

Appendix-Environmental Review and Permit List

Project Case Study	ENVIRONMENTAL REVIEW									ENVIRONMENTAL PERMITS											Percent Mitigation		
	NEPA Document (EIS, EA, DCE, CE)	SEPA Document	Noise Assessment Study	Air Quality Conformity Determination - Clean Air Act	National Historic Preservation Act, Section 106 Concurrence from DAHP	Executive Order O5-05 - Concurrence from DAHP	FHWA Review/Approval on Section 4(f): Wildlife Refuges, Recreation Areas,	**NOAA Consultation - ESA Impact	***USFW Consultation - ESA Impact	Tribal Consultation/Approval	Hydraulic Project Approval (WDFW)	Army Corps Clean Water Act Section 404 Permit	USACE Section 10 Permit - Navigable Waters	Coast Guard Section 9 Permit - Bridges over certain navigable waters	Local Agency Growth Management Act/Critical Area Ordinance Review	Local Agency Shoreline Approval (Shoreline Management Act)	Clean Water Act Section 401 Water Quality Certification	Clean Water Act Section 402 - NPDES Construction Stormwater Permit	Clean Water Act Section 402 - NPDES Municipal Stormwater Permit	Coastal Zone Management Consistency Determination (Ecology)		Dept. of Natural Resources - Aquatic Lands Use Authorization	Local Agency Noise Variance / Exemption
SR 16 Burley Olalla		X			X			X	X		X	X					X	X	X				19.1%
I-5/SR 16 WBNV	X		X		X				X		X				X		X	X	X			X	9.1%
I-5 Grand Mound	X	X			X			X	X	X	X	X			X	X	X	X	X				19.9%
US 290 Starr Rd.	X	X			X			X										X					4.6%
SR 270 Pullman to Idaho	X	X			X		X	X	X	X	X				X		X	X	X				11.4%
SR 24 - SR 241 Cold Crk.	X	X			X			X	X									X					6.4%
US 12 Frenchtown	X		X	X	X			X	X	X	X	X			X	X	X	X	X				4.6%
SR 539 Ten Mile Rd.	X	X	X		X		X	X	X	X	X				X	X	X	X	X		X	X	23.7%
SR 522 UW/Cascadia CC	X		X					X	X	X	X	X			X	X	X	X	X	X	X	X	11.2%
SR 518 SeaTac Airport	X	X	X	X	X				X	X	X						X		X			X	34.6%
I-5/SR 502 I/C	X	X	X	X	X		X	X	X	X	X				X	X	X	X	X				22.6%
SR 500/I-205 I/C	X	X			X				X		X				X	X							12.4%
US 2/97 Peshastin I/C	X	X	X		X			X	X	X	X						X	X					17.4%
US 2/97 Wenatchee Trail	X	X			X			X	X						X	X		X	X				7.3%

*Clean Water Act
 *National Pollutant Discharge Elimination System
 ** National Oceanic and Atmospheric Administration-Fisheries
 ***United States Fish and Wildlife Service

Why do we mitigate for stormwater?

Increases in paved surfaces from roadway construction generate stormwater discharges that can contribute to changes in stream flow, stream temperature, water quality and aquifer recharge, because the pavement prevents infiltration into the ground and the highway runoff conveys pollutants from the roadway into the environment. Additionally, storm events during construction can cause erosion and degraded water quality. WSDOT's stormwater mitigation activities are aimed at minimizing the effects of new impervious surfaces and erosion and sedimentation on construction sites.

Laws and regulations that govern actions affecting stormwater include:

Federal Permits and Review

The Clean Water Act, Section 402, regulates discharges of stormwater. This section, its implementing regulations, and permits issued thereunder, is the biggest driver of stormwater mitigation for WSDOT. Stormwater that flows from WSDOT construction sites (one acre or larger) into river systems and wetlands is strictly regulated for erosion control under the National Pollution Discharge Elimination System (NPDES) general permit for construction activities. This permit requires best management practices for erosion control on construction projects. WSDOT also mitigates stormwater discharges from new and existing impervious surfaces under another NPDES permit – the municipal stormwater permit issued to WSDOT in November 2008. Implementation of Section 402 has been delegated by the U.S. Environmental Protection Agency to the Washington State Department of Ecology. The Ecology-issued NPDES permits require use of the *Highway Runoff Manual* for mitigating construction and post-construction discharges from WSDOT sites and facilities.

