

GeoScience, Inc.

January 18, 2012

Ms. Wendy Farley
Senior Planner
City of Florence
via email: wendy.farley@ci.florence.or.us

RE: PHASE II SITE INVESTIGATION REPORT, 16 SEA WATCH COURT

Dear Ms. Farley:

This Site Investigation Report is being submitted in compliance with Florence City Code Title 10, Chapter 7 - 4 C, which states (Code requirements in "Arial" font and GeoScience information in "Times" font):

- C. General Requirements for Phase II Site Investigation Report shall include at least the following information. Additional information, commensurate with the level of hazard and site conditions shall be submitted.
1. Identification of potential hazards to life, proposed development, adjacent property, and the natural environment which may be caused by the proposed development.

The proposed development is designed to mitigate a potential hazard to life, the risk of loss of the existing residence on Lot 16 of Sea Watch Estates, and similar damage to property on portions of Lots 15 and 18. The proposed "development" consists of measures to provide bank stabilization in an area affected by a catastrophic slope movement on December 26, 2010 (see attached GeoScience Report dated 3-18-2011). Since that time, the slope failure and erosion at the toe of the slope has continued, exposing the bank stabilization system installed at the site in 1997 to increased risk of complete failure. The proposed "development" in itself does not result in an increase of the risk to life and property in the vicinity. In addition, as outlined in the Resource Capability Assessment (submitted under separate cover), the proposed "development" does not result in adverse impacts to the natural resources of the Siuslaw Estuary. The main concern for impact to the environment is from potential releases of petroleum products which might leak from equipment used during construction of the bank failure mitigation.

2. Mitigation methods for protecting the subject property and surrounding areas from each potential hazard.

Per consultation with ODFW and NMFS, all machinery will be equipped with oil-absorbent pads and booms in the areas where releases would be most likely, spill-kits will be on site, and an oil-absorbent boom will be placed in the river during construction. To minimize turbidity, work will be conducted only above the water level of the river.

Exhibit I

3. Acceptable development density.

Not applicable.

4. Identification of soil and bedrock types.

See description of Soils and Geology in attached GeoScience report (3/18/2011). No bedrock is exposed at the site and none is expected to be present in the subsurface for several tens of feet of depth.

5. Identification of soil depth.

See description of Soils and Geology and cross sections (Figures 4-6) in attached GeoScience report (3/18/2011). More recent dune sand at the site ranges from 10 to 20 feet in depth. Older, partially weathered dune sand (MTD - Marine Terrace Deposit) is more than 40 feet deep.

6. Water drainage patterns.

There is no surface drainage at the site. Groundwater discharges from several locations at the toe of the slope at the bottom of the recent dune sand and above the MTDs. Three larger such "springs" are present below the northern portion of the existing sheet pile wall, the central portion of the wall, and below the south end of the wall.

7. Identification of visible landslide activity in the immediate area.

See GeoScience report. The "development" is designed to stabilize the slope movements.

8. History of mud or debris flow.

See GeoScience report. A similar failure occurred at the site in 1996/97 and was partially mitigated by installation of a sheet-pile wall and minor protection of the toe of the slope.

9. In areas prone to landslide, mudflow and where slopes exceed 25%, reports shall identify the orientation of bedding planes in relation to the dip of the surface slope.

Not applicable. No "bedded" rock is present at the site.

10. Recommendations for removal, retention, and placement of trees and vegetation.

See "Recommendations" section of GeoScience 3/18/2011 report. Most of the area is currently devoid of vegetation as a result of the slope movement. The area will be planted with beach grass, sallal, willows, and native evergreen huckleberry.

Ms. Wendy Farley
January 18, 2012
Page 3

11. Recommendations for placement of all structures, on site drives, and roads.

No "structures" or permanent "on site drives" or permanent "roads" are proposed for the site. See Figures 7-9 of the 3/18/2011 GeoScience report for location of sand retention system and rip rap along lower portion of the bank.

