# 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 <u>all parts of your proposal</u>, 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 <u>SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D)</u>. 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:

Slide Ridge Culvert Replacement, Flood Control Zone District Project No. 503

### 2. Name of applicant:

Chelan County Public Works Department
Chelan County Flood Control Zone District (FCZD)

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

Chelan County Public Works Department/
Chelan County Flood Control Zone District
Attn: Jason Detamore, Environmental Manager
316 Washington Street, Suite 402
Wenatchee, WA 98801
(509) 667-6415
Jason.Detamore@co.chelan.wa.us

## 4. Date checklist prepared:

October 2020

# 5. Agency requesting checklist:

- Chelan County Public Works Department
- Chelan County Flood Control Zone District

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

The Slide Ridge Culvert Replacement project is anticipated to begin in either 2021 or 2022, and construction is estimated to have approximately 60 working days.

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

Slide Ridge is located along South Lakeshore Road to the west of Lake Chelan approximately 13 miles northwest of the City of Chelan, just south of Shrine Beach, in Chelan County, Washington. This roadway is the only year-round north-south corridor for residents along the west side of Lake Chelan. A vicinity map is provided.

In the Final Comprehensive Flood Hazard Management Plan (2017), this project is identified as Action Item No. 15 to mitigate regular occurrences of the costly cleanup and safety concerns from flash flooding along South Lakeshore Road (Road Log No.

94710). Slide Ridge, also known as Granite Ridge, is a ridge characterized by steep rock outcrops split by loose rock slopes with little areas of soil or vegetation. Rainfall on the ridge results in water eroding and dislodging rock and mobilizes loose rock down the slope to the apex of the alluvial fan.

In 1995, an earthen engineered drainage channel was constructed in the slide area from the apex to South Lakeshore Road in an attempt to protect public and private property downstream. The drainage channel conveys material to a sedimentation basin on the west side of the road, where a 72-inch corrugated metal pipe culvert is intended to convey material under the roadway along its historical path to Lake Chelan. In addition, there is a 36-inch corrugated metal pipe culvert acting as an overflow if the larger culvert is blocked. This configuration is not ideal because it leaves the county continuing to pay for costly cleanup expenses and temporarily blocks South Lakeshore Road until it can be cleaned off.

As a result, it was decided to move forward with a new channel conveyance option that includes replacement of the culvert with a bridge crossing that would better convey the debris flow material to the lake. The Bridge Feasibility Report and Alternatives Analysis (2019) provides the basis for the scope and design of the proposed project. Channel work will need to occur upstream and downstream of the bridge structure to tie in the upstream and downstream reaches and to construct the channel section beneath the roadway crossing. Work will also include filling the existing sedimentation basin, removing the existing culverts, re-grading the downstream channel to the lake, and elevating portions of the conveyance berms/side slopes.

This capital project is anticipated to be constructed in 2021 or 2022 and ongoing maintenance will occur on an as-needed basis.

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

Chelan County has a programmatic Hydraulic Project Approval for the work around Lake Chelan to reestablish the existing channel.

A Bridge Feasibility Report and Alternative Analysis (2019) has been completed. This provides the basis of the design which is currently under development.

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.

- Hydraulic Project Approval Washington State Department of Fish and Wildlife
- Section 401 Permit Department of Ecology
- Section 404 Permit US Army Corps of Engineers
- Shoreline Substantial Development Permit Chelan County Community Development Department
- Critical Area Ordinance Variance Chelan County Community Development Department
- Floodplain Development Permit Chelan County Community Development Department

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.)

In July 2019, as it has done in the past, a heavy rainfall event eroded and dislodged rock - mobilizing loose rock down the slope of Slide Ridge. This debris flow event overwhelmed the debris basin and overtopped South Lakeshore Road. Chelan County removed the rock, restored the debris basin, reestablished the upstream/downstream channel, cleaned out the culverts, and other such activities necessary to have the system functioning as it did before the event occurred.

