SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants:

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

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

Instructions for Lead Agencies:

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

Use of checklist for nonproject proposals:

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

A. Background [HELP]

1. Name of proposed project, if applicable: *Milles Lake Dam Safety Repairs*

2. Name of applicant: *Doug Wiedemeier, WDFW*

3. Address and phone number of applicant and contact person: *600 Capitol Way N, Olympia WA 98501-1091; 360-789-2464; Doug Wiedemeier*

4. Date checklist prepared: January 4, 2022

5. Agency requesting checklist: *WDFW*

6. Proposed timing or schedule (including phasing, if applicable): *Begin construction in early fall 2022 after fire danger has passed (if permits obtained, otherwise 2023) and complete within 6 months of beginning work.*

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. *No other work currently planned.*

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. *The WDFW CAMP wetland staff have delineated two wetlands on-site. One is on the lake side adjacent to the dam, and the other is immediately downstream of the existing spillway. Milles Lake is a Type F lake according to the state hydro layer. A wetland report is available upon request.*

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. *No.*

10. List any government approvals or permits that will be needed for your proposal, if known. *WDFW will pursue all County permits, a Corps permit, Dam Construction Permit for Department of Ecology Dam Safety, and a hydraulic project approval.*

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.

The Washington State Department of Fish and Wildlife (WDFW) proposes to upgrade the Milles Lake dam spillway to meet the Inflow Design Flood (IDF) with adequate freeboard as required by the Washington State Department of Ecology Dam Safety Program. This lake is located in Okanogan County. The existing spillway does not pass a 500-year flood event, and therefore is not suitable for extreme events. Currently, high water events impact the adjacent county road which has become the auxiliary spillway, which is not acceptable. This is part of the Big Buck Unit of the Methow Wildlife Area. WDFW owns the south half of the lake, with a private landowner to the north. WDFW is coordinating with the adjacent landowner.

WDFW proposes the following scope of work:

1. *Construct after fire season has concluded (likely September through November).*
2. *Excavate 191 Cubic Yards (CY) of material in the existing dam.*
3. *Expand the spillway from the current 8.3 feet at base and 18.9 at top to 84 feet at the base and 96 feet at the top.*
4. *Fill with 191 CY of riprap, quarry spalls, gabion cages filled with rock, and pre-cast ecology blocks. The entire spillway will be underlaid with a geotextile membrane.*
5. *Mitigate for the 833 Sq. Ft. of wetland impacts in Wetland B by planting willow and red osier dogwood in Wetland A away from the face of the dam.*

6. Upon project completion, any bare ground will be grass seeded at an appropriate time.

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 outside Twisp, WA. Access from Frost Road. Township 33N, Range 21E, section 2. Okanogan County. N 48.3623 W -120.1842 Parcel # 3321024003. See plans for additional location information.

B. Environmental Elements [HELP]

1. *Earth* [help]

a. General description of the site:

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

b. What is the steepest slope on the site (approximate percent slope)? 42%.

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.
According to the USGS Web Soil Survey, soils present are Johnton-Foggydew-Rock outcrop complex and Newbon gravely loam.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. *No.*

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.
Purpose: to meet the Inflow Design Flood (IDF) with adequate freeboard as required by the Washington State Department of Ecology Dam Safety Program.
Type: Wildlife Area Dam
Total Area: Total disturbed area of 3,612 square feet.
The resulting project will have a net zero cut/fill. Native material will be excavated and replaced with pre-cast ecology blocks, riprap, and quarry spalls. Source will a local commercial source, source to be determined.
No actual work proposed below OHWM proposed.
See permitting plans for details.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Possibly, however BMPs will be in place. Once construction has been completed and soils are stabilized, there should be minimal risk of future erosion. Upon completion, areas of bare soils will be seeded.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings *The new spillway will be less pervious, given the addition of pre-cast ecology blocks, riprap, and quarry spalls. No additional new impervious outside the reconstructed spillway. The increase to impervious surface will be 168 Sq. Ft. due to the ecology blocks.*

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: *BMPs will be in place during and after construction to control erosion. Any resulting bare ground will be seeded to restore vegetative cover.*

2. Air [help]

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. *There will be an increase in diesel emissions while construction is occurring. Upon construction completion, emissions will return to current levels.*

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: *None, as once construction is complete emissions will return to normal levels.*

3. Water [help]

a. Surface Water: [help]

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. *Yes, the project involves work on the spillway for Milles Lake, a Type F water. The outflow is likely only active in the spring, and channel connection to the Twisp River is marginal at best.*

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. *Yes, the project will involve significant work within 200 feet of OHWM. See plans.*

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.