12. Recommendations for protecting the surrounding area from any adverse effects of the development. (Amended by Ord. No. 10, Series 2009).

The surrounding area requires no protection from adverse effects of the "development" (see Resource Capability Assessment and GeoScience 3/18/2011 report and addenda to the Joint permit application, submitted under separate cover). The proposed work will increase the overall stability of the bank in the immediate vicinity of the sand retention system and revetment. As outlined above (under 10-7-4-C-1 & 2), measures will be taken during construction to minimize impacts to fish habitat.

If you have any questions regarding this letter, please do not hesitate to contact me at (541) 607-5702.

Sincerely,
GeoScience, Inc.



Gunnar Schlieder, Ph.D., CEG

Attachments: GeoScience Report 3/18/2011

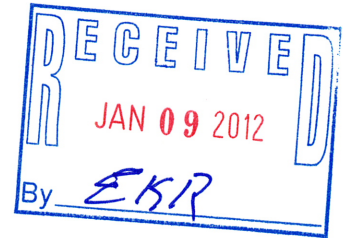


DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, PORTLAND DISTRICT
EUGENE FIELD OFFICE
1600 EXECUTIVE PARKWAY SUITE 210
EUGENE OR 97401-2156
December 22, 2011

REPLY TO
ATTENTION OF:

Operations Division
Regulatory Branch
Corps No.: NWP-2011-141

Ms. Patricia and Mr. Richard Lukens
P.O. Box 2568
Florence, Oregon 97439-0170



Dear Ms. and Mr. Lukens:

The U.S. Army Corps of Engineers (Corps) received your request for Department of the Army (DA) authorization to stabilize eroding streambank on your property. The project is located on the Siuslaw River, RM 1.75, in Florence, Lane County, Oregon (Section 15, Township 18 South, Range 12 West).

Up to 600 cubic yards (cy) of sand and silt material will be excavated from below ordinary high water to reshape the bank near the base of existing sheet pile. Up to 600cy of new material including riprap will be placed at the toe and up the bank for stabilization and to prevent further erosion. The work area will comprise of a footprint measuring 200 feet long by 15 feet wide and 11 feet high. The project is shown on the enclosed drawings (Enclosure 1).

This letter verifies that your project is authorized under the terms and limitations of Nationwide Permit (NWP) No. 13 (Bank Stabilization Projects). Your activities must be conducted in accordance with the conditions found in the Portland District NWP Regional Conditions (Enclosure 2) and the NWP General Conditions (Enclosure 3). You must also comply with the Oregon Department of Environmental Quality (DEQ) Water Quality Certification Conditions (Enclosure 4), Oregon Department of Land Conservation and Development (DLCD) Coastal Zone Management Concurrence Conditions (Enclosure 5), and the project specific conditions lettered (a) through (h) below. **Failure to comply with any of the listed conditions could result in the Corps initiating an enforcement action.**

The following special condition is a part of all DA permits which provide authorization under Section 10 of the Rivers and Harbors Act, regardless whether the permit provides such authorization under Section 10 alone or in combination with authorization under other laws:

- a. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from

Exhibit J

the U.S Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

- b. Permittee shall notify the Regulatory Branch with the date the activities authorized in waters of the United States are scheduled to begin. Notification shall be sent by email to cenwp.notify@usace.army.mil or mailed to the following address:

U.S. Army Corps of Engineers
Eugene Field Office
Permit Compliance, Lane County
1600 Executive Parkway Suite 210
Eugene, Oregon 97401-2156

The subject line of the message shall contain the name of the county in which the project is located followed by the Corps of Engineers permit number.

- c. Permittee shall perform all in-water work, including any fill and/or structures, during ODFW's recommended in-water work window. The window for the Siuslaw River Estuary is November 1 to February 15. Any variation to this window requires review by the managing agency and subsequent approval from the Corps prior to working outside this window.
- d. Permittee shall isolate and confine the worksite from the active channel to minimize turbidity and prevent pollutants from entering the waterbody. Permittee shall install and maintain adequate erosion control measures throughout construction and until permanent controls are in place.
- e. Permittee shall ensure all excavated materials are disposed of at a suitable upland location and adequately stabilized to minimize increases in turbidity levels and indirect impacts to wetlands and other aquatic systems.