In addition, instead of hauling all the material offsite, Chelan County utilized approximately 8,000 cubic yards of the material from this event on the downstream berms (side slopes) to gain elevation and capacity of the existing channel to the lake. Work terminated above the 200-foot shoreline zone of Lake Chelan.

The proposed project work covered by this SEPA consists of raising the roadway, improving residential access points, installation of a bridge on South Lakeshore Road, filling a portion of the existing debris basin and removal of the existing culverts, regrading and slight alignments changes to the existing channel, and extending the berms/side slopes from where the 2019 work terminated to the low water mark of Lake Chelan.

It is estimated that within 200 feet of the ordinary high water mark of Lake Chelan, there will be 1,000 cubic yards of cut (channel excavation) and 4,100 cubic yards of fill (extension of the berms/side slopes).

Due to extensive debris modeling, it was determined that extending the conveyance berms/side slope will also need to occur below the ordinary high water line (approx. elev. 1102') down to the low water line (approx. elev. 1085') of Lake Chelan in order to protect adjacent private property from impacts during higher debris flow events. This will result in an estimated 80 cubic yards of cut (channel excavation) and 5,500 cubic

yards of fill (i.e. rip rap type of rock). This work will occur in the dry between November and May, when Lake Chelan is lowered, so no in-water work will occur.

Supporting project information can be found at: <a href="https://www.co.chelan.wa.us/flood-control-zone-district/pages/slide-ridge">https://www.co.chelan.wa.us/flood-control-zone-district/pages/slide-ridge</a>

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.

Slide Ridge is located along South Lakeshore Road to the west of Lake Chelan approximately 13 miles northwest of the City of Chelan, just south of Shrine Beach, in Chelan County, Washington. This roadway is the only year-round north-south corridor for residents along the west side of Lake Chelan. A vicinity map is shown in Figure 1.

Township 28 North, Range 21 East, Section 21

## **B. ENVIRONMENTAL ELEMENTS**

1	Earth		
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a. General c	description of the	e site:		
(circle one):	Flat, rolling, hil	ly, steep slopes	, mountainous,	other

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

Approximately 30 percent at the apex down to 10 percent near Lake Chelan.

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.

Burnscreek Stony Sandy Loam, 3 to 30 percent.

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

Slide Ridge is a historic landslide area and is classified as such by Chelan County.

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.

For this project, the county will be reconstructing roadway approaches, installing a bridge, realigning the channel, and additional work on the berms towards the lake. The approaches will require substantial fill to match the proposed elevation for the bridge. Preliminary design grading volumes are calculated to be greater than 5,000 cubic yards of cut and over 20,000 cubic yards of fill. The majority of fill is to fill in the existing debris basin.

It is estimated that within 200 feet of the ordinary high water mark of Lake Chelan, there will be 1,000 cubic yards of cut (channel excavation) and 4,100 cubic yards of fill (extension of the berms/side slopes). Extending the conveyance berms/side slope will also need to occur below the ordinary high water line (approx. elev. 1102') down to the low water line (approx. elev. 1085') of Lake Chelan in order to protect adjacent private property from impacts during higher debris flow events. This will result in an estimated 80 cubic yards of cut (channel excavation) and 5,500 cubic yards of fill (i.e. rip rap type of rock). This work will occur in the dry between November and May, when Lake Chelan is lowered, so no in-water work will occur.

Fill material may be sourced from prior Slide Ridge debris spoil sites. If not available, all imported material will follow WSDOT standard specifications for material of this nature.

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

Yes, erosion could occur as a result of the project from exposed cut/fill areas.

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

The new bridge and road approaches will increase the impervious area approximately 10 percent over the existing conditions.

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

If necessary, erosion and sedimentation may be controlled through the implementation of temporary erosion and sediment control (TESC) measures and best management practices (BMPs) utilizing the Department of Ecology's Stormwater Management

Manual for Eastern Washington and the WSDOT's Highway Runoff Manual as guidance.

Some examples of TESC measures and BMPs that may be implemented for this project include: straw wattles, silt fencing, check dams, erosion control blankets, stabilized culvert outfalls, culvert inlet protection, detention/retention ponds, and vegetation.

