

## Chapter 431 Wetlands and other waters

---

- 431.01 Introduction
- 431.02 Applicable statutes, regulations, executive orders, & agreements
- 431.03 Considerations during project development
- 431.04 Analysis & documentation requirements
- 431.05 External engagement
- 431.06 Internal roles and responsibilities
- 431.07 Applicable permits & approval process
- 431.08 Mitigation
- 431.09 Abbreviations and Acronyms
- 431.10 Glossary
- 431.11 Exhibits

### 431.01 Introduction

This chapter presents policies to be followed when planning work in or near wetlands or other waters of the state or of the United States. It includes information on describing and assessing wetlands and other waters, determining impacts (adverse effects), compensating for unavoidable impacts, and links to related information. Work described in this chapter that applies to wetlands may also apply to other waters. Project teams should follow the guidance in this chapter and the step-by-step procedures on our [Wetlands and other waters](#) webpage.

Washington State Department of Transportation (WSDOT) *Wetlands Protection and Preservation* Secretary's Executive Order (EO) [E 1102.00](#) directs employees to protect and preserve Washington's wetlands, to ensure no net loss of wetland acreage and function is caused by department actions, and to increase the quantity and quality of wetlands in the long term. These activities must be implemented in planning, designing, constructing, and maintaining the state's transportation system. Employees, our contractors and consultants must avoid impacts to wetlands and other waters where practical; minimize impacts when wetland impacts are unavoidable; provide compensatory mitigation for unavoidable impacts; and protect, preserve, and maintain wetlands under department stewardship.

WSDOT's environmental policies direct employees to protect and preserve state natural resources while providing for cost-effective delivery and operation of transportation systems. Our [Strategic Plan](#) webpage details WSDOT's values, including integrity and sustainability, that reinforce protection and preservation of wetlands and other waters.

See [Exhibit 431-1](#) for a flow chart of work to be performed throughout the project phases, from Planning to Maintenance and operations.

## 431.02 Applicable statutes, regulations, executive orders, & agreements

### 431.02(1) **Federal**

- 42 United States Code (USC) 4321 National Environmental Policy Act of 1969 (NEPA)
- Clean Water Act of 1977 ([Section 404](#))
- [Final Rule on Compensatory Mitigation for Losses of Aquatic Resources \(2008\)](#)
- Rivers and Harbors Act of 1899 ([Section 10](#))
- Title 23: Highways Part 771 – Environmental Impact Related Procedures ([23 CFR 771](#))
- Title 33 Navigation and Navigable Waters, Part 332 Compensatory Mitigation for Losses of Aquatic Resources ([33 CFR § 332.2](#))
- Title 40: Protection of Environment ([40 CFR § 1500 – Purpose and Policy, Part 1508 - Definitions](#))

### 431.02(2) **State**

- Environmental mitigation in highway construction projects – Public lands first or other sites that avoid loss of long-term, commercially significant agricultural lands ([RCW 47.01.305](#))
- Environmental mitigation - Exchange agreements ([RCW 47.12.370](#))
- Governor's [EO 89-10 Protection of Wetlands](#)
- Procurement of Goods and Services ([RCW 39.26](#))
- [State Environmental Policy Act \(SEPA\)](#)
- WSDOT Secretary's [EO E 1102.00 Wetlands Protection and Preservation](#)
- WSDOT [Strategic Plan](#)
- Shoreline Management Act [RCW 90.58](#) and [WAC Title 173](#)
- Optional Shoreline process [RCW 90.58.356](#)
- Water Rights [RCW 90.03 WAC 173-152](#)

### 431.02(3) **Local**

- Shoreline ordinances and Shoreline Master Program (see local agency webpages).

### 431.02(4) **Agreements**

- [Interagency wetland mitigation guidance](#): Wetland Mitigation in Washington State Part 1 – Agency Policies and Guidance and Part 2 – Developing Mitigation Plans
- The Environmental Protection Agency (EPA) and United States Army Corps of Engineers (Corps) “Exempt Construction or Maintenance of Irrigation Ditches” joint memo provides information including terms and definitions as well as guidance for how both agencies will work together to apply these exemptions. This memorandum refers to citations 404(f) (1)(C) and 404(f)(2) of the Clean Water Act (CWA) as well as 33 CFR 323.4(c).

## 431.03 Considerations during project development

### 431.03(1) *Planning*

Planners screen proposed projects to identify the potential for wetlands and other waters in the planning study area. If the planner identifies possible wetlands or other waters in the planning study area, they notify the region environmental coordinator who can prepare to coordinate wetland and stream reconnaissance for scoping as project-level information develops.

Identifying mitigation opportunities and needs during planning, corridor studies, and scoping phases allows time to coordinate with other planning efforts and forecast compensation needs. Early coordination aids in planning sustainable and effective watershed-based solutions and may expand the range of mitigation options for project impacts.

WSDOT must protect existing compensatory mitigation sites. See the [Environmental guidance for planning studies](#) webpage for information on how to conduct environmental screening to identify WSDOT compensatory mitigation sites in a study area.

