



UNITED STATES DEPARTMENT OF COMMERCE
The Deputy Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

APR 30 2001

TO ALL INTERESTED GOVERNMENT AGENCIES AND PUBLIC GROUPS:

Under the National Environmental Policy Act, an environmental assessment (EA) has been performed on the following action:

TITLE: Swan Creek Restoration Project

LOCATION: Commencement Bay, City of Tacoma, Washington

SUMMARY: The Commencement Bay Natural Resource Trustee Council has completed an Environmental Assessment (EA) to restore natural resources injured by the releases of hazardous substances or discharges of oil in Commencement Bay, Tacoma, Washington. The project will consist of creating a 530-foot meandering stream channel that will connect Swan Creek with the three-acre Haire Wetland. This approach will result in establishment of a freshwater marsh and an open water habitat within Commencement Bay. The project will create new off-channel rearing habitat, enhance existing spawning and wetland habitat in Swan Creek and in the drainage, provide a riparian buffer for both the existing and new habitat, and provide public access for education and passive recreation. The overall project is designed to establish freshwater marsh habitat for an assemblage of wetland-dependent marine, bird and plant species. The 12-acre parcel is located on property bordering one or both sides of Swan Creek on Pioneer Way near the Puyallup River with the Port of Tacoma habitat restoration project located to the north.

The public and other interested parties have participated in public meetings during the permitting process. The environmental review process has led us to conclude that these restoration actions will not have a significant effect on the human environment. Consequently, the National Oceanic and Atmospheric Administration submitted the plan for an issuance of a finding of no significant impact (FONSI) which was approved.



RESPONSIBLE OFFICIAL: William T. Hogarth, Ph.D.
Acting Assistant Administrator for
Fisheries
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, Maryland 20910
301/713-2239

Therefore, an environmental impact statement will not be prepared. A copy of the finding of no significant impact including the supporting EA is available upon request to the responsible Official.

Sincerely,

for Margaret McCullen

Scott B. Gudes
Acting Under Secretary for
Oceans and
Atmosphere/Administrator
and Deputy Under Secretary

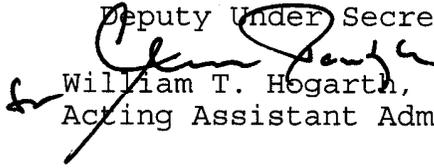
Enclosure



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, MD 20910

THE DIRECTOR

MEMORANDUM FOR: Scott B. Gudes
Acting Under Secretary for Oceans
and Atmosphere/Administrator and
Deputy Under Secretary

FROM:  William T. Hogarth, Ph.D.
Acting Assistant Administrator for Fisheries

SUBJECT: Swan Creek Restoration Project - Environmental
Assessment and Finding of No Significant Impact

The Commencement Bay Natural Resource Trustee Council has completed an Environmental Assessment (EA) to restore natural resources injured by the releases of hazardous substances or discharges of oil in Commencement Bay, Tacoma, Washington. The Trustees have been working with the City of Tacoma under a Consent Decree (United States v. City of Tacoma, Civ. No. C97-5336RJB (W.D. Wash., Dec. 30, 1997)) to construct five restoration projects, including this one. This project will consist of creating a 530-foot meandering stream channel that will connect Swan Creek with the three-acre Haire Wetland. Creation of this channel will establish a freshwater marsh and an open water habitat within Commencement Bay. The 12-acre project site is located on property bordering one or both sides of Swan Creek on Pioneer Way near the Puyallup River with the Port of Tacoma habitat restoration project located to the north.

The National Oceanic and Atmospheric Administration (NOAA) is the lead Federal agency for National Environmental Policy Act (NEPA) compliance for this project. Cooperating agencies and tribes include the other Commencement Bay Natural Resource Trustees -- the Puyallup Tribe of Indians, the Muckleshoot Indian Tribe, the Washington Department of Ecology (as lead state Trustee), the Washington Department of Fish and Wildlife, the Washington Department of Natural Resources, and the U.S. Department of the Interior (U.S. Fish and Wildlife Service and the Bureau of Indian Affairs).