The Endangered Species Act (ESA) was passed to protect and ensure the long-term viability of avian, terrestrial, aquatic, and marine species of flora and fauna. The United States Fish and Wildlife Service (USFWS) is tasked with managing avian, terrestrial, and aquatic species, while the National Oceanic and Atmospheric Administration Fisheries Service (NOAA) is tasked with managing marine species. The listed species most notable to WSDOT with respect to stormwater are bull trout and salmon. Every project with a federal nexus (funding, permit, etc.) proposed by the department must be reviewed for compliance with the ESA. Stormwater impacts to water bodies that function as habitat for ESA species is one of the effects considered in an ESA review, which is referred to in the law as a “consultation”. Some projects must complete a Biological Assessment and enter into informal or formal consultation with the Services (one or both depending upon the species potentially affected by the project). Projects in the consultation process must receive concurrence in the form of a concurrence letter for an informal consultation or a Biological Opinion for a formal consultation, prior to construction. The Endangered Species Act *does not require* a project to mitigate for impacts nor prescribe a specific method of mitigation; however, if a finding of jeopardy is made for a species, or a finding of adverse modification is made for critical habitat, the project may not move forward.

The Clean Water Act, Section 401, certifies that discharges of fill, dredged and other material into waters of the state will not violate state water quality standards, when the discharge is regulated by a Section 10 or 404 permit issued the United States Army Corps of Engineers. If stormwater impacts occur to waters of the state through a 404 permitted activity, and the impact is not regulated by a Section 402 permit (see above), the Department of Ecology is required to certify that the project will be in compliance with the state aquatic protection laws through issuance of the §401 Water Quality Certification. Under an Executive Order, the Governor has delegated authority for Section 401 to the Washington State Department of Ecology.

The National Environmental Policy Act (NEPA) applies to all projects that either receive federal funding or are required to obtain federal permits. Potential impacts and mitigation strategies are identified through Environmental Impact Statements (EIS), Environmental Assessments (EA), or a Documented Categorical Exclusion (DCE). NEPA documents are developed in conjunction with a federal lead agency, typically the Federal Highway Administration, for WSDOT's transportation projects. Compliance with NPDES stormwater permits and use of the Highway Runoff Manual is generally presumed to meet NEPA requirements for mitigation of environmental impacts from stormwater.

State Permits and Review

The State Environmental Policy Act (SEPA) requires review of potential impacts to stormwater and identification of mitigation opportunities. WSDOT is the lead agency for its projects under SEPA. All agencies with expertise are expected to review documents created by the lead agency. The SEPA administrative code is adopted and updated by the Department of Ecology. Compliance with NPDES stormwater permits and use of the Highway Runoff Manual is generally presumed to meet SEPA requirements for mitigation of environmental impacts from stormwater.

The State's Water Pollution Control Act (Chapter 90.48 RCW) Requires the use of all known, available and reasonable methods of prevention, control and treatment to prevent the pollution of Washington State's waters. Requires waste discharge permits prior to discharging waste materials into waters of the state and requires the Washington State Department of Ecology to investigate proposed discharges to determine whether the discharge will pollute state waters in violation state policy. Authorizes the Washington State Department of Ecology to assume delegation of the federal National Pollutant Discharge Elimination System (NPDES) permit program. Ecology's NPDES permits address the requirements of both the state Water Pollution Control Act and the federal Clean Water Act.

Hydraulic Project Approvals. Chapter 77.55 RCW governs construction projects in state waters and requires the department to get a Hydraulic Project Approval (HPA) from the Department of Fish and Wildlife (WDFW) for all work in state waters. The purpose of this permit is to ensure that the state's aquatic species are not unduly harmed. For stormwater, HPAs regulate only the construction of stormwater facilities below the

Ordinary High Water Level of state waters, not the type of BMP nor the quality or quantity of the stormwater discharge.