WSDOT must protect existing compensatory mitigation sites. See the [Environmental planning webpage](#) for information on how to conduct environmental screening to identify WSDOT compensatory mitigation sites in a study area.

### 431.03(2) *Scoping*

WSDOT environmental teams begin considering compensatory mitigation options as soon as they think impacts to wetlands and other waters in the project area may occur. During scoping and environmental review, WSDOT considers available compensatory mitigation options in the following order:

1. Wetland mitigation banks (established by WSDOT or others)
2. [In-Lieu Fee Programs](#) (established by a non-profit entity or a government agency involved in natural resource management)
3. Advance mitigation established by WSDOT (permittee-responsible mitigation)
4. Constructing a new WSDOT compensation site concurrently with the project (permittee-responsible mitigation)

The 2008 [Final Rule on Compensatory Mitigation for Losses of Aquatic Resources](#) expresses a preference for using credit from mitigation banks as a first choice, credit from an in-lieu fee programs as a second choice, and permittee-responsible mitigation as least desirable. Project specifics provide additional context for determining which mitigation option is the most suitable choice.

Find information on how to determine compensatory mitigation options in case impacts are unavoidable during Scoping on the [Wetlands & other waters](#) webpage.

## WSDOT Geographic Information Systems workbench

The WSDOT Geographic Information Systems (GIS) workbench is a comprehensive collection of GIS datasets that can be used to approximate the location and extent of known wetlands that is accessible to WSDOT employees. The workbench contains map data from several sources helpful in determining if wetlands may be present including the National Wetland Inventory, local wetland inventories, WSDOT mitigation site locations, hydric soils, topography, satellite imagery, and infrared and true-color aerial photographs.

The workbench provides general information at a small scale suitable for screening for environmental impacts in the early stages of planning and scoping. Wetland biologists (biologists; see [Section 431.06](#) Roles and Responsibilities) pair this office-based activity with a field assessment scaled to suit the purposes of the investigation. It can be a first phase of a wetland and stream reconnaissance or assessment. The workbench doesn't provide enough information to determine presence or absence of wetlands for permitting purposes.

## Wetland and stream reconnaissance

A reconnaissance survey confirms the presence or absence of wetlands and other waters based on a field visit by a biologist. Reconnaissance may include estimation of wetland category, stream water type, and buffers depending on the necessary level of information to address project needs. WSDOT staff can use reconnaissance to inform the preliminary design and avoid and minimize impacts to wetlands and other waters.

If the reconnaissance survey concludes no wetlands or other waters are present in the project area, no further wetland work needs to be done unless the project area changes. The Region/Modal Environmental Manager documents this in the Environmental Review Summary and Environmental Classification Summary (ERS-ECS) database. No further action is needed.

If wetlands or other waters are present, the permit/environmental coordinators must identify permit needs and enter preliminary information into ERS. They continue the mitigation sequence (see [Section 431.08](#) Mitigation) started during Planning and strategize to avoid and minimize impacts.

Biologists don't complete reconnaissance for every project. Biologists may skip this step for projects with known wetlands and other waters and begin documenting existing conditions with a wetland and stream assessment. Either a wetland and stream reconnaissance or assessment is required to complete the ECS. Wetland permit applications require a wetland and stream assessment.

Find information on how to:

- Conduct a wetland, stream and tidal water reconnaissance survey, determine which agency has jurisdiction over the waters and your permitting needs during Scoping on the [Wetlands & other waters](#) webpage.
- Identify applicable permits and approvals in [Section 431.07](#).

## 431.03(3) Design

### Wetland and stream assessment

A Wetland and Stream Assessment is a detailed field study of wetlands and other aquatic resources within the project area. Biologists may conduct an assessment instead of a reconnaissance if detailed wetland information is needed during scoping. If wetlands or other aquatic resources will be impacted by a transportation project, the permit application submittal will require a Wetland and Stream Assessment Report.

A wetland and stream assessment includes delineating:

- Boundaries of wetlands and other aquatic resources
- Ordinary High Water Mark (OHWM) of streams/tributaries and lakes
- High Tide Line (HTL) of tidal waters

Survey should collect ditch centerlines to include in the assessment.

Biologists use the Washington State Wetland Rating System to determine the category of wetlands based on the functions and values the wetlands provide. They classify the wetlands using one or more national methods. More complex projects may need additional functional assessment to develop detail.

A Wetland and Stream Assessment Report summarizes the field data and includes:

- A map showing:
  - Surveyed wetland boundaries
  - Surveyed OHWM
  - HTL and mean high water
  - Ditches that meet United States Army Corps of Engineers (Corps) criteria for Waters of the US
  - Regulatory buffers
  - Study area limits
- A narrative describing the wetlands and other waters
- Photographs
- Data sheets including
  - Wetland delineation
  - Wetland rating and figures
  - Functions analysis

WSDOT staff use this information to show how the project avoids and minimizes impacts where possible, determine unavoidable impacts, and document compensatory mitigation for unavoidable impacts.

