

**Clean Water Act Section 404 Analysis**

**Quillayute River Federal Navigation Channel Maintenance  
LaPush, Callam County Washington**

**Prepared by:**

**U.S. Army Corps of Engineers  
Seattle District  
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**US Army Corps  
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Seattle District

FINAL  
SECTION 404(b)(1)EVALUATION  
FISCAL Year's 2004- 2009 QUILLAYUTE RIVER MAINTENANCE DREDGING  
LA PUSH, CALLAM COUNTY, WASHINGTON

## 1.0 Introduction

The purpose of this document is to record the U.S. Army Corps of Engineers (USACE)' compliance evaluation of the Quillayute River Federal Navigation Maintenance Dredging project pursuant to the Clean Water Act (CWA), the Rivers and Harbors Act (RHA), and the General Regulatory Policies of the USACE. Specifically, Section 404 of the CWA requires an evaluation of impacts for work involving discharge of fill material into the waters of the U.S., and evaluation guidance can be found in the CWA 404(b)(1) Guidelines [40 CFR §230.12(a)]. Section 10 of the Rivers and Harbors Act [33 USC §403] prohibits modification to or creation of an obstruction within a navigable water of the U.S. unless recommended by the Secretary of the Army and authorized by the Chief of Engineers. The General Regulatory Policies of the Corps of Engineers [33 CFR §320.4(a)] provide measures for evaluating permit applications for activities undertaken in navigable waters.

The main body of this document summarizes the information presented in Attachment A and includes relevant information from the Environmental Assessment for the project that was collected pursuant to the National Environmental Policy Act (NEPA) of 1969 [42 USC §4321 et seq.]. Attachment A provides the specific USACE analysis of compliance with the CWA 404(b)(1) and the General Regulatory Policy requirements.

## 2.0 Project Background

A final environmental impact statement (EIS), dated February 1986, was prepared to examine the environmental consequences of various alternatives for Operation and Maintenance activities for the Quillayute River Navigation Project at La Push, Washington. The accompanying environmental assessment (EA) describes proposed Fiscal Year (FY) 2004 - 2009 dredging and disposal of sediments from the Quillayute River Navigation Channel. This EA also compares the project between 1986 and 2003. The following evaluation was prepared pursuant to Section 404(b)(1) of the Clean Water Act in accordance with the guidelines promulgated by the Environmental Protection Agency (40 CFR 230) for evaluation of the discharge of dredged fill materials into waters of the United States. This 404(b)(1) evaluation assesses the placement of dredged material on the ocean side of the spit separating the Quillayute River and the Pacific Ocean. Only the portions of these fills that are below mean higher water (MHHW) will be evaluated, as these are the features that fall within Section 404 jurisdiction. References to the EA for this action will be made throughout this evaluation.

### **3.0 Project Need**

There is an urgent need to dredge the Federal Navigation Channel and Marina to allow full coverage of the U.S. Coast Guard rescue boats. Currently they are hindered by shoaling that has occurred and are unable to leave the marina on a 24/7 basis. This shoaling is also affecting the Tribal fisheries in the same manner with not being able to ingress or egress the marina as needed.

### **4.0 Project Purpose**

The purpose of the dredging of the Federal navigation channel and marina is to allow U.S. Coast Guard accessibility on a 24/7 that is 365 days a year.

### **5.0 Proposed Action and Alternatives**

The following sections describe the proposed action (Alternative A, the preferred action), Alternative B, and the “No Action” Alternative that were considered for the maintenance of the Federal navigation channel.

#### **a. Proposed Action (Alternative A, preferred)**

The proposed action is to pipeline dredge the marina and federal navigation channel. There is potential to clam shell dredge the entrance. All of the 75,000 to 100,000 cubic yards will be used on the ocean side of the spit to be of beneficial use to surf smelt. The exception will be approximately 10,000 cubic yards that will be given to the Quillayute Tribe for their use.

#### **b. Alternative B**

Under alternative B, the USACE would have performed the same maintenance dredging of the Federal navigation channel but would have used a clam shell dredge for the entire operation. This was not carried forward due to the amount of material to be dredged and the accessibility of the ocean side of the spit, plus the extra cost associated with re-handling the material at least 3 times.

#### **c. No Action Alternative**

Under the No Action Alternative, no maintenance dredging would occur. The Federal Navigation Channel and marina would be allowed to shoal in as sediment moved downstream. This would have prevented the U.S. Coast Guard from being able to perform their rescue duties on a 365 day 24/7 schedule. This alternative would also have a tremendous economic impact to the Quillayute Tribal Fisheries as their fishing vessels would eventually not be able to egress or ingress the marina.

