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### 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.

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\*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 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
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NWP	Nationwide Permit ( <u>U.S. Army Corps of Engineers</u> )
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

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, wetlands, 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.

**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 due weight 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

develop and implement management programs. Washington's Coastal Zone Management Program has been approved by the National Oceanic and Atmospheric Administration and is administered by Ecology. Under the program, cities and counties can develop local management plans that must be approved by Ecology. Ecology also provides general program overview and support. For details see **Section 450.02**. The law is online at:

☞ <http://www4.law.cornell.edu/uscode/16/ch33.html>

#### (d) **Endangered Species Act (ESA)**

This act is administered by USFWS and NOAA Fisheries. Formal consultation under the act is triggered by a federal nexus including permits, funding or actions on federal land, and by the potential harm, harassment, or take of listed species or impacts to their habitat. Informal consultation under Section 10 of the act requires applicants to comply with the ESA even if a federal nexus does not occur.

The ESA has relevance to surface water quality because of listed aquatic species. The listing of salmonids under the Endangered Species Act (ESA) has triggered the development of new requirements for surface water quality issues. WSDOT has also prepared a Biological Assessment Writers Stormwater Guidance to help evaluate the potential for impacts on ESA species. Please see **Section 436.02** for more details.

The law is online at:

☞ <http://www4.law.cornell.edu/uscode/16/ch35.html>

BA Writers Stormwater Guidance is located online at:

☞ <http://www.wsdot.wa.gov/Environment/Biology/BA/default.htm#writing>

USFWS home page:

☞ <http://www.fws.gov/>

NOAA Fisheries home page:

☞ <http://www.nmfs.noaa.gov/>

## (2) **State**

### (a) **State Environmental Policy Act**

The State Environmental Policy Act (SEPA), requires that all major actions sponsored, funded, permitted, or approved by state and/or local agencies undergo planning to ensure environmental considerations such as impacts on surface water quality are given due weight in decision-making. State implementing regulations are in WAC 197-11 and WAC 468-12 (WSDOT). For details on SEPA procedures, see **Chapter 410**, **Chapter 411**, and **Chapter 412**.

**(b) State Water Quality Laws and Rules**

Water quality regulations are mandated by the federal Clean Water Act (CWA). The Water Pollution Control Act (RCW 90.48) is the primary water pollution law for Washington State. Under state statute, discharge of pollutants into waters of the state, is prohibited unless authorized. WAC 173-201A mandates water quality standards for surface waters. All wastes must be provided with all known, available, and reasonable methods of prevention, control, and treatment (AKART) prior to discharge into the state's waters.

To promote compliance with state surface water quality standards, Ecology issues CWA Section 401 certificates of water quality compliance for each project requiring a CWA Section 404 permit, administrative orders for projects not requiring Section 404 permits, National Pollutant Discharge Elimination System (NPDES) individual and general permits, and State Waste Discharge Permits (SWDPs).

The Water Pollution Control Act is online at:

☞ <http://apps.leg.wa.gov/RCW/default.aspx?cite=90.48>

And WAC 173-201A is online at:

☞ <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-201A>

**(c) Shoreline Management Act (SMA)**

The goal of Washington's Shoreline Management Act (RCW 90.58) is "to prevent the inherent harm in an uncoordinated and piecemeal development of the state's shorelines." The Act establishes a broad policy of shoreline protection, which includes surface water quality.

The SMA uses a combination of policies, comprehensive planning, and zoning to create a special zoning code overlay for shorelines. Under the SMA, each city and county can adopt a shoreline master program that is based on state guidelines but tailored to the specific geographic, economic, and environmental needs of the community. Master programs provide policies and regulations addressing shoreline use and protection as well as a permit system for administering the program.