The Corps considers wetland delineations valid for five years from the date of the field work. If the project is delayed beyond the five year time frame, the field work and report will need to be updated before submitting the permit application.

Find information on how to:

- Assess and document wetlands and other waters in a Wetland and Stream Assessment Report during Preliminary Design on the [Wetlands & other waters](#) webpage.
- Determine which agencies have jurisdiction over any wetlands or other waters assessed during Scoping on the [Wetlands & other waters](#) webpage.

## Identifying impacts to wetlands and other waters

WSDOT staff identify impacts to wetlands and other waters by comparing the surveyed wetland boundaries to the project footprint during environmental review. A short description of wetland impacts may be included directly in the environmental review document. The environmental coordinator writes a separate Wetland Discipline Report if the impacts are environmentally controversial or complex. If no compensatory mitigation is required, wetland reconnaissance documentation is all that is required.

Common transportation project activities that may impact wetlands or other waters include:

- Filling wetlands
- Draining wetlands
- Altering natural drainage patterns
- Increasing or decreasing water levels
- Discharging sediment or toxicants in runoff
- Mechanically removing wetland vegetation
- Compacting wetland soils
- Using wetlands as staging areas
- Altering wetland or stream buffer areas
- Shading impacts to wetlands
- Converting aquatic resource

Impacts to wetlands and other aquatic resources include:

- **Permanent** – when work results in the permanent loss of wetlands or other aquatic resources.
- **Long-term temporary** – When work affects wetland functions, and the functions are restored in a year or more following impacts.
- **Short-term temporary** – When work affects wetland functions, but functions are restored within one year or within one growing season following impacts.
- **Indirect** – When work may affect the functions of wetlands or other aquatic resources.
- **Loss of a wetland** – When the entire area of the wetland is permanently impacted or no longer provides any functional value.
- **Aquatic resource conversions** – For example, converting a wetland to a stream channel during a fish passage barrier correction, or a forested or scrub-shrub wetland to an emergent wetland.

Regulators may not require compensatory mitigation for unavoidable impacts for projects designed for aquatic habitat restoration or enhancement, such as projects specifically built for fish barrier correction, if they result in net increases in aquatic resource functions and values.

See Washington State Department of Ecology's (Ecology) [Interagency wetland mitigation guidance](#) webpage for detailed definitions of the different types of impacts and when regulators may require compensatory mitigation.

Find information on how to:

- Document impacts and find the Wetland Discipline Report Checklist during Preliminary Design on the [Wetlands & other waters](#) webpage.
- Write appropriately sized discipline reports on the [NEPA & SEPA](#) webpage.

See [Section 431.08](#) Mitigation for information on developing Mitigation Plans.

#### **431.03(4) Construction**

See [Chapter 600](#): Construction for considerations of wetlands and other waters during and at the end of construction including:

- Submitting a right-of-way plan
- Submitting an as-built plan

Find information on how to initiate compensation site monitoring and apply for a permit modification on the [Environmental during construction](#) webpage.

#### **431.03(5) Maintenance and Operations**

##### **Site coordination during monitoring period**

Region or mode compensatory mitigation site manager coordinates with the wetland monitoring group throughout the monitoring period by:

- Reviewing the monitoring manager's proposed fieldwork schedule to coordinate management and monitoring activities (e.g. to make sure weed spraying isn't conducted just before the monitoring visit.)
- Sending documentation of management activities to the wetland monitoring group for inclusion in the annual monitoring report.
- Responding to feedback from the wetland monitoring group regarding emerging problems at the site. For example, if the wetland monitoring group sees invasive weed species, they will notify the site manager so that weed control can take place.
- Reviewing draft monitoring reports before they are submitted to the permitting agencies.

The ESO wetland monitoring group:

- Coordinates and conducts monitoring activities for compliance with permits.
- Provides management recommendations based on site observations and data to inform the adaptive management cycle.
- Facilitates annual meetings with the regions/modes to review site development.
- Provides annual monitoring reports for site compliance.

## Concluding monitoring

At the end of the monitoring period, the wetland monitoring group documents that WSDOT has replaced the acreage and functions of the impacted wetlands and other waters. They request concurrence from regulators that permit obligations have been met.

The wetland monitoring group continues to monitor compensatory mitigation sites while waiting for either a release from further monitoring from the regulators or concurrence that permit conditions have been met.

The WSDOT maintenance division or environmental restoration crews protect compensatory mitigation sites that remain in WSDOT ownership after monitoring in perpetuity. They follow the long-term management plan for the site. See [Section 431.08](#) Mitigation for WSDOT's long-term responsibilities for compensatory mitigation sites.

## 431.04 Analysis & documentation requirements

This section describes analysis and documentation requirements based on regulatory requirements. Determine level of detail based on complexity/size of project, expected severity of impacts, and potential for public controversy.

### 431.04(1) Analysis & documentation for NEPA

Wetland and Stream Assessment Report is required for NEPA documentation if wetlands or other waters are present. WSDOT submits the Wetland and Stream Assessment Report and as part of the permit application.