The Trustees determined that excavation of the site to connect the stream channel and the adjacent wetland, resloping the banks and revegetating the upland and riparian borders of the site,

THE ASSISTANT ADMINISTRATOR
FOR FISHERIES



would provide beneficial habitat for fish and wildlife species in the area, including chinook salmon, a listed species under the Endangered Species Act and the Magnuson-Stevens Fishery Management and Conservation Act. The public and other interested parties have participated in public meetings during the permitting process.

The project will be constructed in compliance with all permits required by the State and Federal regulatory agencies. The proposed activities were evaluated under the goals and objectives and other evaluation criteria specified by the Commencement Bay NRDA Restoration Plan and with the evaluation factors under the National Environmental Policy Act (40 CFR 1508.27).

Based on review of the Environmental Assessment for the Swan Creek Restoration Project, NOAA and the Trustees have determined that no significant impacts to the quality of the human environment will result from the proposed action. Therefore, an environmental impact statement will not be prepared.

The purpose of this memo is to request your concurrence in the determination of a Finding of No Significant Impact. Please return this signed memorandum for our project files and for the Administrative Record.

Attachments

I concur: Margaret McCalla ^{for} Scott Gule 4/30/2001
Date

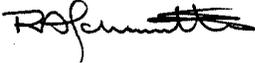
I do not concur: _____
Date



APR 23 2001

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

MEMORANDUM FOR: F - William T. Hogarth, Ph.D.

FROM: F/HC - Rolland A. Schmitt 

SUBJECT: Swan Creek Restoration Project - Environmental Assessment and Finding of No Significant Impact

The Commencement Bay Natural Resource Trustee Council has completed an Environmental Assessment (EA) to restore natural resources injured by the releases of hazardous substances or discharges of oil in Commencement Bay, Tacoma, Washington. The Trustees have been working with the City of Tacoma under a Consent Decree (United States v. City of Tacoma, Civ. No. C97-5336RJB (W.D. Wash., Dec. 30, 1997)) to construct five restoration projects, including this one. This project will consist of creating a 530-foot meandering stream channel that will connect Swan Creek with the three-acre Haire Wetland. Creation of this channel will establish a freshwater marsh and an open water habitat within Commencement Bay. The 12-acre project site is located on property bordering one or both sides of Swan Creek on Pioneer Way near the Puyallup River with the Port of Tacoma habitat restoration project located to the north.

The National Oceanic and Atmospheric Administration (NOAA) is the lead Federal agency for National Environmental Policy Act (NEPA) compliance for this project. Cooperating agencies and tribes include the other Commencement Bay Natural Resource Trustees -- the Puyallup Tribe of Indians, the Muckleshoot Indian Tribe, the Washington Department of Ecology (as lead state Trustee), the Washington Department of Fish and Wildlife, the Washington Department of Natural Resources, and the U.S. Department of the Interior (U.S. Fish and Wildlife Service and the Bureau of Indian Affairs).

The Trustees determined that excavation of the site to connect the stream channel and the adjacent wetland, resloping the banks and revegetating the upland and riparian borders of the site, would provide beneficial habitat for fish and wildlife species in the area, including chinook salmon, a listed species under the



Endangered Species Act and the Magnuson-Stevens Fishery Management and Conservation Act. The public and other interested parties have participated in public meetings during the permitting process.

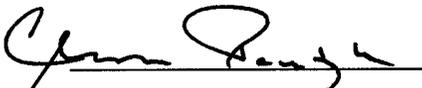
The project will be constructed in compliance with all permits required by the State and Federal regulatory agencies. The proposed activities were evaluated under the goals and objectives and other evaluation criteria specified by the Commencement Bay NRDA Restoration Plan and with the evaluation factors under the National Environmental Policy Act (40 CFR 1508.27). Based on a review of all of these factors and the referenced documents, NOAA and the Trustees concluded that the proposed activities would not have a significant effect on the quality of the human environment. Therefore, an environmental impact statement will not be prepared. A determination of a Finding of No Significant Impact (FONSI) is recommended.

In accordance with NOAA Administrative Order 216-6, the EA and FONSI are attached for your environmental review and transmittal for concurrence by NOAA's Office of Policy and Strategic Planning.

RECOMMENDATION

We request that you sign the attached memorandum for transmittal to the Office of Policy and Strategic Planning.