Local Permits and Review

In most instances, local stormwater management standards will not override the requirements in the *Highway Runoff Manual*. The Revised Code of Washington (RCW) 47.01.260(1) grants WSDOT plenary power in planning, locating, designing, constructing, improving, repairing, operating, and maintaining state highways, including drainage facilities and channel changes necessary for the protection of such highways. This grant of authority means that, absent express legislative direction, WSDOT is not subject to local regulations in areas within WSDOT's purview. The following are major local/area specific requirements that WSDOT will comply with where applicable.

The State Shoreline Management Act (Chapter 90.58 RCW) requires local governments to develop "shoreline master programs" that regulate development in shoreline areas adjacent to rivers and larger streams, lakes larger than 20 acres, and marine waterfronts. These local programs include both plans and regulations for achieving the level of protection of shorelines based on state guidelines, but tailored to meet specific community needs. The plans are a comprehensive vision of how shoreline areas will be used and developed over time. Regulations are the standards that shoreline projects and uses must meet. WSDOT's compliance with SMA rules and the conditions of local shoreline master programs is achieved during the project planning and design phase and through submittal of the required permit applications. Typically, compliance with the Highway Runoff Manual will address concerns relative to stormwater in shoreline areas.

The State Growth Management Act Critical Area Regulations (Chapter 36.78 RCW and Chapter 365-195 WAC) requires all local governments to adopt and enforce *critical areas ordinances* and, more recently, to meld these with SMA requirements. Critical areas ordinances are a set of development regulations that protect wetlands, stream corridors, fish and wildlife habitat, potable water groundwater recharge areas, flood plains, and geologic hazard areas. If a project is located within a designated critical area, WSDOT's compliance with critical area ordinances is achieved during the project planning and design phase through submittal of the required permit applications and negotiations in project design and mitigation measures. Typically, compliance with the Highway Runoff Manual will address concerns relative to stormwater in critical areas.

Tribal Governments Review

Federal treaties between Sovereign Tribal Nations and the federal government require WSDOT to maintain government-to-government relations with 29 federally recognized tribes. This covers cultural, environmental, and economic rights of the tribe related to aquatic species and habitat.

Why do we mitigate for noise impacts?

Construction and traffic noise is a nuisance to both humans and wildlife. Noise can affect human sleeping habits and outdoor recreation. Breeding, foraging, and nesting habits in wildlife can be impacted by construction noise. Local ordinances aim to diminish the effect of short-term construction noise, while the Federal Highway Administration regulates traffic noise.

Laws and regulations that govern actions affecting noise include:

Local Permits and Review

Local ordinances that govern noise are limited to nighttime construction activities and vary greatly from jurisdiction to jurisdiction. These ordinances may prohibit certain activities such as pile driving or jack-hammering during certain hours of the day. WSDOT often receives variances from these ordinances. Local governments do not regulate chronic traffic noise and daytime construction activities are exempt.

State Permits and Review

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 are given due weight in decision-making. SEPA documents identify potential impacts due to noise as well as abatement opportunities. WSDOT is the lead agency for its projects under SEPA. All agencies with expertise are expected to review documents created by the lead agency. The SEPA administrative code is adopted and updated by the Department of Ecology.

WSDOT Department directive D22-22 and the Priority Study (1985) outline the criteria for conducting a noise inventory for existing state highways and establishment of noise priority sites for traffic noise abatement.

Federal Permits and Review

The National Environmental Policy Act (NEPA) applies to all projects that either receive federal funding or are required to obtain federal permits. Potential impacts and mitigation strategies are identified through Environmental Impact Statements (EIS), Environmental Assessments (EA), or a Documented Categorical Exclusion (DCE). NEPA documents are developed in conjunction with a federal lead agency, typically the Federal Highway Administration, for WSDOT's transportation projects.

FHWA Noise Standards, *Procedures for Abatement of Highway Traffic Noise and Construction Noise*, require a traffic noise analysis for federally funded projects that 1) involve construction of a new highway, 2) significantly change the horizontal or vertical alignment, or 3) increase the number of through traffic lanes on an existing highway. When federal funds are used in project construction, FHWA noise abatement standards must be met. When state, county or city only funds are used WSDOT noise policy standards must be met.