WSDOT performs Section 404(b)(1) analysis as part of the NEPA document for individual permits to submit with the Section 404 permit application.

Environmental coordinators write a Wetland Discipline Report if impacts are environmentally controversial or complex. The Wetlands Discipline Report Checklist can be found on the [Wetlands & other waters](#) webpage during Preliminary Design.

### Analysis & documentation for SEPA only (No federal nexus)

Analysis and documentation for SEPA-only projects are the same as for NEPA.

## 431.05 External engagement

For most Nationwide Permits (NWP), the Corps will send the project description, impacts numbers, and drawings out for a 10-day Agency & Tribal Review. All tribal and agency comments must be addressed before the Corps can verify the work under a NWP.

For Individual Permits, the Corps will issue a joint public notice (15-30 days depending on the activity) with the Section 401 certifying agency or tribe once they have a complete application.



## 431.06 Internal roles and responsibilities

### 431.06(1) *Planner*

- Conducts environmental screening for potential wetlands and other waters.
- Notifies the region environmental coordinator if obvious wetlands or other waters are in the study area.

### 431.06(2) *Project Engineer*

- Works with environmental managers and permit coordinators to request a reconnaissance from a WSDOT regional or headquarters environmental office or consultant.
- Works with environmental managers and permit coordinators to request a wetland and stream assessment from a WSDOT regional or headquarters environmental office or consultant.
- Provides the biologist the project description, purpose, and location, project plan sheets including the study area or area of potential effect, written right of entry for access to non-DOT property, and survey crew.

### 431.06(3) *Region/Modal Biology Programs, Environmental Services Office Wetland Program, or Consultant*

- Biologists must meet the [minimum qualifications for wetland biologists](#) (PDF 565KB).
- Performs wetland and stream reconnaissance and prepares the Wetland and Stream Reconnaissance Memo to provide to the project engineer, environmental coordinator, and permit coordinator.
- Performs wetland, stream, and other waters assessment, evaluates and documents ditches, evaluates wetland and stream buffers, and prepares the Wetland and Stream Assessment Report.
- Writes the Conceptual Mitigation Plan.
- Writes the Draft and Final Mitigation Plan.
- WSDOT biology staff review and comment on consultant prepared reports/plans.

### 431.06(4) *Region Environmental Coordinator*

- Fills out the ERS
- Determines potential unavoidable impacts with Region Permit Coordinator and Biologist.
- Documents impacts in the environmental review document or a wetland discipline report.
- Plans for and documents avoidance and minimization of impacts.

### 431.06(5) *Region Permit Coordinator*

- Fills out the ERS.
- Determines potential unavoidable impacts with Region Environmental Coordinator and Biologist.
- Plans for and documents avoidance and minimization of impacts.
- Applies for permits.

### 431.06(6) *Region/Modal Environmental Manager*

- Reviews and approves documentation that goes into ECS.

**431.06(7) Environmental Services Office Wetland Monitoring Group**

- Monitor WSDOT owned mitigation banks and compensatory mitigation sites.
  - Communicate with site managers in the region/mode and restoration crews and provide site observations and data to inform adaptive management of mitigation sites to achieve permit requirements.
- Write annual monitoring reports.
- Write and submit emails to regulatory agencies to request closeout of permit monitoring requirements for mitigation banks and compensatory mitigation sites.

**431.07 Applicable permits & approval process**

Apply for one or more of the following permits when work is in or over a wetland or stream:

- Navigable waters permit under Section 10 of the Rivers & Harbors Act
- Discharge permit under Section 404 of the Clean Water Act
- Administrative Order for fill in non-federally regulated wetlands

See the Graphic depiction of the [Limits of Corps Regulatory Jurisdiction](#) on the Corps' webpage.

Permits under Section 10 of the Rivers & Harbors Act and Section 404 of the CWA require a Water Quality Certification per Section 401 of the CWA. See [Chapter 430 Surface Water](#) for information on Water Quality Certifications and compliance with Section 401 of the CWA.

**431.07(1) Section 10 of the Rivers & Harbors Act**

The purpose of the Rivers and Harbors Act is to ensure the free flow of interstate commerce on our aquatic "highways", or navigable waters. Navigable waters are tidally influenced waters currently or historically used to transport commerce, such as Puget Sound, Lake Washington, and the Columbia River. You will need a Section 10 permit from the Corps when you work on a structure in or over a navigable water of the US.

Check the lists of [Navigable Waters in Washington State \(PDF 100KB\)](#) on the [Streams, Rivers, and Tidal Waters](#) page of the Corps Permit Guidebook to see if the Corps has Section 10 jurisdiction of the waterbody.

Use the same permit processes as the Section 404 discharge permits, below, to obtain coverage under Section 10.

**431.07(2) Section 404 Nationwide Permits**

The Corps issues programmatic permits covering activities that have minimal individual and cumulative adverse environmental effects every five years. The Corps will verify projects fit under one or more of the NWP. Permit coordinators can use Section 5 of the [Corps' User's Guide for Nationwide Permits in Washington State \(PDF 2.27MB\)](#), the [Corps' 2017 NWP Summary Chart \(PDF 110KB\)](#) to find out if an activity is covered by an NWP.

