RECORD OF DECISION
SR 520 BRIDGE REPLACEMENT AND HOV PROGRAM

JANUARY 2011

SR 520 Pontoon Construction Project

U.S. Department of Transportation
Federal Highway Administration

Washington State
Department of Transportation

SR 520 Pontoon Construction Project

FHWA-WA-EIS-10-01-F

Record of Decision

January 2011

Decision

The Federal Highway Administration (FHWA) concurs with the Washington State Department of Transportation (WSDOT) in the choice to construct the Preferred Alternative, which consists of the Aberdeen Log Yard Alternative as the selected alternative for the State Route (SR) 520 Pontoon Construction Project in Grays Harbor County, Washington.

The Aberdeen Log Yard Alternative shown in Exhibit 1 of this Record of Decision is identified as the environmentally preferable alternative that would meet the project needs as well or better than the other alternatives considered. The Preferred Alternative would be less expensive, would present less risk, and would avoid substantial environmental effects on an archaeological site eligible for listing in the National Register of Historic Places (NRHP) as well as effects on 4.8 acres of wetlands.

This decision is based on an evaluation of information presented in the Final Environmental Impact Statement (EIS), the project's purpose and need, input from the public, and interagency and tribal coordination. One comment was received on the Final EIS during the 30-day waiting period after the Notice of Availability of the Final EIS appeared in the Federal Register. The comment and the response from FHWA and WSDOT are included in this Record of Decision. Additional basis for this decision is presented in this Record of Decision

01/10/2011 Daniel M. Mathis

Date of Approval

Daniel M. Mathis, P.E., Division Administrator Federal Highway Administration, Washington Division

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Abbreviations and Acronyms

APE	Area of Potential Effects
CTC	Concrete Technology Corporation, Inc.
CZMA	Coastal Zone Management Act
DAHP	Washington State Department of Archaeology and Historic Preservation
Ecology	Washington State Department of Ecology
EIS	environmental impact statement
ESA	Endangered Species Act
FHWA	Federal Highway Administration
HOV	high-occupancy vehicle
JARPA	Joint Aquatic Resources Permit Application
LAA	likely to adversely affect
LOS	level of service
MMPA	Marine Mammal Protection Act
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NE	no effect
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLAA	Not likely to adversely affect
NMFS	National Marine Fisheries Service
NOAA Fisheries	National Oceanic and Atmospheric Administration, National Marine Fisheries Service
NRHP	National Register of Historic Places
PCPACT	Pontoon Construction Project Agency Coordination Team

SR	State Route
USC	United States Code
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WSDOT	Washington State Department of Transportation

SR 520 Pontoon Construction Project Record of Decision

Introduction

The State Route (SR) 520 Pontoon Construction Project is one of four projects in the SR 520 Bridge Replacement and High-Occupancy Vehicle (HOV) Program (SR 520 Program). The SR 520 Pontoon Construction Project involves building 33 pontoons needed to replace the Evergreen Point Bridge in its current configuration as a four-lane bridge, in the event of a catastrophic failure. To accomplish this, the Washington State Department of Transportation (WSDOT) would build a new facility for pontoon construction in Grays Harbor, Washington.

This project also includes mooring all pontoons until they are needed. If the floating section of the Evergreen Point Bridge does not fail due to a catastrophic event, then all pontoons built during the SR 520 Pontoon Construction Project could be moored and used for the proposed SR 520, I-5 to Medina: Bridge Replacement and HOV Project.

The Federal Highway Administration (FHWA) and WSDOT released the *SR 520 Pontoon Construction Project Draft Environmental Impact Statement* (EIS) in May 2010 for public comment (WSDOT 2010a). The Notice of Availability for the Final EIS appeared in the Federal Register on December 10, 2010.

FHWA and WSDOT analyzed the three alternatives presented in the Draft EIS and Final EIS: a No Build and two build alternatives—one at the Anderson & Middleton property in Hoquiam and one at the Aberdeen Log Yard property in Aberdeen. FHWA and WSDOT determined that the Preferred Alternative (Aberdeen Log Yard Alternative) would meet the project needs as well or better than the other alternatives considered. The Preferred Alternative, therefore, is the SR 520 Pontoon Construction Project selected alternative.

Purpose and Need

The purpose of the SR 520 Pontoon Construction Project is to accomplish the following: (1) expedite construction of the pontoons needed to replace the existing traffic capacity of the Evergreen Point Bridge, if a catastrophic event occurs, and (2) store these pontoons in case they are needed for catastrophic failure response or until they are incorporated into the proposed SR 520, I-5 to Medina: Bridge Replacement and HOV Project. A secondary purpose of the SR 520 Pontoon Construction Project is to ensure access to the proposed facility if it were needed to build pontoons for unforeseen WSDOT floating bridge repairs or replacements.

The SR 520 Pontoon Construction Project is needed now to shorten the time required to replace the Evergreen Point Bridge if the bridge were ever damaged beyond repair. If pontoons were not built and ready for emergency bridge replacement, WSDOT would need 5 years to reconstruct the floating bridge. With the SR 520 Pontoon Construction Project completed, WSDOT could replace the bridge to its current four-lane configuration in just 1.5 years.

The Evergreen Point Bridge is a critical component of the Puget Sound region's transportation infrastructure. A long-term bridge closure would impair moving goods and people across Lake Washington. Travel times, miles traveled, and travel costs would increase as cars, trucks, and buses switch to alternate routes, thereby causing a domino effect of increased congestion on other roads across and around the lake.

The pontoons that support the existing Evergreen Point Bridge have approximately 6,000 linear feet of cracks, which decrease the bridge's structural integrity. Any windstorm could further decrease the bridge's structural integrity and life expectancy, and storms exceeding the 20-year windstorm intensity could cause catastrophic failure of the bridge. Although WSDOT made repairs to the bridge in the 1990s, it remains at risk of failure.

