



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755

received
electronically
june 23, 2016

Environmental and Cultural Resources Branch

JUN 23 2016

Ms. Loree' Randall
Washington Department of Ecology
PO Box 47600
Olympia, Washington 98504

Dear Ms. Randall:

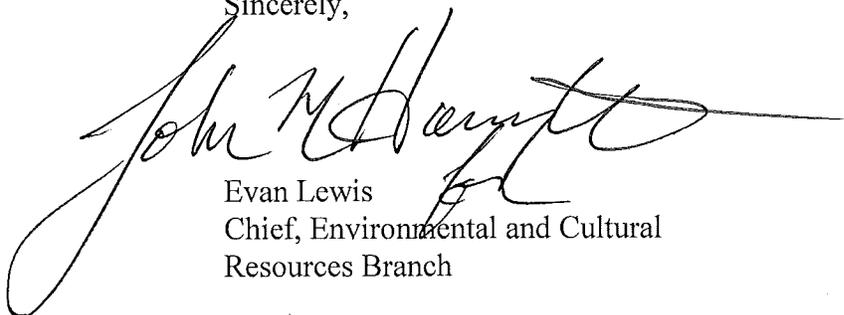
The U.S. Army Corps of Engineers, Seattle District (Corps) in partnership with Snohomish County is proposing levee rehabilitation activity to the Startup Training Federal Levee near Sultan, WA.

On the Skykomish River, four high water events occurred between October and December 2015 causing flood damage to the levee. Damages occurred at two locations along the levee. The levee suffered scour loss of toe rock and slope armor and at one location suffered a rotational slope failure in addition to toe scour. The proposed action is to repair 550 feet of levee in order to restore the pre-flood level of protection at the damage location.

The proposed levee repair is located within Snohomish County, which is defined in Washington Coastal Zone Management Program as part of the coastal zone. Therefore, a consistency determination is required to evaluate whether the proposed repair will affect Washington's coastal zone or resources.

Enclosed is the Federal Consistency Determination for this proposed project. The Corps has determined that this proposed project will be consistent with enforceable policies of Washington's Coastal Zone Management Program. We request your concurrence with our determination. Please provide written concurrence for our records. If you have any questions, please contact Ms. Hannah Hadley at 206-764-6950.

Sincerely,



Evan Lewis
Chief, Environmental and Cultural
Resources Branch

Enclosures

**COASTAL ZONE MANAGEMENT ACT
CONSISTENCY DETERMINATION**

**Coastal Zone Management Act Consistency Determination
Startup Levee Rehabilitation Project
June 2016**

The rehabilitation actions are activities undertaken by a Federal agency; the following constitutes a federal consistency determination with the enforceable provisions of the Washington Coastal Zone Management Program.

1. INTRODUCTION

The proposed Federal action applicable to this consistency determination is the rehabilitation activities along the Skykomish River, as described below. This determination of consistency with the Washington Coastal Zone Management Act is based on review of applicable sections of the State of Washington Shoreline Management Program and policies and standards of the Snohomish County Shoreline Management Use Regulations.

Four high water events occurred over the six-week period from the end of October through mid-December 2015. The flows at the Skykomish River near Gold Bar (USGS gage 12134500) exceeded flood stage during each of these events. The largest event occurred on 17 November 2015 and reached a stage of 22.23 feet (gage height) and a peak flow of 101,656 cfs. Flood stage is defined as 15 feet. This event corresponds to approximately a 35- to 40-year average return interval (3% AEP). All four events were driven by high intensity precipitation originating from modest atmospheric river events. Damages occurred at two locations along the portion of the levee along the Skykomish River. The levee suffered scour loss of toe rock and slope armor along 150 LF at approximately Station 12+00 (Site 1). Downstream, similar scour damage has occurred along approximately 400 LF of the levee (Site 2). The upstream 25 LF of Site 2 has also suffered a rotational slope failure in addition to toe scour. The slope failure is likely due to scour at the toe. For repair purposes, this location is denoted as Site 2A. Photographs of the damage are included in Appendix A. In the damaged condition, the levee provides a 1-year level of protection.