The Corps has determined the proposed project may affect Oregon Coast coho salmon, a species protected by the Endangered Species Act, and Essential Fish Habitat for salmon species as designated under the Magnuson-Stevens Fishery Conservation and Management Act. The Corps performed a formal consultation and received a biological opinion from NMFS which assesses compliance with these laws and provides coverage for incidental take. The biological opinion is titled *Endangered Species Act Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Lukens Bank Stabilization, Siuslaw River mile 1.75 near Florence (6th field HUC 171002060804) Lane*

County, Oregon (Corps No.: NWP-2011-141), dated December 16, 2011. The Corps recommends that you review the biological opinion in its entirety, which is attached for your convenience (Enclosure 6).

The formal consultation also requires that we provide you with the following notice:

If a sick, injured or dead specimen of a threatened or endangered species is found, the finder must notify NMFS' Office of Law Enforcement at 503-231-6240 or 206-526-6133. The finder must take care in handling of sick or injured specimens to ensure effective treatment, and in handling dead specimens to preserve biological material in the best possible condition for later analysis of cause of death. The finder also has the responsibility to carry out instructions provided by the Office of Law Enforcement to ensure that evidence intrinsic to the specimen is not disturbed unnecessarily.

- f. Permittee shall fully implement all of the nondiscretionary Terms and Conditions of the Reasonable and Prudent Measures contained in National Marine Fisheries Service (NOAA Fisheries) biological opinion dated 16 December 2011. The nondiscretionary Terms and Conditions of the Reasonable and Prudent Measures are listed on pages 20-22 of the opinion (Enclosure 6).
- g. Permittee shall notify the Corps if the project changes in scope or is otherwise modified. The Corps is required to reinitiate consultation on this action where discretionary Federal involvement or control over the action has been retained or is authorized by law and (a) the amount or extent of taking specified in the Incidental Take Statement is exceeded, (b) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered, (c) the identified action is subsequently modified in a manner that has an effect to the listed species or critical habitat that was not considered in the biological opinion; or (d) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16).
- h. Permittee shall fully implement all of the Essential Fish Habitat conservation measures provided on page 25 of NMFS biological opinion dated December 16, 2011 (Enclosure 6).

We direct your attention to NWP General Condition 25 (Enclosure 3) that requires the transfer of this permit if the property is sold, and NWP General Condition 26 that requires you to submit a signed certificate when the work is completed. A "Compliance Certification" is provided (Enclosure 7).

We have prepared a Preliminary Jurisdictional Determination (JD), which is a written indication that wetlands and waterways within your project area may be waters of the United

States (Enclosure 8). Such waters have been treated as jurisdictional waters of the United States for purposes of computation of impacts and compensatory mitigation requirements. If you concur with the findings of the Preliminary JD, please sign it and return it to the letterhead address within two weeks. If you believe the Preliminary JD is inaccurate, an Approved JD maybe requested, which is an official determination regarding the presence or absence of waters of the United States. If you would like an Approved JD, one must be requested prior to starting work within waters of the United States. Once work within waters of the United States has been started, the opportunity to request an Approved JD will no longer be available.


This authorization does not obviate the need to obtain other permits where required. Permits, such as those required from the Oregon Department of State Lands (DSL) under Oregon's Removal /Fill Law, must also be obtained before work begins.

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked prior to March 18, 2012. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a Public Notice when the NWPs are reissued. Furthermore, if you commence or under contract to commence this activity before the date the relevant NWP expires, is modified or revoked, you will have 12 months from the date of the modification, or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

We would like to hear about your experience working with the Portland District, Regulatory Branch. Please complete a customer service survey form at the following address:
<http://per2.nwp.usace.army.mil/survey.html>.