No work below OHWM.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. *No.*

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. *Yes, portions, if not the entire site is located in the 100 year floodplain*.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. *No.*

b. Ground Water: [help]

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. *No.*

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. *None.*

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. *Presently, stormwater is shed off the site. The resulting proposal will also shed off the storm water.*

2) Could waste materials enter ground or surface waters? If so, generally describe. *The WDFW crew will have spill equipment on site during construction.*

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe. *Yes. The purpose of the project is to widen the spillway to increase the dam's capacity to pass the dam safety Inflow Design Flood (IDF) of 500 years, which is necessary due to downstream population risk. The widened spillway width will allow high flows to disperse evenly across the dam face, and to decrease overflowing onto the county road during high flows.*

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any: *BMPs will be used as needed, including seeding of any bare ground upon completion. Other than spillway enlargement, drainage will remain unchanged.*

4. Plants [help]

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

_x___deciduous tree: alder, maple, aspen, other: **aspen**
____evergreen tree: fir, cedar, pine, other
____shrubs
__x__grass
____pasture
____crop or grain
____ Orchards, vineyards or other permanent crops.
__X__ wet soil plants: **cattail**, buttercup, bullrush, skunk cabbage, other
____water plants: water lily, eelgrass, milfoil, other
____other types of vegetation

b. What kind and amount of vegetation will be removed or altered? *Any woody vegetation found on the face of the dam may be removed, since that creates weaknesses in the structure. Any grasses damaged will have that area reseeded upon completion of construction at an appropriate time of the year (first growing season following completion).*

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

No listed species are known to be on the site.

A search on the USFWS IPaC site registered the following species:

Canada Lynx (Lynx canadensis), a Threatened species with defined Critical Habitat. The project area is not located within Critical Habitat.

Yellow-billed cuckoo (Coccyzus americanus), a Threatened species with defined Critical Habitat. The project area is not located within Critical Habitat.

Bull Trout (Salvelinus confluentus), a Threatened species with defined Critical Habitat. The project area is not located within Critical Habitat.

Monarch butterfly (Danaus plexippus), a Candidate species. No critical habitat has been defined.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: *Seeding will be done to any bare areas. Some enhancement (planting of willow and/or red osier dogwood) of wetland A may be done as mitigation for unavoidable impacts to wetland B.*

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

Known invasive species includes reed canary grass.

5. Animals [help]

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site.

Examples include:

birds: **hawk, heron,** eagle**, songbirds**, other:
mammals**: deer, bear,** elk, beaver, other:
fish: **bass,** salmon**, trout**, herring, shellfish, other _____

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

No listed species are known to be near the site.

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

Yes, the site is in the Pacific Flyway.

d. Proposed measures to preserve or enhance wildlife, if any: *None.*

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

None known.

6. Energy and Natural Resources [help]

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

The existing site, and after proposed work, does not have any utilities.

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

No.

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

None.

7. Environmental Health [help]

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. *Work will not start until after fire season has concluded. No increase from present hazard potential, other than heavy equipment. Spill response measures will be present on site at all times.*

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

No known contaminates at site.

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. 811 will contacted prior to start of construction.

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

None.

4) Describe special emergency services that might be required.

None anticipated.

5) Proposed measures to reduce or control environmental health hazards, if any: *Ensure spill response measures are present at all times work is being done.*

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? *There will be a temporary increase in noise as the construction occurs. Once construction is done, noise levels will return to normal.*

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 there will be an increase in traffic and construction noise.
Long-term noise levels will return to normal.