The Endangered Species Act was passed to protect and ensure the long-term viability of avian, terrestrial, aquatic, and marine species of flora and fauna. Highway construction operation can have harmful effects on listed species, including interruption of foraging, breeding, and nesting activities. Each project that receives federal funding must undergo ESA review. Some projects must prepare a Biological Assessment and enter into formal or informal consultation with the services. Projects which have entered formal consultation must obtain a Biological Opinion while projects which have entered informal consultation must obtain a concurrence letter. In both cases, concurrence must be obtained prior to construction. The Endangered Species Act does not require a project to mitigate for impacts; however, if a finding of jeopardy is made for a species or a finding of adverse modification is made for critical habitat, the project may not move forward.

Why do we mitigate for wetland impacts?

Wetlands perform a broad variety of critical functions for our ecological systems, including improving water quality, stabilizing stream flows, providing storage for flood waters, providing rearing areas for juvenile salmon, creating rest stops for migratory waterfowl, and providing essential forage, breeding, and nesting areas for a host of species.

Laws and regulations that govern actions affecting wetlands habitats include:

Local Permits and Review

The Revised Code of Washington (RCW) 47.01.260(1) grants WSDOT plenary power in planning, locating, designing, constructing, improving, repairing, operating, and maintaining state highways, including drainage facilities and channel changes necessary for the protection of such highways. This grant of authority means that, absent express legislative direction, WSDOT is not subject to local regulations in areas within WSDOT's purview. The following are major local/area specific requirements that WSDOT will comply with where applicable.

The State Shoreline Management Act (Chapter 90.58 RCW) tasks local governments with establishing shorelines of statewide significance and with creating overall development plans for all shorelines. The Shoreline Management Act explicitly includes wetlands associated with regulated shorelines. Any WSDOT project that impacts a wetland that is associated with a regulated shoreline is then subject to regulation under the Shoreline Management Act. Each county is empowered to enforce elements of the Shoreline Management Act.

The State Growth Management Act (Chapter 36.78 RCW and Chapter 365-195 WAC), combined with Article 11 of the Washington State Constitution, mandates that local jurisdictions adopt ordinances that classify, designate, and regulate land use in order to protect critical areas. Critical areas include, wetlands and their buffers, among others. These areas are regulated through local critical/sensitive areas ordinances. WSDOT must gain local government approval under the Growth Management Act whenever wetlands are impacted. Requirements of these ordinances vary widely from jurisdiction to jurisdiction.

State Permits and Review

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 wetlands, are given due weight in decision-making.

WSDOT is the lead agency for its projects under SEPA. Potential impacts and mitigation strategies are identified in the SEPA documents. All agencies with expertise are expected to review documents created by the lead agency. The SEPA administrative code is adopted and updated by the Department of Ecology.

The State Water Pollution Control Act (Chapter 90.48 RCW) is the primary water pollution law protecting state waters, including wetlands. The State's Water Quality Standards, 173-201(A) WAC, specifically require that the beneficial uses of wetlands be protected. The Department of Ecology has authority under the Act to issue administrative orders to protect waters of the state not covered by federal laws, such as isolated wetlands. The Department of Ecology is mandated to enforce compliance with the State Water Pollution Control Act and require mitigation for wetland impacts in order to replace lost functions of the permitted impacts.

Hydraulic Project Approvals. The Hydraulic Code, Chapter 77.55 RCW, governs construction projects in state waters and requires WSDOT to get a Hydraulic Project Approval (HPA) from the Washington Department of Fish and Wildlife (WDFW) for all work in state waters, including wetlands that contain fish habitat. Chapter 220.110 WAC expands on this goal by including all work that may impact state waters. The purpose of this permit is to ensure that the state's aquatic species are not unduly harmed. WDFW issues Hydraulic Project Approvals .

Why do we mitigate for wetland impacts? (Continued)

Federal Permits and Review

The National Environmental Policy Act (NEPA) requires that all major actions sponsored, funded, permitted, or approved by federal agencies undergo planning to ensure that environmental considerations, such as impacts to wetlands, are given due weight in decision-making. Potential impacts and mitigation strategies are identified through Environmental Impact Statements (EIS), Environmental Assessments (EA), or a Documented Categorical Exclusion (DCE). NEPA documents are developed in conjunction with a federal lead agency, typically the Federal Highway Administration, for WSDOT's transportation projects.

