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The complete manual, revision packages, and individual chapters can be accessed at www.wsdot.wa.gov/publications/manuals/m31-11.htm.

Please contact Vicki Steigner at 360-705-7493 with comments, questions, or suggestions for improvement to the manual.

Instructions for Printed Manuals

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Approved By	Signature
Christina Martinez	/s/



TECHNICAL MANUAL

Environmental Procedures Manual

M 31-11.08

June 2010

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400.01 Introduction
400.02 Process Overview
400.03 Organization of Part 4
400.04 Abbreviations and Acronyms
400.05 Glossary
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400.01 Introduction

Part 4 covers the Design and Environmental Review phase of the WSDOT Transportation Decision-Making Process. During this phase, much of the design work and environmental analysis and documentation requirements for a project are completed, and work on permits often begins. For any project funded by the legislature, this phase begins after Project Scoping and Programming and ends with approval of any environmental review documents that must be completed for compliance with NEPA and SEPA, as well as other environmental laws, including the Endangered Species Act, Section 106 of the National Historic Preservation Act, Section 4(f) of the Department of Transportation Act, and Section 6(f) of the Land and Water Conservation Fund Act.

400.02 Process Overview

Figure 400-1 illustrates the relationship between Design and Environmental Review and preceding and succeeding phases of the decision-making process. During Design and Environmental Review, project design is completed to the level needed to conduct the required environmental analysis and compare alternatives when appropriate.

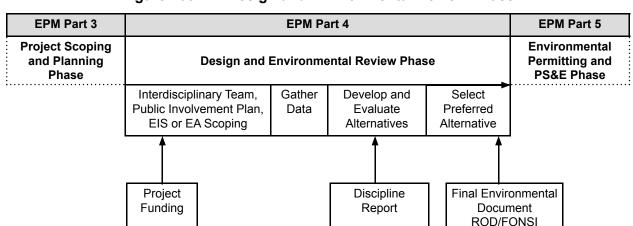


Figure 400-1: Design and Environmental Review Phase

Most environmental analysis is done in tandem with project design, and re-design to address an environmental issue is common. For more information on environmental considerations in design, and Context Sensitive Design in general, see the WSDOT publication *Understanding Flexibility in Transportation Design-Washington*, which is available at:

http://www.wsdot.wa.gov/eesc/design/Urban/PDF/ UnderstandingFlexibilityInTransportationDesignWashington.pdf

An environmental document is drafted after analyzing environmental issues, comparing alternatives, developing mitigation measures, consulting with resource agencies regarding any required permits, and making a determination about the significance of any unmitigated environmental impacts. When the environmental documents are finalized, Environmental Permitting and PS&E (including right of way acquisition) can begin. This relationship is illustrated in Figure 400-2.

Calendar Davs 45 105 120 135 150 **Environmental Document Approved** Submit PS & E Submit PS & E Project To Region To OSC to Ad <u>/10\</u> /14\ Design Approved All permits ∕6\ obtained. HPA **Bridge Site Data Complete** Ecology's review Shoreline from Local Agencies Corps Sec 10, 404 USCG Sec 9 Ecology – Water Quality Final Design Certification Region Prepares PS&E Preliminary osc Region Earthwork & Reviews & Drainage. & Modifies Review Bridge Lavout Environmental PS & E ner Permit Conditions Floodplain Forest Practices 15 30 60 90 105 120 150 **Decision Point** Time Requirement Float Time

Figure 400-2: Relationship Between Design and Permitting

Chapter 410 Environmental Review Process Overview

410.01 Introduction
410.02 Applicable Statutes and Regulations
410.03 Process Overview for NEPA and SEPA
410.04 Agency Roles and Responsibilities
410.05 Public Involvement
410.06 Tribal Consultation
410.07 WSDOT Internal Roles and Responsibilities
410.08 Exhibits

Key to Icons

→ Web site.*

410.01 Introduction

Chapter 410 and Chapter 411 describe the environmental review procedures that occur during the Design and Environmental Review phase of the WSDOT Transportation Decision-Making Process. Detailed guidance is given for the major steps in the environmental review process.

Chapter 410 focuses on understanding NEPA/SEPA legislative authority, agency roles and responsibilities, and public involvement. Chapter 411 gives detailed guidance on the documents and procedures for each classification, and internal WSDOT procedures for environmental review.

Environmental analysis is conducted to some degree at each stage of the decision-making process. The first formal analysis occurs during project definition, with preparation of the Environmental Review Summary (Section 310.05). The most extensive analysis occurs during project design, when project teams prepare environmental review documents (e.g., environmental assessments/checklists and environmental impact statements) and permit applications. Federal and state environmental laws and regulations require analysis of elements of the environment that the proposed project may affect. Chapters 420 through Chapter 470 give specific guidance for analysis of each of the environmental elements. Part 5 gives direction and guidance about project permitting.

(1) Abbreviations and Acronyms

Abbreviations and acronyms used in Chapter 410 and Chapter 411 are listed below. Others are found in Appendix A.

^{*}Web sites and navigation referenced in this chapter are subject to change. For the most current links, please refer to the online version of the EPM, available through the WSDOT Environmental Services Office (ESO) home page: http://www.wsdot.wa.gov/environment/

AASHTO American Association of State Highway and

Transportation Officials

CE Categorical Exclusion (NEPA) or

Categorical Exemption (SEPA)

CEQ Council on Environmental Quality (federal)

CFR Code of Federal Regulations

DCE Documented Categorical Exclusion (NEPA)
DEIS Draft Environmental Impact Statement
DNS Determination of Nonsignificance (SEPA)
DS Determination of Significance (SEPA)

EA Environmental Assessment

ECS Environmental Classification Summary

EIS Environmental Impact Statement
ERS Environmental Review Summary
ESO Environmental Services Office

FEIS Final Environmental Impact Statement FONSI Finding of No Significant Impact (NEPA)

MDNS Mitigated Determination of Nonsignificance (SEPA)

NAT Notice of Action (taken) (SEPA)
NEPA National Environmental Policy Act

NOI Notice of Intent (to prepare a NEPA EIS)

ROD Record of Decision (NEPA)

SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity

Act: A Legacy for Users

SAGES Statewide Advisory Group for Environmental Stewardship

SEPA State Environmental Policy Act

USDOT United States Department of Transportation

(2) Glossary of NEPA and SEPA Key Terms

Categorical Exclusion/Exemption – An action that does not individually or cumulatively have a significant environmental effect, as defined in NEPA/SEPA regulations, and is classified as excluded (NEPA) or exempt (SEPA) from requirements to prepare an Environmental Assessment/Checklist or Environmental Impact Statement.

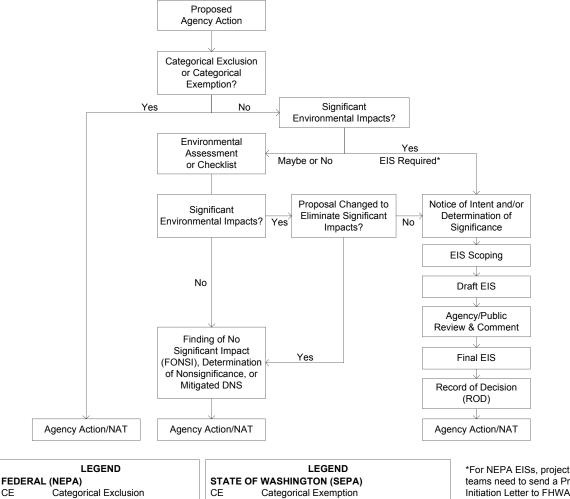
Cumulative Impact/Effect – The impact on the environment that results from the incremental effect of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. [40 CFR 1508.7]

with other relevant factors in agency decision-making. Other statutes impose a substantive environmental obligation on federal agencies, but NEPA merely prohibits uninformed—rather than unwise—agency action.

Figure 410-1 is a generalized flow chart illustrating the environmental review process, participants, and documentation. Critical path timelines for preliminary engineering of hypothetical Class I, II, and III projects are online via the ESO Web site:

http://www.wsdot.wa.gov/Environment/Compliance/ ComplianceGuidance.htm#path

Figure 410-1: NEPA and SEPA Environmental Review Process Overview



EΑ **Environmental Assessment** DNS FONSI Finding of No Significant Impact DS EIS **Environmental Impact Statement** EIS NOI Notice of Intent **MDNS** ROD Record of Decision

Determination of Nonsignificance Determination of Significance **Environmental Impact Statement** Mitigated Determination of Nonsignificance NAT Notice of Action (taken) (optional)

teams need to send a Project Initiation Letter to FHWA prior to issuing the Notice of Intent.

Adapted from: Background and Implementation of NEPA: Training Manual, Chapter 1, Planning, Environmental, and Land Use Publications, Point Arena, CA. www.solano.com

NEPA applies to projects with a federal nexus (see definition in **Section 410.01**). Any federal project, or a private or state project funded by or requiring a permit from a federal agency, must meet NEPA requirements.

SEPA is intended to ensure that environmental values are considered during decision-making by state and local agencies. The policies and goals of SEPA apply to all branches of government in Washington, including state agencies, counties, cities, districts, and public corporations. Any government action may be conditioned or denied pursuant to SEPA.

Most WSDOT projects must comply with both NEPA and SEPA. For example, because a highway project involving a bridge over a major river requires a permit from the U.S. Army Corps of Engineers, it would have to meet NEPA requirements. As an action of a state agency, the project would have to meet SEPA requirements.

Deciding upon the proper level of environmental documentation and preparing adequate documents are critical. Both NEPA and SEPA grant discretion to the Responsible Official to decide how detailed the studies should be and what issues to cover.

The SEPA Rules allow an agency to adopt environmental analysis, prepared under NEPA, to satisfy SEPA requirements (WAC 197-11-610). In general, a NEPA EA may be adopted to satisfy requirements for a SEPA Determination of Nonsignificance (DNS). A NEPA EIS may be adopted as a substitute for a SEPA EIS or WSDOT and the federal NEPA lead may decide to prepare a combined NEPA/SEPA EIS. Federal documents may also be incorporated by reference as support for issuance of a SEPA document (WAC 197-11-635).

410.04 Agency Roles and Responsibilities

(1) Lead Agencies

The Lead Agency is responsible for ensuring that NEPA and SEPA requirements are met. For state transportation projects, including ferry and rail projects, WSDOT is the lead agency for SEPA (WAC 197-11-926). State law gives WSDOT sole authority to site, design, construct and operate state transportation facilities. WSDOT typically prepares, approves and signs the SEPA or NEPA document.

Federal NEPA leads are determined by the federal approval or funding that is anticipated in the proposed action. In general, the federal NEPA lead does not prepare the NEPA document, instead the primary role of the federal NEPA lead is to provide guidance and independently evaluates the adequacy of the document (see 42 USC 4332(2)(D) and 23 CFR 771.123).

Federal Highway Administration (FHWA) is the most common NEPA lead agency because it is the federal agency responsible for funding and approving most highway projects. FHWA directs funding to many tribal or local government projects through WSDOT's Highways and Local Programs

- Publishing a notice in a newspaper of general circulation in the area where the project is located (WAC 197-11-510(1)(b)).
- Sending a copy of the checklist and DNS to any agency, organization, or individual requesting information, in writing, concerning the project (WAC 468-12-510(1)(a)(ii)).
- Posting the property (an option under SEPA rules).

Upon approval of the design file, the Region or Mode may wish to publish a Notice of Action (NAT). Under SEPA, the NAT establishes a statute of limitations on challenges to an environmental document. See **Section** 411.09 for more discussion about the NAT.

411.08 Procedures for Class I (Environmental Impact Statement) Projects

This section provides direction on the preparation of documentation designed to meet the requirements of both the National Environmental Policy Act (NEPA) and the State Environmental Policy Act (SEPA). Combined documentation is the most efficient means to comply with state and federal requirements. One document is prepared and circulated for public review. The steps for a SEPA-only or NEPA-only EIS are very similar and have been included in past versions of this manual but are removed to avoid redundancy. Contact ESO for details.

An overview of the combined NEPA/SEPA EIS process and procedures is described in detail in this section, and some details regarding the new coordination and public input process required by SAFETEA-LU are also outlined below as well as discussed in **Chapter 410**.

Interdisciplinary Approach

NEPA requires an interdisciplinary approach in the preparation of EISs (23 CFR 105(c)). WSDOT's general practice is to use an interdisciplinary team (IDT) in preparation of the EIS. An IDT is an advisory group composed of people with varied training or skills in the natural and social sciences, engineering, and environmental design. IDT members may come from agencies other than WSDOT. The interdisciplinary approach is used in the planning and design of transportation facilities involving an EIS. The team is established in the early stages of the environmental process.

(1) Project Initiation Letter (NEPA – SAFETEA-LU)

For all federal actions requiring a NEPA EIS, SAFETEA-LU now requires the project sponsor (in this case WSDOT) to submit a project initiation letter to FHWA or FTA. This needs to occur prior to publishing the NOI in the Federal Register. The contents and guidelines as well as a template for preparation of the letter are found on the Environmental Services Web site:

http://www.wsdot.wa.gov/Environment/Compliance/NEPA_SEPA.htm#wsdot

(2) SAGES Coordination – Statewide Advisory Group for Environmental Stewardship (SAGES)

Members of the SAGES consists of representatives from WSDOT, FHWA, NOAA Fisheries, Dept. of Ecology, WA Dept. of Fish & Wildlife, U.S. Fish & Wildlife Service, USEPA, U.S. Army Corps of Engineers, and Dept. of Archeology and Historic Preservation.

This advisory group serves as a standing committee to assist WSDOT and other lead agencies in making efficient environmental decisions at the NEPA/SEPA EIS level of environmental classification. The SAGES meet as needed to discuss recurring issues, concerns, and potential process improvements. The SAGES will also be used as a project kickoff forum to ensure the new EIS process is clear to all parties.

The intent of the SAGES is to provide project proponents, early in the project development process, advisory feedback on possible environmental issues that may have a negative effect on the project later on. They will also provide informal comment on draft project purpose and need and insight on developing information needed for permitting concurrently with the development of the NEPA EIS.

Project teams will meet with and present their projects to the SAGES as early as practicable before the issuance of the Notice of Intent (NOI). Project teams will need to prepare an "Environmental Pre-Scoping Package" that will be distributed to the SAGES via e-mail 14-days prior to their scheduled meeting. Regular meetings generally occur on an as-needed basis.

The Environmental Pre-Scoping Package consists of:

- EIS Coordination Plan for Public and Agency Involvement
- SAGES Project Data Sheet
- SAGES Advisory Comment Form

Project teams will only be required to meet with the SAGES this one time. Project teams have the option to request assistance from the SAGES in establishing their own technical advisory groups.

For convenience and consistency, the Project Data Sheet, Advisory Comment Form, and the Coordination Plan are available as templates and can be found online at the Environmental Services Web site:

http://www.wsdot.wa.gov/Environment/Compliance/NEPA_SEPA. htm#wsdot

Project teams will need to contact the Environmental Services Office to request to be added to the SAGES meeting agenda.

- Monitoring or Enforcement Program Describe any monitoring or enforcement program that has been adopted for the specific mitigation measures, as outlined in the FEIS.
- Commitment List Include an item-by-item list of commitments and mitigation measures from the commitment file. The list serves as a ready reference for the design, construction, and maintenance of the project (see Chapter 490).

411.09 Statute of Limitations

(1) Under NEPA

23 CFR 771.139 establishes a 180-day statute of limitations on claims against USDOT and other Federal agencies for certain environmental and other approval actions. The statute of limitations applies to a permit, license, or approval action by a Federal agency if:

- The action relates to a transportation project (as defined above); and
- A statute of limitations notification is published in the Federal Register announcing that a Federal agency has taken an action on a transportation project that is final under the Federal law pursuant to which the action was taken.

If no statute of limitations notice is published, the period for filing claims is not shortened from what is provided by other parts of Federal law. If other Federal laws do not specify a statute of limitations, then a 6-year claims period applies.

Full details on implementation of this requirement can be found in 23 CFR 771.139, which is found by using the quick search function on the Code of Federal Regulations Web site: http://www.gpoaccess.gov/cfr/index.html

(2) SEPA Notice of Action (NAT)

Under SEPA, the Notice of Action establishes a statute of limitations on challenges to an environmental document. See the Environmental Services Compliance Web site for a sample; see also WAC 197-11-990.

Under SEPA Rules (WAC 197-11-704), an "action" includes:

- New and continuing activities (including projects and programs) entirely or partly financed, assisted, conducted, regulated, licensed, or approved by agencies.
- New or revised agency rules, regulations, plans, policies, or procedures.
- Legislative proposals.

Issuance of an environmental document is not an action under SEPA. The typical SEPA action is approval of the design file.

The decision to publish a Notice of Action is made by the Project Office of a Region or mode. Normally the Environmental Manager of a Region or mode will write and sign the Notice of Action.

A Notice of Action can be issued whether or not a public hearing has been held. It is an optional process for the purpose of limiting potential court challenges of an environmental document. SEPA was amended in 1995 to change the appeal period to within 21 days of the last newspaper publication of the Notice of Action for both private and governmental projects (RCW 43.21C.080). A Notice of Action should be published any time there is reason to believe challenges to the environmental document will be filed. Substantial controversy or known threats of challenges by project opponents are indicators that judicial review is likely. By limiting appeals to a certain time period, project schedules are less likely to be disrupted.

The following notification procedure is specified in RCW 43.21C.080:

- Publishing notice on the same day of each week for two consecutive weeks in a legal newspaper of general circulation in the area where the property which is the subject of the action is located.
- Filing notice of such action with Ecology at its main office in Olympia prior to the date of the last newspaper publication.
- Notifying adjacent property owners and others by one of the following methods prior to the date of first newspaper publication (except for nonproject actions):
 - 1. Mailing to the latest recorded real property owners, as shown by the records of the county treasurer, who share a common boundary line with the property upon which the project is proposed, by U.S. mail, first class, postage prepaid.
 - 2. Posting of the notice in a conspicuous manner on the property upon which the project is to be constructed.

Contact the ESO Compliance Program for assistance in preparing a SEPA NAT distribution list.

411.10 Administrative Record

The administrative record is a formal catalogue of the basis for a project decision. Its primary use is to document the reason for the project decision. It reflects the project history, environmental evaluation, and prior decision-making on the project. The administrative record should also include criticism and responses to agency and public comments to document that opposing views were considered.

(1) When to Prepare

All projects must be documented to support key decisions. A formal administrative record must be prepared for projects requiring an EIS where substantial controversy exists, and may be prepared for other projects. Project files on all projects should be kept in an orderly manner throughout the life of the project, whether or not an administrative record is prepared. Also, as decisions are made on the project, they should be recorded and filed.

(2) Administrative Record Contents

An administrative record should contain all federal, state, regional, or local actions. These include corridor approval, corridor adoption, design approval, and Region-approved transportation master plans or programs. It may also contain other related material.

The administrative record of an EIS should contain the following elements, as applicable, in chronological order:

- Table of contents.
- Project prospectus.
- Environmental Classification Summary (ECS).
- Regional transportation plans or studies.
- · Route studies.
- · Notice of intent.
- Minutes of EIS scoping meeting(s).
- Each Interdisciplinary Team meeting minutes and recommendations.
- Agency meeting minutes and phone call summaries.
- Comments from public open houses.
- Public hearing transcript.
- Correspondence from agencies or the public and responses to them (both letters and e-mails).
- Interoffice communications relating to project development.
- Discipline reports.
- Draft and final EIS.
- Copy of all references cited in the DEIS and FEIS.
- · Official notices.
- · Record of Decision.
- Corridor, design, and access plan approvals.

- Affidavit of publication of Notice of Action.
- Other relevant evidence such as local zoning or planning reports, government studies, questionnaires, or university studies.

The administrative record need not include every item in the project file. Generally, items that do not relate to a major project decision, it should not be included. Project teams should consult with the Attorney General's during the preparation process.