If you have any questions regarding this NWP verification, please contact Mr. Benny A. Dean Jr. at the letterhead address, by telephone at (541) 465-6769, or e-mail Benny.A.Dean@usace.army.mil.

Sincerely,


Michele Hanson
Team Leader
Regulatory Branch

Enclosures

Copy Furnished:

Oregon Department of State Lands (Kiryuta)

Oregon Department of Environmental Quality (Anderson)

Oregon Department of Land Conservation and Development (Hickner)

GeoScience, Inc. (Schlieder)



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

December 16, 2011

Refer to NMFS No:
2011/01964

Kevin Moynahan
Chief, Regulatory Branch
U.S. Army Corps of Engineers, Portland District
P.O. Box 2946
Portland, Oregon 97208-2946

Re: Endangered Species Act Biological Opinion and Magnuson-Stevens Fishery
Conservation and Management Act Essential Fish Habitat Response for the Lukens Bank
Stabilization, Siuslaw River mile 1.75 near Florence (6th field HUC 171002060804),
Lane County, Oregon (Corps No.: NWP-2011-141)

Dear Mr. Moynahan:

The enclosed document contains a biological opinion (opinion) prepared by the National Marine Fisheries Service (NMFS) pursuant to section 7(a)(2) of the Endangered Species Act (ESA) on the effects of a proposal by the Portland District of the U.S Army Corps of Engineers to authorize the Lukens Bank Stabilization under the authorities of section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act. In this opinion, NMFS concludes that the proposed action is not likely to adversely affect southern distinct population segment (southern) North American green sturgeon (*Acipenser medirostris*) or southern distinct population segment (southern) Pacific eulachon (*Thaleichthys pacificus*). The NMFS also concluded that the proposed action is not likely to jeopardize the continued existence of Oregon Coast (OC) coho salmon (*Oncorhynchus kisutch*) or result in the destruction or adverse modification of their designated critical habitat.

As required by section 7 of the ESA, NMFS is providing an incidental take statement with the opinion. The incidental take statement describes reasonable and prudent measures NMFS considers necessary or appropriate to minimize the impact of incidental take associated with this action. The take statement sets forth nondiscretionary terms and conditions, including reporting requirements, that the Federal action agency must comply with to carry out the reasonable and prudent measures. Incidental take from actions that meet these terms and conditions will be exempt from the ESA's prohibition against the take of listed species.

This document also includes the results of our analysis of the action's likely effects on essential fish habitat (EFH) pursuant to section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), and includes three conservation recommendations to avoid, minimize, or otherwise offset potential adverse effects on EFH. Two of these conservation recommendations are a subset of the ESA take statement's terms and conditions. Section 305(b)(4)(B) of the MSA requires Federal agencies to provide a detailed written response to NMFS within 30 days after receiving these recommendations.

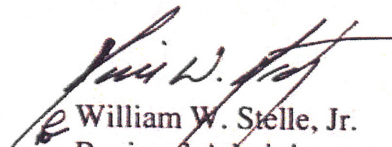
Exhibit K



If the response is inconsistent with the EFH conservation recommendations, the Federal action agency must explain why the recommendations will not be followed, including the scientific justification for any disagreements over the effects of the action and the recommendations. In response to increased oversight of overall EFH program effectiveness by the Office of Management and Budget, NMFS established a quarterly reporting requirement to determine how many conservation recommendations are provided as part of each EFH consultation and how many are adopted by the action agency. Therefore, we request that in your statutory reply to the EFH portion of this consultation, you clearly identify the number of conservation recommendations accepted.

Please direct questions regarding this opinion to Jeff Young, fisheries biologist in the Oregon Coast Branch of the Oregon State Habitat Office at 541.957.3389.