Based on the project need described above and the reasons listed below, FHWA and WSDOT believe the SR 520 Pontoon Construction Project has independent utility from the other projects in the SR 520 Program:

- **The project would not force WSDOT to take other actions**. The pontoons can be moored for the long term until needed. Pontoons are, however, likely to be needed for either catastrophic failure response or for proposed bridge replacement of the Evergreen Point Bridge.
- **The project does not foreclose reasonable alternatives for Evergreen Point Bridge replacement**. The Evergreen Point Bridge floating structure will need to be replaced with another floating structure. Building pontoons for a four-lane bridge does not predetermine or foreclose any alternatives for the superstructure design, location of landings, or the width of the replacement bridge.
- **The project is a reasonable expenditure of public funds on its own**. SR 520 is a major regional highway. Advance preparation for potential catastrophic bridge failure or closure, even without planned bridge replacement, will significantly decrease the time that this corridor is closed to traffic if the bridge failed or had to be closed before the planned replacement.

Alternatives Considered in the Final EIS

FHWA and WSDOT considered three alternatives in the Final EIS (a No Build and two build alternatives), which were carried forward from the Draft EIS. The build alternatives' design was refined somewhat from that presented in the Draft EIS. The lead agencies analyzed the possible use of the Concrete Technology Corporation, Inc. (CTC) facility in Tacoma, Washington, to build additional pontoons and determined that using that facility would not provide sufficient cost, schedule, and logistics advantages to support the use of this option in meeting the proposed project's purpose and need. Therefore, although presented in the Draft and Final EISs, the CTC

facility option is not part of the Aberdeen Log Yard (Preferred Alternative) and is not discussed further herein.

Aberdeen Log Yard Alternative (Preferred Alternative)

The Preferred Alternative would involve constructing a casting basin facility for building pontoons at the Aberdeen Log Yard site, excavating and dredging a launch channel to connect the casting basin to Grays Harbor, building 33 pontoons, towing completed pontoons to a designated moorage area in outer Grays Harbor, and mooring the pontoons until they are needed. The 55-acre Aberdeen Log Yard site lies on the north shore of Grays Harbor. As shown in Exhibit 1, the casting basin and support facilities would occupy the entire site.

Anderson & Middleton Alternative

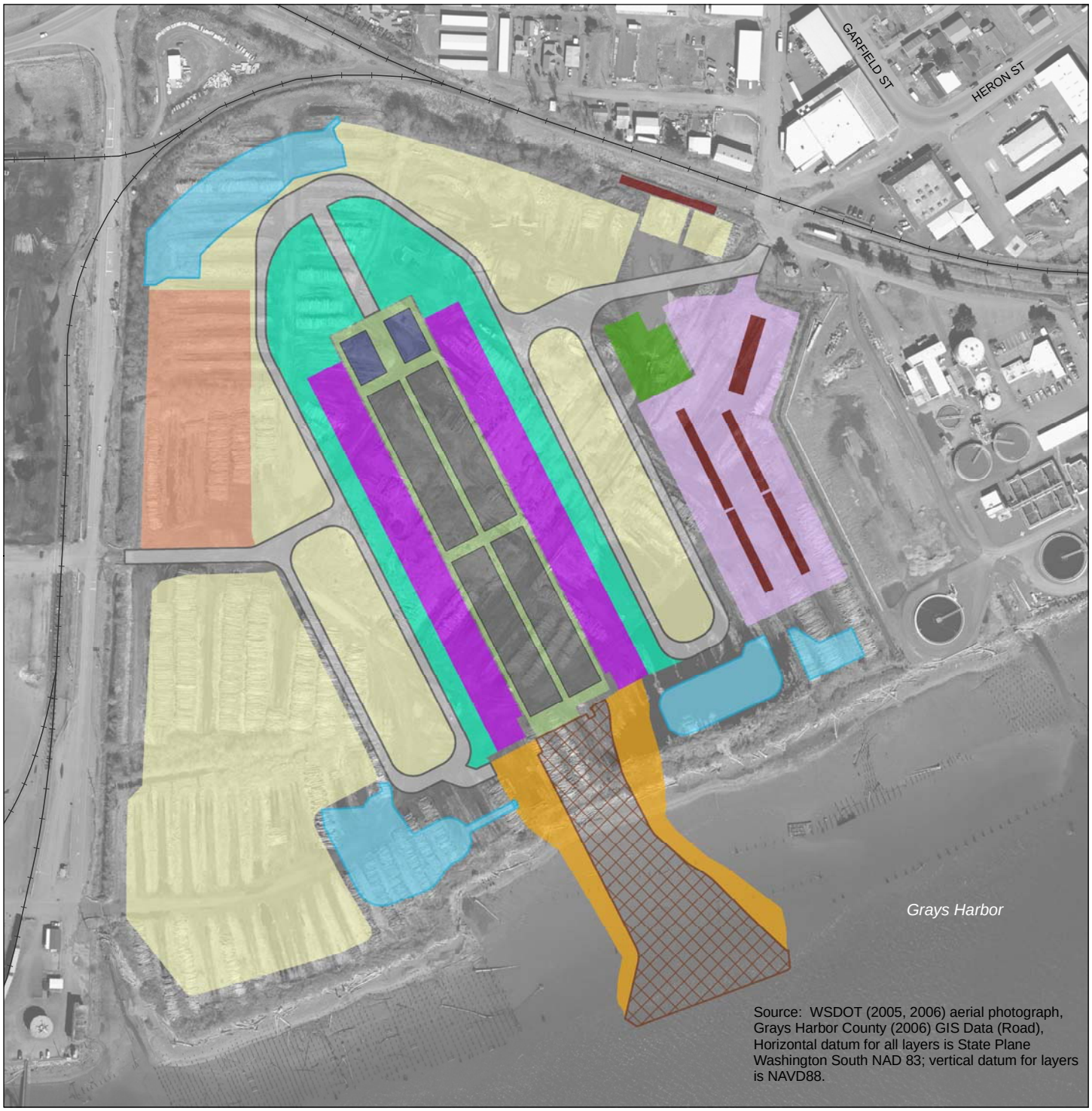
The Anderson & Middleton Alternative would involve the same activities described above for the Preferred Alternative, taking place at the Anderson & Middleton site. The Anderson & Middleton site is located about 2,000 feet west of the Hoquiam River on the north shore of Grays Harbor in Hoquiam. WSDOT would purchase 93 acres of this property; the casting basin and support facilities would occupy about 55 acres of the eastern portion of the site.