Attachments

I concur:  Date: 4-26-01

I do not concur: _____ Date: _____

**FINDING OF NO SIGNIFICANT IMPACT
ENVIRONMENTAL ASSESSMENT
FOR THE SWAN CREEK RESTORATION PROJECT
SEATTLE, WASHINGTON**

The National Oceanic and Atmospheric Administration (NOAA) is the lead Federal agency for National Environmental Policy Act (NEPA) compliance for the Swan Creek Restoration Project, Commencement Bay, Tacoma, Washington. This project is sponsored by the Commencement Bay Natural Resource Trustees and designed to help restore natural resources injured by the releases of hazardous substances or discharges of oil in Commencement Bay, Tacoma, Washington.

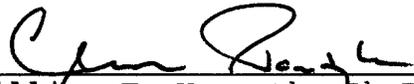
NOAA prepared this Environmental Assessment (EA) to set forth its decision making authority for this project, its determination that an alternative (the Excavation/Enhancement Alternative) other than the No Action Alternative would be the most ecologically sound alternative, and its determination that an environmental impact statement (EIS) will not need to be prepared for this project.

The Trustees determined that excavation of the site to connect the stream channel and the adjacent wetland, resloping the banks and revegetating the upland and riparian borders of the site would provide beneficial habitat for fish and wildlife species in the area, including chinook salmon, a listed species under the Endangered Species Act and the Magnuson-Stevens Fishery Management and Conservation Act. The public and other interested parties have participated in public meetings during the permitting process.

The project will be constructed in compliance with all permits required by the State and Federal regulatory agencies. The Biological Assessment for the project, and the informal consultations (National Marine Fisheries Service and the U.S. Fish and Wildlife Service addressing Endangered Species Act and Essential Fish Habitat) for the Swan Creek Restoration Project are part of the Administrative Record for this project. The proposed activities were evaluated under the goals and objectives and other evaluation criteria specified by the Commencement Bay NRDA Restoration Plan and with the evaluation factors under the National Environmental Policy Act (40 CFR 1508.27). Based on a review of all of these factors and the referenced documents, NOAA and the Trustees concluded that the proposed activities would not have a significant effect on the quality of the human environment. NOAA agrees with the Corps and the City of Tacoma that an EIS will not need to be prepared.

DETERMINATION:

Based upon an environmental review and evaluation of the Environmental Assessment for the Swan Creek Restoration Project, I have determined that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969, as amended. Accordingly, an environmental impact statement is not required for this project.

for 

William T. Hogarth, Ph.D.
Acting Assistant Administrator for Fisheries
National Marine Fisheries Service
National Oceanic and Atmospheric Administration

4/26/01
Date

**ENVIRONMENTAL ASSESSMENT
FOR THE SWAN CREEK RESTORATION PROJECT
SEATTLE, WASHINGTON**

TABLE OF CONTENTS

Fact Sheet	3
Introduction	3
Chronology	3
Alternatives Considered and Selection of Preferred Alternative	4
Environmental Consequences	4
Conclusion	5
List of Agencies Consulted	6
Documents Incorporated by Reference:	6
FONSI	8

**ENVIRONMENTAL ASSESSMENT (EA)
FOR SWAN CREEK RESTORATION PROJECT
SEATTLE, WASHINGTON**

LEAD FEDERAL AGENCY FOR EA: National Oceanic and Atmospheric Administration

LEAD STATE AGENCY FOR EA: City of Tacoma

PARTICIPATING AGENCIES/TRIBES: Commencement Bay Natural Resource Trustees: U.S. Fish and Wildlife Service (U.S. Department of the Interior); State of Washington: Department of Ecology (Ecology, as lead state Trustee), Washington Department of Fish and Wildlife (WDFW), Washington Department of Natural Resources (WDNR); Puyallup Tribe of Indians; and Muckleshoot Indian Tribe.

PROJECT MANAGER FOR CITY: John O'Loughlin
City of Tacoma Utility Services
2201 Portland Ave.
Tacoma, WA 98421-2711
Phone: 253-502-2108

TRUSTEE CONTACT PERSON: Jennifer Steger, NOAA
Damage Assessment and Restoration Center NW
7600 Sand Point Way NE, Building 1
Seattle, Washington 98115-0070
Phone: (206) 526-4363
Fax: (206) 526-6665
Email: jennifer.steger@noaa.gov

ADMINISTRATIVE RECORD: Copies of the EA are available for download at: <http://www.darcnw.noaa.gov/swan.htm> and by contacting the person listed above.