The American Association of State Highway and Transportation Officials (AASHTO) has prepared a handbook on maintaining a project file and preparing an administrative record for a NEPA study, which is available at:

http://environment.transportation.org/center/products_programs/practitioners handbooks.aspx

411.11 Related Environmental Review Documents and Procedures

(1) Using Existing Documents

NEPA CEQ regulations and SEPA rules allow the use of existing documents to reduce duplication and unnecessary paperwork. If an analysis has already been done for the proposed project or a similar project, use it. Existing documents can be used in any of the following ways:

- Adoption (CEQ 40 CFR 1506.3, and WAC 197-11-630)
- Addendum (CEQ 40 CFR 1502.9 and WAC 197-11-625)
- Incorporation by Reference (CEQ 40 CFR 1502.21 and WAC 197-11-635)
- Supplemental EIS (CEQ 40 CFR 1502.9 and WAC 197-11-620)

See the WSDOT Environmental Web site for guidance in using existing documents.

(2) Endangered Species Act

The federal Endangered Species Act requires separate documentation independent of the SEPA or NEPA document. See Chapter 436.

(3) Section 106 – Historic and Cultural Resources

The National Historic Preservation Act requires separate documentation independent of the SEPA or NEPA document. See Chapter 456.

(4) Section 4(f) Evaluation

This federal law (USDOT (49 USC 303)) requires documentation that can be included with or separate from the NEPA document. If you are preparing a NEPA CE or EA you are advised to check with FHWA or FTA regarding the timing and process for documenting compliance with Section 4(f). This is less of an issue with EIS-level documents. See Chapter 450 and Chapter 457.

Chapter 430

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430.02	Applicable Statutes and Regulations
430.03	Policy Guidance
430.04	Interagency Agreements
430.05	Technical Guidance
430.06	Permits and Approvals
430.07	Non-Road Project Requirements
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Key to Icons

* Web site.*

430.01 Introduction

Many of WSDOT's projects impact water resources due to stormwater runoff. WSDOT must comply with all applicable federal, state, and local laws; regulations; policies; and plans. In accordance with these requirements, studies must be completed before permits can be applied for and the project can go to construction. This chapter includes information and requirements for surface water quality, stormwater runoff, fill material in wetlands, and construction erosion control and runoff. It focuses mainly on road projects. Policies, procedures, and permit requirements specific to ferries, airports, rail, and non-motorized transport are addressed in Section 430.07. For other water-related issues required to be considered by NEPA and SEPA, see Chapter 431 (Wetlands), Chapter 432 (Floodplain), Chapter 433 (Groundwater), and Chapter 450 (Land Use).

(1) Summary of Requirements

Water quality and other surface water issues that must be addressed during development of WSDOT projects include work in water, shorelines, floodplains, and other critical areas as well as stormwater discharges, interference with stream flows, use of herbicides, and water rights.

WSDOT's Surface Water Discipline Report checklist provides the basis for identifying these issues and available sources of information. Other references, documents, Interagency Agreements, permits, certificates, and approvals included in this section provide background relevant to the WSDOT discipline reports for surface water.

^{*}Web sites and navigation referenced in this chapter are subject to change. For the most current links, please refer to the online version of the EPM, available through the WSDOT Environmental Services Office (ESO) home page: http://www.wsdot.wa.gov/environment/

Surface Water Chapter 430

Surface water quality standards are implemented through the Clean Water Act (CWA) Section 401 certifications, water quality modifications, and compliance with the standards in RCW 90.48 and WAC 173-201A. Applications for water quality related permits include the Joint Aquatic Resources Permit Application (JARPA) process, and the National Pollutant Discharge Elimination System (NPDES) permits. Water-related permits, certificates, and approvals are listed in Section 430.06. Details are in Chapter 520 through Chapter 550. See also Sections 431.06, 432.06, 433.06, and 436.06.

(2) Abbreviations and Acronyms

Abbreviations and acronyms used in this chapter are listed below. Others are found in the general list in **Appendix A**.

401 Certification Clean Water Act, Section 401, Water Quality Certification

AKART All known, available, and reasonable methods of

prevention, control, and treatment

BMP Best Management Practice
Corps U.S. Army Corps of Engineers

CWA Clean Water Act

CZM Coastal Zone Management CZMA Coastal Zone Management Act

EAP Environmental Assessment Program

ESA Endangered Species Act

FEMA Federal Emergency Management Agency
GHPA General Hydraulic Project Approval

HPA Hydraulic Project Approval

JARPA Joint Aquatic Resources Permit Application

LOP Letter of Permission

MHHW Mean Higher High Water
MOA Memorandum of Agreement

NMFS National Marine Fisheries Service

NOAA National Oceanic and Atmospheric Administration

NOI Notice of Intent

NPDES National Pollutant Discharge Elimination System
NWP Nationwide Permit (U.S. Army Corps of Engineers)

OHWM Ordinary High Water Mark or line

SMA Shoreline Management Act SWDP State Waste Discharge Permit

STMs Short-Term Water Quality Modifications
TESC Temporary Erosion and Sediment Control

TMDL Total Maximum Daily Load

Chapter 430 Surface Water

USDA U.S. Department of Agriculture

USEPA U.S. Environmental Protection Agency

USFWS U.S. Fish and Wildlife Service

WDFW Washington State Department of Fish and Wildlife

WSF Washington State Ferries

WRIA Water Resource Inventory Area

(3) Glossary

See **Appendix B** for a general glossary of terms used in the EPM.

Contaminant – Any physical, chemical, biological, or radiological substance or matter that has an adverse affect on air, water, or soil.

Herbicide – A chemical designed to control or destroy plants, weeds, or grasses.

Navigable Waters or Navigable Waters of the United States – Those waters of the United States including the territorial seas that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity. [33 USC 1362(7) and 33 CFR 329.4]

Pollutant – Any substance of such character and in such quantities that upon reaching the environment (soil, water, or air), is degrading in effect so as to impair the environment's usefulness or render it offensive.

Surface Runoff – Overland flow of water.

Stormwater – Rainwater that flows over land and into natural and artificial drainage systems. Stormwater runoff is a major transporter of nonpoint source pollutants.

Surface Water – All water naturally open to the atmosphere, such as rivers, lakes, reservoirs, ponds, streams, <u>wetlands</u>, seas, and estuaries.

Suspended Sediment – Fine material or soil particles that remain suspended by the current until deposited in areas of weaker current. Can be measured in a laboratory as "Total Suspended Solids" (TSS).

Turbidity – A condition in water caused by the presence of suspended material resulting in scattering and absorption of light rays.

Wastewater – Literally, water that has been used for some purpose and discarded, or wasted; typically liquid discharged from domestic residential, business, and industrial sources that contains a variety of wastes.

Surface Water Chapter 430

Watershed – The land area that drains into a stream; the watershed for a major river may encompass a number of smaller watersheds that ultimately combine at a common point.

Waters of the State or State Waters – Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington. [RCW 90.48.020]

Waters of the United States – Those waters listed in 33 CFR 328.3(a). (See also Section 431.02(1)(b).)

430.02 Applicable Statutes and Regulations

This section lists the primary statutes and regulations applicable to water quality issues. See **Appendix D** for an index of major statutes and regulations referenced in the EPM. Permits and approvals required pursuant to these statutes are listed in **Section 430.06**.

(1) Federal

(a) National Environmental Policy Act

The National Environmental Policy Act (NEPA), 42 USC Section 4321, requires that all major actions sponsored, funded, permitted, or approved by federal agencies undergo planning to ensure that environmental considerations such as impacts on water quality are given appropriate consideration in decision-making. Federal implementing regulations are at 23 CFR 771 (FHWA) and 40 CFR 1500-1508 (CEQ). For details on NEPA procedures, see Chapter 410, Chapter 411, and Chapter 412.

(b) Clean Water Act

The Water Pollution Control Act, better known as the Clean Water Act (CWA), 33 USC 1251 et seq., provides for comprehensive federal regulation of all sources of water pollution. It prohibits the discharge of pollutants from non-permitted sources. The CWA authorizes the USEPA to administer or delegate water quality regulations covered under the act. In Washington, authority is delegated primarily to the Corps and Ecology. USEPA administers CWA implementation on tribal and federal land.

Implementation requirements for CWA Sections 303(d), 305(b), 401, 402, and 404 are described in **Section 430.06**. The law is online at:

http://www4.law.cornell.edu/uscode/33/ch26.html

(c) Coastal Zone Management Act

The Coastal Zone Management Act (CZMA) of 1972, 16 USC 1451 et seq., (regulations in 15 CFR 923-930), was enacted to encourage advancement of national coastal management objectives and help states

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(d) Coastal Zone Management Act Certification (CZM)

Ecology includes a CZM consistency response with the CWA Section 401 certification for any work in the 15 coastal counties. For detail, please see Section 540.02 and Section 540.03.

(e) Watershed Planning Law

The watershed planning law (RCW 90.82) is intended to provide more specific guidance on cooperative methods of determining the current water resource situation in each water resource inventory area of the state. It serves to provide local citizens with the maximum possible input concerning goals and objectives for water resource management and development. The law is online by direct link at:

http://apps.leg.wa.gov/RCW/default.aspx?cite=90.82

430.03 Policy Guidance

(1) Governor's Directive on Acquisitions of Agricultural Resource Land

Governor Gregoire has directed WSDOT to notify the Governor's Chief of Staff when WSDOT is seriously considering the use of agricultural properties. The directive, as conveyed in a letter dated May 15, 2007, is available on the following Web page under General Guidance, Environmental Directives:

http://www.wsdot.wa.gov/Environment/Compliance/ ComplianceGuidance.htm#general

For information on how this directive is being implemented, especially on actions to condemn or purchase designated agricultural resource lands for environmental mitigation purposes, see Section 450.03.

(2) Other Policy Guidance

For other policies related to wetlands, please see Section 431.03.

430.04 Interagency Agreements

The following interagency agreements pertaining to surface water are available at:

http://www.wsdot.wa.gov/Environment/Compliance/agreements.htm

(1) Implementing Agreement – <u>State Surface</u> Water Quality Standards (1998) – under revision

The February 1998 Implementing Agreement between Ecology and WSDOT regarding compliance with state surface water quality standards, is intended for use by WSDOT and WSDOT contractors. The agreement covers general conditions, concrete work, erosion control, hazardous spill prevention and control, spill reporting, and activity-specific provisions to help ensure

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compliance with state surface water quality standards for erosion control in new roadway and bridge construction projects. Ecology is notified of projects through submittal of a JARPA application if applicable, or through telephone/e-mail contact for:

- All new construction projects requiring a CWA Section 401 Water Quality Certification.
- Projects that are large, contentious, or involve a significant amount of work in the water.
- Any project that does not comply with conditions listed in the agreement.

Surface water quality standards are implemented and maintained by the JARPA process, NPDES permits, WSDOT's 2008 *Highway Runoff Manual*, and appropriate BMPs.

This 1998 implementing agreement does not allow for a modification of state surface water quality standards. However, short-term water quality modifications might still occasionally be issued by Ecology's Federal Permits Unit for in-stream work where implementation of all available BMPs may not be enough to ensure conformance with state surface water quality standards (see Section 540.25, Other State Approvals – Temporary Exceedance of State Surface Water Quality Standards). Monitoring and testing of surface water quality is required during construction.

When the agreement supersedes the need for a Hydraulic Project Approval (HPA) permit, it is courteous for WSDOT to inform WDFW of work performed in waterways (see the MOU on work in water courses, described below).

(2) Compliance Implementing Agreement – State Surface Water Quality Standards (2004)

The November 2004 Compliance Implementing Agreement between WSDOT and Ecology is designed to assist in obtaining and maintaining WSDOT compliance with state surface water quality standards, including compliance with Section 401 Certifications, Section 402 NPDES permits, and other Ecology Orders and approvals. It defines the elements needed to increase compliance for WSDOT and WSDOT contractors. For details, see Section 610.03.

(3) Alternative Mitigation Policy Guidance Interagency Implementation Agreement

The purpose of this February 2000 agreement between WDFW, Ecology, and WSDOT is to describe consensus on mitigation policy among the agencies responsible for aquatic resource mitigation. See Section 431.04 for details.

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(4) Memorandum of Agreement <u>on Hydraulic Project Approvals for Transportation</u> Activities

This May 2008 MOA between WSDOT and WDFW is designed to establish mutual understanding and procedures between the agencies for complying with the Hydraulic Code Rules (WAC 220-110) applicable to transportation projects. This agreement replaces the MOA Concerning Construction of Projects in State Waters, June 2002. See Section 436.04 for details.

(5) Other Interagency Agreements

For other agreements related to surface water, please see **Section 436.04** (fish and wildlife) and **Section 431.04** (wetlands). See **Appendix E** for a guide to all interagency agreements referenced in the EPM.

430.05 Technical Guidance

(1) Surface Water Discipline Report

The purpose of the Surface Water Discipline Report is to provide information required for NEPA and SEPA environmental documentation when there is some level of impact or controversy. Discipline studies characterize water quality in a watershed context that includes surface water, groundwater, wellhead protection areas, source water protection areas, soils and topographic features affecting basin hydrology, existing water quality conditions, and land use patterns affecting runoff conditions.

(a) Determining the Necessary Level of Effort

It is important to properly determine whether or not a discipline study is necessary and the appropriate level of detail to include in discipline studies.

A Discipline Report is <u>generally</u> needed when a proposed project could have impacts to receiving waters by:

- Increasing the amount of pollutants discharged to receiving waters.
- Increasing peak runoff flows to receiving waters.
- Presenting a significant risk of eroded sediments or spilled pollutants which could enter receiving waters.
- Involving construction within <u>surface</u> water bodies, their buffers or floodplains.

The Surface Water Discipline Report may also be necessary in cases where build options reduce the amount of pollutants or peak flows but there are significant differences in the benefits between the alternatives.

If it is not clear whether <u>surface</u> water impacts are likely, a preliminary investigation should be performed using the guidance for preparing discipline studies outlined below. If at any point, it becomes apparent there

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will be no significant impacts or differences among the alternatives, the investigation can be terminated. The rationale for determining that a full Discipline Report is not needed should be documented and added to the project file.

(b) Preparing the Discipline Report

Exhibit 430-1 and the below listed technical guidance documents constitute WSDOT's guidance for preparing surface water discipline studies. The Surface Water Discipline Report Checklist (Exhibit 430-1) helps ensure that all project-related water issues are adequately considered. The document, Surface Water Discipline Report Technical Guidance, provides detailed instructions on how to write Surface Water Discipline Reports. The guidance document, *Information Source Listing for WSDOT* Surface Water Discipline Reports, provides additional assistance to help report writers more quickly identify information sources. The technical document, Quantitative Procedures for Surface Water Impact Assessments, describes the two different methods for comparing surface water impacts of project alternatives. <u>Using either of the methodologies</u> in this document is required to estimate pollutant loading for surface water discipline reports. All other pollutant loading methodologies, including the Highway Runoff Dilution and Loading Stormwater (Hi-Run) model, will not be accepted for use in producing Surface Water Discipline Reports. Note: Over the next year, WSDOT will be reevaluating existing impact assessment methods with the intent of incorporating a watershed based approach.

The latest versions of all of the above-mentioned technical guidance documents and a Surface Water Discipline Report Template can be found on WSDOT's Water Quality Web page at:

http://www.wsdot.wa.gov/Environment/waterquality/#NEPA SEPA

(2) Other WSDOT Guidance and Technical Resources

(a) WSDOT Highway Runoff Manual

The *Highway Runoff Manual* summarizes the stormwater management requirements and describes approved methods of managing stormwater runoff known as Best Management Practices (BMPs). The *Highway Runoff Manual* contains sections on stormwater planning, BMP selection, design, and computational standards, economic and engineering feasibility, temporary erosion and sediment control planning, spill prevention control and countermeasures planning and surface water quality monitoring. The NPDES Construction Stormwater General Permit that was issued in November 2005 includes water quality monitoring requirements. Chapter 6 of the *Highway Runoff Manual* reflects these new requirements.

The Washington State Department of Ecology approved the 2008 *Highway Runoff Manual* as equivalent to its Stormwater Management Manuals for Western and Eastern Washington (SMMWW and SMMEW) for

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compliance with Ecology permits (40 CFR 402; WAC 173-270). Permit conditions are attached to the manual

The latest version of the manual and associated updates are available at:

http://www.wsdot.wa.gov/Environment/WaterQuality/Runoff/HighwayRunoffManual.htm

(b) WSDOT GIS Workbench

Useful information may be obtained from the WSDOT GIS Workbench, a GIS interface for internal WSDOT users only. It has numerous layers of environmental and natural resource management data. WSDOT works with federal, state, and local agencies to maintain a collection of the best available data for statewide environmental analysis. Available databases relevant to surface water quality include water resource inventory areas (WRIAs) and sub-basins, major shorelines, CWA Section 303(d) Impaired Waters, NPDES permit areas and sites, and stormwater outfalls on State Routes. For information on how to access the GIS Workbench, see:

http://www.wsdot.wa.gov/Environment/GIS/workbench.htm

For a list of current data sets, see the WSDOT Web site at:

http://www.wsdot.wa.gov/mapsdata/geodatacatalog/default.htm

(3) FHWA Guidance

(a) FHWA Technical Advisory

FHWA Technical Advisory T 6640.8A (October 1987) gives guidelines for preparing environmental documents. For water quality, an EIS should identify roadway runoff or other nonpoint source pollution that may have an adverse impact on sensitive water resources such as water supply reservoirs, groundwater recharge areas, and high quality streams. The Surface Water Discipline Report is intended to meet the requirements of the FHWA Technical Advisory. For details, see the FHWA Web site at:

http://www.fhwa.dot.gov/legsregs/directives/techadvs/t664008a.htm

(b) FHWA Watersheds, Water Quality, and Stormwater Runoff

Abstracts of documents produced by or for the FHWA regarding surface water quality, stormwater runoff, and watersheds are available online. These include the *National Highway Runoff Water-Quality Data and Methodology Synthesis*, USEPA's site on the Clean Water Initiative, basic definition of watershed and watershed management, USEPA's Surf Your Watershed, and other FHWA resources.

Accessed by direct link for Water Quality:

http://www.fhwa.dot.gov/environment/h2o.htm

Or by direct link for Watersheds:

http://www.fhwa.dot.gov/environment/h2o shed.htm

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(c) FHWA Environmental Review Toolkit and Guidebook

FHWA online Environmental Review Toolkit and Guidebook contain several guidance documents and federal MOAs on topics related to surface water quality, the Clean Water Act, and coastal zone management. Available via the FHWA Web site at:

http://www.environment.fhwa.dot.gov/index.asp

(4) Ecology Guidance

(a) Impaired and Threatened 303(d) Waterbodies

Washington State is required by the CWA Section 303(d) (40 CFR 130.7) to identify its polluted water bodies every two years and submit the 303(d) list to USEPA. The list is comprised of "water quality limited" estuaries, lakes, and streams that fall short of state surface water quality standards, and are not expected to improve within the next two years. USEPA requires the state to set priorities for cleaning up threatened waters and to establish a Total Maximum Daily Load (TMDL) for each. A TMDL, or water cleanup plan, entails an analysis of pollutant loadings to determine how much pollution a waterbody can take and still remain healthy for its intended beneficial uses. The cleanup plan also includes recommendations for controlling the pollution and a monitoring plan to verify compliance with established TMDLs. For certain waterbodies, TMDLs have been set; for others, TMDLs are being developed by Ecology.

Once developed, the TMDLs are tied to Corps Section 404 and 401 water quality permit requirements.

Ecology's Web site provides access to a list of approximately 3,246 water body segments currently identified as impaired or threatened. The list identifies the locations of the waterbodies, the state surface water quality standards each exceeds, and by how much the standards are exceeded.

Washington's Final 2008 Section 303(d) list of Impaired and Threatened Waterbodies is available at:

http://www.ecy.wa.gov/programs/wq/303d/index.html

Internal WSDOT users can view 303(d) listed water bodies at:

Data/GIS/GISOSC\GEODATA\maps\100K\DOE\303D\

(b) Water Quality 305(b) Assessment

Washington State is required by the CWA Section 305(b) to prepare a water quality assessment report every five years and submit it to USEPA. In addition, USEPA requires the state to submit certain assessment data annually for compilation in a national report. The requirements are administered by Ecology.

