



Permit Requirements for Ditch Maintenance



This fact sheet provides an overview of regulatory requirements and guidance related to:

- ✓ Ditch maintenance
- ✓ Recordkeeping
- ✓ Proper disposal
- ✓ Permitting for ditches with natural flow
- ✓ Other local permits that may apply

NPDES Municipal Stormwater Permit Requirements

Mapping

Mapping ditches is required by the National Pollutant Discharge Elimination System (NPDES) Phase I and Phase II municipal stormwater permits if they eventually drain to an outfall or discharge point that has a specified diameter. Ditch attributes that must be mapped according to the NPDES municipal stormwater permit include:

- Conveyance type (e.g., pipe, ditch)
- Material
- Size (if known)
- Associated drainage area
- Land use

Phase I and Phase II Municipal Stormwater Permit References

Phase I: S5.C.2.a and S5.C.2.b
Phase II: S5.C.3 (S5.C.4 in 2019-2024 permit)



Standard Operating Procedures (SOPs)

The following ditch-related activities shall be addressed as part of a Municipal Operation and Maintenance (O&M) Program according to the NPDES municipal stormwater permit:

- Cleaning of culverts that convey stormwater in ditch systems
- Ditch maintenance
- Maintaining roadside areas, including vegetation management
- Erosion and sediment control
- Landscape maintenance and vegetation disposal



Ditch and roadside vegetation maintenance, Photo source: WSDOT



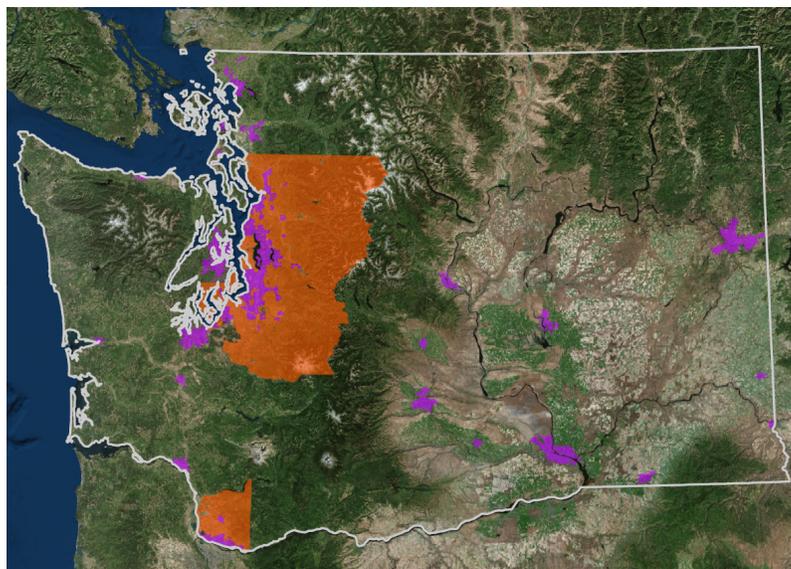
NPDES Municipal Stormwater Permit Requirements

Recordkeeping

Permittees must maintain records of inspections and maintenance or repair activities for up to five years.

Disposal

Street waste solids (including sediment accumulations removed during ditch maintenance) may be reclaimed, recycled, or reused when allowed by local codes and ordinances. Soils that are identified as contaminated pursuant to [Chapter 173-350 WAC](#) must be disposed at a qualified solid waste disposal facility.



Legend Regulated municipal stormwater permit areas as of 2018
Figure source: Washington Department of Ecology

- Phase 1
- Phase 2

Phase I NPDES Municipal Stormwater Permit References

- Mapping: S5.C.2.a and S5.C.2.b
- SOPs: S5.C.9.e (S5.C.10.e in 2019-2024 permit)
- Recordkeeping: S5.C.9.h (S5.C.10.h in 2019-2024 permit)
- Disposal: G10 and Appendix 6

Phase II NPDES Municipal Stormwater Permit References

- Mapping: S5.C.3.a. (S5.C.4.a in 2019-2024 permit)
- SOPs: S5.C.5.f (S5.C.7.e in 2019-2024 permit)
- Recordkeeping: S5.C.5.i (S5.C.7.h in 2019-2024 permit)
- Disposal: G10 and Appendix 6



Disposal Considerations

Use or disposal options for the sediment removed from ditches will depend on the characterization of the waste. Roadside ditch cleanings contaminated by spills or other releases known or suspected to contain dangerous waste must be handled following the Dangerous Waste Regulations ([Chapter 173-303 WAC](#)). If testing determines materials are not dangerous waste, but contaminants are present, consult with your local health department for disposal options.