The levee is located on the right bank of the Skykomish River near Sultan, Washington. The project area consists of the downstream 320 feet of the damaged Federal training levee known as the Startup levee. Construction of the Skykomish River-Wallace River Project was completed in October 1965 and was modified by adding the Startup training levee in September 1969. This project was constructed to provide flood control protection from periodic recurring flooding of the Skykomish River. The levee is approximately 4 to 8 feet high and the landward side and is predominantly comprised of sand and rounded gravel with Class IV riprap on the riverward slope from Station 0+00 to 9+00. Landward slopes are 4H:1V, while riverward slopes are 2H:1V. The landward slope is covered with sod. The levee crest ranges from 8 to 24 feet wide and is surfaced with gravel and sod. In an undamaged state, the levee provides at least a 70-year level of protection against flooding to residential and agricultural properties. Snohomish County requested assistance under the U.S. Army Corps of Engineers, Seattle District (Corps) PL 84-99 Program, in implementing repair projects at these locations. The Corps determined that the levees were in need of repair in order to provide the necessary level of flood protection for the neighboring residences, farmland, and associated public infrastructure.

The proposed action is to replace in-kind but some new armoring rock will be placed consistent with the rest of the levee that has been designed based on the current hydraulic condition at the site, which is

Startup Levee Rehabilitation Project CZMA Consistency Determination

different from the condition that existed when the levee was originally constructed. At both sites, repairing the levee in-kind is recommended to restore the levee to its pre-damage level of protection. The riverward launchable toe will be restored within the pre-flood footprint using Class V riprap. The existing riprap will be salvaged and incorporated as practicable into the 4-foot thick layer of Class V riprap backed by quarry spalls. The armored surface of the slope will match the pre-damage geometry and will be inclined at 2H:1V. Where the riverward slope has failed at Site 2A, scour damage at the toe will be repaired at a finished grade at 2H:1V. Once the toe repair reaches the toe of the slope failure, a bench cut will be made to remove the failed embankment material. The levee embankment will be restored by placing and compacting controlled embankment fill. A 12-inch layer of quarry spalls will be placed over the embankment, and the slope will be re-armored with 4 feet of Class V riprap. Total construction length for both sites is approximately 550 LF, including any necessary transitions. The project concept drawings are in Appendix B.

2. STATE OF WASHINGTON SHORELINE MANAGEMENT PROGRAM

The Coastal Zone Management Act of 1972, as amended, requires Federal agencies to carry out their activities in a manner that is consistent to the maximum extent practicable with the enforceable policies of the approved state Coastal Zone Management (CZM) Programs. The Shoreline Management Act of 1972 (RCW 90.58) is the core of authority of Washington's CZM Program. Primary responsibility for the implementation of the SMA is assigned to local governments. Snohomish County, in which the proposed levee rehabilitation project is located, fulfilled this requirement with the Shoreline Master Program.

3. SNOHOMISH COUNTY SHORELINE MASTER PROGRAM

The Snohomish County Shoreline Master Program was used to determine project consistency. The proposed repair footprint is located near Hamilton, Skagit County, Washington. The designation for the Startup Levee in Snohomish County's Shoreline Environment Designations is Conservancy Shoreline Environment and is zoned Agriculture-10 Acre (A-10).

Applicable portions of the Snohomish County Municipal Code are presented below with the Corps consistency indicated in *bold italics*.

30.44.110 Development exempted from the shoreline substantial development permit requirement.

The following types of development shall not be considered shoreline substantial developments for purposes of this chapter and shall not be required to obtain a shoreline substantial development permit:

(2) Normal maintenance or repair of existing structures or developments, including damage by accident, fire, or elements;

(3) Construction of the normal protective bulkhead common to single family residences;

(4) Emergency construction necessary to protect property from damage by the elements;

... and

(12) Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on the effective date of the 1975 amendatory Shoreline Management Act which were created, developed, or utilized primarily as a part of an agricultural drainage or diking system; provided that any new development associated with said diking or drainage systems, which would (1) reclaim lands which are not being used for agricultural purposes at the time the development is proposed, (2) increase the level of protection provided, or (3) enlarge the land area for which protection is provided, shall not be considered operation and maintenance under this exemption.