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http://www.wsdot.wa.gov/Environment/Biology/Wetlands/guidelines.htm WSDOT Wetland Mitigation guidance is provided at the following Web site:

http://www.wsdot.wa.gov/Environment/Biology/Wetlands/mitigation.htm

(a) Required Reports

A Wetland Inventory Report may be prepared to identify reasonable alternatives early in the EIS or EA scoping process. For each project that requires NEPA/SEPA documentation and will potentially impact wetlands, WSDOT prepares a Wetland Discipline Report for a Documented Categorical Exclusion (DCE), an Environmental Assessment (EA) or an Environmental Impact Statement. If the project will not impact wetlands, streams, or other waters of the U.S.; does not require acquisition of property, or excavation or fill; and all work will take place within the road prism, the Environmental Classification Summary will be sufficient documentation in the NEPA/SEPA process. If impacts are anticipated, a <u>NEPA/SEPA</u> Mitigation <u>Memorandum</u> that identifies the mitigation concept may be developed for submittal with other NEPA documents. A Wetland Assessment Report and Draft and Final Wetland (or Wetland and Stream) Mitigation Reports are prepared for permitting as part of the JARPA. Also, a Conceptual Wetland (or Wetland and Stream) Mitigation Report may be required depending on site data availability.

(b) WSDOT GIS Workbench

WSDOT's GIS Workbench, a GIS interface for internal WSDOT use, can be accessed to obtain some of the data necessary to write wetland reports, including National Wetlands Inventory coverage. Some local jurisdiction information is available on the workbench, and local agencies should be contacted to find out whether additional local wetland mapping is available, on GIS or hard copy. When required, WSDOT's GIS staff can process requests for this information. For information on how to access the GIS Workbench, see:

http://www.wsdot.wa.gov/Environment/GIS/workbench.htm

For a list of current data sets, see WSDOT's Web site at:

 $\verb| http://www.wsdot.wa.gov/mapsdata/geodatacatalog/default.htm| \\$

(c) WSDOT Standard Symbols and Conventions

WSDOT Standard Symbols and Conventions for Wetlands and Stormwater Treatment Areas are listed in the *Plans Preparation Manual* (M 22-31). Current standards are located on WSDOT's Web site at:

http://www.wsdot.wa.gov/Publications/Manuals/M22-31.htm

Scroll to Division 5, Standards and Symbols (p 5-1 through 5-9); In the Index of Symbols and Conventions, Level 31: Wetlands and Stormwater Treatment Areas is on pages 231and 232.

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(d) WSDOT Wetland Training

Several wetland-related classes are available for WSDOT employees as part of WSDOT's Automated Training Management System (ATMS):

- <u>Introduction to</u> Wetlands (Course Code: BKS) The course is designed to give class participants an understanding of the value of wetlands as a resource; their regulation by local, state, and federal agencies; and methods of wetland identification. Mitigation and wetland policy is discussed, as well as how these environmental issues affect the WSDOT processes for project development.
- Wetland Delineation (Course Code: CKI) A refresher course for professionals who perform wetland delineations as well as for those who do not. The class will serve as an introduction to the complexities of the discipline.
- Hydric Soils An introduction to hydric soils. Participants will learn about redoximorphic processes in soils, redoximorphic features, definitions and criteria of hydric soils, and field indicators of hydric soils.
- Rating System Training (Ecology Instructor) This two-day intensive workshop will provide wetland regulators and consultants with practical information and experience in using the newly revised rating system for wetlands in Western Washington. It is specifically designed for those who will be using the rating system in the field.
- Cultural Resources Training (Various Instructors) Each spring and fall a 3-day Cultural Resources Training is offered in The Dalles, Oregon. The training supports continued recognition of the value of Washington's heritage and advances programs that promote awareness, preservation and stewardship. It is open to all as space is available, but specifically intended for government agencies (including tribal governments).

(2) Wetland Inventory Report

Avoiding and minimizing impacts to wetlands must be considered in all WSDOT projects. The Wetland Inventory Report is used to identify potential waters of the U.S, including wetlands, streams, other aquatic resources, and their buffers early enough that changes to project alternatives can be considered. The Wetland Inventory Report is prepared by a WSDOT wetland biologist or qualified consultant. It is submitted to the WSDOT Regional Environmental Manager and a copy is sent to the WSDOT Project Engineer. The report is used as part of the data for initial development of project design alternatives. Please consult the WSDOT regional environmental office to determine whether this report is required.

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wetlands and streams. WSDOT's guidance on this subject can be found on the following Web page:

http://www.wsdot.wa.gov/Environment/Biology/Wetlands/mitigation.htm#stream

The mitigation design concept is developed using identified wetland establishment, re-establishment, rehabilitation, and/or enhancement area, and appropriate buffer areas. During the permitting process, two (and sometimes three) iterations of the mitigation report are typical. If there is insufficient site data available to complete the mitigation design, a Conceptual Wetland (or Wetland and Stream) Mitigation Report can be submitted with permit application materials. When detailed on-site hydrology, vegetation and soil data has been obtained, a Draft Wetland (or Wetland and Stream) Mitigation Report, including detailed mitigation site design and performance criteria, is submitted to the agencies with the permit application. The Final Wetland (or Wetland and Stream) Mitigation Report incorporates the agency review comments and permit conditions.

(a) Conceptual Wetland (or Wetland and Stream) Mitigation Report

A <u>Conceptual</u> Wetland <u>(or Wetland and Stream)</u> Mitigation Report is submitted with other permit application materials even though some site-specific data is lacking. The report should provide enough information for WSDOT and resource agency personnel to agree upon or reject the concept of the mitigation site design proposal before a detailed analysis of hydrology is done. Depending on the particular project and its potential impacts, the <u>Conceptual Wetland (or Wetland and Stream)</u> Mitigation Report is used to coordinate with other agencies at an early stage of project development. Please consult the WSDOT regional environmental office to determine whether this report is required. Once the missing data has been obtained this report can be converted to a Draft Wetland <u>(or Wetland and Stream)</u> Mitigation Report and re-submitted to continue the permit application process.

(b) Draft Wetland (or Wetland and Stream) Mitigation Report

The Draft Wetland (or Wetland and Stream) Mitigation Report is submitted with wetland-related permit applications. The Draft Wetland (or Wetland and Stream) Mitigation Report provides detailed mitigation site design, including a grading plans supported by detailed hydrology data, performance criteria, a contingency plan and a site management plan. The draft document includes enough detail for the agencies to understand the mitigation proposal and to make recommendations.

The maintenance plan submitted with the Draft Wetland (or Wetland and Stream) Mitigation Report must describe planned maintenance activities, including erosion control and protection of plant materials from herbivores, repair of damage from vandalism, and other activities that may be required over time to maintain site viability.

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Contingency plans should be developed in the event of failure or partial failure of mitigation measures. A contingency plan must outline the steps that will be taken if performance standards are not met.

The Draft Wetland (or Wetland and Stream) Mitigation Report is reviewed by the region Biology Program, Project Engineer, Landscape Architecture, and Headquarters Environmental Services Ecological Mitigation Program before submittal to regulatory and resource agency personnel. The Region Environmental Manager is responsible for coordinating the appropriate review within the region.

After WSDOT reviews and comments on the report, it is submitted with the JARPA application. Permit applications required by local jurisdictions should also be submitted at this stage. Permits and approvals that may be required are listed in **Section 431.06**. Regulatory agencies should provide written conditional approval of the Draft Mitigation Report before work proceeds any further. Coordination and effective communication at this stage speed up the permit review process. An on-site review of the project and discussion of proposed wetland mitigation is also advisable in most cases.

(c) Final Wetland (or Wetland and Stream) Mitigation Report

The Final Wetland (or Wetland and Stream) Mitigation Report is the Draft Wetland (or Wetland and Stream) Mitigation Report with the negotiated agency comments and conditions incorporated. It is the document of record for compliance with the permit conditions. Work on the Final Wetland (or Wetland and Stream) Mitigation Report should not begin until the appropriate review agencies have provided written conditional approval of the Draft (or Wetland and Stream) Mitigation Report. This approval is contingent on the following conditions:

- The Final Wetland (or Wetland and Stream) Mitigation Report will not be substantially different from the Draft Report.
- The Final Wetland (or Wetland and Stream) Mitigation Report will adequately demonstrate the likely success of the mitigation project.

After completing the Final Wetland (or Wetland and Stream) Mitigation Report, regional environmental staff supply the regulatory agencies with any remaining information required to complete permit applications. If coordination and involvement have taken place in the appropriate manner prior to this stage, permits should be granted with a minimum of delay.

After permits are received from regulatory agencies, the Mitigation Report is finalized. The design plan is put in PS&E format after in-house review. Responsibility for this task rests jointly with the project engineer, regional environmental manager, and the regional landscape architect or landscape designer. A maintenance estimate through the end of the monitoring period should be completed prior to the end of the construction contract.

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Standard within every Corps permit for wetland mitigation is the submittal of an as-built topographic map of the site. These as-built plans should include an official survey following completion of the wetland mitigation site. In addition to submitting the plans to the Corps or lead agency, all supporting documentation should be sent to the WSDOT Wetland Monitoring Program at Headquarters. In addition to the as-built topographic survey, the submittal package should also include: plant species and quantities used, photographs of the site, plant establishment plan (*Standard Specifications* 8-02.3 (13)), and notes about any changes to the original approved plan.

(d) Mitigation Performance Standards

The development of complete, well-articulated performance standards is a key component of each wetland (or wetland and stream) mitigation report. A performance standard is a clear description of a measurable standard, desired state, threshold value, amount of change, or trend used to achieve a particular population or habitat characteristic. It may also set a limit on the extent of an undesirable change.

In order to ensure mitigation site performance standards are measurable, Environmental Services Office Wetland Assessment and Monitoring Program staff should review all proposed mitigation reports prior to submittal with the permitting agencies.

For more information, visit the following Wetlands Guidelines Web site:

http://www.wsdot.wa.gov/Environment/Biology/Wetlands/mitigation.htm#perfcriteria

(e) Mitigation Monitoring Methods

Monitoring plans are developed at the beginning of each field season. Monitoring plans are guided by the goals and objectives, and include strategies for measuring performance standards based on current site conditions and plant community development. Monitoring results are used to guide site management decisions.

Monitoring methods are available online on the Wetland Guidelines Web page at:

http://www.wsdot.wa.gov/Environment/Biology/Wetlands/monitoring.

(7) Best Management Practices for Mitigation Site Construction

• **High Visibility Fencing** – To prevent permit violations during construction, WSDOT Project Delivery Memo #09-02 (December 3, 2009) describes requirements for high-visibility fencing to delineate wetlands, streams, and sensitive areas. The memo outlines criteria for identifying wetland and environmentally sensitive areas during project development.

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- Contract plans are to identify these areas and show the location of high visibility fencing. See **Section 690.02** for details.
- Access roads and stockpiles should be in upland areas that are planned to be buffers.
- Construction Methods to Minimize Compaction BMPs to minimize soil compaction include but are not limited to:
 - Avoid work when soil is moist or saturated
 - Use low-ground-pressure equipment
 - Construct from quarry spall roadways which are removed as the area is excavated
 - Use thick bark mulch blankets (6 inch minimum, may be thicker depending on soil texture and moisture content), large metal plates, temporary bridging within the site to hold equipment during construction
- Construction Methods to Prevent Erosion Consider alternatives to silt fencing, such as compost socks, compost berms, compost blankets, straw wattles, or coir wattles. BMPs that use compost can be left on site. The compost can be spread and incorporated before planting, providing two benefits for one cost. Further information on these structures can be found in the 2008 *Standard Specifications* (Chapter 8) at:
 - http://www.wsdot.wa.gov/Publications/Manuals/M41-10.htm

(8) Other WSDOT Technical Guidance

- **Isolated Wetlands** <u>and Ditch</u> <u>Guidance</u> Isolated wetlands are wetlands which do not have surface or subsurface connections to water bodies such as rivers, streams, lakes and bays. Several U.S. Supreme Court cases have addressed the limits of CWA Section 404 jurisdiction with respect to isolated waters <u>and</u> constructed ditches. Guidance <u>for both topics</u> can be found at:
 - http://www.wsdot.wa.gov/Environment/Programmatics/RapanosCase.
- Permitting Procedures for Projects With Isolated Wetlands Ecology authorizes impacts to isolated wetlands with administrative orders.
 Guidance for obtaining an administrative order can be found at:
 - http://www.wsdot.wa.gov/Environment/Programmatics/permittools.htm
- WSDOT *Design Manual* (M 22-01) Chapters 220 and 230 Chapter 220 addresses project environmental documentation while Chapter 230 lists a variety of environmental permits and approvals from

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government agencies, permit requirements, when to initiate the permits, and the applicable laws or rules. The wetland-applicable permits and approvals listed in the *Design Manual* are described in this latter chapter.

• WSDOT *Roadside Manual* (M 25-30) – This manual describes procedures for coordination between all WSDOT partners responsible for roadside activities, including wetland protection.

(9) Ecology Technical Guidance

Ecology has broad authority under the state Water Pollution Control Act to control and prevent the pollution of streams, lakes, rivers, ponds, inland waters, salt waters, and other waters of the state, including isolated wetlands. See **Section 540.13** for details. Information on how isolated wetlands are regulated by Ecology is summarized at:

http://www.ecy.wa.gov/programs/sea/wetlands/isolated.html

The following Ecology Web site contains useful sources of information for a range of other wetland issues:

http://www.ecy.wa.gov/biblio/wetlands.html

(10) FHWA Technical Guidance

(a) FHWA Technical Advisory

FHWA Technical Advisory T 6640.8A (October 1987) gives guidelines for preparing environmental documents. Wetland issues that should be addressed in the EIS include wetland identification and assessment, impacts to wetlands, evaluation of project alternatives, and identification of practicable measures to minimize adverse impacts.

If the preferred alternative would result in wetland impacts, the final EIS needs to contain a separate subsection entitled "Only Practicable Alternative Finding." The subsection should include a reference to Executive Order 11990 (see Section 431.03), an explanation for why there are no practicable alternatives, an explanation for why the proposed action includes all practicable measures to minimize harm to wetlands, and a concluding statement that: "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 may result from such use."

The above WSDOT Wetland reports are structured to provide the information necessary to meet the requirements of FHWA's technical advisory. For details, see:

http://www.fhwa.dot.gov/legsregs/directives/techadvs/t664008a.htm

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(b) FHWA Environmental Guidebook

FHWA's online Environmental Guidebook includes information on several federal wetland issues, including Section 404 permit requirements and agreements, and wetland analysis/design and permitting phases of project development. The Guidebook is available at the following FHWA Web site under "Wetlands":

http://environment.fhwa.dot.gov/guidebook/index.asp

(c) FHWA Documents

The FHWA Web site below includes abstracts for documents produced by or for the FHWA regarding wetlands.

http://www.fhwa.dot.gov/environment/wetland/wet abs.htm

(11) USEPA Guidance

The USEPA Office of Water provides information on wetland laws, regulations, and guidance at:

http://www.epa.gov/owow/wetlands/laws/

431.06 Permits and Approvals

Permits relating to wetlands are addressed in the following sections:

Federal

• Section 520.02 – Section 404 Permit

Tribal

• Section 530.03 – Tribal approval required under federal statutes on tribal lands: Clean Water Act Section 401 (the Confederated Tribes of the Chehalis Reservation, Kalispel Tribe of Indians, Makah Tribe, Port Gamble S'Klallam Tribe, Puyallup Tribe of Indians, Spokane Tribe of Indians, and Tulalip Tribes)

State

- Section 540.02 Section 401 Water Quality Certification
- Section 540.03 Coastal Zone Management Consistency Certification
- Section 540.08 Other NPDES Permits (programmatic permits on use of herbicides for control of noxious and nuisance aquatic Reports, and pesticides for mosquito control)
- Section 540.13 Isolated Wetlands
- Section 540.25 Other State Approvals (temporary exceedance of surface water quality standards)

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Local

- Section 550.02 Shoreline Permits
- Section 550.04 Critical Areas Ordinance Compliance

431.07 Non-Road Project Requirements

Ferry, rail, airport, or non-motorized transport systems are generally subject to the same statutes and regulations, policies, procedures, or permits that apply to road systems.

Rail – The Federal Railroad Administration has agreed with FHWA to follow FHWA requirements regarding impacts and mitigation. Any advance mitigation for rail projects may not use gas tax funds. Because WSDOT does not own railroad tracks or rail right-of-way, regulatory requirements for rail projects are coordinated with the BNSF (Burlington Northern Santa Fe) Railway or Union Pacific Railroad (UPRR).

Airports – Environmental review documents for public-use airport projects must address specific wildlife hazards on or near airports. These issues are addressed in an August 28, 2007, Federal Aviation Administration (FAA) Advisory Circular, *Hazardous Wildlife Attractants on or Near Airports* (No: 150/5200-33B), which is available at:

http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.n sf/0/532DCAFA8349A872862573540068C023?OpenDocument&Highlig ht=150/5200-33a

431.08 Exhibits

Exhibit 431-1	Conceptual Flow Charts Illustrating the NEPA and
	Permitting Processes

Exhibit 431-2 Wetland Glossary

Exhibit 431-3 Wetland Discipline Report Checklist

Wetlands Chapter 431

Buffer – The area abutting to a wetland that serves to protect the wetland from outside influences. Wetland buffers contribute to the integral functions of the wetland. Regulated buffer widths vary depending upon the quality of the wetland and guidelines established by the local jurisdiction under the state Growth Management Act.

Compensatory Mitigation – The stage of the mitigation sequence where impacts that cannot be avoided, minimized, rectified or reduced over time are offset through establishment (creation), restoration (re-establishment and rehabilitation), enhancement, or in exceptional circumstances, preservation of wetlands and/or other aquatic resources. (See also Mitigation and Mitigation Bank.)

Created Wetlands – (See Establishment below).

Delineated Wetlands – Wetlands whose boundaries have been identified by a qualified biologist using a standard delineation method evaluating soils, vegetation, and hydrology. A right of entry might be required to delineate a wetland for project purposes if it does not occur entirely on WSDOT right of way. The delineated boundary is flagged in the field and surveyed. The wetland and stream assessment report includes the delineation survey with flag locations and numbering.

Enhancement – The manipulation of the physical, chemical, or biological characteristics of a wetland to heighten, intensify, or improve specific aquatic resource functions. Enhancement is undertaken for specified purposes such as water quality improvement, flood water retention, or wildlife habitat. Activities typically consist of planting vegetation, controlling non-native or invasive species, modifying the hydrologic regime, or some combination of these. Enhancement results in the gain of selected wetland functions, but may also lead to a decline in other wetland functions. Enhancement does not result in a gain in wetland area.

Establishment (Formerly **Creation**) – The manipulation of the physical, chemical, or biological characteristics present to develop a wetland at an upland site. Activities typically involve excavation of upland soils to elevations that will produce a wetland hydroperiod, hydric soils, and support the growth of hydrophytic plant species. Establishment results in a gain in wetland area and functions.

Functions – $\underline{\mathbf{T}}$ he physical, chemical, and biological processes that occur in ecosystems.

Wetland Glossary Exhibit 431-2

Function Assessment – Systematic methods designed to evaluate the presence and level of performance of ecosystems functions.

Groundwater – Water that occurs below the surface of the earth, contained in pore spaces. It is either passing through or standing in the soil and underlying strata and is free to move under the influence of gravity.

Habitat – The physical or natural environment where a species or population may live.

Hydrology – The science that relates to the occurrence, properties, and movement of water on the earth. It includes water found in the oceans, lakes, wetlands, streams, and rivers, as well as in upland areas, above and below ground, and in the atmosphere.