ABSTRACT:

This Environmental Assessment (EA) has been prepared for the Swan Creek Restoration Project to set forth NOAA's decision making responsibilities for this project, its determination that an alternative other than the No Action Alternative would be the most ecologically sound alternative, and its determination that an environmental impact statement will not need to be prepared for this project. NOAA has independently reviewed the permitting and other regulatory documents in the Administrative Record and has determined that they adequately evaluate and mitigate as needed any potentially significant impacts to the human environment associated with this Commencement Bay, Washington restoration project.

The project will consist of creating a 530-foot meandering stream channel that will connect Swan Creek with the three-acre Haire Wetland. This approach will result in the establishment of a freshwater marsh and an open water habitat within Commencement Bay. The project will create new off-channel rearing habitat, enhance existing spawning and wetland habitat in Swan Creek and in the drainage, provide a riparian buffer for both the existing and new habitat, and provide public access for education and passive recreation. The overall project is designed to establish freshwater marsh habitat for an assemblage of wetland-dependent marine, bird and plant species. The 12-acre parcel is located on property bordering one or both sides of Swan Creek on Pioneer Way near the Puyallup River with the Port of Tacoma habitat restoration project located to the north.

Introduction

This Environmental Assessment (EA) has been prepared for the Swan Creek Restoration Project to set forth NOAA's decision making responsibilities for this project, its determination that an alternative (the Excavation/Enhancement Alternative) other than the No Action Alternative would be the most ecologically sound alternative, and its determination that an environmental impact statement (EIS) will not need to be prepared for this project. In accordance with the requirements of the National Environmental Policy Act (NEPA), NOAA has independently reviewed the permitting and other regulatory documents in the Administrative Record and has determined that they adequately evaluate and mitigate as needed any potentially significant impacts to the human environment associated with this Commencement Bay, Washington restoration project.

This project was evaluated by the Commencement Bay Natural Resource Trustees (Trustees) as to its suitability as a project to help restore natural resources injured by the releases of hazardous substances or discharges of oil in Commencement Bay, Tacoma, Washington. The Trustees have been working with the City of Tacoma under a Consent Decree (United States v. City of Tacoma, Civ. No. C97-5336RJB (W.D. Wash., Dec. 30, 1997)) to construct five restoration projects, including this project.

Chronology

In order to guide decision making regarding the implementation of natural resource restoration activities, in 1996 the Trustees prepared a draft Restoration Plan/Programmatic Environmental Impact Statement (RP/EIS). The Final Restoration Plan (Feb. 1997), set forth a number of screening criteria for the selection of restoration projects by the Trustees. During settlement discussions with the City of Tacoma, the Trustees evaluated the proposed Swan Creek Restoration Project against the criteria in the Restoration Plan and the environmental consequences discussions in the EIS, and determined that the site was consistent with the goals and objectives of the NRDA restoration program. This project was then approved by the Trustee Council and incorporated into the Consent Decree as Appendix B. Additional information about the Trustees' restoration activities, the Commencement Bay environment, and the restoration

projects under the settlement with the City of Tacoma can be found in the above-referenced documents, available from the NOAA Contact Person listed above.

The project site is approximately 12 acres in size and is a combination of vacant uplands and non-vegetated shoreline wetlands. The site is located almost entirely within 200 feet of either Swan Creek and/or the Haire Wetland, which principally borders the site on the south. The project goals and objectives are consistent with and complement the other NRDA restoration projects by establishing new estuarine or freshwater marsh habitat for an assemblage of wetland-dependent marine, bird and plant species, enhancing existing habitat, providing a riparian buffer for both the new and existing habitat, and providing public access for education and passive recreation. In total, the Trustees and the City of Tacoma anticipate that the project will improve over 5.8 acres of fish and wildlife habitat, including approximately four acres of riparian forest and three acres of access to wetlands for salmonid rearing habitat.

