Chapter 431 Wetlands

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.

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 wetlands 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 must avoid impacts to wetlands and other waters where practical; minimize impacts where it is not possible to avoid wetlands; 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.

Transportation project activities that may impact wetlands or other waters (aquatic resources) 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 wetlands from bridges

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

Many statutes, regulations, EOs, and agreements protect wetlands. This section identifies wetland policies, regulations, agreements, and guidance that pertain to the environmental review phase.

431.02(1)  Federal

- Clean Water Act (Section 404)
- Final Rule on Compensatory Mitigation for Losses of Aquatic Resources (2008)
- Rivers and Harbors Act of 1899 (Section 10)
- 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

431.02(3)  Federal & State


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 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 wetlands may be present in the study area. 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)
   
   The procurement reform law (RCW 39.26) must be followed to purchase mitigation credit. For assistance first go to the Wetland Mitigation webpage, or contact the Environmental Services Office Financial Program Manager, Jodie Vosse, at jodie.vosse@wsdot.wa.gov.
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.

### 431.03(3) 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. 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 that wetlands are or aren’t present for permitting purposes.

### 431.03(4) Wetland and stream reconnaissance

Wetland and stream reconnaissance confirms the presence or absence of wetlands and other waters based on a field visit by a biologist. The terms "wetland reconnaissance" and "wetland inventory" are synonymous. They include identification of streams and other waters. 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.

Document reconnaissance results in an email or a Wetland and Stream Reconnaissance Memo. The email or memo may include a sketch map showing the limits of the study area and the approximate location, size and quality of the wetlands and other waters present.

If the Wetland and Stream Reconnaissance Memo concludes no wetlands 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 begin considering the mitigation sequence (see Section 431.08 Mitigation) and plan 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:
- Request and perform wetland and stream reconnaissance, and prepare an email or Wetland and Stream Reconnaissance Memo on the Wetland & stream reconnaissance webpage.
- Enter project information into ERS-ECS database on the Categorical Exclusion process webpage.
- See Section 431.07 to identify applicable permits and approvals.

431.03(5) 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 early stages of project development. If wetlands or other aquatic resources will be impacted by a transportation project, the Environmental Review Summary (ERS) and the permit application submittal 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
- Ditch centerlines
Biologists use the Washington 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 of the surveyed wetlands
- OHWM and HTL boundaries
- Regulatory buffers
- Ditches that meet United States Army Corps of Engineers (Corps) criteria for wetlands or streams/tributaries

WSDOT staff use this information to determine the impacts, show how the project avoids impacts where possible, and required compensatory mitigation for each alternative.

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

Find information on how to:

- Conduct wetland and stream assessments and write Wetland and Stream Assessment Reports on the Wetland & stream assessment webpage.
- Determine which agencies have jurisdiction over any wetlands or other waters assessed on the Determining jurisdiction of wetlands and 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, the environmental coordinator writes an abbreviated Wetland Discipline Report.

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 on the Wetland mitigation webpage.
- Write appropriately sized discipline reports on the Preparing quality environmental documents webpage.
- Find the Wetland Discipline Report Checklist on the WSDOT Wetland & stream assessment webpage.

See Section 431.08 Mitigation for information on developing Mitigation Plans.

### 431.03(6) 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
- Initiating compensation site monitoring
- Applying for a permit modification
431.03(7) **Maintenance and Operations**

**Site coordination during monitoring period**

Region or mode compensatory mitigation site manager coordinate 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.

**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**

Biologist may write a Wetland and Stream Reconnaissance Memo or email early in scoping to document the presence or absence of wetlands and other waters. If the reconnaissance concludes no wetland or other waters are present in the project area, the environmental manager enters this information into the ERS-ECS database. No further documentation is required unless the project area changes.
If wetlands or other waters are present, the environmental coordinator identifies permit needs and enters preliminary information into ERS. A 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.

A short description of wetland and stream impacts may be included directly in the environmental review document. Environmental coordinators write a Wetland Discipline Report if impacts are environmentally controversial or complex. If there are no impacts, an abbreviated discipline report may be written. Information on how to compile a discipline report can be found on the Preparing quality environmental documents webpage. The Wetlands Discipline Report Checklist can be found on the Wetland & stream assessment webpage.

**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 NWPs, 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, and 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](https://example.com) (pdf 565 kb).
- 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.
- 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.
- 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)  **Design Team**

- Documents how impacts were avoided and minimized.

431.06(8)  **Environmental Services Office Wetland Monitoring Group**

- Monitor WSDOT owned mitigation banks and compensatory mitigation sites.
- 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 100 kb) 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 NWPs. Permit coordinators can use Section 5 of the Corps’ User’s Guide for Nationwide Permits in Washington State (pdf 2.27 mb), the Corps’ 2017 NWP Summary Chart (pdf 110 kb) 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 NWPs 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 Non-federally regulated wetlands webpage to apply for an Administrative Order from Ecology. Coordinate with the tribes and EPA 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.
431.08 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 minimizes the effect of wetland impacts over time by using mitigation credits established prior to project impacts. Mitigation banks and advance mitigation projects establish the compensation resource before project impacts occur, acting to reduce temporal impacts. Agencies must approve in-lieu fee program instruments, including identification of initial sites, before any credits are released for use. In-lieu fee programs sell a percentage of the credits in advance of the construction of the mitigation projects and the remainder after the site is established. Each approach has specific requirements to meet before credits can be used. See the Mitigation proposals webpage for how to purchase third-party mitigation credits.

Approved third-party mitigation banks and in-lieu fee programs are available for use in many areas, while permittee-responsible mitigation may be the only option in other areas. Using credit from previously implemented compensatory mitigation is preferred because the functioning wetland or other aquatic resources are developed before impacts to wetlands and waters occur. This reduces many of the risks and uncertainties related to impacts and mitigation success. Mitigation developed on larger sites in carefully selected landscape positions has the potential to provide higher ecological functioning and may be more sustainable over time.

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 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 must apply mitigation sequencing for all projects to avoid and minimize impacts, then identify unavoidable impacts and propose compensatory mitigation. WSDOT documents all of this in Conceptual, Draft and Final Wetland and Stream Mitigation Plans. See Section 431.08 Mitigation for mitigation requirements and compensation options for wetlands and other waters.

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 compete 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 or Excess Mitigation Credit** – 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 [Mitigation proposals](#) webpage for information on how to:

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

**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 the Permit application drawings 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 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 98 kb). 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 Wetland monitoring reports webpage.
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
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
OHWM     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 the purpose of 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