To be covered under an NWP, the work must also follow the:

- National General Conditions - broad conditions that apply to all NWPs nation-wide. See Section 4 of the User's Guide.

- Regional General Conditions – Corps Seattle District conditions that apply to all NWP for work in Washington. See Section 3 of the User’s Guide.
- NWP-specific Regional Conditions – Corps Seattle District conditions that apply only when work will be verified under that NWP. See Section 5 of the User’s Guide.

### **431.07(3) Section 404 Individual Permits**

Permit coordinators need to apply for an Individual Permit for work that cannot be verified under the NWPs.

### **431.07(4) Section 404 Regional General Permits**

Section 404 of the Clean Water Act also allows the Corps to issue 5-year Regional General Permits (RGPs) for certain types of activities, similar to the NWPs. There are currently no RGPs that WSDOT work can use at this time.

### **Exemptions from Section 404 Permits**

Work in or over navigable waters is not exempt from getting a permit under Section 10 of the Rivers and Harbors Act.

The maintenance or emergency repair of transportation structures or riprap that was previously authorized may be exempt from getting a permit under Section 404 of the Clean Water Act (33 CFR 323.4). This can include bank stabilization, culvert repairs, and bridge footing scour repairs.

To be exempt, work must be consistent with the previously authorized work in the following ways:

- **Scope** – The purpose of the work must be the same as the purpose of the previous work.
- **Character** – The material must be of the same type and size (or one size larger) as was previously placed.
- **Size** – The footprint of the work must be the same as the previous footprint.

The repair must also be done within a “reasonable period of time” after the damage occurs to be exempt.

If you are certain the work is exempt, it is not necessary to submit a permit application or request approval from the Corps. If you are not sure if the work is exempt, contact the liaison program for help.

### **431.07(5) Non-federally regulated wetlands**

For waters of the state under Ecology’s jurisdiction, and where there is no Corps jurisdiction, Ecology will issue an Administrative Order that the work is consistent with the State Water Pollution Control Policy and other state laws ([Chapter 430](#)). Follow the procedures on the [Wetlands & other waters](#) webpage during Final Design to apply for an Administrative Order from Ecology. Coordinate with the tribes and the Environmental Protection Agency early in the design process for work in waters of the state on tribal lands to find out what approval is needed for the work.

### **431.07(6) Shoreline permits and approvals**

Shoreline permits and approvals may be required for work within 200 ft. of a shore-line of statewide significance. Shorelines include floodways, wetlands, and all ma-rine waters along the Puget Sound and Pacific Ocean. The Department of Ecology is responsible for implementing the Shoreline Management Act, which directs local governments to develop Shoreline Master Programs (SMP). Local governments issue Shoreline permits and approvals, following their SMP. Types of Shoreline Permits & approvals:

- Substantial Development Permits
- Conditional Use Permits
- Variance
- Exemption Issued by Local Government
- Exemption (optional shoreline process for WSDOT only [RCW 90.58.356](#))

Many WSDOT projects within 200 ft. of shoreline jurisdiction qualify for the optional shoreline process under [RCW 90.58.356](#). The optional shoreline process allows WSDOT to perform certain maintenance, repair, safety, and replacement work without applying for a shoreline permit or approval. Check [RCW 90.58.356](#) to determine if your project meets the criteria for this process.

If the project does not require a permit and will cost more than \$1 million to plan and design, send written notification of the project prior to construction to all:

- Agencies, federal and state, with jurisdiction in the area, including the Ecology Regional Planner.
- Agencies with facilities or services that may be impacted by the project, including utility companies, transit systems, and schools.
- Adjacent property owners within 300 feet of the shoreline jurisdiction area.

If there are dozens to hundreds of property owners that require notification under the optional shoreline process or if the local agency's permit process is simple, consider applying for a shoreline permit or approval instead.

If your project doesn't meet the criteria for an optional shoreline process, apply for a shoreline permit or approval during final design. See the local SMP and coordinate with local government staff to determine which permit you need. Sometimes local governments have different criteria for different types of shoreline permits and approvals.

### **Coastal Zone Management Certification**

Ecology evaluates federal activities and permit applicants ([15 CFR 930.39](#)) to en-sure consistency with the state's Coastal Zone Management Program (CZMP). This applies to projects within the 15 coastal counties. Washington State does not have a stand-alone law on Coastal Zone Management, but Ecology looks at how the project is consistent with the state's the Shoreline Management Act, Water Pollu-tion Control Act, and the Ocean Resources Management Act.

## Water Rights

Ecology issues water right permits to applicants that need to withdraw any amount of surface water or more than 5,000 gallons per day of groundwater ([RCW 90.03](#) and [WAC 173-152](#)). WSDOT or the contractor may need to acquire a temporary water right permit for dust control or watering a mitigation site if potable water is not available near a site.

### 431.08 Mitigation

WSDOT's Wetland Protection and Preservation Secretary's EO is to mitigate for all adverse effects to wetlands in accordance with Governor's [EO 89-10](#).