## **6.0 Potentially Adverse Effects (Individually or Cumulative) on the Aquatic Environment**

### **a. Effects on Physical, Chemical, or Biological Characteristics of the Aquatic Ecosystem**

The major impacts to the ecosystem will be the continued disruption of the benthic community. A positive impact will be the placement of the dredged material on the ocean side of the spit for the littoral drift to carry the material to increase surf smelt habitat. The sediment has passed the DMMO sediment standards for open water disposal so no effects will be associated with chemicals. Dredging of the Federal navigation channel and marina will have the physical impact of removing shoaling from the channel and marina. Given time the shoaling will occur again most likely in the same area.

### **b. Effects on Recreational, Aesthetic, Historical, and Economic Values**

There will some loss of recreational, aesthetic, and economic value to the public and possibly the Tribe during construction. These impacts will be short-term because the area will return to existing uses after project completion. There after the project will assist in improving the economic values as fishing vessels will be able to egress and ingress the marina.

*“It is the policy of the Corps (33 CFR 336.1[c][6]) that historic resources surveys should not be conducted for maintenance dredging and disposal activities proposed within the boundaries of previously constructed navigation channels or previously used disposal areas. Since the proposed dredging is confined to the removal of recently deposited sediments within the previously dredged channel width and depth boundaries, no submerged cultural resources will be affected by the project.”*

### **c. Findings**

There will be no significant adverse impacts to the aquatic ecosystem functions and values. Rather, it is expected that aquatic ecosystem functions and values may improve over time because of the surf smelt habitat enhancement.

## **7.0 All Appropriate and Practicable Measures to Minimize Potential Harm to the Aquatic Ecosystem**

### **a. Impact Avoidance Measures**

Three project alternatives were evaluated in order to select the best alternative for minimizing cost and impact to the environment. The proposed project action was selected because it will have the least negative impact on the environment while maintaining the egress and ingress for the U.S. Coast Guard Rescue Boats.

### **b. Impact Minimization Measures**

The USACE will take all practicable steps during construction and monitoring of the project to minimize impacts to aquatic and terrestrial resources. Contingencies will

be in place if any of the water quality protection measures fail to achieve their intended function. The USACE will observe all construction windows to ensure that impacts to migratory fish will be avoided or minimized. The minimization measures will be as follows:

- Best management practices will be used to ensure that no unnecessary damages to the environment occurs;
- Spill kits will be onboard the dredge;
- If the contractor, Corps personnel, or Tribal members note dead or dying fish all work will stop immediately until an investigation is completed.

**c. Compensatory Mitigation Measures**

There is no compensatory mitigation measures required for routine maintenance dredging. However, the majority (all but 10,000 c.y. of the 75,000 to 100,000 c.y.) of the material will be used beneficially by placing the dredged material on the ocean side of the revetment so the littoral drift will move the material into surf smelt habitat. This added material will enhance surf smelt breeding habitat. Ten thousand c.y.'s of material will be placed in the upland disposal site for the Quileute Tribe to use beneficially within their reservation.

**d. Findings**

The USACE has determined that all appropriate and practicable measures have been taken to minimize potential harm to the environment.

**8.0 Other Factors in the Public Interest**

**a. Fish and Wildlife**

The USACE has coordinated the maintenance dredging with the Quillayute Tribe and state and federal resource agencies to ensure that minimal impacts to fish and wildlife resources will occur. Concurrence letters were received with a finding of not likely to adversely affect threatened and endangered species from U.S. Fish and Wildlife Service December 22, 2004 and from National Marine Fisheries Service October 19, 2004 for a period of five years 2004 – 2009.

**b. Water Quality.**

The USACE concluded that this project would not violate state water quality standards. The EPA issued a water quality certification on September 9, 2005 and is good through September 2008. EPA chose to issue the permit for only four years instead of the five years requested.

**c. Historical and Cultural Resources**

See 6.b. above.

**d. Environmental Benefits**

This project will help to preserve surf smelt habitat.

**9. Conclusions.**

The USACE finds that this project is within the public's interest and complies with the substantive elements of Section 404 of the Clean Water Act and Rivers and Harbors Act.

## Attachment A

### Clean Water Act 404(b)(1) Evaluation [40 CFR §230] Permit Application Evaluation [33 CFR §320.4]

#### 404(b)(1) Evaluation [40 CFR §320.4]

##### Potential Impacts on Physical and Chemical Characteristics [Subpart C]:

###### 1. Substrate [230.20]

The beach site proposed for dredged material disposal has been previously used for disposal of dredged materials. The disposal site on the spit, where most material will be disposed, formerly consisted of material from the river and ocean. The proposed discharges are expected to have little or no additional impact on the substrate or aquatic ecosystem at any of the disposal sites.

The federal navigation channel and marina have been dredged on a cycle of every other year so there may be some impacts to long life benthic communities; however the benthic study conducted by the Corps in 2001 indicated a strong and viable benthic community within and around the federal navigation channel.

