Environmental Requirements for Maintenance and Operations

The purpose of this chapter is to summarize environmental requirements and procedures that apply to the Washington State Department of Transportation (WSDOT) Maintenance and Operations Program.

At WSDOT, highway maintenance includes both maintenance and operations. The maintenance service objective, stated in the State Highway Systems Plan, is to “maintain and operate state highways on a daily basis to ensure safe, reliable, and pleasant movement of people and goods.”

Maintenance work is performed to care for and maintain the highway and associated features so it substantially retains its original intended use and function. Maintenance activities include patching pavement, cleaning ditches and culverts, repairing slopes and streambank stabilization structures, controlling vegetation, and painting stripes on the road surface.

Operations activities provide a direct service to ensure reliable use of the highway system. Activities include operating rest areas, reversible lane gates, highway lighting, traffic signals, snow and ice control, and keeping the roads operational during a disaster.

(1) Project Management Phases and Maintenance

Often environmental commitments made years before during design and environmental review and environmental permitting and PS&E will require ongoing maintenance and attention. Figure 700-1 illustrates the relationship between maintenance and operations and preceding phases of WSDOT’s transportation decision making process.

Among the maintenance activities that may impact the environment are painting, sanding, anti icing, applying herbicide, mowing and brush control, restoring native plants, and maintaining drainage facilities. Materials stored and used at maintenance facilities also have the potential to adversely impact the environment. The Maintenance and Operations Office provides environmental support at WSDOT facilities by assessing for the presence of hazardous or contaminated materials; managing disposal of hazardous or problematic waste; and providing basic regulatory awareness to Maintenance and Operations personnel.
WSDOT Maintenance and Operation Plans and Policies

A WSDOT Environmental Policy Statement E 1018 issued by executive order on April 7, 2009 makes it clear that WSDOT will comply with environmental requirements and that it is each individual employee’s responsibility to ensure that happens.

In 2003, WSDOT received coverage under the Regional Road Maintenance Program (RRMP) approved by NOAA along with the Regional Road Maintenance Endangered Species Act Program Guidelines that include various general practices and specific practices (such as BMPs) that WSDOT will use to avoid and minimize adverse impacts to fish and aquatic habitat. In areas where none of the referenced documents apply, and there is potential for a maintenance activity to harm a fish or aquatic habitat protected under the ESA, BMPs will still be utilized to avoid and minimize adverse impacts.

The organizational structure of the program includes Regional Maintenance Environmental Coordinator (RMEC) positions that are dedicated to support environmental compliance in each of the regions. WSDOT uses statewide Regional Maintenance Environmental Coordinator Meetings to identify and announce any modifications or changes to the RRMP. New technologies are also discussed at these meetings. Modifications are shared with NOAA Fisheries for concurrence to maintain the status of “ESA compliant.” Additional forums are utilized or created if needed to adequately include key stakeholders (i.e., federal and state regulatory agencies and additional WSDOT personnel) in changes of applicable environmental protection practices.

The Environmental Compliance Assurance Procedures for the maintenance program were updated in 2010. The purpose is to provide notification information and procedures to prevent noncompliance events or violations. These procedures cover notification for spills, planned in-water work, emergency in-water work, BMP performance, and violations.

Training is an important part of implementing the RRMP. All new maintenance staff are trained on how to apply the program during the annual maintenance academy. Training includes both classroom and field courses to understand how to apply BMPs to achieve environmental outcomes. Training is also provided at the regional level on an as needed basis to ensure field operations are up to date on current compliance expectations.

WSDOT ESO also provides training on Guidance for the Protection of Terrestrial Species protected under ESA. Guidance documents are in place for each of the region maintenance areas. They identify special management areas and BMPs to avoid and minimize impacts to terrestrial species including birds, plants and animals.
WSDOT has developed Roadside Vegetation Management Plans to provide a “how to” guide for managing roadsides at the maintenance area level throughout the state. These plans determine the right tool or combination of tools, for the right plant at the right place and time. Vegetation management plans cover mowing and trimming, selective use of herbicides, improving soils, planting native plants, and the care of wetland mitigation sites. The Wetlands Protection and Preservation Policy P 2038 directs WSDOT employees to protect and preserve wetlands and manage wetland mitigation sites and other department owned wetlands for long-term stewardship.

700.03 Interagency Agreements for Maintenance Activities

The following interagency agreements apply to the maintenance program activities. Appendix B includes an index to all of WSDOT’s environmental interagency agreements. Interagency agreements also exist at the regional level. For example, some regions may have agreements with their district USFS office, district WDFW, or local agency environmental departments.

(1) MOA Between WDFW and WSDOT – May 2008

The MOA describes how WSDOT and WDFW will cooperate to ensure that state transportation projects protect fish life and habitats, and ensure consistent and uniform application of RCW 77.55 (construction in state waters) and WAC 220-110 (hydraulic code rules). It includes procedures for emergency/disaster maintenance and repair. Appendix F of the MOA is maintenance guidelines.