WSDOT uses the mitigation sequence outlined in state and federal EOs and state and federal regulations. Mitigation sequencing requires the applicant to:

1. **Avoid** impacts to wetlands and other aquatic resources.
2. **Minimize unavoidable impacts.**
3. **Compensate for unavoidable impacts** through required compensatory mitigation.

Avoidance is the preference because it has the greatest reliability and is the simplest, most effective way to preserve and protect wetlands.

The Federal Highway Administration Mitigation of Environmental Impacts section of the [Environmental Review Toolkit](#) webpage summarizes parts of [40 CFR § 1500](#), [1508](#), and [23 CFR 771](#) that pertain to mitigation.

#### **431.08(1) *Selecting a compensatory mitigation option***

WSDOT develops mitigation strategies that result in the greatest ecological benefit while making efficient use of financial resources. Compensatory mitigation should make ecological sense in the landscape context in which it occurs. WSDOT prioritizes compensation projects that restore environmental processes at the site scale or at a larger landscape scale. Find more information about evaluating landscape and site scale environmental processes on Ecology's [Watershed Characterization](#) webpage.

WSDOT follows guidance in the [Final Rule on Compensatory Mitigation for Losses of Aquatic Resources \(2008\)](#) uses mitigation credits established prior to project impacts when possible. Agencies must approve mitigation bank and in-lieu fee program instruments, including identification of initial sites, before any credits are released for use. If the impacts are not in the service area of an approved third-party mitigation bank or in-lieu fee program, permittee-responsible mitigation may be the only option. WSDOT uses credit from previously implemented compensatory mitigation before considering construction of a new compensatory mitigation sites when possible. See the [Wetlands & other waters](#) webpage during Final Design for how to purchase third-party mitigation credits or use advance WSDOT mitigation credits.

If credits aren't available from mitigation banks, in-lieu fee programs, or advance mitigation sites, then WSDOT plans permittee-responsible mitigation.

WSDOT can only use agricultural lands of long-term commercial significance for compensatory mitigation when there are no other options ([RCW 47.01.305](#)). Washington law directs WSDOT to consider public and private lands before using agricultural lands. WSDOT must make every effort to avoid net loss of commercial agricultural lands.

Like any other project, existing wetlands and other waters must be documented prior to construction of permittee-responsible compensatory mitigation sites in a Wetland and Stream Assessment Report. The mitigation design team uses the baseline resource conditions to determine the area available for different types of compensatory mitigation (e.g. restoration, establishment, enhancement, and preservation). The wetland monitoring group uses digital files (MicroStation design or GIS shapefiles) of the delineations of pre-existing wetlands or other waters to evaluate how many acres of each type of mitigation has been provided after the site has been constructed.

### **431.08(2)      *Developing Conceptual and Draft Mitigation Plans***

WSDOT documents the full mitigation sequence, including avoidance and minimization measures, unavoidable impacts and compensatory mitigation proposals in Conceptual, Draft and Final Wetland and Stream Mitigation Plans.

A Conceptual Mitigation Plan contains general information to allow for discussion of the design alternatives and proposed mitigation. WSDOT staff can bring the Conceptual Mitigation Plan to pre-application meetings and append it to the environmental review document. See Ecology's [Interagency wetland mitigation guidance](#) webpage for information on what biologists include in a Conceptual Mitigation Plan.

State and federal regulatory agencies evaluate the mitigation concept to determine if it would adequately compensate for the expected project impacts. A commitment to the mitigation option must be made during the NEPA process, leaving sufficient time to develop an appropriate detailed Wetland and Stream Mitigation Plan and design for the application.

Biologists document how the project avoids and minimizes impact to wetlands or other waters in a Draft Wetland and Stream Mitigation Plan. They describe the project, the remaining unavoidable impacts, and the approach for providing compensatory mitigation.

Regulatory agencies will determine the adequacy of the proposed compensatory mitigation after they review the complete project proposal and Wetland and Stream Mitigation Plan.

Complete Wetland and Stream Mitigation Plans include:

- Details of impact avoidance
- Details of minimization
- Proposed compensatory mitigation for unavoidable impacts
- A plan for establishing a legal mechanism to protect the compensatory mitigation property in perpetuity
- An outline of a Long-Term Management Plan to implement after the compensatory mitigation site permit obligations are met

As of March 2015, the Corps and Ecology require Wetland and Stream Mitigation Plans to contain a commitment to develop a 10-Year Long-Term Management Plan. This requirement does not affect the ongoing requirement for perpetual stewardship of compensatory mitigation sites.

Additional work necessary to develop the Wetland and Stream Mitigation Plan for submittal with the application varies depending on the compensatory mitigation option chosen.

**Mitigation Bank & In-Lieu Fee Programs** – A Mitigation Bank Credit Use Plan or an In-Lieu Fee Program Use plan must be submitted.

**Advance Mitigation** – Advanced Mitigation Plans are approved at the time the site is authorized. It includes details of how the advance mitigation credit will be developed and used, briefly explains how the available credit compensates for project impacts, and provides a ledger showing the debits and remaining credit value.