Sincerely,



William W. Stelle, Jr.
Regional Administrator

cc: Richard Lukens (Applicant)
Gunnar Schlieder (Consultant)
Brian Wilson (Corps)

Endangered Species Act Biological Opinion
and
Magnuson-Stevens Fishery Conservation and Management Act
Essential Fish Habitat Response
for the

Lukens Bank Stabilization
Siuslaw River mile 1.75 near Florence (6th field HUC 171002060804)
Lane County, Oregon
(Corps No.: NWP-2011-141)

NMFS Consultation Number: 2011/01964

Federal Action Agency: U.S. Army Corps of Engineers

Affected Species and Determinations:

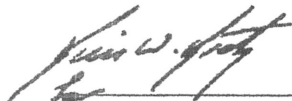
| ESA-Listed Species | ESA Status | Is the action likely to adversely affect this species or its critical habitat? | Is the Action likely to jeopardize this species? | Is the action likely to destroy or adversely modify critical habitat for this species? |
|---------------------------|------------|--|--|--|
| Oregon Coast coho salmon | T | Yes | No | No |
| Southern green sturgeon | T | No | No | No |
| Southern Pacific eulachon | T | No | No | No |

| Fishery Management Plan that Describes EFH in the Action Area | Would the action adversely affect EFH? | Are EFH conservation recommendations provided? |
|---|--|--|
| Pacific Coast salmon | Yes | Yes |
| Coastal pelagic species | Yes | Yes |
| Pacific Coast groundfish | Yes | Yes |

Consultation
Conducted By:

National Marine Fisheries Service
Northwest Region

Issued by:


William W. Stelle, Jr.
Regional Administrator

Date:

December 16, 2011

1. INTRODUCTION

This Introduction section provides information relevant to the other sections of this document and is incorporated by reference into Sections 2 and 3 below.

1.1 Background

The biological opinion (opinion) and incidental take statement portions of this document were prepared by the National Marine Fisheries Service (NMFS) in accordance with section 7(b) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531, *et seq.*), and implementing regulations at 50 CFR 402.

The NMFS also completed an essential fish habitat (EFH) consultation. It was prepared in accordance with section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. 1801, *et seq.*) and implementing regulations at 50 CFR 600.

The opinion and EFH conservation recommendations are both in compliance with section 515 of the Treasury and General Government Appropriations Act of 2001 (Public Law 106-5444) ("Data Quality Act") and underwent pre-dissemination review.

1.2 Consultation History

On May 13, 2011, NMFS received a request from the U.S. Army of Corps of Engineers (Corps) to initiate consultation on the Lukens Bank Stabilization on the Siuslaw River, Oregon. In this request, the Corps determined that the proposed action was not likely to adversely affect (NLAA) Oregon Coast (OC) coho salmon (*Oncorhynchus kisutch*), designated critical habitat for OC coho salmon, southern distinct population segment (southern) North American green sturgeon (*Acipenser medirostris*), and designated critical habitat for southern green sturgeon.

On August 8, 2011, NMFS sent a non-concurrence letter describing that NMFS did not concur with the Corps determination because the project was likely to adversely affect OC coho salmon, designated critical habitat for OC coho salmon, and EFH. This letter included a request for additional information that needed to be provided to NMFS for initiation of consultation.

On September 16, 2011, NMFS received a letter in response to the additional information request and requested a site visit. This additional information was helpful, but the additional clarification, better drawings and direct observation were needed to finalize our assessment. Therefore, on September 29, 2011, NMFS visited the site with the applicant and their consultant. At the site visit, NMFS gathered information and took photos of the site. On September 29, 2011, NMFS determine we had sufficient information to initiate consultation. A complete record of this consultation is on file at the Oregon Coast Habitat Branch of the Oregon State Habitat Office in Roseburg, Oregon.

1.3 Proposed Action

“Action” means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration.

The proposed action is the authorization by the Corps under authorities of section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act for the Lukens bank stabilization at river mile 1.75 of the Siuslaw River. The proposed action involves stabilizing an eroding bank which is threatening a sheet pile structure that supports a home. Sand and bank materials are being eroded by discharging groundwater and tidal fluctuations, undermining the structural integrity of the sheet pile wall.