Impact – Synonymous with "Effect." Includes ecological impacts (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health impacts, whether direct, indirect, or cumulative. Effects may also include those resulting from actions that may have both beneficial and detrimental effects.

Indicator – One of the specific environmental attributes measured or quantified through field sampling, remote sensing, or compilation of existing data from maps or land use reports, used to assess ecosystem condition or functions or exposure to environmental stress agents.

In-Lieu Fee – Funds paid to a governmental or non-profit natural resources management entity that provides compensatory mitigation and sells mitigation credits. The obligation to provide compensatory mitigation is transferred from the permittee to the in-lieu fee entity.

Inventory – A data collection process during which information about the presence, approximate extent, and in some cases the characteristics of wetlands is collected. Inventories can be general (e.g., aerial photographs) or site-specific (through field inventory work).

Mitigation Bank – A site where wetlands are established, restored, enhanced, and/or preserved, for the purpose of providing compensatory mitigation in advance of authorized impacts to aquatic resources.

Monitoring (mitigation site) – The collection and analysis of repeated observations or measurements to evaluate changes in condition and progress toward meeting compensatory mitigation objectives on a site.

Navigable Waters or Navigable Waters of the United States – Those waters of the United States including the territorial seas that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the

Exhibit 431-2 Wetland Glossary

entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity. [33 USC 1362(7) and 33 CFR 329.4]

Performance Measures (mitigation) –Environmental variables used to describe conditions on a mitigation site. These can include physical, hydrological, biological, and chemical attributes.

Performance Standards (mitigation) – Quantifiable thresholds for observable or measurable physical, hydrological, chemical, or biological attributes used to determine if a compensatory mitigation project is meeting its objectives.

Preservation (mitigation) – The removal of a threat to, or preventing the decline of, wetland resources by an action in or near those resources. This term includes activities commonly associated with protecting and maintaining wetland resources by using appropriate legal and physical mechanisms. Preservation does not result in a gain of wetland area or functions.

Restoration – The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former or degraded wetland. For the purpose of tracking net gains in wetland area, restoration is divided into Re-establishment and Rehabilitation.

Re-establishment – The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural or historic functions to a former wetland. Activities could include removing fill material, plugging ditches, or breaking drain tiles. Re-establishment results in a gain in wetland area and functions.

Rehabilitation – The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural or historic functions of a degraded wetland. Activities could involve breaching a dike to reconnect wetlands to a floodplain or return tidal influence to a wetland. Rehabilitation results in a gain in wetland function but does not result in a gain in wetland area

Values – Wetland attributes that, although not necessarily essential to the integrity of the landscape systems, are perceived as valuable to society.

Waters of the State or State Waters – Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters and all other surface waters and watercourses within the jurisdiction of the state of Washington. [RCW 90.48.020]

Waters of the United States – Those waters listed in 33 CFR 328.3(a).

Wetland – Area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted

Wetland Glossary Exhibit 431-2

for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not usually include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities. Wetlands may include those artificial wetlands intentionally created from non-wetland areas to mitigate conversion of wetlands.



Exhibit 431-3 Wetlands Discipline Report Checklist

Proje	ct Nam	ne:		J	ob Number:
Conta	act Nan	ne:			
Date	Receiv	ed: _		Date Reviewed:	Reviewer:
(SAT	= Satis	sfacto	ry; INC = I	ncomplete; MIS = Missing;	N/A = Not Applicable
Answ	ers are	requi	red for que	stions which have no N/A b	OOX.
evalu in the	ates the projec	e proje et desig	ect's impact	ts (direct, indirect, and cum rior to the selection of a pre	a wetland assessment report, and ulative). The report may be written early ferred alternative, and should include an
of im the di analy to all	pact or iscipling or transfer	contraction contra	oversy is su ort so it adeo ding unnec ation staff to	ubstantial or minimal. Proje quately addresses the impac essary information. The lev	oncise depending upon whether the level ct teams should take care to "right-size" ets and controversy without overrel of documentation should be sufficient about alternative selection, mitigation es.
This so bo shoul (see l	th can de linttp://w	sumn be inc mited ww.ac	luded in the to no more ecountabilit	e EIS, EA, or DCE with onl	rt and presents any conclusions reached y minor modification. The summary be written in "Plain Talk" language
SAT	INC	MIS	N/A		
			A.	Introduction. States the pu	rpose of the report.
			В.	a brief description of the p	the project purpose and need and roject. If alternatives are being ription of each and the major
			C.	Existing Conditions. Summer wetland (or groups of similar	narize the characteristics of each lar wetlands).
			D.	impacts of the project for e	each alternative, and indicate the amount on wetlands in the study area.
			F.		y mitigation that should be considered nanent wetland impacts of the project

II.	Intro	ductio	on		
This	section	states	the pu	rpose	of the report.
SAT	INC	MIS	N/A		
				A. S	States the purpose of the report.
III.	Proje	ect De	escrip	tion	
				-	urpose and need for the project and describe and illustrate the tive considered in the analysis.
SAT	INC	MIS	N/A		
				A. I	Purpose and need for the project and project description.
					Site location shown on regional map (i.e., state highway map or system map).
					Describe the alternatives, including the No-Build. Should provide a more in-depth description than what is found in Section I.
				D. N	Map of alternatives.
IV.	Exis	ting (Condi	tions)
This repor		descr	ibes ob	serve	d wetlands as summarized from an attached wetland assessment
SAT	INC	MIS	N/A		
				A. S	Study Area.
				1	Project setting briefly described. Include the physiographic region, general topography, dominant habitat and vegetation type(s), regional soils, nearby water resources, and land use types.
				2	2. Study area identified in text (e.g., all areas within 10 feet of toe of fill, all ROW, etc.).
				3	 Study area map showing the limits of the area examined for wetlands and waters and the location of each wetland described in the report.
				۷	1. Identify regulatory authority (federal, state, and/or local as

appropriate).

SAT	INC	MIS	N/A		
				В.	Wetlands and waters. For each wetland identified, provide a brief summary of the information in the wetland assessment report, including:
					1. Wetland name and/or ID number.
					2. Wetland location shown on the Study Area map or other exhibit.
					3. USFWS (Cowardin) classification.
					4. Hydrogeomorphic (HGM) classification.
					5. Rating according to Ecology's four-tier rating system
					6. Rating according to applicable local jurisdiction, if different. (Include information on required buffers.)
					7. Wetland size.
					8. Connection or proximity to other wetlands or surface waters.
					9. Dominant vegetation communities described.
					10. Discuss the functions of each wetland.
					11. Describe buffers.

Note: Analysis should be commensurate with the level of impact. Wetlands identified or delineated which will be completely avoided must still be shown on figures and discussed in report, but their descriptions may be less detailed than that of impacted wetlands.

V. Impacts

This section describes the direct (permanent), indirect and cumulative wetland impacts of the proposed project, and any alternatives, and quantifies the adverse effect on wetlands in the study area. Impacts should be reported as a range to the nearest 1/10 of an acre (for example, Alternative 3 will require 2.0 to 2.5 acres of permanent wetland impact). Describe (and quantify where possible) the following for each alternative:

SAT	INC	MIS	N/A	
				A. Describe how impacts are identified.
				B. Direct impacts (e.g., filling, dredging, alteration to hydrology) caused by the proposed alternatives.
				C. Indirect impacts. Reasonably foreseeable effects caused by the proposed alternatives that may occur later in time or farther removed than the direct effects.

SAT	INC	MIS	N/A		
				D.	Discuss possible cumulative impacts to wetlands including long-term maintenance and operation of roadway (e.g., supports increased development resulting in increased pollution, sedimentation and fragmentation, degradation of buffer). Result from the incremental impacts caused by the alternatives when considered with the impacts of other past, present or reasonably foreseeable future actions. May be individually minor but collectively significant.
				E.	Discuss impacts to wetland functions based on rating system and other function assessment methods used.
				F.	Summarize the impacts to wetlands under each alternative, giving impact totals for each category of wetland and Cowardin type (may be presented in table format).
				G.	Mention any rare plants and wetland-dependant wildlife species, and reference Discipline Report that addresses them.
				Н.	Discuss quantity and level of function of buffer impacts, if applicable.
(i.e., 1	fundin	g or pe	ermits)	and	nt may be required if the proposed project has federal involvement federally listed species are potentially present. This should be r (see Biological Assessment section).
VI.	Mitig	atior	1		
				-	itigation that should be considered for the temporary and permanent et for each alternative:
SAT	INC	MIS	N/A		
				A.	Discuss mitigation measures for the direct and indirect wetland impacts. All relevant, reasonable mitigation measures that could alleviate the effects of the project must be identified. Wetland mitigation must be developed in the following priority order:
					1. Avoid.
					2. Minimize – limit degree or magnitude.
					3. Rectify by repair, rehab or restore.
					4. Reduce impact over time.
					5. Compensate.

SAT	INC	MIS	N/A				
				В.	Reference the mitigation measures described in the NEPA/SEPA Mitigation Memo.		
	Note: NEPA/SEPA Mitigation Memos and mitigation design are generally outside the scope of this document and are addressed under separate cover.						
VII.	Refe	erenc	es				
Lists	all puł	olished	l source	s of	data and other information used in preparing the report.		
SAT	INC	MIS	N/A				
				A.	List all published sources of data and other information used in preparing the report.		
VIII.	VIII. Appendices						
Lists	all nec	essary	appen	dice	s attached to the report.		
SAT	INC	MIS	N/A				
				A.	Wetland Assessment Report.		
				B.	Map clearly showing existing and proposed alternatives in impact areas.		
				C.	Map clearly showing areas of potential direct wetland impacts.		

regulates, indicate where all the inventoried habitat areas are, and identify the regulations relating to the management and development of these areas. If available, these maps should be reviewed to help identify critical areas.

The GMA also requires counties and cities that meet certain population and growth rate criteria to adopt planning policies and comprehensive plans. WDFW makes recommendations for comprehensive plan contents related to fish and wildlife habitat and critical area regulations, but local jurisdictions develop the final plans and regulations. The result is inconsistencies in regulations among jurisdictions. Unless the local laws conflict with state law, WSDOT must be consistent with local regulations. Local planning departments should be contacted to determine requirements that could affect a project. See Section 450.02 for details on the GMA.

436.03 Policy Guidance

(1) WSDOT State Habitat Connectivity Policy

On July 23, 2007, the Secretary of Transportation signed an Executive Order called "Protections and Connections for High Quality Natural Habitats." This WSDOT policy provides guidance on how considerations for ecological sustainability will be built into the long term planning and day-to-day work of WSDOT transportation professionals. It recognizes the significant effects of roads on wildlife and the steps that can be taken to reduce or eliminate those that are potentially harmful. Among those effects is the barrier effect created by some roads on some species. The construction and operation of a highway system can have significant ecological effects. Healthy wildlife populations must have access to sufficient high quality habitat. Habitat patches need to be accessible and of sufficient size to provide for survival and successful reproduction. Maintaining the accessibility of these habitat patches is essential for the long-term conservation of species. WSDOT and WDFW are co-leads in a multi-organization partnership devoted to an analysis of statewide habitat connectivity patterns that will establish conservation priorities. Integrating the results of this work with transportation project development will result in significant benefits to the state's wildlife resource. The statewide habitat connectivity analysis will be used to bring priority wildlife considerations to transportation planning, project development and operation. The Executive Order and a list of projects in which wildlife crossing issues play a key role are available online at:

http://www.wsdot.wa.gov/Environment/Biology/bio_esa.htm#HabitatConn

436.04 Interagency Agreements

The following interagency agreements pertaining to wildlife, fish, and vegetation are available at:

http://www.wsdot.wa.gov/Environment/Compliance/agreements.htm

(1) May 2008 MOA Between WSDOT and WDFW

The May 2008 Memorandum of Agreement (MOA) between WSDOT and WDFW addresses transportation construction work in state waters. The purpose of the MOA is to establish and promote mutual agreement of the needs and mandates of the respective agencies, to facilitate the consistent and efficient administration of Hydraulic Project Approvals (HPAs) for transportation projects under Chapter 77.55 RCW (Construction Projects in State Waters), and Chapter 220-110 WAC (Hydraulic Code Rules); to ensure that fish passage at transportation projects is facilitated through Chapter 77.57 RCW (Fishways, Flow, and Screening); and facilitate the implementation of the Chronic Environmental Deficiency Program. The MOA supersedes previous MOUs concerning work in state waters (2002), work in watercourses (1996) and the 1990 MOU between WSDOT and WDFW.

Implementation of the MOA is intended to facilitate cooperation and dialogue between the signatory agencies to meet objectives of both agencies. The agreements' objectives encourage WDFW and WSDOT to work cooperatively to:

- 1. Ensure that state transportation projects protect fish life and habitats, and ensure the consistent and efficient administration of Chapter 77.55 RCW (Construction Projects in State Waters), Chapter 220-110 WAC (Hydraulic Code Rules), and Chapter 77.57 RCW (Fishways, Flow, and Screening) for transportation projects.
- 2. Ensure that WSDOT can fulfill its mission to safely, effectively, and efficiently build, operate, and maintain state transportation systems, and WDFW can fulfill its mission to provide sound stewardship for fish and wildlife.
- 3. Identify and evaluate potential project impacts on fish life and habitat, and to reach accord on mitigation measures early in the design process to facilitate project design and construction while ensuring protection of fish life.
- 4. Provide active support, funding, training and guidance within and between WDFW and WSDOT to meet the intent of this agreement.

The Legislature tasked WDFW and WSDOT in 2004 with developing a series of programmatic General Hydraulic Project Approvals (GHPAs) for common maintenance and construction activities. See Section 540.15 for current programmatic GHPAs. The permits and related documents are online at:

http://www.wsdot.wa.gov/environment/Programmatics/default.htm

In the event that a GHPA is unavailable, the MOA also describes processes for early coordination on scheduled projects and maintenance activities as well as definitions and procedures for WSDOT on unscheduled, expedited or emergency projects.

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EIS environmental impact statement
ERS environmental review summary
ESA environmental site assessment
ESO Environmental Services Office
FHWA Federal Highway Administration
GIS geographic information system

HAZWOPER Hazardous Waste Operations and Emergency Response

ISIS Integrated Site Information System

LBP Lead Based Paint

MTCA Model Toxics Control Act

L&I Washington State Department of Labor and Industries

NEPA National Environmental Policy Act

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List

OSHA Occupational Safety and Health Act

PCB polychlorinated biphenyl

PE Project Engineer

POTW publicly owned treatment works
QA/QC Quality Assurance/Quality Control

RCRA Resource Conservation and Recovery Act

RCW Revised Code of Washington

REC Recognized Environmental Conditions
RI/FS remedial investigation & feasibility study
RSEF Regional Sediment Evaluation Framework

SDWA Safe Drinking Water Act

SEPA State Environmental Policy Act
SMS Sediment Management Standards

SPCC Spill Prevention, Control and Countermeasures

TCLP toxicity characteristic leaching procedure

TSCA Toxic Substances Control Act
TSD storage, transfer and disposal

USDOT United States Department of Transportation
USEPA United States Environmental Protection Agency

USC United States Code

UST underground storage tank

WAC Washington Administrative Code

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(3) Glossary

Many terms are commonly used to describe different types of hazardous materials that require special handling and disposal when encountered at construction sites. "Hazardous materials" is a common term for all types of contaminated or hazardous media, including dangerous waste, hazardous waste, toxic waste, problem waste, hazardous substances, and petroleum products. Definitions of these terms from state and federal statutes are given below, and the relationships between them are shown in Figure 447-1. See **Appendix B** for a general glossary of terms used in the EPM.

Solid Waste – State regulations define solid waste as all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, problem wastes as defined below, and recyclable materials. Federal regulations define solid waste as any garbage, refuse, or sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities. Solid waste includes hazardous and problem wastes.

Hazardous Material – A generic term for any medium that contains organic or inorganic constituents considered toxic to humans or the environment. This term includes dangerous waste, problem waste, petroleum product, and hazardous substances

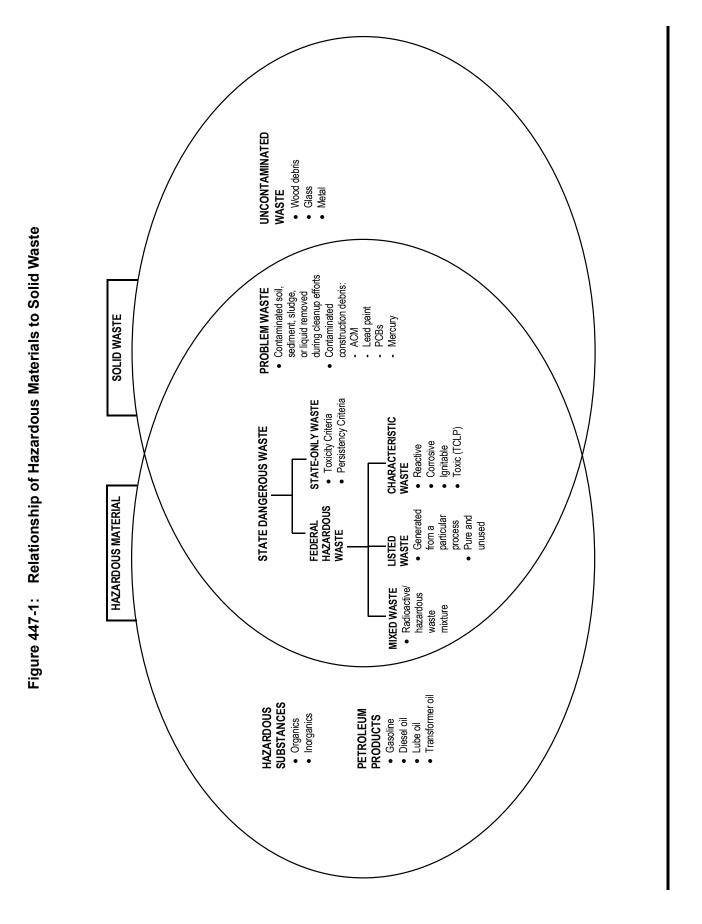
Hazardous Substance – Hazardous substance designated under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 42 USC § 9601(14) and 40 CFR 116 that pose a threat to public health or the environment. Federal regulation of hazardous substances excludes petroleum, crude oil, natural gas, natural gas liquids or synthetic gas usable for fuel. State regulation of hazardous substances is more stringent and includes petroleum products, which are addressed by the Model Toxics Control Act (MTCA). Federally-designated hazardous substances are listed in 42 USC § 9601(14) and can be accessed online at:

http://www.law.cornell.edu/uscode/42/9601.html

The MTCA definition for hazardous substances can be accessed online at:

http://www.ecy.wa.gov/biblio/9406.html

Hazardous Waste – Solid wastes designated in 40 CFR Part 261 and regulated as hazardous and/or mixed waste by the United States Environmental Protection Agency (USEPA). Mixed waste includes both hazardous and radioactive components; waste that is solely radioactive is not



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regulated as hazardous waste. Hazardous waste includes specific listed waste that is generated from particular processes or activities or exhibits certain reactive, corrosive, toxic, or ignitable characteristics. Hazardous waste is also regulated by the Washington State Department of Ecology (Ecology) as dangerous waste.

Dangerous Waste – Solid wastes designated in WAC 173-303-070 through 173-303-100 as dangerous, or extremely hazardous or mixed waste. Dangerous waste includes all federal hazardous waste, plus certain wastes exhibiting specific characteristics based on toxicity and persistence. The regulatory requirements for disposal of dangerous waste, are more complex than the requirements for disposal of problem waste and place additional responsibility both on WSDOT as the generator and on the contractor for safe handling and disposal.