30.44.120 - Requirements for exempted developments.

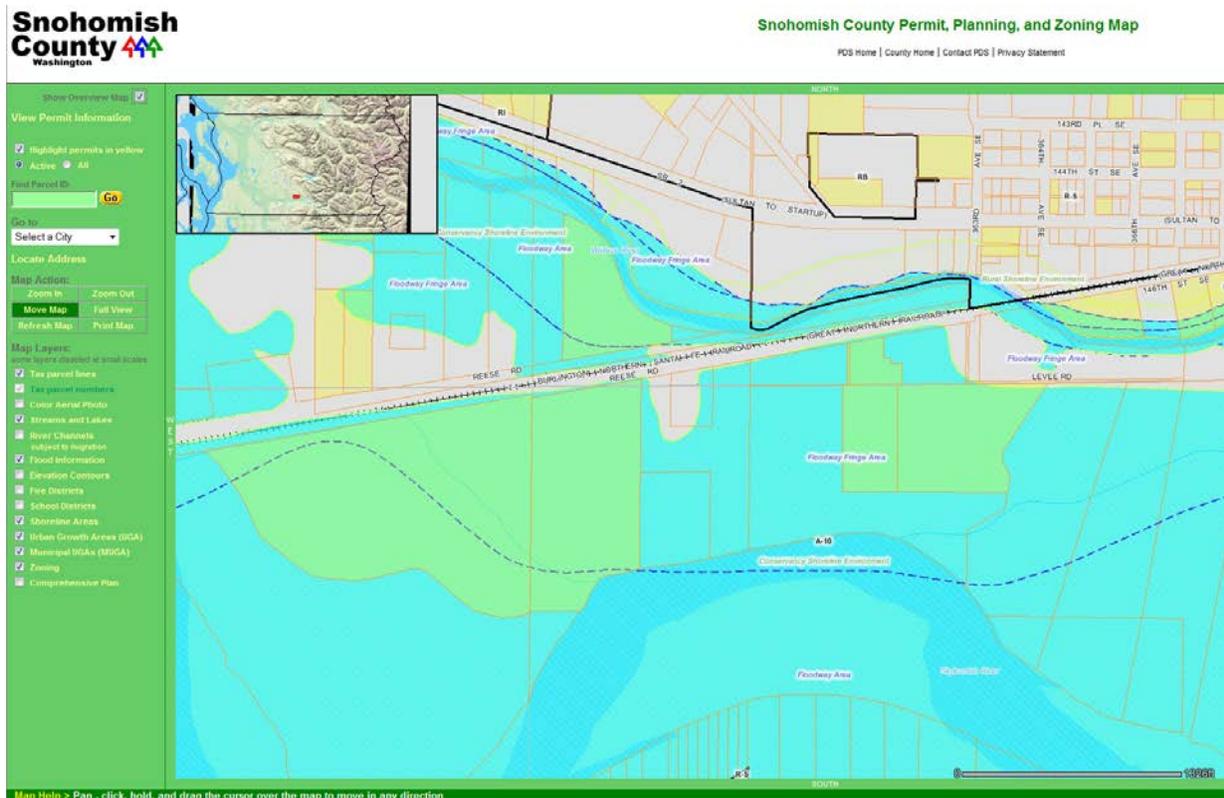
Startup Levee Rehabilitation Project CZMA Consistency Determination

Any development or shoreline substantial development exempted from obtaining a shoreline substantial development permit by SCC 30.44.210 shall be required to be consistent with the policy and intent of the Shoreline Management Act of 1971, this chapter, and the master program.

30.44.150 – Applicability of permit system to federal agencies.

(5) Federal agency actions shall be consistent with the approved Washington state coastal zone management program, subject to certain limitations set forth in the federal Coastal Zone Management Act, 16 U.S.C. 1451 et seq., and regulations adopted pursuant thereto.

Consistent. The Corps considers the proposed action to be the emergency repair of an existing structure damaged by flooding. The levee was originally constructed in the 1930s, but was destroyed and rebuilt in the 1950s. The project will not change the footprint, height or profile of the levee and as such will not increase the level of protection or enlarge the protected area from the pre-damaged condition.