Please refer to **Chapter 450** and **Section 550.02** for more details about the SMA, local Shoreline Master Programs, and Shoreline Substantial Development, Conditional Use, and Variance Permits. The statute is available at:

☞ <http://apps.leg.wa.gov/RCW/default.aspx?cite=90.58>

And WAC 173-26 is available at:

☞ <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-26>

#### (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 – State Surface 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

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 2006 *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.

(4) **Memorandum of Agreement on Hydraulic Project Approvals for Transportation 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 generally 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 surface 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 surface 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

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. **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](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 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](http://www.fhwa.dot.gov/environment/h2o_shed.htm)

**(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 650 waterbodies 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.

For access to the data and a description of requirements for ecoregions, stream/river basins, estuaries, and lakes, refer to the Washington State Water Quality Assessment Section 305(b) reports on the Ecology Web site at:

☞ <http://www.ecy.wa.gov/programs/wq/303d/305breport/305b-index.html> |

**(c) Watershed Basin Reports and Action Plans (Local or Inter-Jurisdictional Plans)**

Many watershed and basin plans include specific recommended action items on priority environmental issues such as fixing or repairing fish passage barriers. The Surface Water Discipline Report should address the guidance outlined in watershed/basin action plans. |

Some plans are listed under Ecology's Watershed Planning Web site below; others are available from local jurisdictions.

☞ <http://www.ecy.wa.gov/watershed/index.html>

**(5) U.S. Army Corps of Engineers Water Protection Guidance**

The U.S. Army Corps of Engineers (Corps) regulatory program concerns not only the integrity of traditional navigable waters, but also the quality of waters of the United States, including adjacent wetlands. Corps regulatory procedures are available on the Corps Seattle District Web site at: |

☞ [http://www.nws.usace.army.mil/publicmenu/menu.cfm?sitename=reg&pagename=home\\_page](http://www.nws.usace.army.mil/publicmenu/menu.cfm?sitename=reg&pagename=home_page)

## **430.06 Permits and Approvals**

Each water quality permit or approval listed in this section should be considered for relevance during design and environmental review. See previous sections in this chapter for policies and other guidance related to these permits. See **Appendix F** for a complete summary of permits and approvals that may be applicable to WSDOT projects.

WSDOT's Surface Water Discipline Report should provide the information needed to satisfy most permit requirements. If WSDOT is in compliance with water quality permits, then it is presumed to be in compliance with state surface water quality standards. |

Permits relating to Water Quality are addressed in the following sections:

***Federal***

- **Section 520.02** – Section 404 Permit

***Tribal***

- **Section 530.03** – Tribal consultation or approval required under federal statutes: Clean Water Act Section 401 Water Quality Certification (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 Tribe have authority to approve Section 401 Water Quality Certifications.)

***State***

- **Section 540.02** – Section 401 Water Quality Certification
- **Section 540.03** – Coastal Zone Management Consistency Certification
- **Section 540.04** – NPDES Construction Stormwater Permit
- **Section 540.05** – NPDES Municipal Stormwater Permit
- **Section 540.06** – NPDES Sand and Gravel Permit
- **Section 540.07** – NPDES Industrial Stormwater Permit
- **Section 540.08** – Other NPDES Programmatic Permits
- **Section 540.13** – Isolated Wetlands Administrative Order
- **Section 540.15** – Hydraulic Project Approval
- **Section 540.16** – Aquatic Lands Use Authorization
- **Section 540.21** – On-Site Sewage Facility Permit
- **Section 540.25** – Other State Approvals (Temporary Exceedance of Water Quality Standards)
- **Section 540.25** – Other State Approvals (Dam Construction Permit, Reservoir Permit)

***Local***

- **Section 550.02** – Shoreline Management Permits
- **Section 550.03** – Floodplain Development Permit
- **Section 550.04** – Critical Areas Ordinance Approval

**430.07 Non-Road Project Requirements****(1) Ferries**

Surface water treatment for portions of WSF terminals is often difficult because of the confined areas, and because most of the docks slope toward the water.