Problem Waste – Pursuant to Chapter 173-350 WAC (as amended in March 2005), problem wastes are defined as soil, sediment, sludge, and liquids (groundwater, surface water, decontamination water, etc.) that are removed during the cleanup of a remedial action site, or other cleanup efforts and actions, that contain hazardous substances but are not designated as dangerous waste pursuant to Chapter 173-303 WAC. Examples of the type of waste streams that may be disposed of under this definition include:

- Contaminated soil, sludge, groundwater, surface water, and construction demolition debris containing any combination of the following compounds: petroleum hydrocarbons, volatile and semivolatile organic compounds, polynuclear aromatic hydrocarbons, polychlorinated biphenyls (PCBs), heavy metals, herbicides, and pesticides.
- Contaminated dredge spoils (sediments) resulting from the dredging of surface waters of the state where contaminants are present in the dredge spoils at concentrations not suitable for open water disposal and the dredge spoils are not dangerous wastes and are not regulated by Section 404 of the Clean Water Act.
- Asbestos-containing material (ACM).

447.02 Applicable Statutes and Regulations

This section lists the primary statutes and regulations applicable to hazardous materials issues. See **Appendix D** for a list of statutes referenced in the EPM. Permits and approvals required pursuant to these statutes are listed in **Sections 540.24** and **540.25**.

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Methodology and Report Sizing

The methodology for completing a report will depend on whether the project needs a full, mid, or low level discipline report as determined in the ERS/ECS form (see Section 447.05(1)). Guidance for "right sizing" a report and details for how to prepare a Hazardous Materials Discipline Report is provided in two separate documents maintained on WSDOT's Web site at:

http://www.wsdot.wa.gov/Environment/HazMat/Guidance.htm#DisciplineRpts

A two stage approach is appropriate when the level of detail needed for a report is uncertain because the project is in the early development phase and many elements (i.e., design and acquisition plans or funding priorities) are subject to change. Phasing the work in two steps can assist WSDOT in investing the appropriate amount of resources to the project. The first step only identifies existing conditions and references the standard impacts and mitigation measures posted on WSDOT's Web site (see link above). If needed, the second step (later in the project schedule) evaluates the impacts based specifically on the project design plans and evaluates the mitigation options and cost estimates to gauge the significance of the impact to the environment and the project schedule and budget. A report including a summary of the affected environment, project-specific impacts and mitigation measures (standard impacts and mitigation measures in an appendix), cost estimates for project-specific mitigation measures and recommendations for further investigations should be developed.

This two stage approach is incorporated in the example Scope of Work available at the link above and the flow chart shown in **Exhibit 447-1**. A checklist for WSDOT staff who review full sized reports is provided in **Exhibit 447-2**.

(3) Phase I Environmental Site Assessment (Phase I)

Phase I ESAs are typically conducted for property acquisition. The purpose of a Phase I ESA is to conduct a detailed inquiry into specific parcels of land that may be contaminated and to assess impacts on design, construction and WSDOT's liability. A Phase I ESA may be conducted independently or in support of a discipline report. RCW 47.01.170 allows for visual inspections of properties to conduct Phase I ESAs.

The All Appropriate Inquiry (AAI) rule (40 CFR Part 312) was developed by the USEPA and issued on November 1, 2005, to define standards for Phase I ESAs. The American Society for Testing and Materials (ASTM) issued ASTM E1527-05 to conform to the AAI rule. The primary purpose of the new rule is to provide established methods for AAI (described in Section 447.03) in order to qualify for several liability protections.

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WSDOT's procedure is to follow the ASTM E1527-05 standard for Phase I ESAs to the extent practical. Depending on project needs, some portions of the standard Phase I ESA may be omitted as long as the reasons for the deviation are clearly documented (e.g., no interviews were conducted, no property title was obtained). Any deviations should be stated clearly in the scope of work section at the beginning of the Phase I ESA report. Refer to the USEPA Web site for detailed information regarding the AAI rule. The final rule can be viewed on the USEPA Web site at:

http://www.epa.gov/brownfields/regneg.htm

The revised standard ASTM E1527-05 can be obtained at the ASTM Web site for a fee:

1 http://www.astm.org

WSDOT staff have access to ASTMs on an internal Web site without a fee. Additional information regarding Phase I ESAs is maintained on the WSDOT Web site at:

http://www.wsdot.wa.gov/Environment/HazMat/Guidance.htm#PhaseI

(4) Phase II Environmental Site Assessment (Phase II)

A Phase II ESA is a limited field investigation that is conducted when the Phase I ESA or discipline report determines that there is a potential hazardous materials risk that is not predictable and may affect the environment, the project, and/or WSDOT's liability. The objective of a Phase II ESA is to characterize the nature and extent of potentially contaminated media prior to construction activities.

A Phase I ESA or sufficiently detailed hazardous materials discipline report is normally required before a Phase II ESA is undertaken. The Phase II investigation is based the information obtained in previous reports, planned areas of construction, and acquisition plans. Phase IIs are limited in scope and will not always identify all the contamination on the site. Unidentified contamination may be encountered during construction that was not anticipated (e.g., unknown USTs).

Often times a Phase II ESA is not necessary when site-specific documentation exists in the Ecology files for the planned acquisition or construction activities areas. The determination to conduct a Phase II ESA should be made in coordination with the WSDOT Hazardous Materials Program. ASTM issued ASTM E1903-97(2002) to establish guidelines for conducting Phase II ESAs. The revised standard ASTM E1903-97(2002) can be obtained at the ASTM Web site for a fee:

1 http://www.astm.org

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WSDOT staff have access to ASTMs on an internal Web site without a fee. Additional information regarding Phase II ESAs is maintained on the WSDOT Web site at:

http://www.wsdot.wa.gov/Environment/HazMat/Guidance.htm#PhaseII

(a) Methodology – Field

Most Phase II ESA methods involve some form of investigative sampling or analysis. Investigative technologies are selected based on knowledge of how hazardous materials respond in specific geologic conditions and analytical requirements.

Phase II field sampling and report writing should be performed only by or under the guidance of qualified staff that possess 40-hour HAZWOPER training and hold one or more of the following professional licenses/qualifications:

- Licensed geologist
- Professional engineer

Soil and groundwater samples collected for laboratory analysis are the primary means for identifying the presence and extent of contamination hazardous to human health or the environment. A number of techniques are used to obtain soil and water samples, depending on local conditions and known subsurface geology.

Selection of analytical methods and proper sample-handling techniques are critical to a successful Phase II ESA. Most laboratory methods are selected based on the specific objective of the Phase II ESA, although many are dictated by specific provisions of regulatory documents. Laboratory analysis must be performed by Ecology-certified laboratories. Improper or incomplete sample or analysis planning may invalidate sampling results or make the results legally indefensible. Proper handling of samples is also crucial to obtaining usable and defensible data, which includes selecting correct sample containers, proper storage and transport, meeting holding time requirements, and following strict chain-of-custody procedures.

Prior to field sampling, proper rights-of-entry are usually required and should be obtained with the assistance of the project office and Real Estate Services. Additional information on right-of-entry procedures is contained in Section 447.07.

(b) Reports

The report prepared for a Phase II ESA depends on the nature of the project and the findings of the Phase I ESA and/or discipline report. Recognized Environmental Concerns (RECs) contained in a Phase I ESA should be summarized in a Phase II report.

Hazardous Materials Chapter 447

Phase II reports must contain, at a minimum, the following information:

- Discussion of the physical environment and its relationship to the potential types of contamination, its influence on where contamination may be found, and how it affects the extent of contaminant migration.
- Selection of sampling techniques, and the rationale for the type of sampling.
- Discussion of the laboratory analysis performed.
- Analytical results summary tables. Copies of raw laboratory data with quality assurance/quality control (QA/QC) methods and verification must be placed on an electronic device and attached as an appendix to the Phase II report.
- Conclusions and recommendations, which should include identification of any contamination found, its likely extent, potential impact on human health and the environment, and a remediation strategy.

Since a Phase II ESA involves limited field sampling, a detailed sampling and analysis plan will not always be necessary, and the conclusions and remediation strategy recommendations are not necessarily the end of the site assessment process. Depending on the details of the project and property acquisition, the site may require a sampling and analysis plan, extensive sampling and/or perhaps long term monitoring. The remedial strategy formulated at this time can serve as no more than a first guess. However, regional offices should expect sufficient detail to make a decision regarding property acquisition or design modifications from the information contained in a Phase II report.

(5) Phase III or Remedial Investigation/Feasibility Study (Phase III)

A Phase III ESA or Remedial Investigation/Feasibility (RI/FS) generally includes conducting a thorough investigation of a site and preparing a remediation plan. The Phase III ESA may be prepared independently, in support of a discipline report being prepared for environmental documentation, or during the construction phase (see Section 620.08).

A Phase III ESA can be extensive, time-consuming, and expensive. Consequently, for WSDOT, a Phase III ESA should be conducted only when long-term monitoring and cleanup responsibilities have been assumed by WSDOT in order to purchase the property or Ecology has issued an order, and funds are available, for WSDOT to perform a cleanup.

Chapter 457 Section 4(f) Evaluation

(2) Section 106 — National Historic Preservation Act

Section 106 of the National Historic Preservation Act of 1966 [codified at 16 USC 470f and implemented through 36 CFR 800] requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. Section 106 even applies to historic properties that have not yet been listed or formally determined to be eligible for listing on the National Register of Historic Places, including eligible properties that have not yet been discovered or evaluated (such as archaeological sites). The Section 106 review process satisfies NEPA and SEPA requirements for historic properties.

(3) Section 6(f) — Land and Water Conservation Fund Act

This statute [codified at 16 USC 4601-8(f)] applies to all projects that would convert any public outdoor recreation land purchased or developed with financial assistance from the Land and Water Conservation Fund to a use other than public outdoor recreation. The Secretary of the Interior must approve such conversions, which require the substitution of other recreation property of at least equal fair market value and reasonably equivalent usefulness and location, and a determination that the conversion is in accord with the existing comprehensive statewide outdoor recreation plan.

(4) Other

None identified.

457.03 Policy Guidance

(1) FHWA's Section 4(f) Policy Paper

FHWA's Section 4(f) Policy Paper, issued March 1, 2005, provides comprehensive guidance on preparing Section 4(f) evaluations. The complete paper (html format), is available on the FHWA Web site at:

http://environment.fhwa.dot.gov/projdev/4fpolicy.asp

(2) Local Plans and Policies

City and county comprehensive plans and parks and recreation plans may contain information and policy guidance on any Section 4(f) property, including significant trees or groves, wildlife habitat, parks, and recreation areas. These documents should be considered in preparing a Section 4(f) Evaluation, and they may be useful for identifying concurrent or joint planning or development opportunities that, if acted on through a written agreement, may prevent a property that is formally reserved for a future transportation use from being subject to Section 4(f) requirements.

Section 4(f) Evaluation Chapter 457

457.04 Interagency Agreements

None. See **Appendix E-1** for a guide to all interagency agreements referenced in the EPM.

457.05 Technical Guidance

The following technical guidance is available to help environmental managers determine if a Section 4(f) evaluation or programmatic Section 4(f) evaluation is needed for a transportation program or project in accordance with the process described in **Section 457.01** and prepare one when needed in cooperation with the appropriate USDOT agency. **Figure 457-2** illustrates the standard Section 4(f) review and approval process with FHWA. (Section 4(f) evaluations are used to document the lack of a feasible and prudent avoidance alternative to using Section 4(f) property and demonstrate that all possible planning is included in the project to minimize harm to the property resulting from the use. They are also used to prove that a project, and any planned mitigation, will also satisfy other requirements that may apply to the Section 4(f) property, including Section 6(f) of the Land and Water Conservation Fund Act.)

If a Section 4(f) evaluation is not needed (because the program or project will not require the use of Section 4(f) property, because the impact of the program or project on any Section 4(f) property will be de minimis, as determined by FHWA and FTA, or because there is a feasible and prudent avoidance alternative), then this conclusion should be documented and explained in the project file and summarized in any NEPA EIS, EA, or CE prepared for the program or project.

(1) WSDOT Section 4(f) Evaluation Checklist

A WSDOT Section 4(f) Evaluation Checklist is attached as **Exhibit 457-1**. A Section 4(f) evaluation should cover all of applicable items in the checklist.

(2) FHWA Environmental Guidebook

The FHWA web-based Environmental Guidebook provides guidance on a wide variety of environmental topics including Section 4(f) and Section 6(f). The guidebook is available at:

http://environment.fhwa.dot.gov/guidebook/index.asp

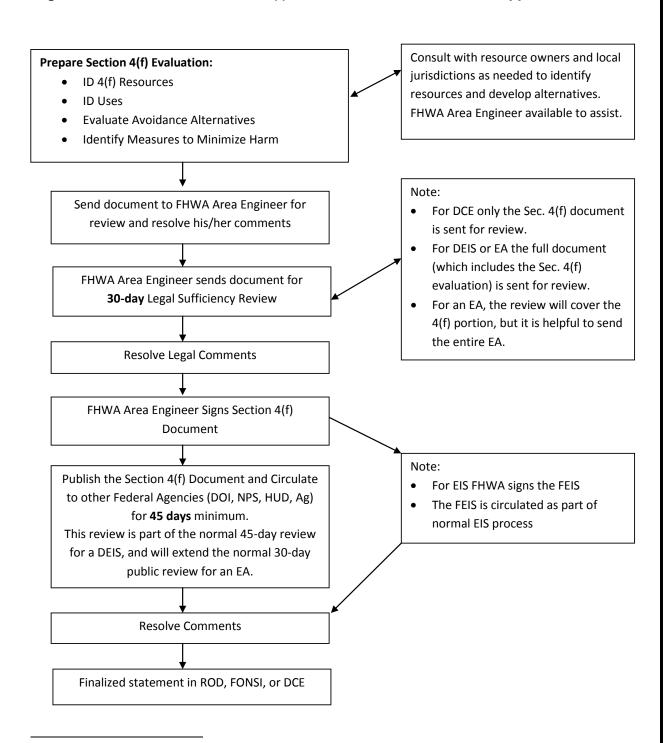
(3) FHWA Technical Advisory T 6640.8A

FHWA Technical Advisory T 6640.8A (October 1987) gives guidelines for preparing and processing environmental documents including Section 4(f) evaluations. Section IX gives detailed guidance on the format and content of a Section 4(f) evaluation. For details, see the FHWA Web page at:

http://www.fhwa.dot.gov/legsregs/directives/techadvs/t664008a.htm

Chapter 457 Section 4(f) Evaluation

Figure 457-2: Standard Section 4(f) FHWA Document Review and Approval Process¹



¹ Note: This process is not applicable to *de minimus* determinations or Programmatic 4(f) Evaluations.

Section 4(f) Evaluation Chapter 457

(4) FHWA Section 4(f) Evaluation Guidance

FHWA guidance on the preparation, circulation, and coordination of Section 4(f) Evaluations is provided at:

http://environment.fhwa.dot.gov/projdev/4feval.asp

(5) FHWA Interstate Highway System Section 4(f) Exemption Guidance

FHWA guidance on the Interstate Highway System Section 4(f) Exemption authorized under SAFETEA-LU is provided at:

http://www.fhwa.dot.gov/hep/interstate4f.htm

(6) FHWA De Minimis Impact Guidance

FHWA guidance for determining de minimis impacts to Section 4(f) property, as authorized under SAFETEA-LU, is provided at:

http://www.fhwa.dot.gov/hep/guidedeminimis.htm

(7) FHWA Section 4(f) Programmatic Evaluations

In some cases, WSDOT may have the option of preparing a programmatic Section 4(f) evaluation. A programmatic Section 4(f) evaluation specifies conditions which, if met, will satisfy the requirements of Section 4(f) by demonstrating that there are no feasible and prudent avoidance alternatives and all possible planning has been included in the project to minimize harm or mitigate for adverse impacts and effects. These conditions generally relate to the type of project, the severity of impacts to Section 4(f) property, the evaluation of alternatives, the establishment of a procedure for minimizing harm to the Section 4(f) property, and adequate coordination with appropriate entities.

FHWA has prepared five programmatic evaluations to be used for projects having impacts on resources covered by Section 4(f). However, a project must demonstrate that it meets the criteria set forth in any programmatic evaluation that it chooses to use, including the following:

Historic Sites – Final Nationwide Section 4(f) Evaluation and Approval for Federally Aided Projects with Minor Involvements with Historic Sites (December 23, 1986).

Historic Bridges – Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges (July 5, 1983).

Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges – Final Nationwide Section 4(f) Evaluation and Approval for Federally Aided Projects with Minor Involvements with Public Parks, Recreation Lands, and Wildlife and Waterfowl Refuges (December 23, 1989).

Chapter 457 Section 4(f) Evaluation

Bikeways and Walkways – Negative Declaration/Section 4(f) Statement [i.e., Determination of Nonsignificance] for Independent Bikeway or Walkway Construction Projects (May 23, 1977).

Net Benefits – Final Nationwide Programmatic Section 4(f) Evaluation and Determination for Federal-Aid Transportation Projects that have a net benefit to a Section 4(f) property (April 20, 2005).

These documents are available online on FHWA's Web site:

http://environment.fhwa.dot.gov/projdev/4fnspeval.asp

The fact that the nationwide programmatic Section 4(f) evaluations are approved does not mean that these types of projects are exempt from or have advance compliance with the requirements of Section 4(f). Section 4(f) does apply to each of the types of projects addressed by the programmatic evaluations. Furthermore, the programmatic Section 4(f) does not relax the Section 4(f) standards; i.e., it is just as difficult to justify using Section 4(f) property with a programmatic Section 4(f) evaluation as it is with a non-programmatic Section 4(f) evaluation.

These programmatic Section 4(f) evaluations may be applied only to projects meeting the applicable criteria. How the project meets the criteria must be documented. The documentation needed to support the conclusions required by the programmatic Section 4(f) evaluation is comparable to the documentation needed for an non-programmatic Section 4(f) evaluation.

The primary advantage of a programmatic evaluation is that it saves time. A programmatic evaluation does not require a draft, legal sufficiency review, or circulation, because its framework and basic approach have already been circulated and agreed upon by the US Department of the Interior (DOI).

These programmatic Section 4(f) evaluations streamline the amount of interagency coordination that is required for a Section 4(f) evaluation. Interagency coordination is required only with the official(s) with jurisdiction and not with the federal Department of Interior (DOI), Department of Agriculture, or Department of Housing and Urban Development (unless the federal agency has a specific action to take, such as DOI approval of a conversion of land acquired using Land and Water Conservation Funds).

(8) WSDOT Web-based Section 4(f) and Section 6(f) Guidance

Technical guidance on Section 4(f), including Programmatic Section 4(f) Evaluation criteria, and Section 6(f) is available on the WSDOT Web site at:

http://www.wsdot.wa.gov/Environment/Compliance/Section4Fguidance.htm

Section 4(f) Evaluation Chapter 457

(9) WSDOT GIS Workbench

Useful information may be obtained from the WSDOT GIS Workbench, a GIS interface for internal WSDOT users only. It has numerous layers of natural and cultural environmental resource management data. WSDOT works with federal, state, and local agencies to maintain a collection of the best available data for statewide environmental analysis. Available data sets relevant to Section 4(f) property include city, county, state, and national parks; national and state recreation areas; wildlife refuges; and National Register Historic Sites, as well as archaeological sites (which have restricted access). For information on how to access the GIS Workbench, see:

http://www.wsdot.wa.gov/Environment/GIS/workbench.htm

For a list of current data sets, see the WSDOT Web site at:

http://www.wsdot.wa.gov/mapsdata/geodatacatalog/default.htm

457.06 Permits and Approvals

Federal

- Section 520.06 Section 4(f) Approval
- Section 520.11 Section 6(f) Approval

457.07 Non-Road Project Requirements

Ferry, rail, aviation, and non-motorized transport systems are generally subject to the same policies, procedures, and permits that apply to road projects.

457.08 Exhibits

Exhibit 457-1 Section 4(f) Evaluation Checklist

(1) Typical Permitting Timelines

Figure 510-1 illustrates the statutory permit timeline for several commonly needed permits, showing the basic steps and timelines set forth in regulations. By contrast, **Figure 510-2**, shows a "typical" timeline based on anecdotal information about how long it actually takes to obtain permits given real world opportunities and limitations. Both figures illustrate critical paths that must be managed to keep multiple permits on track.