### 2. Air

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.

Minor dust, internal combustion engine emissions, and odors typical of diesel equipment may be in the air during construction. After the project is complete, air emissions typical of any other surrounding roadways will be present, which includes dust and engine emissions. All construction emissions will be short term and not present once the project is complete.

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

No known offsite sources of emissions or odor will affect this project.

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

BMPs will be implemented during construction activities to reduce and control air emissions. These practices may include watering exposed soils, sweeping street surfaces, minimizing soil exposed to wind, using rock base course where feasible, using construction equipment equipped with standard mufflers, and turning off equipment when not in use.

# 3. Water

#### a. Surface Water:

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.

Lake Chelan is located in the immediate vicinity of the project.

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.

Due to extensive debris modeling, it was determined that extending the conveyance berms/side slope will need to occur below the ordinary high water line (approx. elev. 1102') down to the low water line (approx. elev. 1085') of Lake Chelan in order to protect adjacent private property from impacts during higher debris flow events. This work will occur in the dry between November and May, when Lake Chelan is lowered, so no in-water work will occur. Additional information can be found at: <a href="https://www.co.chelan.wa.us/flood-control-zone-district/pages/slide-ridge">https://www.co.chelan.wa.us/flood-control-zone-district/pages/slide-ridge</a>

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.

Extending the conveyance berms/side slopes will also need to occur below the ordinary high water line (approx. elev. 1102') down to the low water line (approx. elev. 1085') of Lake Chelan in order to protect adjacent private property from impacts during higher debris flow events. This will result in an estimated 80 cubic yards of cut (channel excavation) and 5,500 cubic yards of fill (i.e. rip rap type of rock) to extend the berm/side slopes. This work will occur in the dry between November and May, when Lake Chelan is lowered, so no in-water work will be necessary. Fill material may be sourced from prior Slide Ridge debris spoil sites. If not available, all imported material will follow WSDOT standard specifications for material of this nature.

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

No surface water withdrawals or diversions are necessary.

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

As detailed on the plan sheets, extending the channel berms/side slopes will be within Lake Chelan's 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 discharge of waste materials are proposed to enter surface waters. Stormwater runoff from the new impervious surface will be managed adjacent to South Lakeshore Road and will not enter Lake Chelan. Slide Ridge debris will continue to follow its natural path into Lake Chelan.

#### b. Ground Water:

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.

The project does not propose to withdraw any groundwater from a well. A water truck will likely be utilized for different aspects of the project and will be filled by using local water lines.

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 is proposed to be discharged into the ground from septic tanks or other sources.

# 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.

Rainfall that enters the slide ridge debris channel is conveyed through the site to Lake Chelan. Stormwater runoff from South Lakeshore Road is proposed to be treated adjacent to the roadway and will not enter the lake.

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

The project will not generate waste materials, therefore will not enter ground or surface waters.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

The project should improve drainage patterns in the vicinity of the site by routing all water off of Slide Ridge towards the lake, minimizing the potential of this runoff going over the roadway and into adjacent residential areas.

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

As stated above, the project should improve drainage patterns in the vicinity of the site by routing all water off of Side Ridge towards the lake, minimizing the potential of this runoff going over the roadway and into adjacent residential areas.

## 4. Plants

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

X_deciduous tree: alder, maple, aspen, other:
X evergreen tree: fir, cedar, pine, other
shrubs:
grass:
pasture
crop or grain
Orchards, vineyards or other permanent crops.
wet soil plants: cattail, buttercup, bulrush, 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?

There are approximately 1200 trees located within the project area that predominately consists of big leaf maple and ponderosa pine. As a result of development and an active flood debris channel/alluvial fan, the majority of the trees are less than 12-inches in diameter. Some of these trees will need to be removed as a result of this project. Within the 200 feet of Lake Chelan up to 150 trees may need to be removed that are less than 12-inches in diameter and 2 greater than 12-inches in diameter.

