

Name of signee Scott Kreiter

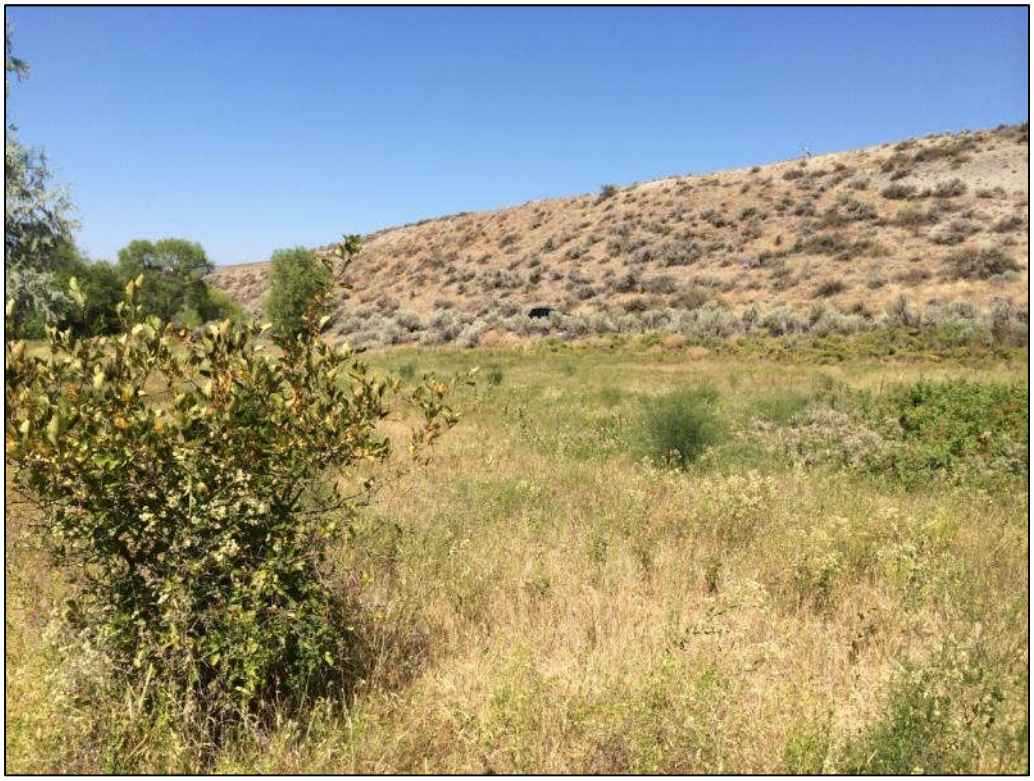
Position and Agency/Organization Land Use Representative

Date Submitted: 2/21/17

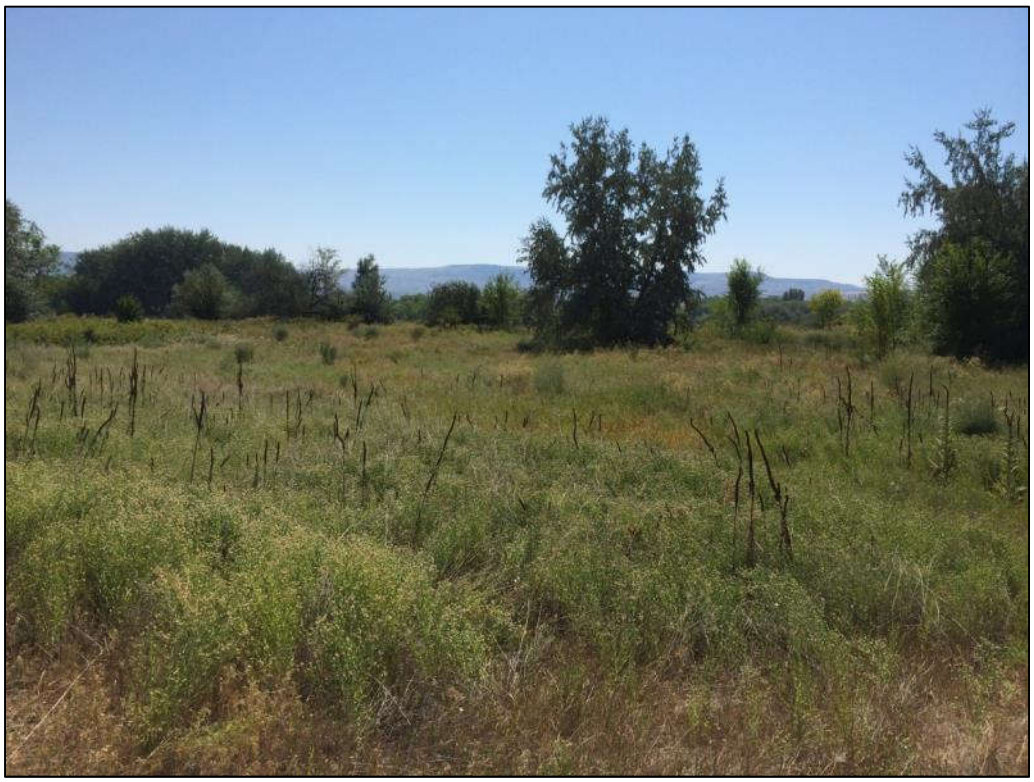


Photograph 1. Typical conditions below OHWM at the proposed landing site.