(2) Implementing Agreement – Alternative Mitigation Policy Guidance for Aquatic Permitting

In this February 2000 agreement, WSDOT agrees to comply with consensus on mitigation policy among agencies responsible for aquatic resource mitigation. This MOA applies to Ecology and WDFW in issuing or reviewing permits, documents, appeals or compensation agreements under Clean Water Act, Shoreline Management Act, or Hydraulic Code.

Provisions applicable to maintenance and operations:
- Monitoring is required. If mitigation is failing and corrective actions not successful, applicant must contact permitting agencies and use an adaptive management approach to achieve stated performance standards.
- Compliance monitoring may be performed by agencies.
- Mitigation site to be permanently protected.

(3) MOU on Preservation of Agricultural and Forest Lands

This September 1982 agreement between WSDOT and the State Conservation Commission is intended to enhance cooperation in preserving agricultural and forest land, to prevent and treat erosion adjacent to or associated with farmlands and state highways, and maintain drainage ways and reclaim abandon roadways for agricultural purposes.

The agreement commits WSDOT to work with conservation districts through county weed control boards or appropriate county officials to control noxious weeds.
(4) **MOU on Highways Over National Forest Lands**

This June 2013 MOU establishes procedures for coordinating transportation activities on national forest lands.

Provisions applicable to maintenance and operations:

- WSDOT will coordinate with USFS on maintenance activities that might affect national forest lands, including: removal/disposal of dangerous trees, disposal of slash or other waste, material source or storage, changes to drainage patterns, snow and avalanche control, and rock scaling.
- WSDOT will work with USFS to develop roadside vegetation management plans.
- WSDOT will furnish and maintain all standard highway signs, including guide signs requested by the USFS.
- WSDOT will coordinate with USFS for third party occupancy or use by utility facility installations on WSDOT easements.
- Specifies responsibilities for signage for maintenance or emergency activities.
- Specifies responsibilities for control of access to WSDOT easements by USFS or its permitees.

700.04 **Permits and Approvals**

As noted under Section 700.02, the RMEC is responsible for coordinating or processing required permits and approvals applicable to WSDOT maintenance activities at the regional level. This may include Federal, State, and Local Permits. Most WSDOT maintenance activities are covered by general or programmatic permits (e.g. NPDES permits and General HPAs). Many of these permits are located on the WSDOT ESO Permit Program web page.

On February 4, 2009 Ecology issued a NPDES Municipal Stormwater Permit to WSDOT. This permit covers the management of WSDOTs stormwater conveyance system. The Maintenance and Operations Office supports management and compliance with the permit.

Additionally, when maintenance activities are carried out on tribal lands, environmental protection measures may be required by the tribal government or the U.S. Environmental Protection Agency (USEPA). Local governments may also have authority to issue permits regulating activities in their jurisdiction.
700.05  **WSDOT Manuals**

Technical guidance is summarized by reference to the WSDOT manuals described below. Refer to these documents for details. Most manuals can be accessed online from the WSDOT Publications Services web page.

*Maintenance Manual M 51-01* – This manual covers procedures for highway maintenance. In several chapters maintenance activities have environmental implications: emergency operations (hazardous materials spills), drainage maintenance (aquatic habitat, water quality, wetlands, shorelines), bridge repair, roadside maintenance (integrated vegetation management), snow and ice control, and procuring materials from quarries or pits.

*Maintenance Accountability Process Manual* – This document is the primary tool used by the Maintenance Office for evaluating program service delivery and identifying budget investment choices.

*Roadside Manual M 25-30* – This manual provides consistent guidelines for roadside management, and supplements guidelines in the WSDOT *Roadside Policy Manual* M 3110. It is organized around a framework of roadside functions: operational, environmental, visual, and auxiliary. Environmental functions include water quality preservation, protection, and improvement; stormwater detention and retention; wetland and sensitive area protection; noxious weed control; noise control; habitat protection and connectivity; air quality improvement; and erosion control. Sections of the manual offer resources on designated and sensitive areas, wetlands, water quality, wildlife, and noise abatement.

700.06  **Abbreviations and Acronyms**

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>BMP</td>
<td>Best Management Practice</td>
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<td>ESA</td>
<td>Endangered Species Act</td>
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<td>HPA</td>
<td>Hydraulic Project Approval</td>
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<tr>
<td>NOAA</td>
<td>National Oceanic and Atmospheric Administration</td>
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<tr>
<td>NPDES</td>
<td>National Pollutant Discharge Elimination System</td>
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<tr>
<td>PS&amp;E</td>
<td>Plans, Specifications, and Estimates</td>
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<tr>
<td>RRMP</td>
<td>Regional Road Maintenance Program</td>
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<tr>
<td>RMEC</td>
<td>Regional Maintenance Environmental Coordinator</td>
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<td>USFWS</td>
<td>United States Forest Service</td>
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<td>USEPA</td>
<td>United State Environmental Protection Agency</td>
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