Snohomish County Zoning maps (online at <http://gis.snoco.org/maps/permits/index.htm>) show that the project is within the Floodway Fringe Area, designated as Conservancy Shoreline Environment and is zoned Agriculture-10 Acre (A-10).

30.21.025 - Intent of zones.

This section describes the intent of each use zone. Snohomish County's use zones are categorized and implemented consistent with the comprehensive plan. The comprehensive plan establishes guidelines to determine compatibility and location of use zones. The intent of each zone is established pursuant to SCC Table 30.21.020 and is set forth below in SCC 30.21.025(1) - (4).

Startup Levee Rehabilitation Project CZMA Consistency Determination

(3)Resource Zones. The Resource zones category consists of zoning classifications that conserve and protect lands useful for agriculture, forestry, or mineral extraction or lands which have long-term commercial significance for these uses. Resource zones consist of the following:

(c)Agriculture-10 Acre (A-10). The intent and function of the Agricultural-10 Acre zone is:

(i)To implement the goals and objectives of the County General Policy Plan, which include the goals of protecting agricultural lands and promoting agriculture as a component of the county economy;

(ii)To protect and promote the continuation of farming in areas where it is already established and in locations where farming has traditionally been a viable component of the local economy; and

(iii)To permit in agricultural lands, with limited exceptions, only agricultural land uses and activities and farm-related uses that provide a support infrastructure for farming, or that support, promote or sustain agricultural operations and production including compatible accessory commercial or retail uses on designated agricultural lands.

(iv)Allowed uses include, but are not limited to:

(A)Storage and refrigeration of regional agricultural products;

(B)Production, sales and marketing of value-added agricultural products derived from regional sources;

(C)Supplemental sources of on-farm income that support and sustain on-farm agricultural operations and production;

(D)Support services that facilitate the production, marketing and distribution of agricultural products;

(E)Off farm and on-farm sales and marketing of predominately regional agricultural products from one or more producers, agriculturally related experiences, products derived from regional agricultural production, products including locally made arts and crafts, and ancillary sales or service activities.

(F)Accessory commercial or retail uses which shall be accessory to the growing of crops or raising of animals and which shall sell products predominately produced on-site, agricultural experiences, or products, including arts and crafts, produced on-site. Accessory commercial or retail sales shall offer for sale a significant amount of products or services produced on-site.

(v)Allowed uses shall comply with all of the following standards:

(A)The uses shall be compatible with resource land service standards.

(B)The allowed uses shall be located, designed and operated so as not to interfere with normal agricultural practices.

(C)The uses may operate out of existing or new buildings with parking and other supportive uses consistent with the size and scale of agricultural buildings but shall not otherwise convert agricultural land to non-agricultural uses.

Consistent. The Corps acknowledges the county's designated zones. The proposed project repairs an existing structure and would not change the existing land use at or adjacent to the project area.

Definitions:

30.44.615 - Emergency (Shoreline emergency).

"Emergency" ("Shoreline emergency") means a situation of a serious nature which has developed suddenly, constitutes an imminent threat, and demands immediate action to protect property from damage by the elements or to protect members of the public from a serious and imminent threat to health or safety. A declaration of emergency for shoreline stabilization measures shall only be used to protect existing development or prime farmland, or to prevent impairment of channel function, and only when one of the following exists:

(1)Imminent danger is existent as a result of high water, and damage is expected due to flooding conditions for which appropriate flood warnings have been issued;

(2)Damage is occurring as a result of flood waters at or exceeding flood stage defined by the appropriate authority;

Startup Levee Rehabilitation Project CZMA Consistency Determination

(3) Property has been damaged and rendered unstable by previous flooding and is in such condition that future flooding will cause additional damage if protective measures are not taken; provided the county engineer has issued written approval of the emergency protective measures sought, such approval being based upon the following findings:

(a) Any protective measures do not exceed \$5,000 in value as measured by the total cost or fair market value of the improvements whichever is greater;

(b) Insufficient time exists to obtain a shoreline development permit prior to the likelihood of future flooding and/or seasonal deadlines for construction in streamway channels; and

(c) The person seeking to undertake emergency protective measures has applied to the county engineer for approval of such emergency protective measures within 30 days of the occurrence of damage by previous flooding.