The Endangered Species Act (ESA). The goals of ESA include species conservation, ecosystem conservation, and species recovery. Regulations pertaining to wetlands overlap with ESA requirements because wetlands can be habitat for federally listed plants and animals.

The Clean Water Act (33 USC § 1251 et seq.), formerly known as the Federal Water Pollution Control Act, provides comprehensive federal regulation for all sources of water pollution. It prohibits discharge of pollution from non-permitted sources.

Section 404 of the Act regulates the discharge of dredged or fill materials into waters of the United States, including wetlands. Section 404 is jointly administered by the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers (Corps). The Corps issues permits for activities that discharge dredge or fill materials to waters of the U.S., including wetlands. In order to obtain a Corps permit for a project that impacts wetlands, WSDOT identifies how it will avoid, minimize and/or compensate for any loss to wetland acreage or function.

Section 401 requires that federally permitted activities comply with the federal Clean Water Act, state water quality standards, and any other appropriate state laws (such as the Water Resources Act and Hydraulic Code). The Washington Department of Ecology implements Section 401 requirements and issues water quality certifications on projects that require a Corps' Section 404 Permit. When WSDOT needs a Section 401 water quality certification for a project that impacts wetlands, WSDOT identifies how it will avoid, minimize and/or compensate for any loss to wetland acreage or function.

The Rivers and Harbors Act (33 USC § 403) Section 10 of the Rivers and Harbors Act requires U.S. Army Corps of Engineers authorization for structures or work in, over or affecting navigable waters of the United States.

The Coastal Zone Management Act requires protection of coast natural resources such as shellfish and salmon, as well as broader ecological and geological functions of coastal areas. This act includes wetlands within Washington's 15 coastal counties. The Coastal Zone Management Act requires states that want to receive federal funding for coastal resource protection to develop a Coastal Zone Management Program. The National Oceanic and Atmospheric Administration Office of Ocean and Coastal Resource Management (OCRM) has approved the Washington State Department of Ecology's Program.

Tribal Governments Review. Federal treaties between Sovereign Tribal Nations and the federal government require WSDOT to maintain government-to-government relations with 29 federally recognized tribes. This covers cultural, environmental, and economic rights of the tribe related to aquatic species and habitat.

Executive Orders and Agency Directives

Protection of Wetlands, Presidential Executive Order 11990 requires federal agencies to minimize the loss or degradation of wetlands and enhance their natural value. WSDOT projects with federal funding are subject to this order.

Preservation of the Nation's Wetlands, U.S. Department of Transportation Order DOT 5660.1A describes U.S. Department of Transportation policy that transportation facilities and projects should be planned, constructed, and operated to assure the protection, preservation, and enhancement of the nation's wetlands to the fullest extent practicable. The order establishes procedures for implementation of this policy.

Protection of Wetlands, Governor's Executive Order 89-10 commits state agencies to no overall net loss to wetlands, and to the encouragement of sensitive site design and planning on a watershed basis to avoid or minimize damage to wetlands. The order designates the State Department of Ecology to provide guidance on wetland issues, and instructs each affected state agency to develop an action plan to lessen the loss of wetlands and to preserve or enhance the values of wetlands.

Protection of Wetlands, Governor's Executive Order 90-04 is more comprehensive than Executive Order 89-10, and requires all state agencies to rigorously enforce their existing authorities to assure wetlands protection. State agencies are required to promote and support mitigation in the order of decreasing preference from avoidance to compensatory mitigation.

Washington State Department of Transportation Directive D31-12, Protection of Wetlands Action Plan establishes policy and guidance for the protection and preservation of wetlands. The Directive was developed to ensure no overall net loss of wetlands is caused by department actions, and to increase the quantity and quality of wetlands in the long term.

Why do we mitigate for stream impacts?