(2) Scheduling the Permitting Work

Since a project can be easily affected by permitting issues, creating and maintaining a work plan and timeline is essential. A visual image of the permitting work flow and how it relates to the design process can be helpful. Figure 500-2 gives a broad example of how this relationship can be modeled for a mainline channelization project requiring minor amounts of new right of way. Figure 510-3 shows the relationship in more detail, illustrating the level of effort over time during design and PS&E development. Because roadside ditches are often at the edge of the right of way, the Rapanos Supreme Court case decision has increased the complexity of assessing the hydrological connections and potential for impacts on wetlands and surface waters under Corps jurisdiction. Ideally, the amount of fill is minor and coverage can be obtained under a General (Nationwide) Section 404 Permit. The wetland mitigation plan or report, required by the permit, may affect stormwater facilities and other design elements. Because stormwater impacts are associated with dredging and filling, an NPDES stormwater permit is needed. Normally, coverage can be obtained under the General Construction Stormwater General Permit. A county or city noise permit may be needed for nighttime work.

Another useful time management tool is a permitting work plan that provides useful information for each permit, such as agency contact information, submittal requirements, internal and agency review dates, fees and current status. This type of work plan is illustrated in **Exhibit 510-2** for a new Park and Ride lot.

(3) Time-Saving Tips from Ecology

The Office of Regulatory Assistance, Environmental Permit Service Center has prepared the following tips to help applicants understand, plan for and navigate the permitting process:

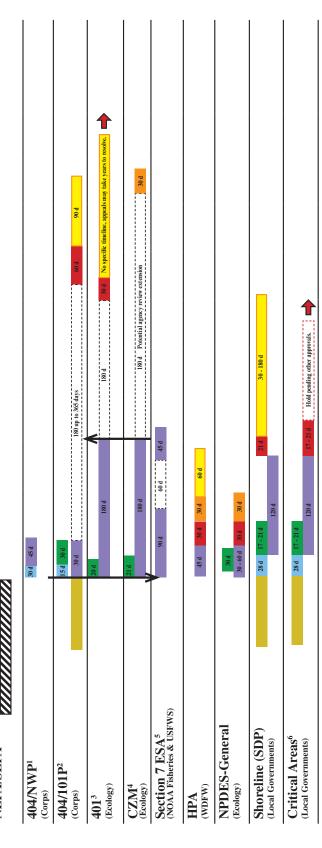
Know the Players – Find out what agencies and permits may be involved, time frames, costs, and information needed for permit approval.

Act Early – Contact agency staff early in the project scoping phase, before making a large investment in property, time, or project design. If enough design detail can be provided to the agencies, considerable time can be saved by identifying the crucial permits that will require a long lead time.

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Month 23

Month 21 Month 19 Month 17 Month 15 Month 13 Figure 510-1: Statutory Permit Timeline Month 11 Month 9 Month 7 Month 5 Month 3 Month 1 Potential Agency Review Extension Hold Pending Other Approvals Application Completeness Public Notice/Comment Post-Appeal Decision Applicant Appeal Agency Review Preapplication Public Appeal NEPA/SEPA



Regulation states that agency decision will be within 45 days of receipt of complete application, unless more information is needed.

Regulation states that agency review schedule will be tied to federal permit application schedule. Regulation allows one year for permit review, but an agreement between the Corps and Ecology requires Ecology to process NWP

Regulation states that agency concurrence or objection to federal consistency determination within 180 days if federal approval needed of federal funding used.

Regulation states that consultation process should conclude within 90 days unless applicant has consented to 60-day extension. Consultation period can be further extended with applicant consent. (Services have additional 45 days

for preparation of Biological Opinion.)
*Local jurisdiction can approve permit upon close of appeal process, but can hold issuance until other related approvals (e.g., HPA, Corps, NPDES) are received.

Month 23 Month 21 Month 19 Month 17 Month 15 Month 13 Figure 510-2: Typical Permit Timeline Month 11 Month 9 Month 7 Month 5 Month 3 Month 1 Potential Agency Review Extension Hold Pending Other Approvals Application Completeness Public Notice/Comment Post-Appeal Decision Applicant Appeal Agency Review Preapplication Public Appeal

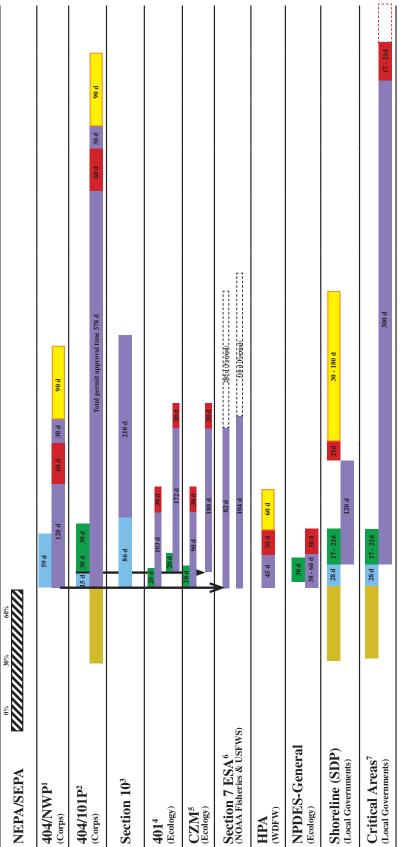
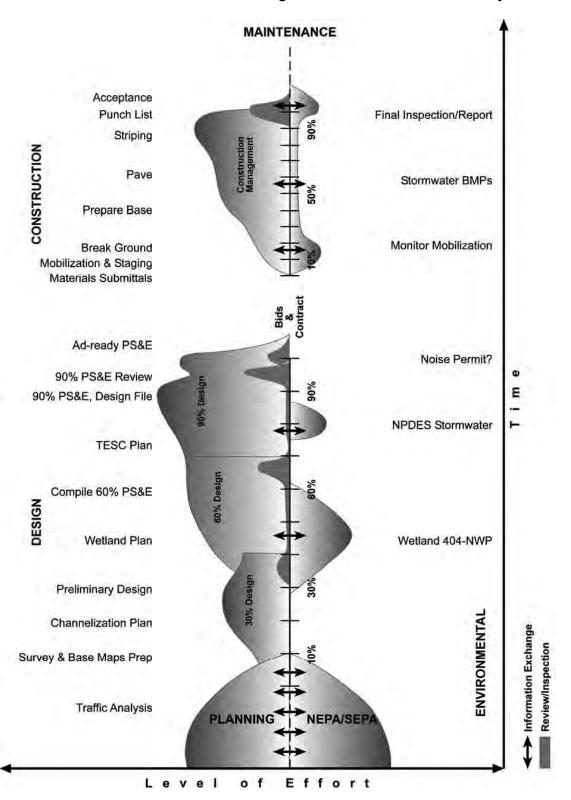


Figure 510-3: Level of Effort Required During Design, Construction, and Environmental Review and Permitting – Mainline Channelization Project



Chapter 540 State Approvals

permit is cancelled. A water right certificate is issued by Ecology to certify that the water user has the authority to use a specific amount of water under certain conditions. Recording the certificate with the county auditor completes the process of obtaining a water right.

Prerequisite Permits and Approvals – In watershed planning under the Watershed Management Act (RCW 90.82), Ecology may await the results of the water quantity and instream flow studies before making a water right permit decision.

Water rights using one cubic foot per second or less of surface water or of 2,250 gallons per minute or less of groundwater for any purpose are exempt from SEPA.

Related Permits and Approvals – A water system approval may be needed from Washington State Department of Health (DOH) for new water systems, alterations to existing systems, and new sources of supply (see below, **Section 540.25**).

Interagency Agreements – None applicable.

Processing Time – Depending on the complexities of water availability, the number of other applications on file, and water use in the watershed, a decision on a new water right may take anywhere from months to years. Ecology has a substantial backlog of pending applications and has adopted priorities for processing these requests.

Fees – Varies, \$50 minimum.

(2) How to Apply

Applications for a new water right, changed water right, or assignment of water right, and other forms can be downloaded from:

1 http://www.ecy.wa.gov/programs/wr/forms/forms.html

JARPA – Not applicable.

Preapplication Conference – Advisable for most applications.

Special Information Requirements – Varies by whether the application is a new source, change of use, or change of ownership.

Public Notice – Published by the applicant after Ecology has accepted the application.

Submitting the Application – Submit the completed application form with appropriate maps or other information to the Ecology regional office where the project is located.

Agency and Public Review – Once an application is complete and accepted, Ecology sends WSDOT a legal notice of the application to publish in the county (or counties) where water is or will be withdrawn, stored, and used.

State Approvals Chapter 540

The notice is to be published once a week for two consecutive weeks, followed by a 30-day public comment period.

After Ecology receives an affidavit of publication from WSDOT, the agency begins an investigation. Ecology can deny, approve, or approve with conditions.

Appeal Process – Within 30 days after being notified of a decision, WSDOT or other interested parties may appeal Ecology's decision to the state Pollution Control Hearings Board.

(3) For More Information

Please see **Chapter 433**, Groundwater, for information on environmental documentation initiated during the NEPA/SEPA process, including relevant statutes, interagency agreements, policy and technical guidance.

Ecology's Web site has more information, including application forms and instructions; policies, procedures and case law; and frequently asked questions. See:

http://www.ecy.wa.gov/programs/wr/rights/water-right-home.html

Ecology has prepared schematic diagrams illustrating the application and review process for obtaining a new water right or changing an existing water right. These schematics are available online at:

1 http://www.ora.wa.gov/resources/schematics list.asp#wr

(4) Permit Assistance

Before beginning work on this permit, contact the WSDOT regional office environmental staff for guidance (see **Appendix G** for list of contacts).

For additional assistance from Ecology, contact Water Resources staff at the Ecology regional office in which the project is located.

Southwest Regional Office: 360-407-6300 Northwest Regional Office: 425-649-7000 Central Regional Office: 509-575-2490 Eastern Regional Office: 509-329-3400

For general inquiries concerning the statewide Water Resources Program, contact Andrew Albrecht, 509-329-3541, aalb461@ecy.wa.gov.

Public Water System Approval – New or Alterations to Existing Systems

(1) Overview

Under state law, the DOH has review and approval authority over water system plans, project reports, and construction documents for new public drinking water systems and alterations or additions to existing systems. In many areas, the local health department does the review and approval for smaller systems (see Section 550.10).

Chapter 590 Tracking Environmental Commitments

590.01 Introduction

590.02 Tracking Environmental Commitments and PS&E

590.03 Exhibits

590.01 Introduction

This chapter reviews the process for tracking commitments made during the NEPA/SEPA process and permitting phase, ensuring that all commitments made throughout project development are incorporated into contract documents.

590.02 Tracking Environmental Commitments and PS&E

All environmental commitments are entered in the Commitment Tracking System (see **Section 490.02**) from which the Commitment File is established (see *Design Manual*, Section 220.10). Use the Commitment Tracking System (CTS) "Assign Responsibility" feature to determine which commitments are the contractor's responsibility and which are WSDOT's responsibility (see **Exhibit 590-1**).

Commitments that are the contractor's responsibility must be addressed appropriately in PS&E through a Standard Specification, a General Special Provision, a Standard Plan, or a Special Provision (see Exhibit 590-2). Often permit language is not appropriate for contract language and consequently, commitments must be translated into language that is biddable by the contractor, buildable in practice, and enforceable. That translation should be a joint effort between Environmental, Design, and Construction staffs. Please refer to Project Delivery Memo #09-01 Environmental Commitments Meeting and Project Delivery Memo #09-03 Environmental Permits/Documentation and Contract Appendices for more information.

- http://www.wsdot.wa.gov/publications/fulltext/ProjectDev/ProjectDeliveryMemos/Memo09-03.pdf
- http://www.wsdot.wa.gov/publications/fulltext/ProjectDev/ProjectDeliveryMemos/Memo09-01.pdf

Use the "Contract Document By Project" report (see Exhibit 590-3) to facilitate the Environmental Commitments Meeting and to ensure project-specific GSPs and Special Provisions are included at final PS&E. The outcome of this effort should be a clear understanding of the individual commitment, and whether it is covered within the contract. This clarity helps ensure the contractor knows what their environmental responsibilities are and how they are covered in the contract. It also assures the permitting agency that WSDOT is fulfilling its commitments.

The outcome of this effort should be a clear understanding of the individual commitment, and whether it is covered within the contract. This type of clarity will help ensure that the contractor knows what his environmental responsibilities are, and how they are covered in the contract. It will also assure the permitting agency WSDOT is fulfilling its commitments.

590.03 Exhibits

Exhibit 590-1	Commitment Tracking System "Assign Responsibility" Screen
Exhibit 590-2	Commitment Tracking System "Assign Responsibility Detail" Screen
Exhibit 590-3	Commitment Tracking System "Contract Document by Project" Report

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Washington State
Department of Transportation

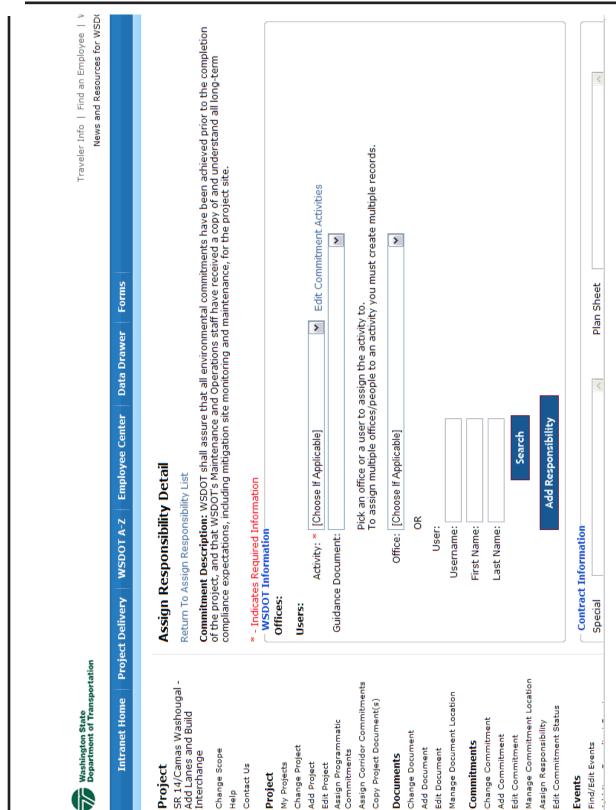
Responsibilities Document Title: 2004 Compliance Implementing Agreement Between WSDOT & Ecology Unassigned Unassigned Unassigned WSDOT shall development and Prepare, Implement Monitor, Report Prepare, Other Forms environmental commitments have been achieved prior to the commitment tracking system to dentify all project commitments contractor, construction project office staff, and supporting that WSDOT's Maintenance and Operations staff have received a copy of and understand all construction, and ferry service completion of the project, and expectations, including mitigation site monitoring and maintenance, for the project performance for maintenance, WSDOT shall track and report permitting. All project commitments shall be clearly WSDOT shall assure that all Data Drawer non-compliance events for made during planning, NEPA/SEPA, design, and periodic assessment of statewide compliance communicated to the ong-term compliance implementation of a Show Responsibility:

All

Assigned

Unassigned operations. **Employee Center** Documents and Commitment Responsibility: Construction, Maintenance Construction Construction Assign Responsibility WSDOT A-Z Document Type: Implementing Agreement Water Quality/Surface Water, Wildlife, Fish, and Vegetation, Wetlands Change Document(s) All Disciplines All Disciplines Disciplines **Project Delivery** Manage Commitment Location Assign Corridor Commitments SR 14/Camas Washougal Manage Document Location Intranet Home Copy Project Document(s) Add Non-Compliant Event Edit Commitment Status Add Lanes and Build Change Commitment Assign Programmatic Assign Responsibility Change Document Add Commitment Edit Commitment Commitments Find/Edit Events Change Project Add Document Edit Document Interchange Change Scope Commitments Documents Add Project Edit Project My Projects Contact Us Project Project Events

Commitment Tracking System "Assign Responsibility Detail" Screen



610.03 Interagency Agreements

This section lists the interagency agreements that have requirements applicable to construction. **Chapter 620** references agreements applicable to each element of the environment. Further information on agreements is found in **Chapter 420** through **Chapter 470**.

Appendix E-1 includes a list of all of WSDOT's environmental interagency agreements, in the form of Memoranda of Understanding (MOUs), Memoranda of Agreement (MOAs) or Implementing Agreements.

Appendix E-1 also includes a matrix and an accompanying narrative showing which agreements have provisions applicable to construction.

These interagency agreements are accessible on line via the following Environmental Services Office link:

http://www.wsdot.wa.gov/environment/compliance/agreements.htm

(1) Memorandum of Understanding on Environmental Issues

This August 1988 MOU between WSDOT and Ecology describes procedures that the two agencies will use to enhance coordination and cooperation on environmental issues in order to provide for timely and efficient review of environmental documents and permit applications. It also provides authority for and directs the two agencies to develop and execute implementing agreements for specified program-specific areas as supplements to the MOU. With regard to construction, the MOU indicates that WSDOT will educate project inspectors to be aware of Ecology's areas of regulation and enforcement and immediately investigate any permit violations identified by Ecology.

(2) Compliance Implementing Agreement

The November 2004 Compliance Implementing Agreement between WSDOT and Ecology is designed to assist in obtaining and maintaining WSDOT compliance with state <u>surface</u> water quality standards, including compliance with Section 401 Certifications, Section 402 NPDES permits, and other Ecology Orders and approvals. That agreement stipulates the following:

- All project commitments are clearly communicated to contractor, construction project office staff, and supporting design offices.
- All sensitive areas are fenced as a first order of work.
- Inspectors be assigned to monitor for environmental compliance.
- WSDOT PE notifies Ecology prior to beginning work.
- PEs must consult with environmental inspector to ensure work in sensitive areas is compliant.
- WSDOT must develop and implement a commitment tracking system.

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• Ensure all WSDOT commitments have been completed prior to completion of the project and commitments, and long-term maintenance needs have been communicated to Maintenance and Operations.

(3) Implementing Agreement on State Surface Water Quality Standards

The February 1998 Implementing Agreement between Ecology and WSDOT regarding compliance with state surface water quality standards, currently being revised, is intended for use by WSDOT and WSDOT contractors. The agreement covers general conditions for concrete work, erosion control, hazardous spill prevention and control, spill reporting, and specific provisions for erosion control in new roadway and bridge construction projects. (See Section 430.04.)

Provisions in the 1998 agreement applicable to construction are:

- Notify Ecology prior to starting work on a project that is large, contentious or when a significant amount of work in the water will take place (so Ecology can respond to any citizen complaints).
- Review conditions with selected contractor. Copy of agreement on the job site at all times.

(4) May 2008 MOA Between WSDOT and WDFW

This May 2008 agreement between WDFW and WSDOT replaces previous agreements including work in state waters (6/02). See Section 436.04.

The MOA describes how WSDOT and WDFW will cooperate to ensure that state transportation projects protect fish life and habitats, and ensure consistent and uniform application of RCW 77.55 (construction in state waters). WAC 220-110 (hydraulic code rules), RCW 77.57 (fishways, flow, and screening), and facilitate the implementation of the Chronic Environmental Deficiency Program.

Provisions applicable to construction are:

- WSDOT will train project inspectors on how to monitor projects for HPA compliance.
- If project design changes or circumstances arise requiring change in design or construction, WSDOT contacts WDFW to discuss potential modifications to HPA.

(5) MOU on Highways Over National Forest Lands

This March 2002 MOU establishes procedures for coordinating transportation activities on National Forest lands. See Section 450.04.

(5) Permits and Approvals

Below is summary information on several permits related to water quality. See **Appendix F** for a complete list of permits that may apply to the project.