(a) **Interagency Agreement**

The 1998 Water Quality Implementing Agreement between Ecology and WSDOT regarding compliance with Washington surface water quality standards, currently being revised, includes activity-specific conditions that apply to the ferry system. Such activities include ferry terminal transfer span cleaning and painting activities, and work on existing ferry structures. The agreement is described in **Section 430.04** and can be located online at:

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

(b) **General Permit Requirements**

The ferry system is subject to the same permits as the road system for upland and aquatic projects. The most commonly required road project permits that are also required for ferry projects are U.S. Army Corps of Engineers Section 10 or Section 404 permits, (including NWPs and Letters of Permission), USCG Section 9, HPA, and shoreline permits. These permits are typically obtained through the JARPA process. In the past, only a few WSF terminals and other facilities have been regulated by NPDES municipal stormwater general permits. These NPDES municipal stormwater permits have recently been replaced by the WSDOT NPDES Municipal Stormwater permit that was issued February 4, 2009. All WSF facilities, with the exception of the vessel maintenance shop in Eagle Harbor (see **Section 430.07(c)**, NPDES Industrial Stormwater Permit, below), have come under jurisdiction of the new WSDOT municipal stormwater permit. Please see **Section 540.05** for more details about this permit.

In order to comply with permit requirements, it is important to know the accurate distance from the shoreline to the project. For marine water the shoreline is measured from the mean higher high water (MHHW) and for freshwater it is measured from the ordinary high water mark (OHWM) or line.

(c) **NPDES Industrial Stormwater Permit**

This permit for stormwater discharges associated with industrial activities is required for the WSF Eagle Harbor vessel maintenance facility. See **Section 540.07** for details.

Development of a Stormwater Pollution Prevention Plan (SWPPP) that identifies BMPs to prevent surface water and groundwater pollution is the most significant permit requirement. WSDOT's *Highway Runoff Manual* is the primary document used for selection of BMPs.

**(2) Airports, Rail, and Non-Motor**

Airport, rail, and non-motorized projects are generally subject to the same water quality policies, procedures, and permits as for road projects. In rail projects, railroad fills, including ties, rails, and structures over streams are considered pervious. To prevent materials falling off trains into waterbodies, enclosed structures must be used to transport materials.

**430.08 Exhibits**

Exhibit 430-1 Surface Water Discipline Report Checklist



## **Exhibit 430-1 Surface Water Discipline Report Checklist**

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Project Name: \_\_\_\_\_ Job Number: \_\_\_\_\_

Contact Name: \_\_\_\_\_

Date Received: \_\_\_\_\_ Date Reviewed: \_\_\_\_\_ Reviewer: \_\_\_\_\_

(SAT = Satisfactory; INC = Incomplete; MIS = Missing; N/A = Not Applicable)

Answers are required for questions which have no N/A box.

A Surface Water Discipline Report can be highly detailed or extremely concise depending upon whether the level of impact or controversy is substantial or minimal. Project teams should take care to “right-size” the discipline report so it adequately addresses the impacts and controversy without over-analyzing or providing unnecessary information.

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### **I. Summary of Conclusions**

The summary of conclusions should be written in “Plain Talk” language.  
See (<http://www.accountability.wa.gov/plaintalk/>) for further guidance.

SAT INC MIS N/A

- A. Findings and impact conclusions relating to water quality and quantity effects of the proposed project.
  - B. Mitigation recommendations to offset any adverse impacts of the project.
- 

### **II. Purpose and Need for the Action**

SAT INC MIS N/A

- A. Purpose and need for the project to include what the project entails and why it is being conducted.
  - B. Final use of the discipline study.
  - C. Relevant background information on the project along with an identification of entities with vested interests.
- 

### **III. Description of Alternatives**

SAT INC MIS N/A

- A. Succinct description of each alternative being evaluated, including the no-action or no-build alternative. Include the site-specific requirements and constraints associated with each proposed alternative.