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

According to the DNR database, there are no known threatened or endangered plant species known to be on or near the site.

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

As a result of this being an active flood debris facility/channel, minimal landscaping is proposed. Erosion control vegetation such as hydroseed may be utilized adjacent to the roadway. Additionally, vegetation may be use for aesthetic purposes for adjacent property owners.

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

There are no known noxious or invasive species known to be on or near the site.

## 5. Animals

a. <u>List</u> any birds and <u>other</u> 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: Osprey mammals: deer, bear, elk, beaver, other: Cougar fish: bass, salmon, trout, herring, shellfish, other:

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

None known.

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

Mule deer.

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

None proposed. Existing migration corridors will not be altered.

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

None known at this time.

# 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.

No energy is needed once the project is complete.

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

No, the completed bridge replacement will not affect the potential use of solar energy by adjacent properties.

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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.

Environmental health hazards typical of any road construction project will be present as a result of this project. Emergency response professionals in Chelan County are trained to respond to environmental health hazards if they occur.

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.

No hazardous chemical/conditions are known to exist within the project area or vicinity.

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.

Chemicals typical of roadway construction will be onsite during construction on a short-term basis. These chemicals may include, but not limited to, petroleum products, hydraulic fluid, etc. These products are required to be staged a minimum of 200 feet from surface waters. Once the project is complete, any staged chemicals will be removed.

No toxic or hazardous chemicals will be stored, used, or produced during the operating life of the proposed new berm/side slopes.

4) Describe special emergency services that might be required.

Specials emergency services beyond what is currently being conducted within Chelan County is not anticipated.

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

Measures to reduce or control environmental health hazards will be addressed in the spill prevention plan, which will be required to be developed before the project begins. The spill prevention plan will detail what to do if a spill were to occur and spill cleanup/notification procedures.

#### b. Noise

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

South Lakeshore Road is a two-lane roadway and is classified as a Rural Major Collector, with an ADT over 400 vehicles per day. No known noise in the project area may affect the county's project.

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.

No new noise would be created or associated with the completed project. Traffic noise will be present sporadically over a 24-hour period, typical of any other roadway in the area. Long-term traffic noise should remain very similar to existing conditions since this roadway will continue as a two-lane road with no additional volume expected because of the improvements.

During the project, construction noise typical of a roadway improvement project will be present throughout the day and will last for the duration of the project (approximately 60 working days). Construction typically occurs Monday – Friday, 6AM to 7PM, however may vary depending on the job.

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

To control potential noise impacts, the construction hours are limited to hours set forth in the project contract documentation. Additionally, standard mufflers will be used on all construction equipment to reduce noise impacts. Once construction is complete, no additional measures are proposed to control noise.

#### 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.

Slide Ridge currently has an earthen engineered drainage channel located in the slide area from the apex to South Lakeshore Road. The drainage channel conveys material to a sedimentation basin on the west side of the road, where a 96-inch corrugated metal pipe culvert is intended to convey material under the roadway along its historical path to Lake Chelan. Adjacent properties are single family homes/cabins.

This project will not impact current land uses on nearby 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?

The project site has not been used as working farmlands or working forest 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, the competed project will not affect or be affected by surrounding working farms or forest land business operations.

c. Describe any structures on the site.

Besides South Lakeshore Road and culverts under the roadway itself, no other structures exist.

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

No structures will be demolished.

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

Rural Waterfront, Rural Residential 2.5 acres, and Rural Residential 20 acres.

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

Rural Waterfront, Rural Residential 2.5 acres, and Rural Residential 20 acres.

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

Urban designation

h. Has any part of the site been classified as a critical area by the city or county? If so, specify.

Yes, Chelan County has classified Lake Chelan as an Urban shoreline and is also an identified as a geohazard area.

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

Not applicable.

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

No displacement of people is necessary.

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

Not applicable.

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

The project will not change any land use classifications in the area and, once complete, will be consistent with the previous existing land uses.

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

There are no impacts to agricultural and forest lands of long-term commercial significance, therefore there are no measures to reduce or control impacts.