(a) Stormwater Management and Erosion Control

The NPDES General Permit to Discharge Stormwater Associated with Construction Activity is administered by the Department of Ecology to regulate stormwater discharge on construction sites for each project that disturbs one acre or more. Low risk projects between one and five acres can apply for an Erosivity Waiver through Ecology. During project development, an NPDES Construction Stormwater Permit covering activity in the WSDOT right of way will have been obtained. The permit should be kept in close proximity to the project site, along with the permit coverage letter, the Temporary Erosion and Sediment Control Plan, Spill Prevention Control and Countermeasures Plan, and the Site Log Book. For any stormwater discharge resulting from construction activity outside the WSDOT right of way, including offsite equipment staging areas, material storage areas, and borrow areas that have not been included in WSDOT's NPDES permit for the project, the contractor will be responsible for obtaining the necessary permits.

See WSDOT's *Highway Runoff Manual* M 31-16, **Section 430.05**, for guidance on stormwater planning and how to develop TESC Plans.

For information about the NPDES permit see Section 540.04.

(b) Section 404 Permit

Under the Clean Water Act, a Section 404 permit from the <u>U.S. Army</u> Corps of Engineers (<u>Corps</u>) is required for discharging, dredging, or placing fill materials within waters of the United States, including wetlands. The permit is required to construct temporary sedimentation basins. If applicable, the permit will have been obtained during project development and should be included in the contract special provisions. See **Section 520.02** for details.

If the contractor's method of operations, weather conditions, design changes, or other factors affect waters of the United States in ways not anticipated or represented in the permit, the Project Engineer will work with the region environmental staff, the assigned representative of the Corps, and the contractor to modify the existing permit or obtain a new or revised one as appropriate.

(6) Non-Road Requirements

Please see Section 430.07 for background.

620.05 Wildlife, Fisheries, and Vegetation

Transportation activities affecting fish species listed as threatened or endangered under the Endangered Species Act (ESA) include:

- Release of construction-related chemicals, products and by-products.
- Clearing, grubbing and filling.
- Runoff from impervious surfaces.
- Activities in areas having listed fish or potential for listed fish habitat.
- Stormwater discharge into a river or stream with a low-flow designation.

See Chapter 436 for background on requirements related to wildlife, fisheries, and vegetation that may apply to the project.

(1) Applicable Statutes and Regulations

Please see Section 436.02 for details.

(2) Policy Guidance

None identified.

(3) Interagency Agreements

See Section 610.03 for information on the May 2008 Memorandum of Agreement between WDFW and WSDOT, which is applicable to wildlife protection during construction. See also Section 436.04.

(4) Technical Guidance

Please see Section 436.05 for details. Also see the WSDOT *Highway Runoff Manual* M 25-30 regarding stormwater effects on fish species listed under the ESA.

Timing restrictions may apply to projects in the vicinity of spawning, nesting, migrating, or wintering habitat of many species, whether or not they are listed as threatened or endangered. For species not protected under the ESA, priority habitats and species recommendations by WDFW may be applied to protect their habitat. In-water work and noise generating activities such as pile driving and blasting are of the greatest concern. Procedures listed in WSDOT's *Roadside Manual* include:

- Clearly flag or place construction fencing around all habitat areas and features that are to be protected.
- Erosion control should be implemented and maintained during construction to minimize impacts to aquatic species.
- Emphasize sensitive areas during preconstruction meetings. Note the kinds of activities not allowed in sensitive areas (clearing, grading, stockpiling materials, staging vehicles and equipment).

Local and state agencies also require documentation for certain activities when hazardous materials are encountered. For example, the local clean air agency may require documentation and notification for activities such as demolition or abatement of ACM, Ecology requires documentation for UST removal and site characterization and local health authorities may regulate and require documentation for disposal of solid waste to landfills.

c) Transportation

Regulations regarding hazardous materials packaging, manifesting, transporting, and other requirements are set forth by the USDOT under Chapter 49 CFR. Most of these regulations are listed in Parts 172 and 173. A summary of information regarding transportation and manifesting requirements for hazardous materials titled Guide for Hazardous Materials Shipping Papers can be viewed online at the National Transportation Library Web site:

- http://ntl.bts.gov/DOCS/hmtg.html
- 49 CFR Part 173, Shippers General Requirements for Shipments and Packaging, can be viewed online at:
- http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title49/49cfr173 main 02.tpl

When contaminated media are classified through analytical testing as a hazardous waste, WSDOT is considered to be the generator and is responsible for obtaining hazardous waste permits (see **Section 540.24**). The transport/disposal facility or ESO office can assist with forms and regulations pertaining to hazardous waste transport and disposal.

- **Disposal Service Vendors/Contractors** WSDOT is mandated to use state contracts for the disposal of hazardous materials from WSDOT sites. Contractors may use other vendors of their choice.
- State Contract No. 03505 Hazardous Waste Handling and Disposal Services covers several types of hazardous waste, such as waste oil, waste paint, solvents, batteries, and Polychlorinated biphenyls (PCBs). This contract can be viewed online at:
 - http://www.ga.wa.gov/pca/contract/03505c.doc
- State Contract No. 00301 Disposal of Contaminated Solid and Liquid Waste covers contaminated soil, sediments, sludge, construction demolition debris, ACM, and contaminated liquids, including groundwater, surface water, stormwater, and decontamination water. This contract expired in April 2007 and

the General Administration office is in the process of creating a new contract. Until a new contract is created, WSDOT is required to acquire three bids from disposal contractors. The expired contract can be viewed online at:

- http://www.ga.wa.gov/pca/contract/00301c.doc
- State Contract No. 11601 Spent Lighting, Computer, and Electronic Equipment Collection, Reuse, Recycling, and Disposal Services can be viewed online at:
 - http://www.ga.wa.gov/pca/contract/11601c.doc

(b) Spills

Project construction often requires the use of hazardous materials, such as gasoline, diesel, motor oil, hydraulic fluid, etc., that are used in construction equipment and vehicles. Cement, paint, liquid asphalt binder, and emulsified asphalt are also used to renovate or construct buildings, pedestrian walkways, parking areas, and roadways. Spills caused by the contractor are the contractor's responsibility to clean up, report, and dispose of properly.

For all WSDOT construction contracts, a Spill Prevention, Control and Countermeasures (SPCC) plan must be completed and implemented in accordance with WSDOT *Standard Specifications* 1-07.15(1). SPCC plans are required to describe potential spill sources, spill prevention methods, response procedures and reporting requirements. The WSDOT Hazardous Materials Program developed a number of documents and guidance materials to assist contractors in developing a SPCC plan that meets WSDOT contract requirements. These include templates, an example written plan and a site map illustrating the level of detail and the type of information expected in a SPCC plan. Training for evaluating SPCC plans is available for WSDOT staff who review SPCC plans. These documents and training information are available through the WSDOT Web site at:

http://www.wsdot.wa.gov/Environment/HazMat/SpillPrevention.htm

Spills of hazardous materials at a WSDOT site should be reported to the WSDOT Project Engineer (PE). Once notified, the PE evaluates the circumstances and follows the Environmental Compliance Assurance Procedures (ECAP) described in Section 1-2.2K(1) of the WSDOT *Construction Manual* M 41-01 as appropriate.

All spills should be contained, cleaned up and disposed of properly. Labeling is of prime importance when dealing with known or suspected contaminated wastes and materials. All containers must have a legible "Hazardous Materials"/"Analysis Pending" label including the project site, container contents (soil, water, and rags), type and amount of material spilled, date, location and contact information. "Hazardous Materials" or

(2) Compliance Implementing Agreement

The November 2004 Compliance Implementing Agreement between WSDOT and Ecology is designed to assist in obtaining and maintaining WSDOT compliance with state <u>surface</u> water quality standards, including compliance with Section 401 Certifications, Section 402 NPDES permits, and other Ecology Orders and approvals.

This agreement, which primarily applies to compliance during the construction phase, includes a provision that maintenance and operations staff have received a copy of and understand all long-term compliance expectations, including mitigation site monitoring and maintenance.

(3) Implementing Agreement on State Surface Water Quality Standards

The February 1998 Implementing Agreement between Ecology and WSDOT regarding compliance with state surface water quality standards, currently being revised, is intended for use by WSDOT and WSDOT contractors. The agreement covers general conditions for concrete work, erosion control, hazardous spill prevention and control, spill reporting, and specific provisions for erosion control in new roadway and bridge construction projects. (See Section 430.04.)

The Implementing Agreement also covers activity-specific conditions for the highway and ferry system maintenance activities listed below. Note that many of these activities are also covered by more recent General (programmatic) NPDES and Hydraulic Project Approval permits; see Section 540.08 and Section 540.15, respectively, for details.

- Beaver dam removal
- Ferry system maintenance pile driving and removal
- Highway bridge and ferry terminal transfer span cleaning and painting
- Bridge pier, structure, bridge protection device, stream bank and roadway protection maintenance and repair.
- Debris removal from bridge piers, piles, braces and abutments
- Ditch, stream, and culvert cleaning and maintenance
- Ferry sacrificial structures, wing walls, dolphins
- Maintenance and relocation of navigation buoys
- Maintenance of stormwater control and treatment structures

The General NPDES and General Hydraulic Project Approval (GHPA) permits are available online at:

http://www.wsdot.wa.gov/environment/Programmatics/

(4) MOA Between WDFW and WSDOT - May 2008

This May 2008 agreement between WSDOT and WDFW replaces previous agreements including Compliance with the Hydraulic Code (8/90), Fish Passage Guidelines – Culvert Installations (8/90, and Work in State Waters (12/96). See Section 430.04.

The MOA describes how WSDOT and WDFW will cooperate to ensure that state transportation projects protect fish life and habitats, and ensure consistent and uniform application of RCW 77.55 (construction in state waters) and WAC 220-110 (hydraulic code rules). It includes procedures for emergency/disaster maintenance and repair. **Appendix F** is maintenance guidelines.

(5) Implementing Agreement – Alternative Mitigation Policy Guidance for Aquatic Permitting

In this February 2000 agreement, WSDOT agrees to comply with consensus on mitigation policy among agencies responsible for aquatic resource mitigation. Applies to Ecology and WDFW in issuing or reviewing permits, documents, appeals or compensation agreements under Clean Water Act, Shoreline Management Act, or Hydraulic Code. See Section 430.04.

Provisions applicable to maintenance and operations:

- Monitoring is required. If mitigation is failing and corrective actions not successful, applicant must contact permitting agencies and use an adaptive management approach to achieve stated performance standards.
- Compliance monitoring may be performed by agencies.
- Mitigation site to be protected permanently or at least for the life of the project.

(6) MOA – Wetland Compensation Banking

This February 1994 agreement between WSDOT, Ecology, WDFW, and several federal agencies, establishes principles and procedures for establishing, implementing, and maintaining the WSDOT wetland compensation bank program. See Section 431.04.

Requirements for inspections and monitoring.

- Semi-annual inspections for five years after as-builts accepted, and annually thereafter.
- WSDOT will use inspection checklist in **Appendix E** to document inspections.
- **Appendix F** is elements of a monitoring plan and report, includes monitoring checklist
- WSDOT retains responsibility for inspections if management and maintenance of the site is transferred to another agency or entity.

Chapter 790 Implementing Environmental Commitments

790.01 Introduction

790.02 Implementing Environmental Commitments During Maintenance and Operations

790.03 Exhibits

790.01 Introduction

As a project progresses through the design and PS&E phases (Part 4 and Part 5 of this manual) many commitments in the form of mitigation plans and permit conditions are made to the various resource agencies to protect the environment, reduce social impacts, and protect cultural and historic resources. Some of those commitments must be fulfilled during maintenance and operations.

Interagency agreements between WSDOT and resource agencies also include environmental commitments. Those applicable to maintenance and operations are summarized in **Section 710.03** and discussed in **Chapter 420** through **Chapter 470**. **Appendix E-1** includes an index of all WSDOT environmental interagency agreements, in the form of Memoranda of Understanding (MOUs), Memoranda of Agreement (MOAs) or Implementing Agreements. **Appendix E-1** also includes a matrix and an accompanying narrative showing which agreements have provisions applicable to maintenance and operations.

In addition, some statutory requirements do not involve permits or approvals, but still apply to WSDOT maintenance; for example, dangerous waste and underground storage tank requirements. See Chapter 710 and Chapter 720 for requirements applicable to maintenance and operations.

Some of those commitments are unique to a given project. Other requirements are standard operating procedure (SOP) for WSDOT and can be found in the *Standard Specifications* M 41-10, WSDOT *Construction Manual* M 41-01 and *Right of Way Manual* M 26-01.

790.02 Implementing Environmental Commitments During Maintenance and Operations

The guidance in this section is intended to ensure compliance with environmental commitments when potential problems occur within the right of way during maintenance fieldwork. It includes procedures for making sure there is a smooth handoff to Maintenance and Operations when a construction project is completed, promptly notifying the appropriate individuals if a potential problem arises, and coordinating appropriate response measures to prevent violations.

(1) Post-Project Construction Requirements

When a construction project has been completed, the Project Engineer (PE) should notify the Regional Environmental Manager (REM). The Regional Environmental Manager, in consultation with the PE, should then brief Regional Maintenance Superintendents and Maintenance Environmental Coordinators (RMEC) on any environmental permit conditions with post-construction requirements and on all mitigation sites in the project area needing avoidance or protection. Perform this briefing according to regional procedures.

(2) In Water Work

Requirements for communication with the appropriate resource agencies are defined in the *Regional Road Maintenance Endangered Species Act Program Guidelines*. Specific notification from maintenance crews to the resource agencies is required in situations described below.

(a) In Water Work

The Regional Maintenance Environmental Coordinator (RMEC) must be notified before beginning any work activity in or adjacent to sensitive or aquatic areas, including streams, wetlands, lakes, marine water, or other waters of the state. Any work in these areas may require some form of environmental review and/or notification, although in most cases formal permits are not be required. This is coordinated through the RMEC. If prior notification is not possible due to an emergency action, the Regional Environmental Office must be informed on the first business day following an emergency declaration.

(b) Emergency In Water Work

The U.S. Army Corps of Engineers (Corps) and the Washington State Department of Fish and Wildlife (WDFW) require immediate notification for any emergency work in or affecting waters of the state. For emergency response work involving in water work, maintenance staff must immediately call the local area habitat biologist with jurisdiction in the affected watershed. If the biologist cannot be reached, maintenance staff must call the WDFW Emergency Hotline, 360-902-2537.

Maintenance staff should also contact Corps liaison for that region or fax work information to 206-764-6602 before proceeding with work. For emergency work outside normal working hours, contact Muffy Walker at 206-764-6915. Work information should include location, nature, and method of work. Take photographs if possible. If a Corps permit is required, work may result in an after-the-fact permit or initial corrective measures which are processed as a violation.

The RMEC or Regional Environmental Office will make the additional notifications required for in water work on the first business day following the response notification. Following notification, the Environmental Office will commence environmental permitting and endangered species impact assessment as required.

The initial emergency response work is to stabilize the affected area only, minimizing adverse environmental effects, and using BMPs to avoid further impact. The normal design, construction, and permit procedures are followed for permanent repairs, as necessary, after stabilizing the initial emergency condition.

(3) ESA/General Permit Reporting Requirements

During the course of maintenance work, crews are required to report work that is conducted within priority sensitive areas on the personal data assistant (PDA) ESA Compliance checklist (consult the Roadside-Sensitive Management Area Atlas, fish sticks, or pavement markings). For instructions on completing this checklist, see *Best Management Practices Field Guide for ESA, Section 4(d), Habitat Protection* (March 2004). The checklist documents WSDOT's compliance with ESA Section 4(d) "take" limits and general permits.

Permit compliance, maintenance category, BMP, and other reports are developed and generated on request. Additional BMPs utilized in the field, along with associated comments, are evaluated and discussed at the statewide RMEC meetings. Any recommended improvements are forwarded to the Regional Forum for consideration.

(4) Environmental Compliance Assurance Procedure (ECAP) for Maintenance Work Activities

Purpose: The purpose of this procedure is to *avoid environmental problems* that could occur during highway maintenance activities and to understand the appropriate response measures to prevent violations. This procedure is a supplement to the Programmatic Field Book for Maintenance Work and serves as ECAP for maintenance as provisioned in WSDOT General HPA permits and consistent with this chapter.

Notification and Response Procedures:

(a) Spill Prevention and Reporting Procedures

All maintenance activities will have available spill kits used for small spills related to equipment failure. If you have spilled oil or other hazardous material into state waters, or you observe a sheen from petroleum products on the water, the RMEC must be contacted and notification provided to the following 24-hour numbers:

National Response Center: 1-800-424-8802

Washington Emergency Management Division: 1-800-258-5990

Ecology Regional Offices for the county where the spill is located:

Southwest Regional Office: 360-407-6300 Northwest Regional Office: 425-649-7000 Central Regional Office: 509-575-2490 Eastern Regional Office: 509-329-3400

When making notification, be prepared to give the following information: Where is the spill? What spilled? How much spilled? Who spilled? Is anyone cleaning up the spill? Are there resource damages (e.g., dead fish)? And who is reporting the spill?

(b) Planned In Water Maintenance Work

Maintenance work in or adjacent to streams, wetlands, lakes, or marine water may require some form of environmental review and/or notification, although in most cases formal permits may not be required. This is coordinated through the Regional Maintenance Environmental Coordinator (RMEC). *The RMEC must be notified before beginning any in water work activity.* If prior notification is not possible due to an emergency action, then follow the emergency notification procedures below.

(c) Emergency In Water Maintenance Work

Emergency response notification procedures for in water work have been developed and are made available by each Region Environmental Office. These notification procedures must be followed for all emergency in water work. The WDFW through the state Hydraulic Code requires immediate notification for any emergency work in waters of the state. The WDFW emergency hotline number is 360-902-2537. The RMEC or Region Environmental Office will make additional notifications as necessary following their region emergency notification procedures.

(d) Adaptive Management (Implementing BMPs and Corrective Actions)¹

During the course of maintenance work, BMPs are installed and monitored. BMP monitoring occurs both during and after the maintenance work to evaluate the effectiveness.

1. The site monitor (lead technician or designee) will notify the lead technician or the RMEC of any apparent failures to meet BMP outcomes.

¹Consistent with Element 6 Adaptive Management of the ESA Regional Road Maintenance Program and expired IL 4057 ECAP for Maintenance.

2. Recommendations for corrective action will be provided as appropriate. If a problem occurs, corrective action will be taken to avoid impacts and to achieve BMP outcome.

(e) Violation Reporting²

If a maintenance action results in a notification from a resource agency that a violation has occurred the following reporting process will be followed:

- 1. On-site maintenance personnel will immediately notify the RMEC and Maintenance Superintendent. Notification will include a description of the activity that triggered the violation, time and location of work, potential solutions to the problem, how to prevent the situation in the future, and any related constraints or safety issues.
- 2. RMEC serves as the lead for resolving the issue that caused the violation, and will notify the Region Environmental Manager and Headquarters M&O Water Quality Manager.
- 3. The Headquarters M&O Water Quality Manager will elevate further notification consistent with Figure 790-1.

790.03 Exhibits

None.

²References Chapters 790 Implementing Environmental Commitments of the WSDOT *Environmental Procedures Manual*.

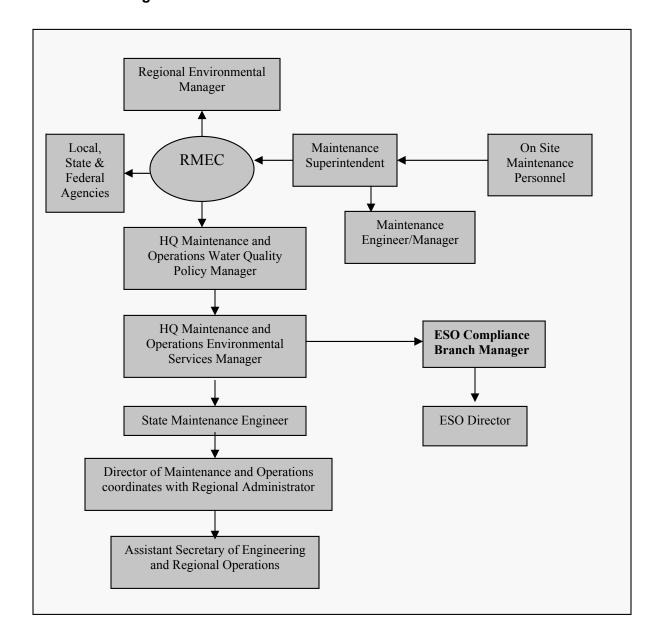


Figure 790-1: Maintenance Violation Notification Process

Chapter 820 Surplus Real Property Lease and Disposal

820.01 Introduction

820.02 Environmental Considerations in Surplus Real Property Disposal

820.03 Non-Road Project Requirements

820.04 Exhibits

Key to Icons

→ Web site.*

820.01 Introduction

This chapter reviews the environmental issues to be addressed <u>and the process</u> to be used when WSDOT is considering <u>lease or disposal</u> of real property. Procedures are given in the *Right of Way Manual* (M 26-01), Chapter 11, Property Management.