###### 2. Suspended particulate/turbidity [230.21]

There will be short term turbidity during the dredging operation; however, due to the strong flow of the river the turbidity will be flushed out of the area rapidly.

###### 3. Water [230.22]

This project is not expected to add any nutrients to the water that could affect the clarity, color, odor, or aesthetic value of the water, or that could reduce the suitability of the Quileute River for aquatic organisms or recreation.

###### 4. Current Patterns and water circulation [230.23]

The USACE expects no disruption of current patterns and water circulation of the Quileute River during or after the dredging is completed.

###### 5. Normal water fluctuations [230.24]

The dredging and disposal operation is not expected to have any effect on normal water fluctuations.

###### 6. Salinity gradients [230.25]

No impact is anticipated to the various gradients of salinity within this estuary after dredging is complete. There may be some variations during the dredging process that is associated with the mixing of fresh and salt water within the dredge plume; however the impact if any would be minor and very short lived in this dynamic river system.

## **Potential Impacts on Biological Characteristics of the Aquatic Ecosystem [Subpart D]:**

### **1. Threatened and endangered species [230.30]**

The USACE prepared a Biological Evaluation for this project that involved close coordination with the USFWS and NMFS to ensure that compliance with the Endangered Species Act of 1972 is achieved. No salmonid species have been proposed for listing under the Endangered Species Act within this project area. The National Marine Fisheries Service has determined that the Olympic Peninsula Evolutionarily Significant Unit (ESU) for coho salmon, Chinook salmon, and steelhead are not warranted for listing within the project area. Therefore no impacts to threatened or endangered species are anticipated. Letters of concurrence from USFWS dated December 22, 2004 and NMFS dated October 19, 2004 concur with our findings.

### **2. Fish, crustaceans, mollusks and other aquatic organisms in the food web [230.31]**

There may be some disturbance as some of the benthic community will be moved from the navigation channel to the ocean side of the project. However, this has not reduced the level of success of the benthic community (Corps 2003). No other crustaceans or aquatic organisms will be impacted by this maintenance dredging.

### **3. Other wildlife [230.32]**

Birds and other wildlife will be temporarily disturbed during dredging due to noise of the dredge and the pumping action of the disposal pipeline. Because these impacts will be short term, they are expected to be insignificant.

## **Potential Impacts on Special Aquatic Sites [Subpart E]**

### **1. Sanctuaries and refuges [230.40]**

The proposed project will not adversely impact marine sanctuaries (designated under local ordinances, state and/or local laws), mudflats, vegetated shallows or riffle and pool complexes. The Olympic Coast National Marine Sanctuary is directly offshore from the mouth of the Quillayute River. This area is not in close proximity to the disposal or dredging sites and is not expected to be impacted by this project.

### **2. Wetlands [230.41]**

There are no wetlands associated with this project.

### **3. Mud Flats [230.42]**

There are no mud flats associated with this project.

### **4. Vegetated Shallows [230.43]**

There are no vegetated shallows associated with this project.

### **5. Corral reefs [230.44]**

Not Applicable.

**6. Riffle and pool complexes [230.45]**

There are no riffles or pool complexes associated with this project as the work will be accomplished within the federal navigation channel and marina.

**Potential Effects on Human Use Characteristics [Subpart F]:**

**1. Municipal and private water supplies [230.50]**

Not Applicable.

**2. Recreational and commercial fisheries [230.51]**

The proposed dredging and disposal activities are scheduled to avoid the surf smelt spawning period (ending in mid-September) and the juvenile salmon out-migration period (starting in mid-March) and is not expected to significantly impact fisheries resources. Surf smelt spawning beds will be temporarily lost on the ocean beach, but will have fully recovered by the next spawning period. The proposed dredging may inconvenience recreational and commercial fishing vessels during operations but will significantly improve navigation safety after completion.

**3. Water-related recreation [230.53]**

There will be some disruption of the water related recreation during the dredging and disposal part of the project but will return to normal after the project is completed.

**4. Aesthetics [230.53]**

During the dredging process there will be some minor disturbance from the dredging equipment associated with noise and exhaust. After completion of the project the area will appear as before dredging with the exception of material placed at the upland disposal site for Tribal use. That too will disappear as the Tribe uses the material beneficially.

**5. Parks, national and historic monuments, national seashores, wilderness areas, research sites and similar preserves [230.54]**

The Olympic National Park is immediately north of the project site. Dredged materials deposited on the ocean side of the spit will, intentionally, be carried by tidal current northward to nourish Rialto Beach. The Quillayute Needles National Wildlife Refuge and the Olympic Coast National Marine Sanctuary, offshore of the project area, will not be affected by this project.