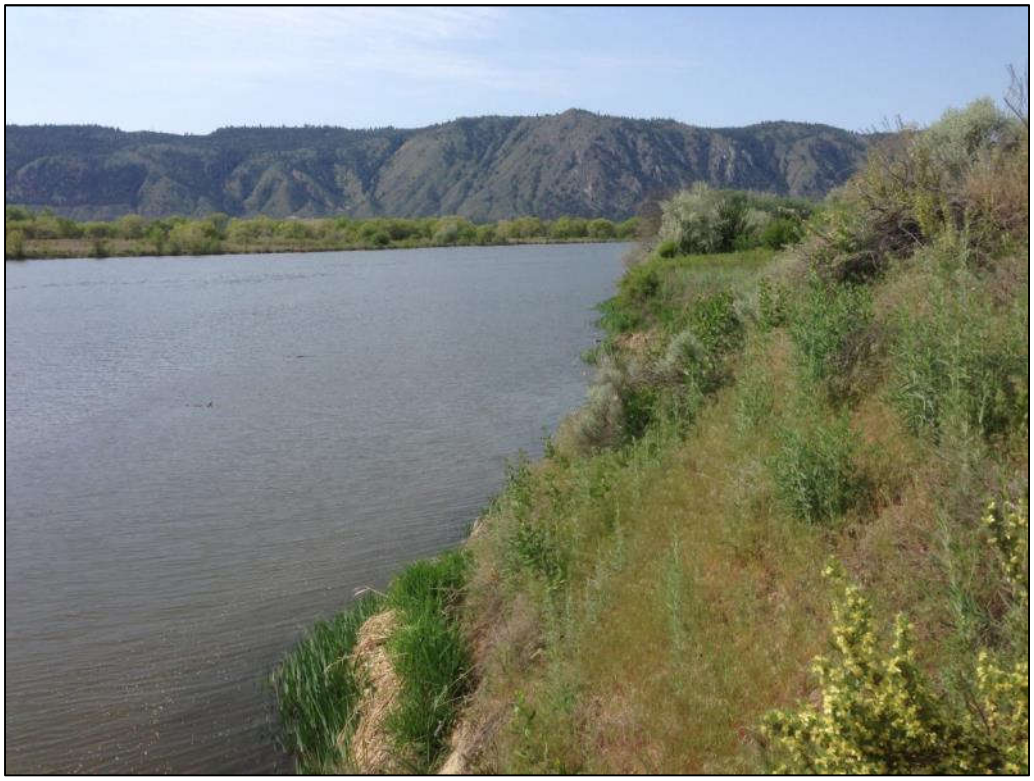
Photograph 2. Narrow wetland and upland area at the landing site



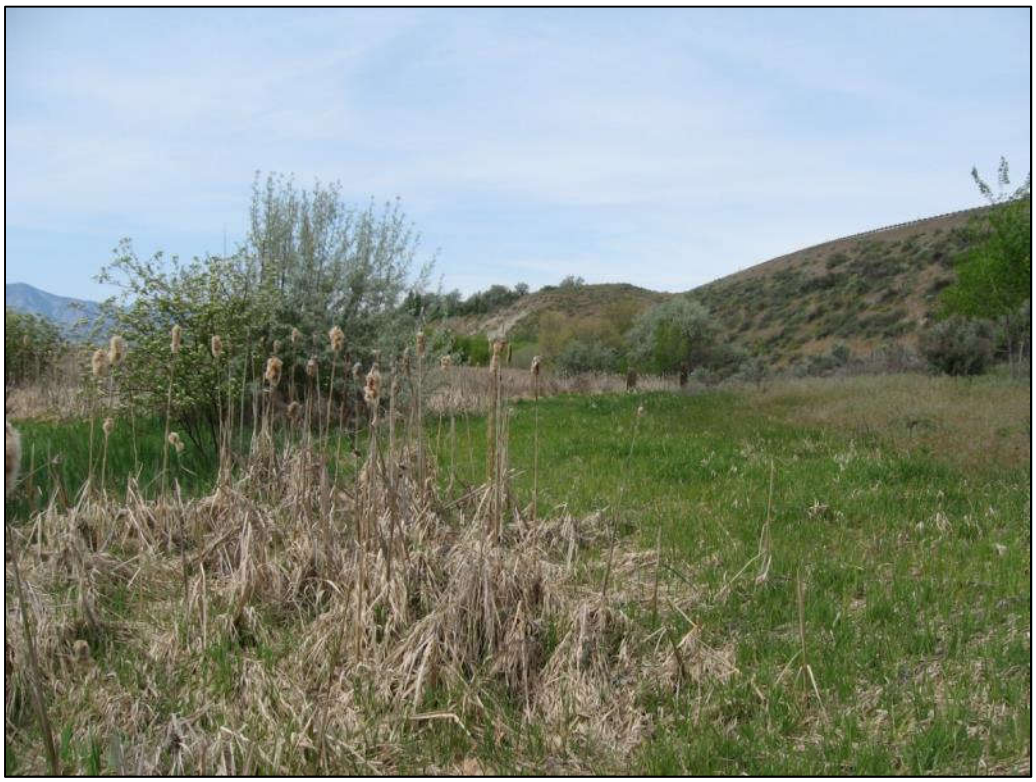
Photograph 3. Typical conditions in the upland at the proposed campsite, facing northwest.



Photograph 4. Typical conditions in the upland at the proposed campsite; facing northeast.



Photograph 5. Typical shoreline conditions at the site; narrow lake-fringe wetland is visible.



Photograph 6. Typical conditions at the mitigation planting area.