No Build Alternative

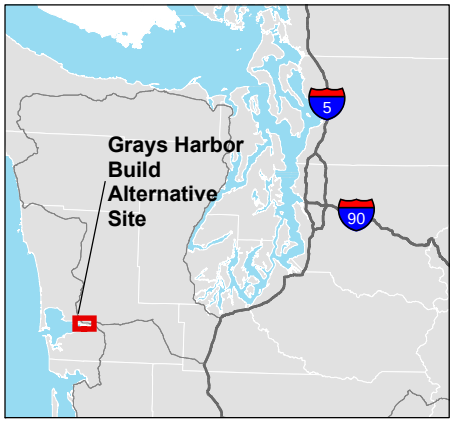
FHWA and WSDOT assume that, if unused by this project, the build alternative sites would continue to be used as they are today: the Aberdeen Log Yard would remain an active log yard, and the Anderson & Middleton site would remain largely inactive. If the project were not built, then pontoons would not be available for catastrophic bridge failure response, and emergency replacement of the Evergreen Point Bridge would take approximately 3.5 years longer than it would with the project.

Selection of the Preferred Alternative

The values that FHWA and WSDOT considered in identifying the Preferred Alternative in August 2009 were based on differences in construction costs and the risks between the two sites. While developing conceptual site designs for the two alternatives, the lead agencies determined that developing the Anderson & Middleton site would require deeper foundation piles to support the casting basin. The Anderson & Middleton site would also require that a noise attenuation barrier (likely a berm or wall) be constructed along the site's northern boundary to shield nearby residences from noise produced at the site. These two factors would contribute toward higher development costs at the Anderson & Middleton site compared with costs for developing the Aberdeen Log Yard site.



Source: WSDOT (2005, 2006) aerial photograph, Grays Harbor County (2006) GIS Data (Road), Horizontal datum for all layers is State Plane Washington South NAD 83; vertical datum for layers is NAVD88.



- Existing railroad
- Crane rail area
- Infiltration trench
- Access road
- Launch channel
- Rock side slope
- Concrete batch plant
- Longitudinal pontoon
- Supplemental stability pontoon
- Water treatment area
- Casting basin
- Casting basin side slope
- Dry storage and laydown area
- Office
- Parking

N

0 200 400 Feet

Exhibit 1. **Conceptual Layout for Aberdeen Log Yard Alternative (Selected Alternative)**

SR 520 Pontoon Construction Project

Washington State Department of Transportation

After completing geotechnical field investigations, WSDOT discussed with geotechnical engineers and groundwater hydrologists the resulting data and the need to dewater the Anderson & Middleton site for both site development and casting basin operation. WSDOT determined that there was a potentially unavoidable risk of inadvertently dewatering roughly 30 acres of federally protected wetlands adjacent to the construction area at Anderson & Middleton. If this risk were realized, it would place WSDOT in a difficult regulatory position and would likely require mitigation at a substantial cost. Weighing these values led WSDOT to seriously consider Aberdeen Log Yard as the Preferred Alternative. While there were differences in direct environmental effects at each site, based on preliminary investigations, the overall effects appeared to be similar.

Preliminary archaeological investigations revealed the potential for similar cultural resources at both the Anderson & Middleton and Aberdeen Log Yard sites, and further archaeological field investigations were still underway when FHWA and WSDOT identified Aberdeen Log Yard as the Preferred Alternative. Ultimately, the field investigations revealed evidence of a buried precontact fish trap complex on the Anderson & Middleton site that is eligible for listing on the National Register of Historic Places (NRHP). While this intact cultural resource might or might not warrant preservation in place, FHWA and WSDOT would prefer not to adversely affect this resource. To do so would require additional time to develop, coordinate, and obtain signatures on a Memorandum of Agreement with multiple tribes and agencies and to perform archaeological data recovery before project construction could begin. This would add to the overall project cost and create a greater risk of not having replacement pontoons constructed and ready for use should the Evergreen Point Bridge experience a catastrophic failure. The discovery of the fish trap complex at the Anderson & Middleton and FHWA and WSDOT's desire to avoid adversely affecting an NRHP-eligible site reinforced the decision to select the Aberdeen Log Yard Alternative as the Preferred Alternative.

Measures to Minimize Harm

FHWA and WSDOT have included all practicable means to avoid and/or minimize harm in the selected alternative. The lead agencies' approach to avoid and minimize effects of the SR 520 Pontoon Construction Project includes the following:

- Identifying and advancing project alternatives for consideration that would result in the least overall environmental effects
- Designing the casting basin, support facilities, and launch channel in a manner that avoids and minimizes environmental effects to the greatest extent possible
- Locating the pontoon moorage location outside the navigation channel and away from nearshore areas where the pontoons would have minimal effects on navigation and aquatic habitat.

More specific measures to minimize and avoid harm are specified in Chapter 5 of the Final EIS as well as in the associated technical memoranda and discipline reports for each element of the environment.

Project Commitments

WSDOT will use appropriate best management practices to mitigate for casting basin facility construction and pontoon-building operations. The best management practices— such as implementing temporary erosion and sediment control plans, implementing construction noise abatement measures, and handling and treating all stormwater runoff according to state water quality requirements using the WSDOT *Highway Runoff Manual* (2008a) —are designed to ensure compliance with all applicable regulations and permit conditions. These best management practices are discussed below, in Chapter 5 of the Final EIS, and in the associated technical memoranda and discipline reports.

Wetlands Mitigation

FHWA and WSDOT have completed the *Conceptual Wetland and Aquatic Resources Mitigation Report, Grass Creek* (WSDOT 2010b), and this plan is subject to regulatory review and will be finalized as part of the Federal Water Pollution Control Act (the Clean Water Act) Section 404 permit and other applicable permits. WSDOT has ensured that the plan complies with federal, state, and local requirements for effects on natural resources subject to regulation.

The goal of compensatory mitigation is to achieve no net loss of wetland functions and values. FHWA and WSDOT, working in collaboration with regulatory agencies, selected the 66-acre Grass Creek mitigation site as the location where anticipated compensatory mitigation would be constructed. As part of the mitigation site selection criteria, FHWA and WSDOT have also conducted analyses to ensure that the selected mitigation site will avoid exposure to toxic materials or effects on culturally significant resources to the greatest degree practicable.