**Evaluation and Testing [Subpart G]:**

**1. General evaluation of dredged or fill material [230.60] & [230.61]**

The sediment was excluded from chemical testing requirements because of the lack of upland sources of contamination, the high sand and gravel content, and the high-energy environment of the dredge and excavation areas. However, the boat basin was sampled and the results were presented in March 2005 with a finding of all sediment is DMMP cleared for open water disposal.

## **Actions to Minimize Adverse Effects [Subpart H]**

### **1. Actions concerning the location of the discharge [230.70]**

The proposed action was modified so the dredged and excavated materials will be used beneficially as nourishment on Rialto Beach.

### **2. Actions concerning the material to be discharged [230.71]**

The Quileute Tribe will be allowed approximately 10,000 cubic yards of dredged material to use beneficially.

### **3. Actions controlling the material after discharge [230.72]**

Not Applicable.

### **4. Actions affecting the method of dispersion [230.73]**

Not Applicable.

### **5. Actions related to technology [230.74]**

Not Applicable.

### **6. Actions affecting plant and animal populations [230.75]**

The dredging and disposal operations will be timed to not impact surf smelt spawning on Rialto Beach (until September 15) and juvenile salmonid out-migration (March 15 – June 15). The EPA in consultation with the WDE, in accordance with section 401 of the Clean Water Act, issued a Water Quality Certification on September 9, 2005 and is good through September 2008. The certification includes conditions to minimize adverse effects to the aquatic ecosystem. Those conditions as stated in the attached Water Quality Certification are herein incorporated by reference.

### **7. Actions affecting human use [230.76]**

The initial placement of dredged material on the ocean beach will limit the public access. It will also take some time for the tidal and wave action to sort and disperse the placed materials. During this time, the aesthetics of the beach will be somewhat diminished.

### **8. Other Actions [230.77]**

Best management practices will be used to ensure that no unnecessary damages to the environment occur during the dredging and disposal process.

## **General Policies for Evaluation Permit Applications [33 CFR §320.4**

### **1. Public Interest Review [320.4(a)]**

The USACE finds this dredging project to be in compliance with the 404(b)(1) guidelines and not contrary to public interest.

### **2. Effects on Wetlands [320.4(b)]**

See 404(b)(1) evaluation above. No impacts to wetlands are expected.

- 3. Fish and Wildlife [320.4(c)]**

The USACE consulted extensively with Tribal, state, and federal resource agencies and other interested members of the public on this action. The USACE as mentioned above has received concurrence letters from USFWS and NMFS.
- 4. Water quality [320.4(d)]**

The USACE certifies that this project will not violate Water Quality Standards as set forth by the Clean Water Act and the 401 water quality certification issued by EPA.
- 5. Historic, cultural, scenic, and recreational values [320.4(e)]**

Federal, state, and tribal archaeologist have reviewed the project and have determined that it will no affect any known Tribal, archaeological, or historic places. Please see evaluation above for more details.
- 6. Effects on limits of the Territorial Sea [320.4(f)]**

There will be no affect to the territorial sea as the project is occurring within the federal navigation channel.
- 7. Consideration of property ownership [320.4(g)]**

Not Applicable, Tribal Lands. Access to disposal site is through Olympic National Park and right of entry has been obtained.
- 8. Activities affection coastal zones [320.4(h)]**

All coastal zone management criteria have been met according to the CZM established by the Quileute Tribe.
- 9. Activities in marine sanctuaries [320.4(i)]**

Not Applicable.
- 10. Other Federal, state, or local requirements [320.4(j)]**

The USACE has received concurrence from USFWS and NMFS and a 401 water quality certification from EPA. No other certifications are required.
- 11. Safety of impoundment structures [230.4(k)]**

Not Applicable
- 12. Water supply and conservation [320.4(l)]**

Not applicable
- 13. Energy conservation and development [320.4(m)]**

Not Applicable
- 14. Navigation [320.4(o)]**

Navigation will be interrupted during part of the dredging project but only a minor interruption. All boats and/or ships will have access to the navigation channel and marina but this access will be associated with minor detours within the channel.
- 15. Environmental benefits [320.4(p)]**

All but 10,000 cubic yards will be placed on the ocean side of the spit to enhance surf smelt habitat a primary food source for salmonids.
- 16. Economics [320.4(q)]**

The Quileute Tribal Fisheries will be able to use the channel and marina without tidal restrictions. This will enable the Tribe to utilize their fisheries on a more regular basis and not interrupt their fisheries business and livelihoods.
- 17. Mitigation [320.4(r)]**

Mitigation is not required for routine O&M dredging.

**Findings**

Based on the information provided in this document, Seattle District has determined that the proposed discharge of fill and dredged material includes practicable steps to minimize impacts to the aquatic environment, and that there is no practicable alternative to the proposed discharge that would have less impact on the aquatic environment. Therefore, Seattle District has determined that the proposed discharge complies with the Clean Water Act, Section 404(b)(1) guidelines.