The upland area is generally flat to gently sloping, with steeper slopes (approximately 30%) at the boundaries. The restoration project will require excavation of approximately 6,200 cubic yards of fill material during the construction of the stream channel. Suitable excavated soil may be utilized to create topographic features, such as small berm between Pioneer Way and the restored wetland and/or between the pedestrian walkway and the habitat areas. The vegetation planting plan will clear the uplands of existing small constructed pathways/driveways and uproot invasive species to create a mixed deciduous and evergreen riparian forest to the south and replanting of shrubs and trees more appropriate for the uplands and stream channel erosion control. A detailed description of the project can be found in the "Design of Swan Creek Stream and Wetland Enhancement" document dated April 11, 2000 and included in the Administrative Record for this project.

Alternatives Considered and Selection of Preferred Alternative

There were only two alternatives to be considered for this project: the No Action Alternative and the Excavation/Enhancement Alternative. The No Action alternative was not selected because the Trustees' mandate is to restore where feasible natural resources that were injured as a result of a release of a hazardous substance or discharge oil into the Commencement Bay environment. The Trustees determined that the site would provide far more benefits to natural resources if the stream and wetland were connected and the site enhanced to increase invertebrate production and provide spawning habitat for chinook and coho salmon and cutthroat trout, with an estimate habitat increase of approximately 2,249 square feet. Enhancement of and restoring the native plant communities at the site will improve the natural biological support functions of both the wetland and upland plant communities. Bird and other wildlife species are anticipated to benefit from an increase in foraging food and nesting habitat.

The project design will taken into consideration the minimum flows needed to avoid creating fish passage barriers when the excavation of the site is taking place. Standard

construction techniques will be employed for the excavation stages. The habitat enhancement characteristics of the site are not technically complicated and are typical of restoration activities in this area that are designed to benefit fish and wildlife species. An adaptive management plan (Appendix A, 04/11/2000 design report) will be instituted to ensure that the enhancement efforts are monitored and evaluated.

Environmental Consequences

The State's environmental checklist provides additional information on a number of factors, such as earth, air, water, plants, animals, energy, environmental health, noise, land and shoreline use, housing, aesthetics, light and glare, recreation, historic and cultural preservation (National Historical Preservation Act and Environmental Justice), transportation, public services, and utilities. NOAA has reviewed the discussions and annotations in these documents and concurs in the responses and conclusions.

Any potential adverse environmental impacts associated with the excavation of the sediments and the removal of the various construction debris will be mitigated by use of best management practices and be consistent with traditional construction techniques applicable in the marine environment and in the conditions set out by the U.S. Army Corps of Engineers (Corps) in its Biological Assessment (BA) and its Nationwide Permit 27 conditions, and the State of Washington in its permitting documents. The potential adverse impacts are temporary and construction-related, but outweighed by the cumulative long-term benefits of converting a contaminated site into a clean, productive freshwater marsh and open water habitat suitable for chinook salmon (*Oncorhynchus tshawytscha*), a listed species under the Endangered Species Act (ESA), as well as other salmonid species and wildlife species in the Commencement Bay environment. As concluded in the BA and agency consultation letters, the project may affect but is not likely to adversely affect the above-listed species, and the agencies believe that this project provides an overall beneficial effect to the listed species and will have a beneficial increase in chinook salmon critical habitat. The permitting agencies concur in this assessment as well.

As can be seen from the permitting documents, incorporated herein by reference, the City will also be working with the regulatory agencies to ensure that the final constructed project meets applicable regulatory requirements, including EPA Sediment Quality Objectives, State Sediment Quality Standards, and State Model Toxic Control Act criteria. Specific conditions under which the work will be conducted will be memorialized in the Corps' section 404 permit and site-specific conditions, the State of Washington's 401 water quality certification, the BA and any additional conditions set forth by the National Marine Fisheries Service (NMFS) or the U.S. Fish and Wildlife Service (USFWS) as a result of the ESA and Essential Fish Habitat (ESH) consultations. This project will be constructed in compliance with all permits required by the State and Federal regulatory agencies.

Conclusion

The proposed activity was evaluated under the goals and objectives and other evaluation criteria specified by the Commencement Bay NRDA Restoration Plan and with the evaluation factors under the National Environmental Policy Act (40 CFR 1508.27). Based on a review of all of these factors and the referenced documents, NOAA and the other Trustees have concluded that the proposed activity would not have a significant effect on the quality of the human environment. NOAA concurs with the Corps NWP No. 27 Decision Document that an EIS will not need to be prepared for this project.