The Grass Creek mitigation site is currently diked off from Grass Creek to prevent overland flow at the site. The dike also prevents saltwater from Grays Harbor from intruding on the site. The intent of the wetland mitigation is to reestablish a range of estuarine wetland habitats along an increasing elevation gradient—from mudflat to upper intertidal salt marsh—and restoring natural tidal influence on the site.

Specific actions will include restoring a portion of estuarine wetland in the area that is currently an upland dike. In addition, proposed activities include removing long sections of the dike, filling drainage ditches, and revegetating the formerly grazed pasture with appropriate estuarine and palustrine native plant species. A portion of the site will also be rehabilitated to improve the site's wetland buffer functions.

Fish and Aquatic Resource Mitigation

In addition to wetland mitigation, the proposed project will mitigate for effects on fish and aquatic resources and their habitat by rehabilitating part of the shoreline of the Grass Creek estuary and rehabilitating existing tidal channels at Grass Creek to provide transitional habitat for outmigrating salmonid smolts and to support typical estuarine salt marsh flora and fauna. Aquatic resources mitigation provided at the site will be in addition to the wetland mitigation described above and will include removing portions of the dike along the eastern boundary to restore and/or enhance natural

hydrology and tidal exchange in five existing tidal channels. WSDOT will use material excavated from the dike to fill an existing constructed ditch located around the inner perimeter of the existing dike. This will restore and/or enhance natural hydrology and tidal exchange and floodplain connectivity in the existing tidal channels and create backwater channels (also called blind sloughs). The conceptual mitigation report (WSDOT 2010b) also calls for creating open mudflat habitat at the outlet of a blind tidal channel at the Grass Creek mitigation site.

In addition to creating the mudflat, WSDOT will rehabilitate portions of the existing degraded mudflat tidal channels by removing a nonfunctioning tide gate to help restore natural hydrology and tidal exchange in an existing tidal channel. Habitat complexity within and adjacent to the enhanced tidal channels will be created by installing habitat structures (e.g., large woody debris) and vegetation enhancement to increase organic material and nutrient input. FHWA and WSDOT will monitor the proposed mitigation site for 10 years. Monitoring, contingency, and site management plans will be provided and used to adaptively manage the mitigation site.

WSDOT will also comply with all terms and conditions of the Biological Opinions for this project, which were issued by National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) (October 25, 2010) and U.S. Fish and Wildlife Service (USFWS) (December 6, 2010).

Wildlife Mitigation

To reduce the potential for in-water pile-driving to injure or disturb marine mammals and foraging seabirds, WSDOT will use pile-installation practices and sound-attenuation methods designed to minimize biological effects. Wildlife habitat functions related to wetland effects will be enhanced through the wetland regulatory process and compensatory mitigation at the Grass Creek mitigation site. As noted above for Fish and Aquatic Resources, WSDOT will also comply with all terms and conditions of the NOAA Fisheries and USFWS Biological Opinions for this project.

Geology and Soils Mitigation

During casting basin facility construction, WSDOT will implement erosion and sedimentation control practices to achieve water quality standards and apply, at a minimum, best management practices following Washington State Department of Ecology (Ecology) and WSDOT guidelines. Listed below are some possible best management practices for erosion and sedimentation control:

- Install quarry spalls (crushed rock).
- Conduct regular sweeping and washing of adjacent roadways.
- Install silt fences downslope of all exposed soil.
- Construct quarry spall-lined temporary ditches, with arranged straw bales or other sediment catchment dams.
- Install temporary covers over soil stockpiles and exposed soil.

- Construct temporary sedimentation ponds to remove solids prone to settling before discharge.
- Place limits on the area exposed to runoff at any given time.

WSDOT is committed to implementing best management practices to avoid or reduce potential dewatering effects, such as ground settlement. Best management practices to minimize potential dewatering effects related to settlement could include the following:

- Underpin sensitive structures.
- Reinfiltrate or reinject groundwater locally near susceptible facilities so that compressible soils are not dewatered (the project design described in Chapter 2 of the Final EIS includes reinfiltrating groundwater from dewatering activities through infiltration trenches).

Potential measures to prevent ground settlement effects related to stockpiling are as follows:

- Stockpile materials at a specified distance from the perimeter of the proposed casting basin and from the buried utilities to avoid inducing settlement that could damage the basin or utilities.
- Stockpile materials at a sufficient distance from the site boundaries to avoid affecting adjacent structures or the stability of the slopes along the water bodies.

Hazardous Materials Mitigation

WSDOT will prepare a project-specific spill prevention, control, and countermeasures plan before any construction activities begin. During proposed project construction, including launch channel maintenance dredging, WSDOT will use standard best management practices to avoid and reduce potential effects from the project. WSDOT will manage and dispose of contaminated soil and/or groundwater in accordance with applicable permits and regulations.

WSDOT will use standard best management practices to avoid and reduce potential effects from the project related to hazardous materials. These best management practices will be designed in accordance with WSDOT's *Environmental Procedures Manual* (WSDOT 2008b) and *Highway Runoff Manual* (WSDOT 2008a).

WSDOT will also develop a comprehensive health and safety plan. This plan will include procedures for monitoring vapor releases and preventing fires caused by potential methane ignition.

Water Resources Mitigation

WSDOT will incorporate water quality treatment facilities and best management practices into the project design to ensure that the proposed project will comply with the applicable federal, state, and local regulations to protect water resources. If total suspended solid levels exceed the permit requirements, then WSDOT will apply Ecology-approved best management practices (such as chitosan treatment) to lower the suspended solid levels to permitted levels prior to discharge. WSDOT will implement neutralization measures, such as carbon dioxide sparging (bubbling) in the water to be treated, if necessary to neutralize the pH levels. WSDOT will take steps, if necessary, to prevent the discharge of water exceeding permitted water quality criteria, such as diverting some

process water from the Aberdeen Log Yard site to the adjacent wastewater treatment plant for treatment before being discharged into Grays Harbor or reinfiltrating groundwater pumped from the dewatering system into the ground using infiltration trenches.

Launch channel dredging at either Grays Harbor build alternative site will conform to the conditions specified in the *Dredged Material Evaluation and Disposal Procedures User's Manual* (DMMO 2008), developed according to the guidance from the Dredge Material Management Office. This plan will contain best management practices to limit sediment resuspension and contain and prevent the transport of resuspended sediments.