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- B. Summarize differences between alternatives as they relate to surface water resources.
- C. Map(s) or figure(s) showing alternatives and project boundaries.

**IV. Studies, Coordination, Methods, and Regulations**

The purpose of this section is to provide adequate evidence of the background work and resources used to justify the analysis approach taken. This includes a review of rules and regulations and the proposed project’s compliance.

SAT INC MIS N/A

- A. Summarize Baseline Documentation:
  - 1. Describe all potentially affected surface water resources in the project area.
  - 2. List all reports, data sources acquired, and contacts made during project development in an appendix.
  - 3. Summarize those data sets or reports most pertinent to the project, how they will be used for the analysis, and why they were selected.
- B. Identify the rules and regulations that are relevant to the project and how they relate to stormwater and future stormwater conditions.
  - 1. WSDOT Plans, Programs, and Policies.
  - 2. Growth Management Act and Comprehensive land use plans (review GMA restrictions limiting development).
  - 3. Local basin plans, watershed protection plans, watershed analysis, etc.
  - 4. Critical areas ordinances.
  - 5. Wellhead/aquifer protection plans. (Refer to groundwater discipline study.)
  - 6. Combined sewer outfall reduction plans (only if runoff will be discharging to a combined sewer system).
  - 7. Total Maximum Daily Loads (TMDLs) and 303d status.
  - 8. Limiting Factors Analysis, Habitat Conservation Plans, 4D rules, or relevant biological assessments.
  - 9. Local Shoreline Plans and Ordinances.
  - 10. Shellfish Closure Response Plans.

**V. Project Area Then and Now**

This section establishes the natural environment and overlaying built environment from which impacts will be evaluated and compared. The detail and focus should be commensurate with the level of impacts anticipated.

SAT INC MIS N/A

- A. Description of natural framework to surface water.
  - 1. Description of soils and their potential to cause or mitigate water quality/quantity problems. Consider geologic setting, slopes, hazardous areas, soil types, soil drainage, water holding characteristics and erodibility.
  - 2. Description of climate.
- B. Description of Surface Water Resources.
  - 1. Identify basin, sub-basin, and project boundaries.
  - 2. Identify WRIA(s).
  - 3. Summary of available sampling data and assessment of its adequacy.
  - 4. Surface water body locations and typing.
  - 5. Surface water quality classifications of waterbodies and their beneficial uses.
  - 6. CWA 303 (d) listed waters. Identify the phase of Ecology listing, i.e., is there a TMDL plan in place, under development, or in the implementation phase?
  - 7. Source identification for existing and/or historical surface water quality problems (point and nonpoint source pollutants).
  - 8. Stream channel features that influence its vulnerability to project impacts (width, depth, riparian vegetation, bank condition, etc.).
  - 9. Identify existing drainage pathways and stormwater outfall locations. Quantify existing impervious surface.
  - 10. Surface water hydrologic features (discharge rates peak and minimum instream flows).
  - 11. Marine waters (tidal and current patterns, flushing rates for estuarine systems, etc.).
  - 12. Reference to hazardous materials report if soil or sediment quality and contamination are an issue.

SAT INC MIS N/A

- |                          |                          |                          |                          |   |
|--------------------------|--------------------------|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 13. Reference to wetland report and possible summary of key related issues.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 14. Reference to groundwater report and possible summary of key related issues.   |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 15. Reference to floodplain report and possible summary of key related issues.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 16. Reference to fisheries report and possible summary of key related issues. (especially in areas with ESA concerns).                                |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | C. Other issues and constraints.  |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Describe public and private water supply sources including wellhead protection areas and identified aquifer recharge areas.                        |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. Briefly describe spill data (historical records of major spills, locations, extent, etc.) and reference the hazardous materials discipline report. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. Groundwater contamination and remediation actions, also referencing the hazardous materials discipline report.                                     |

## VI. Environmental Consequences

The focus and level of detail for this evaluation should be commensurate with the level of concern. The assessment should consider construction, operational, and indirect impacts from project development. The cumulative environmental effects of the proposed actions, in the context of other actions in the surrounding environments, should be addressed on a watershed basis. A summary statement should be included for all significant impacts.