30.44.630 "Floodway fringe"

Means that portion of a floodplain which is inundated by floodwaters but is not within a defined floodway. Floodway fringes serve as temporary storage areas for floodwaters.

30.44.695 Wetlands, shoreline, or associated shoreline wetlands.

"Wetlands, shoreline, or associated shoreline wetlands" are those lands extending landward for 200 feet in all directions as measured on a horizontal plane from the ordinary high-water mark; and all marshes, bogs, swamps, 100-year floodplains, and river deltas associated with the streams, lakes, and tidal waters, which are subject to the provisions of this chapter.

30.44.660 Shoreline substantial development.

"Shoreline substantial development" means any development of which the total cost, or fair market value, whichever is higher, exceeds \$2,500, or any development which materially interferes with the normal public use of the water or shorelines of the state; except that the types of development defined in SCC 30.44.110 shall not be considered shoreline substantial developments for the purpose of this chapter.

Consistent. The Corps acknowledges the definitions above, and considers the proposed levee repairs to be an emergency action within the shoreline that is necessary to address flood damage from October – December 2015 and to return the levee to its previous level of protection.

Chapter 30.62A – Wetlands and Fish and Wildlife Habitat Conservation Areas

30.62A.010 - Purpose and applicability.

(1) The purpose of this chapter is to provide critical area regulations pursuant to the Growth Management Act [chapter 36.70A RCW] for the designation and protection of:

(a) Wetlands, and

(b) Fish and wildlife habitat conservation areas including:

(i) streams;

(ii) lakes;

(iii) marine waters; and

(iv) primary association areas for critical species

30.62A.310 General standards and requirements.

(1) This Part establishes specific standards and requirements for protection of wetlands and fish and wildlife habitat conservation areas, and under what circumstances mitigation may be used to address the impacts of development.

(2) Any development activity, action requiring a project permit or clearing occurring within wetlands, fish and wildlife habitat conservation areas, and buffers is prohibited unless conducted in compliance with this chapter.

Startup Levee Rehabilitation Project CZMA Consistency Determination

(3) Except as otherwise provided in Part 500, all development activities, actions requiring a project permit or clearing shall be designed and conducted to achieve no net loss of critical area functions and values and comply with the following general standards and requirements:

- (a) The project proponent shall make all reasonable efforts to avoid and minimize impacts to wetlands, fish and wildlife habitat conservation areas, and buffers in the following sequential order of preference:
- (i) avoiding impacts altogether by not taking a certain action or parts of an action; or;
 - (ii) when avoidance is not possible, minimizing impacts by limiting the degree or magnitude of the action and its implementation, using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts; and mitigating for the affected functions and values of the critical area;

Consistent. The proposed levee repair conforms to the above provisions. Impacts are avoided or minimized to the extent possible by minimizing overstory tree removal and in-water work, by following best management practices, and native plantings within the project area.

Typical best management practices that would be expected to be followed in this project include:

- ***Construction will occur within the in-water work window for this reach of the Skykomish River, which is July 15 through August 31.***
- ***Work area is restricted to areas of existing and functional flood control structures.***
- ***Staging areas are restricted to previously disturbed lands.***
- ***No net loss of wetland or sensitive aquatic sites.***
- ***Vegetative removal is limited to the repair site area only.***
- ***Willows would be placed in a single lift along levee face at 6-inch spacing.***
- ***Equipment used near the water will be cleaned prior to construction.***
- ***Work will be conducted during a period of low flow.***
- ***Biodegradable hydraulic fluids will be used in machinery where appropriate.***
- ***Refueling will occur on the protected side of the levee, away from wetland areas.***
- ***Construction equipment shall be regularly checked for drips or leaks.***
- ***At least one fuel spill kit with absorbent pads will be onsite at all times.***
- ***Drive trains of equipment will not operate in the water.***
- ***At least one biologist will be on site or available during construction.***

30.62A.320 - Standards and requirements for buffers.