Air Quality Mitigation

State law requires construction site owners and/or operators to take reasonable precautions to prevent fugitive dust from becoming airborne. WSDOT will use standard mitigation measures on either site to control dust. For the proposed onsite concrete batch plant, the operator will have to obtain an air permit from the local air agency and install any required air pollution control equipment, to control dust, for instance.

Energy Mitigation

WSDOT will implement the following measures to minimize the unintended negative effects of energy consumption:

- Use construction practices that encourage efficient energy use, such as avoiding double-handling excavated soil, limiting idling equipment, and locating staging areas near work sites.
- Encourage construction workers to carpool.
- Purchase construction materials from local suppliers to limit transportation fuel consumption.
- Encourage using efficient lighting systems in the casting basin facility.
- Coordinate with the local utilities to minimize the impact on energy demand and supply.
- Use solar-powered, light-emitting diode lights to illuminate the moored pontoons.

Cultural Resources Mitigation

WSDOT will develop an archaeological monitoring plan and Unanticipated Discovery Protocol in consultation with the Washington State Department of Archaeology and Historic Preservation (DAHP) and interested and potentially affected tribes. These plans will describe how and where construction activities will be monitored and what will be done if cultural resources are encountered, including provisions for diverting construction activities away from those resources or stopping work.

Economics Mitigation

The project will not result in any unavoidable adverse effect on the regional economy. Project construction and operation will provide net economic benefits in the form of increased employment and income in the study area; therefore, no mitigation for unavoidable negative effects is proposed.

Navigable Waterways Mitigation

WSDOT will design mitigation measures to avoid or minimize adverse project construction and operation effects, including measures designed in accordance with appropriate U.S. Coast Guard regulations concerning nonpowered vessel movement (towing) and pontoon moorage for storage. These mitigation measures will include the following:

- Coordinate with the appropriate U.S. Coast Guard authorities when towing construction materials or completed pontoons to avoid conflicts with arriving or departing vessels.
- Coordinate with port and pilotage districts to ensure pilot availability during pontoon movements in and out of these jurisdictions.
- Provide appropriate navigational markings and lighting during pontoon movement to and storage at all moorage locations to limit effects on vessel movement outside of the navigation channel.
- Restrict towing activities based on the weather conditions.
- Publish Notices to Mariners concerning moving and storing pontoons at all locations.

Noise Mitigation

Noise levels are not predicted to exceed the Washington Administrative Code (WAC) noise control thresholds at the Aberdeen Log Yard site because of the distance between noise-sensitive properties and major noise-producing sources; therefore, no noise mitigation is proposed. If noise levels exceed state established criteria, then WSDOT will implement several construction noise abatement methods to limit the effects of construction noise, including operational methods, equipment choice, and acoustical treatments. Specific measures might include the following:

- Require that all engine-powered equipment have mufflers installed according to the manufacturer’s specifications.
- Install temporary or portable acoustic barriers around stationary construction noise sources, such as a concrete batch plant.
- Shut off idling equipment.
- Notify nearby residents whenever extremely noisy work would occur.
- Coat the piles.
- Use pile pads.

- Use piston mufflers on pile-driving hammers.

Public Services and Utilities Mitigation

WSDOT will implement the recommended mitigation measures listed below to avoid or minimize adverse effects on public services and utilities:

- Coordinate closely with utility providers to minimize any service interruptions, and notify area businesses and residents and provide a schedule of construction activities in the affected areas.
- If there are temporary waterline shutdowns, then notify and coordinate with the applicable fire department and public works department.
- If there are temporary utility service interruptions, then notify area businesses and residents and provide a schedule of construction activities in the affected areas.
- Coordinate with and give public service providers construction schedules to minimize the effects of utility relocations on public services.
- Coordinate with law enforcement agencies to keep them fully informed about the project construction schedule, activities, locations, and haul routes.

Land Use Mitigation

This project will be compatible with applicable land use plans, and WSDOT will comply with Aberdeen's appropriate development regulations and permit requirements, such as acquiring Substantial Shoreline Development or Conditional Use permits. WSDOT will obtain the necessary permit from Grays Harbor County before mooring the pontoons in Grays Harbor.

Social Elements Mitigation

Mitigation measures that WSDOT will apply for social elements include the following:

- Continue to use the project Web site, mail newsletters with information on the project, and provide contact numbers where residents could voice their concerns about the project.
- Provide project materials in Spanish and other languages as needed.
- Maintain equipment in good mechanical condition, equipping engines with mufflers to minimize exhaust emissions and noise, and encouraging the use of newer equipment or equipment with add-on emission controls.
- Reduce idling time of construction equipment by turning equipment off during prolonged periods of nonuse.
- Require contractors to cover loads and to spray exposed soils with water or other suppressant to reduce dust and windblown debris.
- Add lane capacity through revised road channelization to separate traffic movements at intersections were the level of service (LOS) would noticeably degrade.

FHWA and WSDOT developed a Memorandum of Agreement (MOA) with the Quinault Indian Nation to resolve issues associated with project effects on tribal interests. This MOA was signed on December 8, 2010.

Transportation Mitigation

WSDOT will work closely with local jurisdictions before initiating project construction to establish a process for assessing current conditions of the haul route and for determining if any road maintenance would be needed during or at project completion to repair damage caused by project-related heavy truck traffic. To compensate for negative effects, WSDOT will implement best management practices and comply with any commitments made to the local jurisdiction. WSDOT will also develop a traffic management plan as part of project construction.

For intersections where the LOS would noticeably degrade or access would become difficult, WSDOT will improve channelization at certain intersections near the project site to improve traffic flow and operations and to facilitate access to and from the site. As an example, for the intersection at West Heron Street and South Garfield Street that would degrade to LOS F, WSDOT will revise channelization through restriping and adding an island to mitigate for this effect.

Visual Quality and Aesthetics Mitigation

WSDOT will implement the following measures to reduce direct effects on visual quality and aesthetics:

- Shield temporary construction-site lighting to reduce the amount of light spilling onto nearby residences and businesses.
- Shield permanent lighting and minimize use of lamps on tall poles.
- Minimize visual obtrusiveness by locating temporary and permanent construction equipment and stockpiling materials in less visually sensitive areas and areas not visible from the road or to residents and businesses.