### Comparison of Alternatives

SAT INC MIS N/A

- |                          |                          |                          |                          |  |
|--------------------------|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |                          | A. Clearly identify all significant construction activities and potential impacts for each alternative considering:                    |
|                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 1. Erosion and sedimentation potential and the risks to <u>surface</u> water quality.  |
|                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 2. Describe all activities that could have an effect on <u>surface</u> water quality such as in-water, over-water, or near-water work. |
|                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 3. Work in erosion hazard zones.   |
|                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 4. Potential pH impacts (when extensive concrete work is involved).  |

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- 5. Extent of clearing and grading.
- 6. Potential impacts associated with project staging areas.
- 7. Refer to Groundwater study for potential impact to groundwater quality and sole source aquifers from contaminant sources.
- 8. Refer to Hazardous Materials study for information on sediment quality, contamination sources and potential spillage pathways.
- B. Evaluate operational impacts for each alternative, considering:
  - 1. Impacts of projected typical highway runoff on loadings to receiving waters (see the Quantitative Procedures for Surface Water Impact Assessments technical guidance document).
  - 2. Effects of impervious surface additions and alterations to surface hydrology.

**Indirect and Cumulative Effects**

SAT INC MIS N/A

- A. Evaluate indirect impacts for each alternative, considering:
  - 1. Nonpoint source problems.
  - 2. Water quantity concerns.
  - 3. Hydrologic impacts due to long-term stream flow impairment and changes in stormwater quantities.
  - 4. Changes in land use patterns along the transportation corridor.
- B. Evaluate cumulative impacts:
  - 1. Evaluate direct impacts (e.g., pollutant loading, impervious surface increases, permanent stream crossings, loss of properly functioning riparian zone).
  - 2. Evaluate indirect impacts on a watershed scale, especially considering the impacts of future development (e.g., potential changes in stream flow pattern and morphology).

**Conservation and Mitigation**

**A. Conservation Measures**

Conservation measures are required activities or standard practices that are routinely employed on WSDOT projects to avoid or minimize impacts on water quality and quantity. These activities are often incorrectly considered mitigation measures and should be discussed separately.

Some projects are recommended to summarize these required activities in the surface water discipline report, however it is not essential. See the Mitigation Measures section of Surface Water Discipline Report Technical Guidance, for more information on what qualifies as mitigation and what should be considered required conservation measures.

SAT INC MIS N/A

- |   |  |
|---|--|
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | Brief description with general statements about the <i>Highway Runoff Manual</i> or project specific requirements such as Temporary Erosion and Sediment Control and spill prevention measures, groundwater protection, stormwater treatment and general maintenance practices. Any descriptions about BMPs that may be installed to treat highway runoff should include a caveat that these facilities may change as project design progresses. |
|---|--|

**B. Mitigation Measures**

Summarize the activities that reduce impacts that remain despite required conservation measures. Consider measures that restore or replace environmental resources. Mitigation measures should be evaluated for site-specific problems and for cumulative impacts related to overall watershed development.

SAT INC MIS N/A

- |   |  |
|---|--|
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>                          | A. Identify all mitigation for significant impacts for each alternative. Mitigation strategies include stormwater retrofit ,off-site mitigation or restoration options or plans, opportunities for utilizing special/ newly researched BMPs, assistance with watershed priorities set through watershed planning, Low Flow Frequency Analysis, etc., |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>                          | B. Summarize project elements that reduce impacts or the potential for impacts from construction activities.   |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 1. Measures to protect <u>surface</u> water resources above and beyond those required.   |
| <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | 2. Potential stormwater BMP retrofit opportunities above and beyond required stormwater treatment.   |

General Comments: \_\_\_\_\_  
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