WSDOT may determine that a real property owned and under the jurisdiction of WSDOT is no longer required for transportation purposes, or that a non-highway use of WSDOT property should be allowed. If it is in the public interest, WSDOT may lease or dispose of the property by sale or exchange to entities listed in the *Right of Way Manual*, or as detailed in RCW 47.12.120 for leases and RCW 47.12.063 for disposal.

Region Real Estate Services (RES) offices periodically review the properties they manage and determine if any should be declared surplus. They also periodically receive requests to lease portions of WSDOT ROW from the public. Region Real Estate Services determines if these actions are appropriate by preparing a lease/disposal review package for circulation through various disciplines of WSDOT, including Region environmental staff. Region environmental staff reviews the property for consideration of the environmental issues listed in **Section 820.02**. If the Region review results in a recommendation to lease or dispose of the property, the Region RES office submits the lease/disposal package to the Headquarters Real Estate Services Office. The Environmental Services Office (ESO) will provide technical assistance and advice at the request of the Region/Modal Environmental Services Manager.

^{*}Web sites and navigation referenced in this chapter are subject to change. For the most current links, please refer to the online version of the EPM, available through the WSDOT Environmental Services Office (ESO) home page: http://www.wsdot.wa.gov/environment/

820.02 Environmental Considerations in Surplus Real Property Disposal/Lease

The Region/Modal Environmental Manager determines if a property is eligible for lease or disposal. The decision should take into account the environmental effect of the action, including:

- The potential of the property to fulfill a future transportation need such as stormwater treatment, stream enhancement, noise walls, bridge replacement and roadway realignment.
- The potential for the property to provide environmental mitigation.
- The potential for the proposed land use to adversely impact the safe and proper operations or maintenance of the highway.
- The need to comply with NEPA documentation requirements before seeking FHWA approval of the action.

When FHWA approval is required before WSDOT can make a lease or disposal decision, WSDOT's action triggers a federal nexus. If a federal nexus is created NEPA, NHPA, and ESA documentation must be completed prior to lease or disposal (23 CFR 771.11(d)(6)). Two common real estate decisions requiring FHWA concurrence or approval include: (1) when surplus property being considered for lease or disposal is located on an interstate highway, and (2) if a parcel considered for lease or disposal was purchased with Federal funding and the parcel will be sold for less than fair market value. See **Chapter 410** and **Chapter 411** for Environmental review process and documentation. The Region RES staff will notify Region Environmental Staff if NEPA has been triggered. NEPA is not required for non-interstate leases or disposals sold at or above fair market value.

Property is not appropriate for lease or disposal if:

- It is suitable for retention to restore, preserve, or improve the scenic beauty adjacent to the highway. See **Chapter 459** for background on scenic quality.
- It is suitable for inclusion in WSDOT's wetlands inventory. See **Chapter 431** for background on wetland requirements.
- It is needed for a park and ride lot, flyer stop, or other programmed or known future highway needs
- It is suitable for a water quality or flow control treatment facility location for future proposed widening or retrofit requirements.
- Hazardous material is present on the site or any necessary cleanup has not been completed. See Chapter 447 for background on hazardous material requirements.

If none of these environmental uses for the property become evident during the review, the property may be suitable for lease or disposal. The Region/Modal Environmental Manager will determine the appropriate level of environmental documentation and resources to be expended for each property review. A typical office review of a candidate property includes completion of an Environmental Checklist (**Exhibit 820-1**). However, in some situations, completion of the checklist may not be necessary due to the size, location, or existing knowledge about the property. In other situations, the checklist may not provide enough information, and an Environmental Classification Summary (ECS) form should be completed. The following documentation options may be considered:

- Completion of a memo to file explaining why it was not necessary to complete the Environmental Checklist documenting that there are no endangered species or historic/cultural concerns associated with the property. At a minimum, the following statement should be included in the explanation: "Complies with NEPA (23 CFR 771-117.d List,), ESA, and Sec. 106 of the NHPA." And an explanation should be provided for why no further documentation is needed, such as "the lease/disposal will not lead to construction." Attach a copy of the memo to the STELLENT file.
- Completion of the STELLENT environmental checklist.
- Completion of an H&LP or State Environmental Classification Summary (ECS). If this option is chosen, the Region/Modal Environmental Office must attach a copy of the ECS to the STELLENT surplus property review package.
- The proposed lease or disposal may be addressed as part of a larger action in an Environmental Assessment (EA) or Environmental Impact Statement (EIS). If this option is selected, the appropriate document must be referenced in the comment section of the STELLENT surplus property review package and short summary of the environmental issues attached.

The Headquarters Environmental Services Office will not conduct a separate environmental review of lease and disposal actions unless specifically requested to do so by the Region/Modal Environmental Manager. If the Region recommends lease or disposal of the property, the Environmental Checklist, or other documentation is submitted to Headquarters by Real Estate Services.

Disposal of Pit Sites

If the property to be disposed of is or was a pit site, the following additional documentation needs to be included in the disposal review package:

- Pit Evaluation Report (DOT Form 350-023)
- Reclamation Plan

Hazardous Materials Assessment and Remediation Reports. Any suspected hazardous materials on WSDOT property should be reported to the Area Maintenance Superintendent (inside the operating right of way), Region Real Estate Services Manager (outside the operating right of way), and/or Capital Facilities Manager. Areas of responsibility may overlap, but these managers maintain close lines of communications and will make sure the ESO and Attorney General's office are consulted for assessment, remediation, and determination of liability. See Section 447.05 for background technical guidance.

820.03 Non-Road Project Requirements

Procedural requirements for property used by ferry, aviation, and rail facilities are the same as described above for highways.

820.04 Exhibits

Exhibit 820-1 Environmental Checklist for Surplus Property Lease/Disposal

Exhibit 820-1

Environmental Checklist for Surplus Property <u>Lease/Disposal</u>

Section 1 - Required I.C. Number	Project	Date
addressed by: A. Memo to File (S B. Documentation C. Completion of a	as Part of an EIS or EA Title:an ECS (See Attached)	st, ESA and Sec 106 of NHPA and has been
•	Section 2 of this form I if D above is checked	
1. Type of Review ☐ Field ☐ Office	2. Past or Recent Land Use Pasture/CropPit/Stock Piles Residential/BusinessUndeveloped R	☐ Other oadside
Describe existing veget	tation at the site (including type and size of trees if known	1)
		,
Describe the topograph	ny of the site (Flat, gently or steeply sloping, hummocky, e	etc.)
5. Is surface water presen	nt on or near the property? ☐ Yes ☐ No	
What Type? (River, lak		w close?
Describe	site holds surface water at any time during the year? ential as a future wetland mitigation site? Yes	☐ Yes ☐ No
Is there evidence of pot	tential hazardous materials? (Fuel tanks, dump sites, asp	ohalt waste, etc.) ☐ Yes ☐ No
Describe		
	d for future storm water treatment or storage needs?	☐ Yes ☐ No ☐ N/A
10. Could this site be used Describe	d for future storm water treatment or storage needs? otential for reducing or maintaining reduced traffic noise I	
10. Could this site be used Describe 11. Could this site have porture Describe Section 3 - Required	otential for reducing or maintaining reduced traffic noise I	
10. Could this site be used Describe 11. Could this site have po Describe Section 3 - Required Do You Recommend Di	otential for reducing or maintaining reduced traffic noise I	
10. Could this site be used Describe 11. Could this site have porture Describe Section 3 - Required	otential for reducing or maintaining reduced traffic noise I	
 10. Could this site be used Describe 11. Could this site have portion Describe Section 3 - Required Do You Recommend Dimensional 	otential for reducing or maintaining reduced traffic noise I	
10. Could this site be used Describe 11. Could this site have properties Section 3 - Required Do You Recommend Di Yes Explain No Explain	otential for reducing or maintaining reduced traffic noise I	evels? Yes No
10. Could this site be used Describe 11. Could this site have properties Section 3 - Required Do You Recommend Di Yes Explain No Explain	otential for reducing or maintaining reduced traffic noise I I - Recommendation and Review isposal?	evels? Yes No
10. Could this site be used Describe 11. Could this site have por Describe Section 3 - Required Do You Recommend Di Yes Explain No Explain Recommendation By Title	otential for reducing or maintaining reduced traffic noise I I - Recommendation and Review isposal?	evels? Yes No
10. Could this site be used Describe 11. Could this site have properties Section 3 - Required Do You Recommend Di Yes Explain No Explain Recommendation By Title Specialty Review By	otential for reducing or maintaining reduced traffic noise I I - Recommendation and Review isposal?	evels? Yes No Date
10. Could this site be used Describe 11. Could this site have properties Section 3 - Required Do You Recommend Di Yes Explain No Explain Recommendation By Title Specialty Review By Title	otential for reducing or maintaining reduced traffic noise I I - Recommendation and Review isposal?	evels?

HOV 3+	High Occupancy Vehicle requirement of three or more persons per vehicle	
HPA	Hydraulic Project Approval	
HPAs	High probability areas	
HRM	Highway Runoff Manual	
HSL	Hazardous Site List (state database)	
HSP	Highway System Plan	
HSS	Highways of Statewide Significance	
IA	Implementing Agreement	
IDT	Interdisciplinary Team	
IL	Instructional Letter	
ISA	Initial Site Assessment	
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991	
ITC	Investment Tax Credit	
ITS	Intelligent Transportation System	
JARPA	Joint Aquatic Resources Permit Application	
LA	Landscape Architect	
LAG	Local Agency Guidelines	
LBP	Lead-Based Paint	I
L _{dn}	Day-night sound level	
L&I	Washington State Department of Labor and Industries	I
LEP	Limited English Proficiency	
Leq	Equivalent sound level	
L _{eq(24)}	Equivalent sound level for a 24-hour period	
LESA	Land Evaluation and Site Assessment	
LOP	Letter of Permission	
LOS	Level of Service	
LOV	Letter of Verification	
LTAA	Likely to Adversely Affect	I
LTAP	Local Technical Assistance Program	
LUST	Leaking underground storage tank	
LWCFA	Land and Water Conservation Fund Act (Federal)	
LWD	Large Woody Debris	I
MAP	Maintenance Accountability Program	
MAP Team	Multi-Agency Permitting Team	
MBI	Mitigation Bank Instrument	
MBTA	Migratory Bird Treaty Act	Į
MDNS	Mitigated Determination of Nonsignificance (SEPA)	

Milligrams per kilogram mg/kg mg/L Milligrams per liter **MHHW** Mean Higher High Water

MMPA Marine Mammal Protection Act **MOA** Memorandum of Agreement **MOU** Memorandum of Understanding MPO Metropolitan Planning Organization MS4 Municipal Separate Storm Sewer System

MSA Magnuson-Stevens Act **MSAT** Mobile Source Air Toxic **MSDS** Material safety data sheet **MTCA** Model Toxics Control Act

MTIP Metropolitan Transportation Improvement Program

MTP Metropolitan Transportation Plan

NAAQS National Ambient Air Quality Standards

NAC Noise Abatement Criteria

NAT Notice of Action (taken) (SEPA)

NE No Effect

NEPA National Environmental Policy Act

NF National Forest

NFIP National Flood Insurance Program National Forest Management Act NFMA

NFP Northwest Forest Plan

NHPA National Historic Preservation Act NLTAA Not Likely to Adversely Affect

NMFS National Marine Fisheries Service (U.S. Dept. of Commerce)

NOAA National Oceanic and Atmospheric Administration

NOC Notice of Construction

NOI Notice of Intent (to prepare a NEPA EIS)

NOI Notice of Intent (to undertake a regulated activity)

NOx Nitrogen Oxides

NPDES National Pollutant Discharge Elimination System

NPL National Priorities List **NPS** National Park Service

NRCS Natural Resources Conservation Service

(U.S. Dept. of Agriculture)

NRHP National Register of Historic Places Appendix C Agency Web Sites

Agencies and Organizations	Abbreviation	Web Site					
U.S. Department of	FHWA	http://www.fhwa.dot.gov/					
Transportation Federal Highway Administration		Field Office Addresses: http://www.fhwa.dot.gov/field.html					
		Washington Division Web Site: http://www.fhwa.dot.gov/wadiv/index.htm					
		Division Office Teams: http://www.fhwa.dot.gov/wadiv/teams.htm					
		Program-Specific Information: http://www.fhwa.dot.gov/wadiv/progdel.htm					
U.S. Environmental Protection	USEPA	http://www.epa.gov/					
Agency		Contact Info: http://www.epa.gov/epahome/postal.htm					
		Pacific Northwest Web Site: http://www.epa.gov/region10/					
		Region 10 Contact Info: http://yosemite.epa.gov/r10/homepage.nsf/webpage/ Contact+Us?opendocument					
		Water Quality: http://yosemite.epa.gov/R10/WATER.NSF/webpage/ Water+Issues+in+Region+10					
		Air Quality: http://yosemite.epa.gov/R10/AIRPAGE.NSF/webpage/ Air+Quality					
		Waste and Toxics: http://www.epa.gov/r10earth/					
		Laws and Regulations: http://www.epa.gov/lawsregs/					
		USEPA Programs: http://www.epa.gov/epahome/abcpgram.htm					
U.S. Fish and Wildlife Service	USFWS	http://www.fws.gov/					
		Pacific Region: http://www.fws.gov/pacific/					
		Office Directory: http://www.fws.gov/pacific/phonedir/office/index.cfm					
		National Wetlands Inventory: http://www.fws.gov/wetlands/					
		Section 7 Consultation: http://www.fws.gov/endangered/consultations/index.html					
USDA Forest Service	FS	http://www.fs.fed.us/					
		Pacific Northwest Region: http://www.fs.fed.us/r6/					
		Contact Info: http://www.fs.fed.us/r6/pdx/directory/					
		Natural Resources: http://www.fs.fed.us/r6/nr					

Agency Web Sites Appendix C

Agencies and Organizations	Abbreviation	Web Site
U.S. Coast Guard	USCG	http://www.uscg.mil
		Pacific Northwest: http://www.uscg.mil/d13/
		Unit List: http://www.uscg.mil/d13/units/alpha.asp

Washington State

Agencies and Organizations	Abbreviation	Web Site				
Attorney General's Office	AGO	http://www.atg.wa.gov/agoopinions/default.aspx				
Associated General	AGC	http://www.agcwa.com/				
Contractors of Washington		Contact Info: http://www.agcwa.com/public/contact/contact.asp				
Department of Commerce	Commerce	http://www.commerce.wa.gov/				
		Contact Info: http://www.commerce.wa.gov/portal/aliascted/ langen/tabID38/DesktopDefault.aspx				
County Road Administration	CRAB	http://www.crab.wa.gov/				
Board		Contact Info: http://www.crab.wa.gov/CRABoard/staff.cfm				
Department of Ecology	Ecology	http://www.ecy.wa.gov/				
		Contact Info: http://www.ecy.wa.gov/feedback.html				
		Regional Offices: http://www.ecy.wa.gov/org.html				
		Office of Regulatory Assistance: http://www.ora.wa.gov/default.asp				
		Environmental Permit Handbook: http://apps.ecy.wa.gov/permithandbook/				
		JARPA: http://www.epermitting.org/default.aspx				
		Isolated Wetlands: http://www.ecy.wa.gov/programs/sea/wetlands/ isolated.html				
		TDMLs: http://www.ecy.wa.gov/programs/wq/tmdl/index.html				
		Environmental Programs: http://www.ecy.wa.gov/programs.html				
		Publications and Forms: http://www.ecy.wa.gov/pubs.shtm				
Department of Fish	WDFW	http://wdfw.wa.gov/				
and Wildlife		Contact Info: http://wdfw.wa.gov/about/contact/				
		Regional Offices: http://wdfw.wa.gov/about/regions/				
		North Puget Sound Web Site: http://wdfw.wa.gov/about/regions/region4/				

lndex #	Formal Title	A - Transportation Planning	B - Proj. Scoping/ Programming	C - Environmental Review	D - Env.Permitting/ PS&E	E - Construction	F - Maintenance	G - Property Management
25	First Amended Programmatic Agreement Implementing Section 106 of the National Historic Preservation Act for the Federalaid Highway Program in Washington State Administered by the Federal Highway Administration. March 21, 2007. First Amended Programmatic Agreement Implementing Section 106 of the National Historic Preservation Act for the Federalaid Highway Program in Washington State Administered by the Federal Highway Administration. March 21, 2007.		X	X 456	X	X		
26	Federal-Aid Highway Program Stewardship and Oversight Agreement. February 19, 2008.	Х	X 300	Х	Х	Х	Х	Х
27	Memorandum of Agreement Concerning Administration of Hydraulic Project Approvals for Transportation Activities (Chapter 77.55 RCW and Chapter 220-110 WAC) and Implementation of the Fish Passage Retrofit Program (Chapter 77.57 RCW) and Implementation of the Chronic Environmental Deficiency Program. May 2008.		X	X 436	X	X 610	X 710	
28	Analytical Approach to be used in Assessing Stormwater Effects in Biological Assessments.							
29	Memorandum of Understanding between the Washington State Department of Transportation and the Federal Highway Administration – Programmatic Categorical Exclusion Approvals		X 310					

Environmental and Engineering Programs

Environmental and Engineering Programs Director – 360-705-7101

Environmental Services Office

Management

Environmental Services Office Director – 360-705-7480

Administrative Staff – 360-705-7491

Operations - 360-705-7479

Liaison Manager – 360-705-7662

Compliance

Compliance Manager – 360-705-7448

NEPA/SEPA Compliance Manager – 360-705-7492

Environmental <u>Information</u> Manager – 360-705–7476

Permits Manager – 360-705-7487

Policy

Policy Manager - 360-705-7126

Biology

Biology Manager – 360-705-7406

Ecological Mitigation – 360-705-7409

Fish and Wildlife – 360-705-7404

Wetland Assessment and Monitoring – 360-705-7405

Stream Restoration Manager – 360-705-7518

Resource Programs

Resource Programs Manager – 360-570-6642

Air/Acoustics/Energy Manager – 206-440-4549

Cultural Resources Manager – 360-570-66<u>51</u>

Hazardous Materials Manager – 360-570-6656

Stormwater and Watersheds Manager – 360-570-6637

<u>Hydrology</u> Manager – 360-705-74<u>15</u>

Environmental Managers

Regional Offices

Eastern Region - 509-324-6134

North Central Region – 509-667-3055

South Central Region – 509-577-1<u>750</u>

North West Region – 206-440-4548

Olympic Region – 360-570-6701

South West Region – 360-905-2218

Urban Corridors – 206-716-1136

Maintenance and Other Modes

Highway Maintenance and Operations – 360-705-7812

Rail Office - 360-705-7902

Washington State Ferries – 206-515-3650

Design Services Managers

Headquarters

State Design Engineer – 360-705-7231

Roadside and Site Development – 360-705-7242

Hydraulics – 360-705-7259

Planning Managers

Regional Offices

Eastern Region – 509-324-6195

North Central Region – 509-667-2906

South Central Region – 509-577-1630

North West Region – 360-757-5980

Olympic Region – 360-357-2630

South West Region – 360-905-2110

Headquarters

Transportation Planning – 360-705-7371

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