Monitoring and Enforcement

The FHWA Division Administrator and the WSDOT Director of Environmental Services ultimately will be responsible for monitoring and enforcing mitigation measures. WSDOT will be responsible for assuring compliance of all related commitments and regulatory permit conditions made or obtained for the project. Exhibit 2 lists the anticipated permits and approvals required for the SR 520 Pontoon Construction Project, as well as the agencies from which these would be obtained.

EXHIBIT 2
Required Project Permits

Agency	Required Permit or Approval
Federal	
U.S. Army Corps of Engineers	Clean Water Act, Department of the Army Section 404 Permit Rivers and Harbors Act, Section 10 Permit
U.S. Coast Guard	Private Aids to Navigation Permit
U.S. Fish and Wildlife Service	Endangered Species Act, Section 7 Consultation
National Oceanic and Atmospheric Association, National Marine Fisheries Service	Endangered Species Act, Section 7 Consultation
Washington State Department of Archaeology and Historic Preservation	National Historic Preservation Act, Section 106 Consultation
State	
Department of Ecology	Clean Water Act, Section 401 Certification Coastal Zone Management Consistency Certificate National Pollutant Discharge Elimination System General Sand and Gravel Permit National Pollutant Discharge Elimination System Construction Stormwater General Permit
Department of Fish and Wildlife	Hydraulic Project Approval
Department of Natural Resources	Aquatic Lands Use Authorization Dredge Disposal Site Use Authorization
Local	
Grays Harbor and City of Aberdeen	Street Use Permit Noise Variance Shoreline Substantial Development Permit/Variance/Conditional Use Critical Areas Compliance Building/Grading Permit
Grays Harbor County	Grays Harbor Shorelines Management Master Program Permit Grays Harbor Estuary Management Plan consistency

Comments Received on the Final EIS and Responses

One comment was received during the 30-day period between the Notice of Availability of the Final EIS in the Federal Register and the signature of this Record of Decision. The comment and the response from FHWA and WSDOT are below.

Comment

TO: WSDOT

I fail to understand how WSDOT can announce that "construction on a casting basin is planned to start in spring 2011 and pontoons will be built through 2014," the same day that a final environmental impact statement is published for public review. Every "step" of the way, WSDOT has thumbed its nose at the State Environmental Policy Act by issuing contracts and requesting bids to proceed with its predetermined decision to construct this project prior to the completion of the SEPA process.

David E. Ortman
Seattle, WA

FHWA and WSDOT Response to Comment

FHWA and WSDOT disclosed the proposed SR 520 Pontoon Construction Project schedule in the Final EIS so that impacts may be analyzed considering when and for how long they would potentially occur. Because of high public interest in the project, WSDOT publicly announced that the Final EIS was completed on the date that it was published in the Federal Register, December 10, 2010; this announcement ensured that members of the public who are interested in the project would know that the Final EIS had been completed. The announcement included several project details, including the proposed project schedule.

WSDOT, in consultation with FHWA and the Washington State Office of the Attorney General, designs and constructs its projects within the mandate of all applicable federal, state, and local laws and regulations. The State Environmental Policy Act (SEPA) allows an agency to develop plans or designs, issue requests for proposals, secure options, or perform other work necessary to develop an application for a proposal before a final environmental impact statement is issued as long as the action does not result in an adverse environmental impact or limit the choice of reasonable alternatives (WAC 197-11-070[4]).

In addition, per the contractor's design-build contract, Section 2.8.2.1 states that "If the no-build alternative is selected for the Project, the Project will be terminated according to Section 1-08.10(1) or (2). If an alternative different from the Project described in Section 2.1.1 (General Information) is selected, WSDOT will either terminate the Project according to Section 1-08.10 (1) or (2) or require changes to the scope of the Work in accordance with Section 1-04.4."

Determinations and Findings

The *SR 520 Pontoon Construction Project Draft Environmental Impact Statement* (WSDOT 2010a) and *SR 520 Pontoon Construction Project Final Environmental Impact Statement* (WSDOT 2010c) are part of the environmental record for the SR 520 Pontoon Construction Project and support this Record of Decision. These documents constitute the statements required by the National Environmental Policy Act (NEPA) and Title 23 of the United States Code (USC) on the following:

- The project's environmental effects
- The adverse environmental effects that cannot be avoided if the project is implemented
- Alternatives to the proposed project
- Irreversible and irretrievable effects on the environment that might be involved with the project if it is implemented

Environmentally Preferable Alternative

The FHWA has carefully considered the environmental record noted above; the mitigation measures as required herein; the comments offered by other agencies, tribes, and the public on this record; and the written responses to the comments. The Preferred Alternative would better preserve cultural and natural resources. Specifically, fewer wetlands would be eliminated by the Aberdeen Log Yard Alternative than the Anderson & Middleton Alternative (1.1 acres affected versus 4.8 acres affected, respectively). In addition, the Anderson & Middleton site contains an archaeological site with remnants of a precontact fish trap complex that WSDOT has determined—and DAHP has concurred—is eligible for listing in the NRHP. The Aberdeen Log Yard site does not contain historic or cultural resources that are eligible for listing on the NRHP, and the DAHP concluded that "the project will not have an adverse effect on historic properties if the preferred alternative is selected" (see Appendix B to Appendix I of the Final EIS).

Also, residences adjacent to the Anderson & Middleton site would be affected by project-generated noise, and WSDOT would need to build a barrier, such as a wall or berm to protect these residences from noise exceeding the state noise control regulations. There are no residences near the Aberdeen Log Yard site where project-generated noise would exceed the state noise control ordinance. Therefore, FHWA has determined that the Preferred Alternative is also the Environmentally Preferable Alternative because it could better meet the criteria outlined in NEPA Section 101(b).

Only Practicable Alternative Finding

The SR 520 Pontoon Construction Project complies with Protection of Wetlands, Executive Order 11990 of 1977, which requires federal agencies to minimize the loss or degradation of wetlands and enhance their natural state. Avoidance of effects on wetlands has been achieved by developing project alternatives and the preliminary design process. For instance, while refining alternatives during the environmental process, an alternative (Port of Grays Harbor Industrial Development District Parcel #1) was eliminated from further consideration because it was determined that

wetlands occupied much of the site. Where effects to wetlands could not be avoided, design considerations allowed for wetland impacts to be minimized.