The home sits atop of the north river bank approximately 50 feet above the river with an overall bank slope of 1.25 horizontal :1 vertical. In 1997, a bank failure occurred resulting in the installation of a sheet pile seawall near the top of the bank and above the ordinary high water mark. Riprap and a two-tiered gabion basket buttress were placed at the toe of the bank to further stabilize the slope. By 2010, groundwater flows discharging along the face of the slope had destabilized the slope, exposing the sheet-pile wall beyond the maximum rating for which it was designed (Figure 1). The two-tiered buttress and riprap material have been pushed into the river.

The applicant proposes to reshape and rebuild the slope. The applicant will remove 600 cubic yards of native substrate and then place the same amount of riprap to rebury the sheet pile wall to its design depth. The applicant will lay geotextile fabric wrapped around pea gravel on the shelf at the base of the slope to assist with rock placement retention. Using an excavator and conveyor machine, the applicant will place riprap along 200 linear feet of the river bank where erosion has occurred. The riprap will be the largest size that the equipment will handle to provide voids in the riprap for fish use. Due to the immediate need for stabilization, the applicant proposes to work as soon as possible and before the in-water work window, if necessary. The proposed action will likely take three weeks to complete. The Oregon Department of Fish and Wildlife in-water work window for this location is November 1 through February 15.

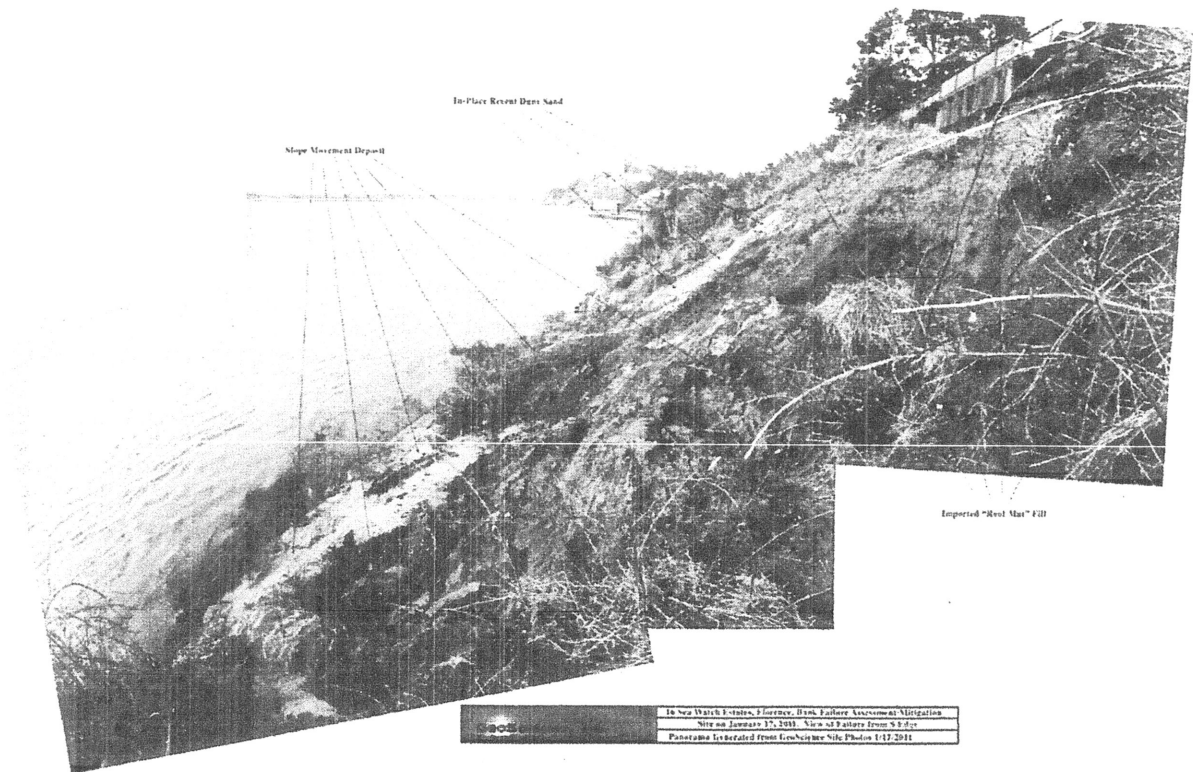


Figure 1. The subject bank in June 2010, showing sheet pile structure in upper right corner. Since then, the sand at the river's edge has eroded away exposing the shelf that the riprap will be placed on and the marine terrace deposits, on which the groundwater is discharging.