Buffers shall be required adjacent to streams, lakes, wetlands and marine waters to protect the functions and values of these aquatic critical areas.

(1) Buffer Standards and Requirements—No Mitigation Required. All development activities, actions requiring project permits and clearing that comply with the buffer requirements of SCC 30.62A.320(1)(a) through (g) satisfy the avoidance criteria of SCC 30.62A.310(3) and are not required to provide mitigation.

(a) Buffer widths shall be as set forth in Table 2a or 2b below.

Table 2a—Stream, Lake and Marine Buffer Width Standards (Feet)	
<i>Streams and Lakes</i>	
Type S	150
Type F with anadromous or resident salmonids	150

Startup Levee Rehabilitation Project CZMA Consistency Determination

Type F without anadromous or resident salmonids	100
Type Np	50
Type Ns	50
<i>Marine Waters</i>	
Type 1	All marine waters 150

(b) Buffer widths shall be measured as follows:

- (i) the buffer for streams, lakes and marine waters shall be measured from the ordinary high-water mark extending horizontally in a landward direction and for wetlands, the buffer shall be measured from the edge of the wetland extending horizontally in a landward direction; and
- (ii) provided however, where the landward edge of the standard buffer shown in Table 2a or 2b extends on to a slope of 33 percent or greater, the buffer shall extend to a point 25 feet beyond the top of the slope.

(c) Within buffers, the following restrictions on impervious surfaces apply:

- (i) no new effective impervious surfaces are allowed within the buffer of streams, wetlands, lakes or marine waters; and
- (ii) total effective impervious surfaces shall be limited to 10 percent within 300 feet of:
 - (A) any streams or lakes containing salmonids;
 - (B) wetlands containing salmonids; or
 - (C) marine waters containing salmonids.
- (d) All development activities, actions requiring project permits or clearing shall be designed to avoid the loss of or damage to trees in buffers due to blow down or other causes.

Consistent. The proposed levee repair will conform to the above provisions. Work within the riparian buffer is required and the removal of understory canopy cover along the riverward bench will be completed. The construction would include planting of native shrubs along the riverward slope. The project has been designed to minimize vegetation removal.

30.62A.330 - Standards and requirements for activities conducted within streams, lakes and marine waters.

This section provides standards and requirements for activities conducted within streams, lakes and marine waters. Protection of streams, lakes and marine waters is inextricably linked to protection of the adjacent buffers. Standards and requirements for buffers adjacent to streams, lakes and marine waters are found in SCC 30.62A.320.

(1) Standards and Requirements for Streams, Lakes and Marine Waters—No Mitigation Required. Any development activity, action requiring project permit or clearing that does not encroach into streams, lakes or marine waters and provides buffers consistent with the requirements of SCC 30.62A.320(1) satisfies the avoidance criteria of SCC 30.62A.310(3) and do not require mitigation.

Consistent. The proposed levee repair is consistent with this criterion. The repair does not encroach into the river. Several alternatives have been considered by the Corps for this repair. Riprap with native plantings will provide protection to the adjacent protected structures while providing habitat functions, reestablishing vegetation within the buffer, and limiting impact to the river.

30.65 Special Flood Hazard Areas

30.65.010 - Purpose and applicability.

The purpose of this chapter is to protect the public health, safety and welfare in those areas subject to periodic inundation due to flooding, and to minimize losses due to flood conditions in the specific areas subject to this chapter by utilizing the methods and provisions set forth herein. The regulations set forth herein shall apply to all development in special flood hazard areas as defined in this title within the jurisdiction of the county.

30.65.020 - Intent.

This chapter restricts uses and regulates structures to those that are consistent with the degree of flood hazard. The intent of this chapter is:

- (1) To minimize loss of life and property by restricting uses and regulating development in special flood hazard areas;
- (2) To alert the county assessor, appraisers, owners, potential buyers and lessees to the natural limitations of the flood plain;
- (3) To meet the minimum requirement of the national flood insurance program; and
- (4) To implement state and federal flood protection programs.