There are no practicable alternatives that would fully avoid wetlands; all practicable project alternative sites contain wetlands. The project's Preferred Alternative is the alternative with the least effects on wetlands as there are fewer wetlands on site and adjacent to the property that would be affected by the project. With avoidance and minimization measures in place, the Preferred Alternative is expected to eliminate approximately 1.1 total acres of wetlands. Measures proposed to mitigate for effects on wetlands are described above in the *Wetlands Mitigation* section. All wetlands that are eliminated will be mitigated in accordance with the Clean Water Act and other applicable permits and requirements.

Based upon the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which might result from such use.

Clean Water Act

Pursuant to the Clean Water Act, the U.S. Army Corps of Engineers (USACE) requires a Section 404 Permit for any discharge of dredged or fill material waterward of the ordinary high water mark in waters of the United States (33 USC Section 1344). Regulation and recent court decisions control which wetlands, streams, and drainage features might be included under the jurisdiction of Section 404. USACE will not issue a Section 404 Permit until the NEPA and Endangered Species Act (ESA) processes have been completed and the Ecology has issued its Section 401 Certification and Coastal Zone Management Act (CZMA) Consistency Determination. The SR 520 Pontoon Construction Project requires a Section 404 Permit for work that involves filling existing wetlands, dredging intertidal and subtidal areas, and constructing the mitigation area. Due to the project's large scale and its effects on waters and wetlands, an individual Section 404 Permit will be required rather than a more general "nationwide" permit.

WSDOT has received a jurisdictional determination on the Preferred Alternative site's delineated wetlands. Building the casting basin at this site will require a Section 404 individual permit, and WSDOT will apply for the Section 404 Permit through the Joint Aquatic Resources Permit Application (JARPA) Form. For this, WSDOT cannot submit an application until the conceptual mitigation plan and other required attachments have been completed. The conceptual mitigation plan was submitted via the JARPA process in August 2010. WSDOT will ensure that the project complies with all permit conditions and appropriately mitigates for adverse effects on jurisdictional wetlands resulting from the project.

National Historic Preservation Act (Section 106)

The National Historic Preservation Act of 1966 (NHPA) (16 USC 470) establishes government policy and procedures regarding "historic properties," districts, sites, buildings, structures, and objects included in or eligible for the NRHP.

Section 106 of the NHPA requires federal agencies to consider the effects of their actions on historic properties. Within the area of potential effects (APE) for the Preferred Alternative site, WSDOT

found two historic properties (residential houses) along the proposed haul route that are eligible for listing on the NRHP. No cultural resources on the Preferred Alternative site are eligible for listing in the NRHP.

FHWA and WSDOT, in consultation with the State Historic Preservation Officer and tribes, determined that no historic properties would be adversely affected by the Preferred Alternative; the DAHP has concurred with the finding.

Endangered Species Act

The ESA of 1973 (16 USC 1531 et seq.), as amended, is intended to protect threatened and endangered species and the ecosystems on which they depend. When the federal government takes an action subject to the ESA, it must comply with Section 7 of the ESA (found at 16 USC Section 1536[a][2]):

> *Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action by the Committee pursuant to subsection (h) of this section. In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available.*

A Biological Assessment (WSDOT 2010d) for the project was submitted to USFWS and NOAA Fisheries on July 23, 2010, analyzing the potential project effects on listed species and designated critical habitat. Exhibit 3 summarizes the conclusions presented in the Biological Assessment (WSDOT 2010d).

EXHIBIT 3
Species and Critical Habitat Effect Determinations in the Project Biological Assessment

Species	Federal Status	Effect Determination	Critical Habitat	Critical Habitat Effect Determination
Southern resident killer whale *(Orca orcinus)*	Endangered	NLAA	Designated	NE
Humpback whale *(Megaptera novaeangliae)*	Endangered	NLAA	None designated	N/A
Steller sea lion *(Eumetopias jubatus)*	Threatened	NLAA	Designated, but not in action area	NE
Green sturgeon *(Acipenser medirostris)*	Threatened	LAA	Designated	LAA
Pacific eulachon (*Thaleichthys pacificus*)	Threatened	LAA	None designated	N/A

EXHIBIT 3
Species and Critical Habitat Effect Determinations in the Project Biological Assessment

Species	Federal Status	Effect Determination	Critical Habitat	Critical Habitat Effect Determination
Bull trout *(Salvelinus confluentus)*	Threatened	LAA	Designated	LAA
Marbled murrelet *(Brachyramphus marmoratus)*	Threatened	LAA	Designated, but not in action area	NE

Source: WSDOT (2010d).
LAA Likely to adversely affect
N/A not applicable
NE No effect
NLAA Not likely to adversely affect

The USFWS issued a Biological Opinion on December 6, 2010, and the NOAA Fisheries issued a Biological Opinion on October 25, 2010. Both Biological Opinions reached the same conclusions as presented above and included incidental take statements, reasonable and prudent measures, terms and conditions, and conservation recommendations to avoid and minimize effects on listed species and designated critical habitat. The Preferred Alternative will incorporate the measures identified in the Biological Assessment and Biological Opinions.

Magnuson-Stevens Fisheries Conservation and Management Act

Under the 1996 Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act) (Public Law 94-265), as amended, federal fisheries management regulations require identifying and conserving habitat that is essential to federally managed fish species. Essential fish habitat is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." If an action will adversely affect essential fish habitat, then NOAA Fisheries is required to provide the federal action agency with essential fish habitat conservation recommendations (Magnuson-Stevens Act Section 305[b][4][A]). Appendix G of the Biological Assessment (WSDOT 2010d) contains an essential fish habitat assessment in response to requirements of the Magnuson-Stevens Act. WSDOT will ensure that the project complies with applicable essential fish habitat conservation recommendations.

Marine Mammal Protection Act

The Marine Mammal Protection Act (MMPA) was enacted in 1972 and prohibits, with certain exceptions, the "take"[1] of marine mammals in U.S. waters and by U.S. citizens on the high seas and the importation of marine mammals and marine mammal products into the United States. The project includes avoidance and minimization measures to protect sensitive species, including marine

[1] "Take" means to harass, hunt, capture, collect, or kill or to attempt to harass, hunt, capture, collect, or kill any marine mammal.

mammals. The Preferred Alternative will fully comply with the MMPA and not lead to the "take" of marine mammals.