A proposed copy of NOAA's independent finding of a FONSI is attached for the Agency's review and approval.

List of Agencies Consulted:

National Oceanic and Atmospheric Administration (Dept. Of Commerce)
National Marine Fisheries Service (Dept. Of Commerce)
U.S. Fish and Wildlife Service (Dept. Of the Interior)
Puyallup Tribe of Indians
Muckleshoot Tribe of Indians
State of Washington Departments of: Ecology, Fish and Wildlife,
Natural Resources, Archaeology and Historic Preservation
U.S. Army Corps of Engineers
City of Tacoma

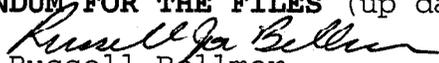
Documents Incorporated by Reference:

- 02/1997 Commencement Bay Natural Resource Trustees. Final Restoration Plan and Programmatic Environmental Impact Statement (RP/EIS).
- 03/1997 Swan Creek Stream Restoration. Project Concept Plan. Appendix B to United States v. City of Tacoma, Civ. No. C97-5336RJB (W.D. Wash., Dec. 30, 1997).
- 05/27/1999 Environmental Checklist, prepared by City of Tacoma
- 08/24/1999 Determination of Environmental Nonsignificance, City of Tacoma
- 08/24/1999 Wetland Development Permit Application. File No. WET 99-00005
- 11/03/1999 Biological Evaluation, Draft Report (by Pentac)
- 11/22/1999 JARPA Form
- 12/15/1999 Hydraulic Project Approval. Log No. 00-E3207-01
- 02/25/2000 Design of Swan Creek Stream and Wetland Enhancement (Pentac)
- 03/13/2000 Conditions of Wetland Approval (No. 293207)
- 04/11/2000 Revised Design of Swan Creek Stream and Wetland Enhancement (Pentac)

- 04/14/2000 NMFS Informal ESA Section 7 consultation - Determination of Not Likely to Adversely Affect Listed Species
- 04/14/2000 NMFS EFH Concurrence with Determination of No Adverse Effect
- 04/14/2000 Permit No. 1999-4-00766, Corps authorization under NWP 27
- 04/26/2000 USFWS IntraService Section 7 biological evaluation
- 07/14/2000 Corps' Nationwide Permit #27 and conditions
- 10/09/2000 State Letter of Verification; determination of consistency

MEMORANDUM FOR THE FILES (up dated April 2001)

APR 17 2001

FROM: 
Russell Bellmer

SUBJECT: EFH Concurrence with a Determination of no Adverse Effect for the Proposed Swan Creek Stream Restoration Project.

Proposed Project Site. The subject property is located in the northern section of Commencement Bay, in the City of Tacoma, Pierce County, Washington. The project site consists of four parcels, two upland parcels and two parcels of second class tidelands. The site is approximately 12 acres. In general, land uses include open space, residential, and industrial.

Proposed Project Description. The project will provide approximately 12 acres of habitat, preserved in perpetuity. The action area within the site involves only the footprint of the fill being removed and area for equipment access as a temporary disruption. The action consists of creating a 530-ft meandering stream channel that will connect Swan Creek to the existing 3-acre Haire Wetland providing access for salmonids. In addition the channel will provide salmonids with summer and winter rearing and spawning habitat. Two log structures (large woody debris) will be installed to increase invertebrate production and provide habitat for coho and cutthroat. The channel will be planted and maintained by locals to help ensure continued habitat use.

Heavy equipment used for construction will include backhoes, front-end loaders, bulldozers, and dump trucks. Neither drilling equipment nor blasting will be used during the project.

Timing/Chronology Of Specific Construction Actions A two-month window is anticipated for all construction, which is expected to include no more than 30 days of actual material and debris removal. The timing for in-water work will be determined by the Hydraulic Project Approval (HPA) issued by the Washington Department of Fish and Wildlife (WDFW). The expected in-water work window for this project will be between August 1 and 31, 2001 at low tides to minimize in-water work. This timing is also consistent with the in-water construction season for Commencement Bay (June 15 through the winter to March 14).