30.65.220 - Floodways—Permitted uses.

The following uses are allowed in the floodway when permitted by the applicable zone in accordance with chapter 30.22 SCC, provided the use is in compliance with the applicable general and specific floodproofing standards of SCC 30.65.110 and 30.65.120, and other applicable provisions of this chapter and will have a negligible effect upon the floodway in accordance with the floodway encroachment provisions of SCC 30.65.230(1):

- (10) Water-dependent utilities and other installations which by their very nature must be in the floodway. Examples of such uses are: Dams for domestic/industrial water supply, flood control and/or hydroelectric production; water diversion structures and facilities for water supply, irrigation and/or fisheries enhancement; flood water and drainage pumping plants and facilities; hydroelectric generating facilities and appurtenant structures; structural and nonstructural flood damage reduction facilities, and stream bank stabilization structures and practices. The applicant shall supply convincing evidence that a floodway location is necessary in view of the objectives of the proposal and that the proposal is consistent with other provisions of this chapter and the shoreline management master program. In all instances of locating utilities and other installations in floodway locations, project design must incorporate floodproofing.
- (11) Dikes, when the applicant can provide clear and convincing evidence that:
 - (a) Adverse effects upon adjacent properties will not result relative to increased floodwater depths and velocities during the base flood or other more frequent flood occurrences;
 - (b) Natural drainage ways are minimally affected in that their ability to adequately drain floodwaters after a flooding event is not impaired; and
 - (c) The proposal has been coordinated through the appropriate diking district where applicable, and that potential adverse effects upon other affected diking districts have been documented.

Consistent. Levees are flood control structures that are by definition located within floodplains. The project repairs an existing levee (dike) to its pre-damaged condition. The levee has not shown adverse affects on adjacent properties nor natural drainage ways. The project is being completed with Snohomish County Public Works as the local sponsor and a public notice will be issued. The project has been designed with native plantings and riprap to provide protection to the adjacent protected structures while providing habitat function and limiting impact to the river.

Startup Levee Rehabilitation Project CZMA Consistency Determination

4. Enforceable Policies of the Coastal Zone Management Program

The project complies with the following enforceable policies of the Coastal Zone Management Program:

- 1) Shoreline Management Act: The consistency determination submitted to Washington Department of Ecology outlines the Corps analysis of substantive compliance with the SMA.
- 2) State Water Quality Requirements: The Corps concludes that the project is not subject to regulation under Sections 401 and 404 of the Federal Water Pollution Control Act. The exemption from the requirement to evaluate the effects of discharges of fill material into waters of the United States under 33 USC 1344(f)(1)(B) applies because all riverward work at the repair site will be conducted within the pre-damaged levee footprint. Therefore the proposed repair of the Startup Levee does not require a 404 (b)(1) evaluation nor a 401 water quality certification.
- 3) State Air Quality Requirements: The project constitutes a routine facility repair and/or maintenance activity, generating an increase in emissions that is clearly *de minimis* under 40 CFR 93.153(c)(2)(iv), and is therefore exempt from the conformity requirements of the Clean Air Act.
- 4) State Environmental Policy Act: Corps Civil Works projects comply with NEPA and are not subject to SEPA. The Corps is preparing an Environmental Assessment on the work and expects to conclude NEPA with a Finding of No Significant Impact prior to construction.

The remaining two policies, the Energy Facility Site Evaluation Council law and the Ocean Resources Management Act are not applicable to this project.

STATEMENT OF CONSISTENCY

Based on the above evaluation, the Corps has determined that the proposed action complies to the maximum practicable extent with the policies, general conditions, and activities as specified in the Snohomish County Shoreline Management Program approved by the Director of the Washington Department of Ecology. The proposed action is thus considered to be consistent to the maximum extent practicable with the State of Washington Shoreline Management Program and policies and standards of the Snohomish County Shoreline Master Program.

**APPENDIX A
PROJECT PHOTOS**



Photo 1. Site 1, looking upstream. Riprap armor and toe rock have been lost.



Photo 2. Slope failure at Site 2 (approximately Station 9+00).

**APPENDIX B
PROJECT DRAWINGS**