Stormwater Management Manual for Western Washington

The Volume IV of the Stormwater Management Manual for Western Washington (SWMMWW) describes best management practices (BMPs) for maintenance of roadside ditches (S416 BMPs): “Maintain roadside ditches to preserve the condition and capacity for which they were originally constructed, and to minimize bare or thinly vegetated ground surfaces. Maintenance practices should provide for erosion and sediment control.” Operational BMPs include:



Inspect ditches regularly to identify sediment accumulations and localized erosion



Remove vegetation when flow is blocked or excess sediment has accumulated



Inspect culverts regularly for scour or sedimentation at inlet and/or outlet



Appropriately dispose of dirt and debris from road surfaces after completing ditch cleaning activities



Clean as needed



Do not apply fertilizer unless needed



Remove trash and debris



Perform seeding, fertilizer application, and harvesting in late spring and/or early fall, where possible

Note: Several Phase I jurisdictions (e.g., King County, Pierce County, City of Seattle) and the Washington State Department of Transportation (WSDOT) have developed their own stormwater manuals which have been reviewed for equivalency to the SWMMWW by Ecology. Refer to the stormwater manual that your jurisdiction has adopted to determine if additional requirements related to maintenance of roadside ditches apply.

The frequency of ditch inspections and cleaning is not specified in the NPDES municipal stormwater permit or SWMMWW and can be set by the local jurisdiction. Considerations for establishing inspection and maintenance frequencies include road type, land use type, and previous maintenance records. See **Fact Sheet A2 - Prioritizing Ditches for Inspection and Maintenance** for more information.



Permitting for Ditches that Convey Natural Flow

For regulatory purposes, a ditch that conveys natural flow should be treated as a stream. This may include ditches that are hydraulically connected and within ¼ mile of a stream or wetland (see local codes and ordinances). In some cases, a ditch may not be properly mapped as natural flow conveyance. If maintenance crews encounter a ditch that appears to be conveying natural flow, planned ***maintenance should be put on hold*** until:

- (1) Appropriate permits are obtained, and
- (2) Crews are trained on stream-specific maintenance practices (see **Fact Sheet F3 - Maintaining Ditches that Convey Natural Flow**)



Natural flow in ditch at upstream road crossing

Hydraulic Project Approval (HPA)

A Washington State HPA is required for projects that will use, divert, obstruct, or change the natural flow or bed of any of the salt or fresh waters of the state. HPA is administered by the Washington Department of Fish and Wildlife (WDFW) under [Chapter 220-660 WAC](#). A **Simplified Application** for HPA can be submitted for road maintenance work which includes, but is not limited to:

- Culvert cleaning
- Ditch maintenance

Plans must be submitted with the Simplified Application for HPA and should address the following:

- Plan and cross-view drawings
- Project location in relation to the ordinary high water mark (OHWM) for freshwater, the mean higher high water line (MHHW) for saltwater, the channel migration zone, and the 100-year floodplain
- Equipment that will be used and where it will be operated
- Construction sequencing
- Sediment and erosion control BMPs
- Plan for removal (if any) of riparian vegetation



Natural flow in ditch

WDFW uses an Aquatic Permitting System (APPS) for the HPA application. This application will include proof of State Environmental Policy Act (SEPA) compliance, and can be converted to a Joint Aquatic Resource Permit Application (JARPA) if needed (several permitting agencies accept this form). A copy of the HPA or Federal Permit for the maintenance activity must be on site during the work.



Permitting for Ditches that Convey Natural Flow

Nationwide Permit (NWP)

In 2017, the U.S. Army Corps of Engineers established 52 Nationwide Permits that regulate dredging and placement of fill in wetlands, streams, lakes, and marine waters and may apply to ditch maintenance activities if maintenance is performed in ditches with natural flow. Some activities that may require a permit include, but aren't limited to:

- Placement of sandbags
- Dredging sediment
- Reshaping ditches

The NWP does not apply to activities that only involve cutting or removing vegetation above the ground, where the activity neither substantially disturbs the root system nor involves mechanized pushing, dragging, or other similar activities that redeposit excavated soil. The following NWPs may apply to ditch maintenance activities:

- Maintenance - NWP 3
- Bank Stabilization - NWP 13
- Linear Transportation Projects - NWP 14
- Reshaping Existing Drainage Ditches - NWP 41

Other Potential Permits

Consult local codes and ordinances for additional specific requirements related to ditch maintenance activities. Code requirements that regulate activities, such as vegetation management, in and near streams may vary by jurisdiction. When natural flow is present, additional local permits and submittals may be necessary, including the following:

- Critical areas permit
- Clearing and grading permit
- Shoreline permit
- Habitat permit (for proposed cleaning in riparian areas that are priority habitat areas designated by the local jurisdiction)
- Vegetation management plan
- NPDES permit for herbicide applications (note: herbicide applications should always be performed by a licensed, qualified professional)
- U.S. Army Corps of Engineers Seattle District regional conditions for NWPs



Natural flow in ditch