3) Proposed measures to reduce or control noise impacts, if any:
Construction will be limited to 7 AM to 7 PM, unless local ordinances restrict noise further, in which case the more restrictive hours will be adhered to.

8. Land and Shoreline Use [help]

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe*. There is one residence above the site, at the upper end of the lake. Otherwise use is outdoor related, including use of the lake.*

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? *This site has been a Wildlife Area since 1975.*

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how*: No.*

c. Describe any structures on the site.
There is an earthen dam creating Milles Lake at this location.

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

e. What is the current zoning classification of the site?
Rural 20.

f. What is the current comprehensive plan designation of the site?
Rural 20.

g. If applicable, what is the current shoreline master program designation of the site?
The shorelines maps do not show a designation on Milles Lake, other than identified as a lake.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.
None known.

i. Approximately how many people would reside or work in the completed project?
No one lives or works at this site.

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

No people will be permanently displaced by this project.

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

No people will be permanently displaced by this project.

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

This proposal will not change use; therefore, compatibility is not an issue. Project purpose is to meet Ecology Dam Safety requirements and result in a safer structure for downstream residents should a high water event occur.

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any:

None proposed or needed, since there will be no impact.

9. Housing [help]

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

None.

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

No impact to housing.

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

None.

10. Aesthetics [help]

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

All resulting work will be lower than the crest of the existing dam, not including the spillway.

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

No changes to views as a result of this proposal.

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

None proposed or needed.

11. Light and Glare [help]

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

There will be no changes in light or glare.

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

No, there should be no change.

c. What existing off-site sources of light or glare may affect your proposal?
None.

d. Proposed measures to reduce or control light and glare impacts, if any:
None anticipated.

12. Recreation [help]

a. What designated and informal recreational opportunities are in the immediate vicinity?
This is a state Wildlife Area. People likely come to catch fish, bird watch, hunt, and enjoy the outdoors. Public use will continue as present once construction is complete.

b. Would the proposed project displace any existing recreational uses? If so, describe.
Only during construction for safety reasons. Once construction is complete, all recreational uses can resume as usual.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: *Project construction is balancing the need to avoid the fire season and complete work before snow arrives. While there are no measures proposed, there is a possibility that a few hunters are disturbed by this work.*

13. Historic and cultural preservation [help]

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers ? If so, specifically describe.
No previously identified archaeological sites or historic structures are within the project area of potential impact.

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.
No previously identified historic structures are within 1-mile (1.6 km) of the project. One previously recorded archaeological site 45OK1113 the Spokane Mine, an historic mining site is 1.6 miles from the proposed project.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.
Consultation with tribes and DAHP under Executive Order 21-02, review in DAHP WISAARD, GIS data, and historic photos.

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.
Cultural resource survey is recommended and completion of an historic property inventory (HPI) form for the dam prior to project implementation. The WDFW inadvertent discovery plan will be in place for the project.

14. Transportation [help]

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

See plans. Frost Road is the access, off Twisp River Road.

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

No public transit serving this site. Nearest bus travels on Highway 20 in Twisp, over 4 mile away by road.

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

No change.

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

No. However, the road may continue to be impacted by high water levels since the lowest elevation is the county road and adjacent slope. The proposed WDFW project will widen the spillway width which will allow peak flow events to evenly disperse across the dam, and to decrease overflowing onto the county road during these peak events. The project will meet Ecology Dam Safety Inflow Design Flood (IDF), while not lowering the overall lake level. Work will need to be done by the county to raise the road elevation nearest the lake's edge to eliminate this impact. Downstream culverts are all undersized for a peak flow event.

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

Site only uses roads for transportation.

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?

Increased vehicular trips would occur during construction only. Once the project is completed, volumes will return to normal.

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:

No transportation impacts anticipated.

15. Public Services [help]

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

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.
None proposed or needed.

16. Utilities [help]

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

c. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.
No additional utilities needed or utilized at the site.

C. Signature [HELP]

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

Signature: _____

Name of signee ____Doug Wiedemeier_____

Position and Agency/Organization ____Permitter, WDFW, CAMP_____

Date Submitted: __1/4/2022_____