Determinations of Effect. In-water construction schedules are based on times of the year when few managed species will be in the proposed project area. The construction will observe seasonal conditions established by the Washington Department of Fish and Wildlife in their Hydraulic Project Approval and supported by the National Marine Fisheries Service to avoid impacts. The proposed project will not adversely affect any managed species or their habitats due to the methods and timing of all activities.

These include the following measures.

Construction shall only occur: within the work-window (1 August to 1 November) specified for the project and in the dry to the maximum extent possible.

The Temporary Erosion and Sedimentation Control Plan (TESCP) shall be implemented as shown in the contract documents and construction drawings. The TESCP shall be implemented before the start of any removal activities. The TESCP shall be based on the proponents current Best Management Practices and include measures such as silt fences, straw bale dikes, and dewatering to allow excavation to proceed in unsaturated conditions.

A responsible party shall inspect the site during construction to verify that the contractor is effectively implementing the TESCP. Work procedures that are out of compliance shall be terminated and an acceptable solution developed before work is allowed to continue.

No hazardous materials or toxic materials shall be transferred or stored within 50 feet of the MHHW of Swan Creek or Puyallup Waterway.

No equipment shall be refueled or maintained within 50 feet of the MHHW of Swan Creek or Puyallup Waterway. Equipment shall be serviced or maintained in designated areas where stormwater runoff can be prevented from directly entering the water.

An emergency spill kit shall be stored at each work site and construction crews trained in their proper use.

All crewmembers and all onsite personnel shall be informed of any and all environmental precautions. These precautions shall include: clearly marking the work area, clearly marked clearing limits, specifically identifying riparian vegetation to be removed, and all applicable laws and permit conditions.

EFH Determination. The area in which the restoration project is planned (fill material and debris removal, with placement of large woody debris) has been identified as EFH for species managed by the Pacific Fishery Management Council under the Amendment 11 to The Pacific Coast Groundfish Fishery Management Plan (March, 1999) and under the Amendment 14 to The Pacific Coast Salmon Plan (September, 2000).

The Groundfish Plan identifies twenty-four species and life stages within the estuarine composite EFH. These species include five species of Class Elasmobranchiomorphi and nineteen species of Class Osteichthyes. Eight species of Family Scorpaenidae (rockfish) and four species of Order Pleuronectiformes (flatfish) are identified within the Plan. Environmental conditions (i.e., temperature, salinity, water depth, substrate) greatly reduce the potential for the presence of these species in the project area

for even short periods of time during extreme high tides. The species that may occasionally visit the project area include: *Squalus acanthias* (spiny dogfish), *Raja inornata* (California skate), *Pleuronectes vetulus* (English sole), *Errex zachirus* (rex sole), *Citharichthys sordidus* (Pacific sanddab), and *Platichthys stellatus* (starry flounder). The eggs, larval stages, and some juvenile fish may occasionally be present in the Puyallup Waterway. However, due to construction activities in the dry or at extreme low tide during periods of the year with minimum fish activities, no adverse impacts will occur to EFH. Therefore, no additional EFH conservation measures have been provided.

The Salmon Plan identifies three species and life stages within the Puget Sound EFH. These species include: chinook (*Oncorhynchus tshawytscha*), coho (*Oncorhynchus kisutch*), and pink (*Oncorhynchus gorbuscha*). In estuarine environments, coho salmon have two primary dispersal patterns: some juveniles spend several weeks in coastal waters before migrating offshore and others remain in coastal waters for at least the first summer before migrating offshore. Although both stream and ocean-type chinook salmon may reside in estuaries, stream-type chinook salmon generally spend a very brief period in the lower estuary before moving into coastal waters. The ocean-type chinook salmon typically reside in estuaries for several months before entering coastal waters. Pink salmon populations use estuarine areas differently. Some populations use it for extended periods to consume a variety of prey items and other populations move rapidly through the area. While still other populations remain within the area for their entire ocean residence period. Some juvenile and adult salmon may be present in the Puyallup Waterway at different times of the year. However, due to construction activities that incorporate all conservation measures identified in the Salmon Plan and being undertaken in the dry or at extreme low tide during periods of the year with minimum fish activities, no adverse impacts will occur to EFH. Therefore, no additional EFH conservation measures have been provided.

If the proposed project plans are substantially revised or if new information becomes available that affects the basis for no adverse effect determination, then EFH consultation will be undertaken.