



## Categorical Exclusion Form

**Project:** FERC Erosion Control - Site #82

**PEPC Project Number:** 66153

**Description of Action (Project Description):**

**Background:** In the 2002 erosion control plan the NPS and Cheplan PUD agreed to protect a 400 ft long portion of the Lakeshore Trail about 4 miles south of Stehekin with a rock wall. At that time the retreating shoreline was within 20 ft of the trail. In 2016 the erosion has gotten closer to the trail, which would be difficult and expensive to relocate to steep slopes farther away from the eroding bank. After a winter 2016 survey, some parts of the shoreline show increased vegetation growth and stability, while in other sections erosion has proceeded (photo).

**Design:** We no longer propose to build a 400 ft long structure, but intend to focus on a 160 ft area in the center of the site where erosion has cut closest to the trail (photo 1). This area includes several tall eroding bluffs and is bound on the north by a seep and on the south by a small intermittent creek. The rapidly eroding section is broken by an area where large woody debris has accumulated, and where bank erosion is minimal. Recognizing the changed conditions and the value of the large wood accumulation, we propose to use two 60 ft long rock walls and an enhanced accumulation of large wood along the 40 ft long middle section to protect the trail. The rock wall design will follow the same specifications as used at several other sites on the lake (Figures 1-4). Key design features are burial of the toe of the structure, use of a both a graded soil filter and filter fabric behind the wall, and proper rockery construction techniques (e.g. face/batter angle, long axis perpendicular to bank, two-point minimum contact, bridging of gaps, etc.). Given the steep bank slope, the wall will be about 5 ft tall, and 2-3 ft wide at the base. The two sections of rock wall will require placement of about 70 yd<sup>3</sup> of angular rock, and 10-15 yd<sup>3</sup> of sand and gravel for the soil filter, and 3-4 yards of topsoil for revegetation.

The existing wood accumulation will be enhanced by adding logs when they become available, and we will attempt to anchor a few key large pieces to stabilize the feature. Anchors could include large rocks or duckbill type anchors attached to the logs with short cables. In some cases large logs with root-wads can also be used to anchor other pieces. All wood removed from the shore to build the rock wall will be replaced.

All of the eroding bank above the PHW mark will be replanted with local native species of shrubs and ground cover after the shoreline is stabilized. We prefer not to use trees because of their greater water demand, and the likelihood that they could compromise the wall if the tipped over by the roots.

The work will be completed in winter when lake levels are low enough so the site is in the dry but can be accessed by the crane mounted barge (1092-1087 ft). Work will be done using a crane mounted barge for areas that can be reached. If there are areas that can't, they will be done using an excavator on dry land. There will be no equipment in the water at any time. The work will take place when lake levels are low enough so the site is exposed above water to avoid in-water work.

The following best management practices will be implemented to minimize impacts to water quality during construction: a. Work will only occur during low lake levels when entire site is in the dry. b. No equipment will enter the watercourse. Work will be done using a crane mounted barge for areas that can be reached by the crane. If there are areas that can't, they will be done using an excavator on dry land. c. Equipment will use biodegradable hydraulic fluid d. Appropriate spill containment equipment will be onsite. e. Rock will be clean

**Project Locations:**

**Location**

**County:** Chelan **State:** WA  
**District:** Lake Chelan National Recreation Area **Section:**

**Mitigation(s):**

- All work involving motorized use shall be completed by February 28 in order to protect Northern Spotted Owl and Osprey nesting activities.

**CE Citation:** C.18 Construction of minor structures, including small improved parking lots, in previously disturbed or developed areas.

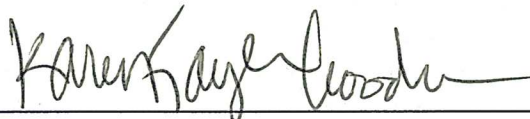
**CE Justification:**

The construction of erosion control structures at Site #82 on Lake Chelan is in response to erosion due to wave action of rising and falling reservoir levels (thus the shoreline here is a previously disturbed site). The project also protects the Lakeshore Trail just upslope from the erosion control structures.

**Decision:** I find that the action fits within the categorical exclusion above. Therefore, I am categorically excluding the described project from further NEPA analysis. No extraordinary circumstances apply.

**Signature**

**Superintendent:**



Karen F. Taylor-Goodrich

**Date:**

10/18/17



**Extraordinary Circumstances:**

If implemented, would the proposal...	Yes/No	Notes
A. Have significant impacts on public health or safety?	No	
B. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas?	No	
C. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA section 102(2)(E))?	No	
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	No	
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	No	
F. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?	No	
G. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office?	No	
H. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?	No	
I. Violate a federal, state, local or tribal law or requirement imposed for the protection of the environment?	No	
J. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898)?	No	
K. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 130007)?	No	
L. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?	No	