The applicant proposes the following conservation measures:

1. The applicant will only operate the excavator and conveyor machine in the upland areas of the slope.
2. No equipment will work in the active channel at any time during construction activities.
3. The applicant will conduct work during low tides when the shelf is exposed and out of the active channel to reduce chances of turbidity with all fill discharged on the shelf above the channel bottom, but below the high tide line.
4. Equipment will be steam-cleaned prior to the arrival at the site.
5. The contractor will have spill kits on-site to contain any spills of hazardous chemicals.
6. The contractor will place oil absorbent booms in areas on the equipment where leaks might occur.
7. The contractor will place an oil absorbent boom in the river around the site to contain any pollutant that contacts the river.
8. Following project completion, the applicant will plant the upper portion of the bank (above the riprap) with native grasses and salal (*Gaultheria shallon*) and willows (*Salix*

sp). No planting is planned for the area where riprap is placed in order to ensure the integrity of the filter fabric.

1.4 Action Area

“Action area” means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR 402.02). For the proposed action the action area consists of 200 linear feet of river bank up to 50 feet above the water line where construction activities will occur and the Siuslaw River 30 feet into the river and in response to tidal flow, 100 feet upstream and downstream for the extent of suspended sediments. The NMFS determined the action area based on the extent of construction activities and dispersion of suspended sediments.

The NMFS listed OC coho salmon as threatened, designated critical habitat, and issued protective regulations under the ESA on February 11, 2008 (73 FR 7816). On June 20, 2011, we announced, after conducting a new status review, that we would retain the threatened listing for this ESU (76 FR 35756). The action area is designated critical habitat for OC coho salmon. The action area is a migration corridor for both adult and juvenile OC coho salmon and is rearing habitat for juvenile OC coho salmon.

The NMFS listed the southern green DPS of sturgeon as threatened under the ESA on April 7, 2006 (71 FR 17757); designated critical habitat for southern green sturgeon on October 9, 2009 (74 FR 52300); and issued protective regulations on June 2, 2010 (75 FR 30714). Southern green sturgeon occur in the Siuslaw River estuary and use it for growth and development. Data from Washington studies indicates southern green sturgeon will only be present in estuaries from June until October (Moser and Lindley 2007). The Siuslaw River estuary is not designated critical habitat for southern green sturgeon.

The NMFS listed the southern DPS of eulachon (hereafter described as ‘eulachon’) as threatened under the ESA on March 18, 2010 (75 FR 13012) and designated critical habitat for eulachon on October 20, 2011 (76 FR 65324). Eulachon from the southern DPS range from the Mad River in northern California to the Skeena River in British Columbia, Canada. Monaco *et al.* (1990) summarized distribution and abundance of eulachon in major Oregon estuaries and listed the Siuslaw River as possessing records of eulachon presence. Willson *et al.* (2006) listed the Siuslaw River as supporting eulachon spawning runs (based on Emmett *et al.* (1991) and personal communications with “fish biologists of Oregon Department of Fish and Wildlife). However, Monaco *et al.* (1990) describes eulachon in the Siuslaw River as ‘rare’, citing Hutchinson (1979) as supporting documentation. Based on this information, NMFS believes that eulachon will potentially occur in the action area and be exposed to the short-term and long-term effects of the proposed action. Eulachon adults return to freshwater between January and March. Evidence suggests that adults may return as early as December or as late as May (WDFW and ODFW 2001) to spawn. To this date, there have been no proposals to issue protective regulations for eulachon. The Siuslaw River is not designated critical habitat for eulachon