**Permittee-Responsible Mitigation** – The Draft Mitigation Plan includes all the information needed for WSDOT to plan appropriate mitigation. It includes the rationale for selecting the site, data describing baseline (pre-construction) conditions, a detailed mitigation plan (including a grading plan and planting plan), and goals, objectives, and performance standards.

If WSDOT plans to develop more wetland area than needed for compensation of the project impacts, WSDOT can propose that the excess be available for use by other projects. The permitting agencies won't approve the value for later use unless it is documented in the Wetland and Stream Mitigation Plan that excess credit generated can be used for other projects.

See Ecology's [Interagency wetland mitigation guidance](#) webpage for information on how to write Conceptual, Draft and Final Mitigation Plans.

See the [Wetlands & other waters](#) webpage during Preliminary Design for information on how to:

- Use available WSDOT mitigation credits.
- Write Credit Use and Mitigation Plans.
- Develop a Long-Term Management Plan.

See the [Wetlands & other waters](#) webpage during Final Design for information on how to purchase third-party mitigation credits.

### **431.08(3) *Establishing the mechanism for compensatory mitigation site protection***

The 2008 [Final Rule on Compensatory Mitigation for Losses of Aquatic Resources](#) requires long-term compensatory mitigation site protection. Long-term site protection must be in perpetuity. Another natural resource management entity may provide the long-term management with or without direct property transfer to their ownership.

Consider opportunities to develop partnerships in mitigation development with other natural resource management entities or local jurisdictions. If possible, establish willing partners to transfer compensatory mitigation sites to manage long-term. Qualified natural resource entities must agree to restrict the use of the property to preserve the natural and beneficial values of the wetland ([RCW 47.12.370](#)).

WSDOT most often uses recordings on the right-of-way plan or a sundry site plan that identify it as a compensatory mitigation site with the Corps permit number as the long-term site protection mechanism. If the site won't be maintained for the long term in WSDOT ownership, another legal mechanism for long-term protection must be developed.

WSDOT environmental staff and project managers coordinate with the region real estate services office to develop the long-term protective mechanisms for land transferred to other ownership. Conservation easements, restrictive covenants, or other mechanisms may be suitable for long-term protection.

WSDOT project managers and environmental staff also coordinate with the region real estate services office and legal counsel as needed to develop any compensatory mitigation site transfer mechanism. See [RCW 47.12.370](#) on the Washington State Legislature webpage for the requirements for environmental mitigation exchange agreements. Regulatory agencies only allow transfer of compensatory mitigation site ownership to other parties for long-term management after meeting all performance criteria during monitoring. There must be an agreement that the new entity will protect the environmental functions in perpetuity.

#### **431.08(4) Final Wetland and Stream Mitigation Plan development**

WSDOT submits the permit application when further design refinements are not likely to change the wetland and other waters impacts. Reports supporting the application may include one or more Wetland and Stream Assessment Reports and a Draft Wetland and Stream Mitigation Plan. See Final design on the [Wetlands & other waters](#) webpage for MicroStation and AutoCAD application drawing pattern templates.

After the permit application has been submitted, WSDOT finalizes the Draft Wetland and Stream Mitigation Plan in coordination with the permitting agencies. The Final Wetland and Stream Mitigation Plan is completed after the appropriate agencies have provided written conditional approval of the Draft Wetland and Stream Mitigation Plan. WSDOT prepares the final mitigation design, approved by the permitting agencies, for contract during the design phase with development of the final Plans, Specifications and Estimates.

#### **431.08(5) Monitoring**

The ESO wetland monitoring group evaluates each compensatory mitigation site annually. They compare the site's performance to criteria established in the Wetland and Stream Mitigation Plan and environmental permits.

The wetland monitoring group collects quantitative data to evaluate mitigation sites according to the [WSDOT Wetland Mitigation Site Monitoring Methods \(PDF 98KB\)](#). This document describes methods to collect data on factors specific to each site's performance criteria.

Find the most recent two years of Monitoring Reports on the See the [Wetlands & other waters](#) webpage under Tools & resources.

#### **431.08(6) WSDOT's long-term responsibilities for compensatory mitigation sites**

WSDOT owns most of its compensatory mitigation sites. They will remain in state ownership in perpetuity. WSDOT transfers ownership of some compensatory mitigation sites to entities that have agreed to keep the area as a compensatory mitigation site after monitoring is complete.

WSDOT may transfer department-owned wetlands to qualified entities that agree to restrict the use of the property consistent with preservation of the wetland and other aquatic resources after permit obligations have been met ([RCW 47.12.370](#)). Any such transfer must



include an approved legal mechanism for long-term protection. WSDOT regions evaluate this option to reduce agency risk.

For WSDOT-owned sites, the regions transfer long-term stewardship to either the maintenance division or environmental restoration crews after the regulatory agencies concur that permit obligations have been met.