# 9. Housing

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

The project will not create any housing units.

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

Not applicable.

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

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 earthern berm/side slope from South Lakeshore Road to Lake Chelan will be raised on average 15 feet above the existing elevation in order to further protect private property. The new/improved berms/side slopes will remain earthern material (compacted soil). Below the ordinary high water mark to the low water line rip rap type rock will be utilized. No buildings will be constructed as part of this project.

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

Existing views are obstructed by the current layout of Slide Ridge. Adding to the height of the berms/side slope should not further obstruct views. Adding to the existing berm below the ordinary high water mark to the low water mark of Lake Chelan may alter or obstruct adjacent property views. However, this is necessary to protect these properties from higher debris flow events. Views that may be impacted include the shoreline of Lake Chelan and the lake itself.

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

Chelan County is proposing to raise the berms/side slopes to protect adjacent properties. Because this is an active flood debris channel, no measures are proposed to reduce or control aesthetic impacts. It will remain as it appeared before the project. The County is raising the height of the berm only as much as needed to protect adjacent properties.

# 11. Light and Glare

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

No light or glare will be produced by the completed project.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?
  Not applicable.
- c. What existing off-site sources of light or glare may affect your proposal?

No offsite sources of light or glare may affect the proposal.

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

No measures proposed.

### 12. Recreation

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

Biking, running, hiking, water recreation, fishing are some of the available recreational opportunities within the vicinity of the project.

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

No existing recreational uses will be displaced as a result of the project. Temporary impacts may occur during construction, however these will be short-term and once construction is complete be returned to normal.

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 are proposed because permanent recreational impacts are not anticipated.

# 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? If so, specifically describe.

No buildings, structures, or sites are located on or near the site that are over 45 years old.

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.

None known. All work is in previously disturbed areas or areas that have been filled with historic flood debris. Work in native ground is not required.

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.

In October 2019, FEMA consulted with DAHP (Project Tracking Code 2019-10-07739) and concurred with the no impacts findings. Interested Tribes were also consulted, with no comments received. Additionally, Chelan County accessed the Department of Archaeology and Historic Preservation (DAHP) WISAARD data base and found no records of cultural/historic resources on or near the project site.

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.

Native ground will not be disturbed by this project. The work the county is proposing will mainly occurred in areas previously disturbed by road or past project construction and within flood debris deposition.

# 14. Transportation

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 enclosed vicinity map.

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?

The project is not served by public transit. The closest location is within the City of Chelan.

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

The project will not create parking, nor eliminate parking.

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).

Yes, South Lakeshore Road will be improved by removing the 72-inch culvert and replacing it with a bridge. This will require raising the roadway several feet in order to allow for high debris flows to be conveyed under the roadway.

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

The project will not use water, rail, or air 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 non-passenger vehicles). What data or transportation models were used to make these estimates?

The project will not increase vehicular trips per day when complete. No additional traffic is anticipated as a result of this work.

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.

The project will not interfere with, affect or be affected by the movement of agricultural and forest projects on roads or streets in the area.

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

South Lakeshore Road will remain open during construction. No measures are

proposed to reduce or control transportation impacts. A temporary bypass detour around the construction of the improvement will be put in place where the existing emergency bypass is located on the east side of the existing road. It may be improved with an all-weather surfacing, and may be controlled with a temporary signal if operated as a single lane.

#### 15. Public Services

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.

Once this project is complete, it will be similar to existing conditions (i.e. infrastructure) and is not anticipated to need an increase in public services.

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

No measures are proposed.

### 16. Utilities

a. Circle utilities currently available at the site:

electricity, natural gas, wa	ter, refuse service	telephone,	sanitary sewer,	septic system,
other: <u>Fiber/cable</u>				

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.

No utilities are proposed for the project.

# 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:

Name of signee

Position and Agency/Organization:	ENVIRONMENTAL MANAGOR, CHERAN COLLY
Date Submitted: Novem Gen	7.2020



LOCATION MAP



VICINITY MAP