Streams are vital to the environment, providing both critical habitat and a mechanism for conveyance of water. Impacts on one part of a stream may affect an entire watershed system. Consequently, maintaining the health of streams is essential to providing a healthy environment.

Laws and regulations that govern actions affecting riparian habitats include:

Local Permits and Review

The Revised Code of Washington (RCW) 47.01.260(1) grants WSDOT plenary power in planning, locating, designing, constructing, improving, repairing, operating, and maintaining state highways, including drainage facilities and channel changes necessary for the protection of such highways. This grant of authority means that, absent express legislative direction, WSDOT is not subject to local regulations in areas within WSDOT's purview. The following are major local/area specific requirements that WSDOT will comply with where applicable.

The Shoreline Management Act (Chapter 90.58 RCW) tasks local governments with establishing shorelines of statewide significance and with creating overall development plans for all shorelines. Whenever WSDOT has a construction project in a river, it is required to get a permit from the appropriate local jurisdiction to ensure that shoreline protection requirements are met and that the development is compatible with the local plan.

The State Growth Management Act (Chapter 36.78 RCW and Chapter 365-195 WAC) requires applicable local governments to establish Critical Area Ordinances for the protection of critical habitats and species. Many riparian areas are included in local Critical Area Ordinances.

State Permits and Review

Hydraulic Project Approvals. Chapter 77.55 RCW governs construction projects in state waters and requires the department to get a Hydraulic Project Approval (HPA) from the Department of Fish and Wildlife for all work in state waters. Chapter 220.110 WAC expands on this goal by including all work that may impact state waters. The purpose of this permit is to ensure that the state's aquatic species are not unduly harmed. In order to obtain an HPA from WDFW on a project that uses, diverts, obstructs, or changes the natural flow or bed of any of the salt or fresh waters of state, WSDOT identifies how it will avoid, minimize and/or compensate for those impacts.

Federal Permits and Review

The National Environmental Policy Act (NEPA) applies to all projects that either receive federal funding or are required to obtain federal permits. Potential impacts and mitigation strategies are identified through Environmental Impact Statements (EIS), Environmental Assessments (EA), or a Documented Categorical Exclusion (DCE). NEPA documents are developed in conjunction with a federal lead agency, typically the Federal Highway Administration, for WSDOT's transportation projects.

The Endangered Species Act (ESA). The goals of ESA include species conservation, ecosystem conservation, and species recovery. Regulations pertaining to streams overlap with ESA requirements because streams can be habitat for federally listed plants and animals.

The Clean Water Act, Section 401, regulates discharge into waters. If rivers are to be filled or discharge is made into a river, a permit is required under Section 401. Such a permit may require mitigation of impacts as part of the permit approval. Under an Executive Order, the Governor has delegated authority for Section 401 to the Washington State Department of Ecology.

The Clean Water Act, Section 402, regulates discharge of stormwater. Stormwater that flows from WSDOT construction sites into river systems is strictly regulated for erosion control under a National Pollution Discharge Elimination System permit. This permit establishes best management practices for erosion control on construction projects. Enforcement of Section 402 has been delegated by the Environmental Protection Agency to the Washington State Department of Ecology.

The Clean Water Act, Section 404, regulates dredging and fill in waters, including rivers. Section 404 permits are granted through the United States Army Corps of Engineers.

The Rivers and Harbors Act, Section 10, regulates all navigable waters. Permit approvals must be secured to ensure no obstructions to navigable waters occur. This is applicable to many WSDOT bridge construction activities. Section 10 permits are granted through the United States Army Corps of Engineers.

The Coastal Zone Management Act requires protection of coast natural resources such as shellfish and salmon, as well as broader ecological and geological functions of coastal areas. The Coastal Zone Management Act requires states that want to receive federal funding for coastal resource protection to develop a Coastal Zone Management Program. The National Oceanic and Atmospheric Administration Office of Ocean and Coastal Resource Management (OCRM) has approved the Washington State Department of Ecology's Program.

Tribal Governments Review. Federal treaties between Sovereign Tribal Nations and the federal government require WSDOT to maintain government-to-government relations with 29 federally recognized tribes. This covers cultural, environmental, and economic rights of the tribe related to aquatic species and habitat.