## 431.09 Abbreviations and Acronyms

Corps	US Army Corps of Engineers
Ecology	Washington State Department of Ecology
ECS	Environmental Classification Summary
ERS	Environmental Review Summary
EO	Executive Order
EPA	Environmental Protection Agency
ERS	Environmental Review Summary
GIS	Geographic Information System
HTL	High Tide Line
NEPA	National Environmental Policy Act
NWP	Nationwide Permit
OHWL	Ordinary High Water Mark
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
WQC	Water Quality Certification
WQMPP	Water Quality Monitoring and Protection Plan
WSDOT	Washington State Department of Transportation

## 431.10 Glossary

This glossary provides reader friendly context for terms in this chapter. The associated links provide technical definitions. These terms may have other meanings in other chapters. Many of the terms below are included in the definitions in Title 33 Navigation and Navigable Waters, Part 332 Compensatory Mitigation for Losses of Aquatic Resources: [33 CFR § 332.2](#).

**Advance Mitigation** – Compensatory mitigation that is accepted by regulatory authorities as being established before an impact occurs. This is a form of permittee -responsible mitigation.

**Buffer** – An upland, wetland, or riparian area that protects or enhances wetlands or aquatic resource functions from disturbances associated with adjacent land uses.

**Compensatory Mitigation** – The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, or in certain circumstances preservation of wetlands or other aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

**Enhancement** – Changing a wetland to improve specific aquatic resource functions. Enhancement results in a gain in aquatic function but does not result in a gain in wetland area.

**Establishment** – Converting an upland area to a wetland or other aquatic resource. Establishment results in a gain in wetland area and functions. (Equivalent to the term ‘creation’ used previously.)

**Impact** – Adverse effect, whether direct, indirect, temporary, or cumulative. Typical adverse effects to wetlands or other waters include filling, draining, altering natural drainage patterns, increasing or decreasing water levels, discharging sediment or toxicants from runoff, mechanically removing wetland vegetation, altering wetland or stream buffers, or compacting wetland soils.

**In-Lieu Fee Program** – A program administered by a governmental or nonprofit natural resources management entity that provides compensatory mitigation and sells mitigation credits. With regulatory approval, the obligation to provide compensatory mitigation is transferred from the permittee to the in-lieu fee entity when the credit purchase is complete.

**Mitigation** – Avoiding adverse impacts to wetlands, streams and other aquatic resources, where practical; minimizing unavoidable impacts; and compensating for all remaining unavoidable impacts.

**Mitigation Bank** – A property developed for the purpose of providing compensatory mitigation in advance of authorized impacts to aquatic resources where wetlands are established, restored, enhanced, or preserved. A mitigation bank may sell credits to and assume the mitigation obligations of third parties. With regulatory approval, the mitigation obligation is transferred when the credit purchase is finalized.

**Mitigation Sequence** – An ordered approach to mitigation that involves analyzing the affected environment, determining the effects of projects, avoiding and minimizing adverse impacts, and compensating for the remaining unavoidable impacts.

**Permittee-Responsible Mitigation** – Compensatory mitigation for which the permittee retains full responsibility.

**Preservation** – Removing a threat to or preventing a decline of aquatic resources by implementing legal or physical mechanisms to provide permanent protection. Preservation does not result in a gain of wetland area or functions.

**Restoration** – Changing a site so natural or historic functions are returned to a former or degraded wetland. For tracking net gains in wetland area, restoration is divided into Re-establishment and Rehabilitation. Re-establishment results in a gain in wetland area; rehabilitation results in a gain in aquatic resource function, but not in area.

**Waters of the state** – 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** – Briefly, all waters that are:

1. Used in interstate commerce, including tidally influenced waters.
2. Interstate waters including interstate wetlands.
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds.
4. Some impoundments.
5. Tributaries of the above.
6. Territorial seas.
7. Wetlands adjacent to waters.
8. Excludes prior converted croplands and waste treatment ponds.

**Wetland** – In general, wetlands are areas that are normally wet enough to support plants typically adapted for life in saturated soil conditions. [Washington State](#) and [federal](#) jurisdictional definitions of wetlands are slightly different.

**Wetland and Stream Assessment Report** – Describes the location, classification, ratings and functional assessment for each wetland based on field work by a qualified wetland biologist and a land survey. The project area for this report should include all potential work areas so the report does not have to be updated unless the project area changes.

**Wetland and Stream Mitigation Plan** – Describes measures taken to avoid and minimize wetland impacts and the way compensatory mitigation will be accomplished. This plan may have several iterations and levels of detail depending on the stage of design and discussions with regulatory agencies. It is finalized as permits are issued, and often is incorporated into the permit conditions.

**Wetland Discipline Report** – Uses the wetland boundaries and categories in the Wetland and Stream Assessment Report and the project footprint for each alternative to estimate impacts to wetlands and other waters. It may be updated as design modifications change the adverse impacts.

**Wetland Reconnaissance Memo** – Describes the presence or absence of wetlands based on a brief field visit. The project area for this report should include the potential work areas for all alternatives.

# 431.11 Exhibits

## Exhibit 431-1 Wetlands and Other Waters Flow Chart