Rivers and Harbors Act (Section 10)

The Rivers and Harbors Act of 1899 was passed to regulate the use, administration, and navigation on the navigable waters of the United States. Pursuant to Section 10 of the Rivers and Harbors Act, any activity or structure that obstructs or alters a navigable water of the United States must be permitted by the USACE. (Section 10 is managed generally as a companion to Section 404 of the Clean Water Act.) Section 404 of the Clean Water Act regulates any loose material or fill that might be placed in or excavated from a water body, and Section 10 regulates actual structures such as piling, dolphins, and stormwater outfalls. As a result, many construction activities in water require both a Section 404 and a Section 10 Permit. In contrast with Section 404, Section 10 only applies to navigable waters and not to associated streams, wetlands, or drainage features.

The SR 520 Pontoon Construction Project requires a Section 10 permit because it involves installing in-water structures such as pilings and dolphins in the launch channel and anchors, chains, and buoys in the open water for pontoon moorage. WSDOT will apply for a Section 10 Permit through the JARPA (USACE) form. The USACE issues only one permit for the project that covers both Section 404 and 10 (personal communication, Rebecca McAndrew, USACE, Seattle District, email dated July 14, 2010). WSDOT will ensure that the project complies with all permit conditions.

Coastal Zone Management Act

The CZMA requires federal activities within coastal counties, including projects requiring federal permits or with federal funding, to be consistent with state adopted Coastal Zone Management Programs; for Washington, Ecology is the agency responsible for making this determination. Projects performed by or for federal agencies must submit a statement to Ecology demonstrating that the project is consistent to the "maximum extent practicable" with the state program. The "maximum extent practicable" requirement refers to situations in which federal law might constrain the agency action, such as in the case of national security. Ecology will then object, concur, or concur with conditions to the Consistency Determination. Projects not conducted by a federal agency but that require a federal permit or have federal funding must be fully consistent with the state program.

The SR 520 Pontoon Construction Project is considered an activity performed by or for a federal agency due to the FHWA's direct involvement and funding. The project is located within tidally influenced waters, along a coastline, and will directly affect saltwater. WSDOT will apply for a CZMA Consistency Determination by preparing and submitting a federal consistency document package to Ecology consisting of a JARPA form, an analysis of project consistency with the state management program, and other supporting documents. The Consistency Determination requires a public notice, and in this case, WSDOT will coordinate the public notice with the Section 404 public notice. Ecology will issue a Consistency Determination once the project's 401 Certification and Shoreline Permits have been issued. WSDOT will comply with any conditions required to achieve consistency.

Environmental Justice

Environmental justice is analyzed in Section 3.13 of the Final EIS. The FHWA has concluded that the Preferred Alternative would not disproportionately affect low-income or minority populations, and it is consistent with Presidential Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (The White House 1994) and FHWA Order 6640.23, *FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (1998).

Conformity with Air Quality Plans

Section 3.5 of the Final EIS analyzes air quality and whether the project would meet conformity requirements for the federal Clean Air Act implemented by U.S. Environmental Protection Agency (Code of Federal Regulations, Title 49, Parts 51 and 93) and by the Washington Clean Air Act (WAC 173-420) and whether the project would demonstrate conformity with applicable State Implementation Plan for meeting and maintain compliance with the National Ambient Air Quality Control Standards (NAAQS). The Final EIS concluded that federal, state, and regional standards, including the NAAQS and Clean Air Act standards, would be met under the Preferred Alternative.

Agency and Tribal Coordination

SR 520 Pontoon Construction Project Agency Coordination Team

The project cooperating and participating agencies and concerned tribes were actively involved as members of the SR 520 Pontoon Construction Project Agency Coordination Team (PCPACT) and met numerous times through August 2010. At the last PCPACT meeting, which was held between the release of the Draft EIS and the Final EIS, the team was apprised of the types of comments received on the Draft EIS. Team members include the USACE, USFWS, NMFS, U.S. Environmental Protection Agency, U.S. Coast Guard, Washington Department of Fish and Wildlife, Ecology, Washington Department of Natural Resources, DAHP, City of Aberdeen, City of Hoquiam, Port of Grays Harbor, Grays Harbor County, Olympic Regional Clean Air Agency, Sound Transit, the Confederated Tribes of the Chehalis Reservation, and the Quinault Indian Nation.

Tribal-Specific Coordination

FHWA and WSDOT followed an ongoing program of government-to-government consultation with affected Native American tribes, with an emphasis on potential effects on cultural and natural resources. Tribes invited to participate as participating agencies for the environmental review process include the Confederated Tribes of the Chehalis Reservation, Hoh Tribe, Quileute Nation, Quinault Indian Nation, Shoalwater Bay Tribe, Squaxin Island Tribe, and Skokomish Tribal Nation. The Quinault Indian Nation formally accepted participating agency status. FHWA and WSDOT also initiated consultation with the Puyallup Tribe regarding the possible use of the CTC casting basin facility in Tacoma.

In December 2007, the Squaxin Island Tribe declined participating agency status and informed FHWA that they require no further project consultation. In August 2009, the Quileute Nation also declined further project consultation. FHWA and WSDOT also closed consultation with the Hoh Tribe on this

project in September 2010. Other tribes did not provide formal correspondence declining or accepting participation, but the lead agencies have continued to provide them with project information, especially related to NEPA and Section 106.

Conclusion

For the reasons outlined in this Record of Decision, the Preferred Alternative would have the least effect on the natural and built environment of the build alternatives. The Preferred Alternative would be less expensive, present less risk, avoid more environmental effects on wetlands than the Anderson & Middleton Alternative, and avoid adversely affecting a cultural resource that is eligible for listing on the NRHP. FHWA, in consultation with WSDOT, arrived at this decision based on information presented in the Final EIS and the factors and commitments presented above.

FHWA selects the Preferred Alternative (Aberdeen Log Yard Alternative) for the SR 520 Construction Project. FHWA finds WSDOT has incorporated all practicable measures to minimize environmental harm into the project. FHWA will ensure that the commitments outlined herein and in the Final EIS will be implemented as part of the project design, construction, and post-construction monitoring.

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