

**O&M Staff Training Module 1:
Maintenance Best Practices for Water Quality Protection**

Introduction and Background



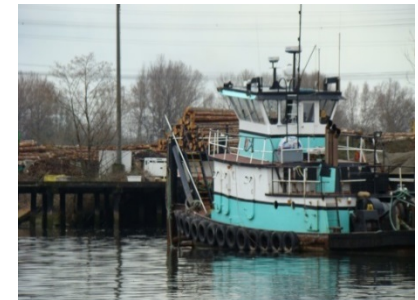
NPDES Phase I Stormwater Permit
City of Tacoma Environmental Services
2018

**Why are we training on
Best Management
Practices to prevent
water pollution?**

...To protect our water

- Most people do not know that the majority of stormwater from the City of Tacoma outfalls is untreated before it flows into receiving waters.
- So controlling pollutants at the source is the best way to protect the many beneficial uses of our waterways like:

- Drinking Water
- Shellfish Consumption
- Fish Consumption
- Recreation
- Flood Prevention



City staff are leading by example in demonstrating the standards of practice

Regulatory Background

Clean Water Act
(Federal Water
Pollution Control Act)
created National
Pollutant Discharge
Elimination System
(NPDES) permits

Tacoma's NPDES
Phase I Municipal
Stormwater Permit
(2013-2018)
describes City
responsibilities to
manage stormwater
runoff draining to
the public storm
system

Section S5.C.9. - O&M
practices, policies and
procedures to reduce
stormwater impacts ...from
all lands owned or
maintained (by the City) and
road maintenance activities
(by the City)

Section S5.C.9. - Ongoing
training program for City
employees who have
primary construction,
operation and maintenance
job functions that may
impact stormwater quality

Operation and Maintenance Standards

These Best Management Practices (BMPs)* are designed to reduce stormwater impacts by:

- Minimizing erosion and sedimentation
- Containing pollutants
- Avoiding habitat impacts

*Based on the *City of Tacoma Stormwater Management Manual* and *Regional Road Maintenance Program (RRMP) Guidance Manual*



Operation and Maintenance Standards

This training will cover selected BMPs from:

**City of Tacoma Utility Employee
Stormwater Quality Best Management Practices Manual
(BMP Manual)
October 2017**



City of Tacoma
Environmental Services

Available online at: www.cityoftacoma.org/omtraining

Regional Road Maintenance Program

Basics

- The City of Tacoma has chosen to participate in the Regional Road Maintenance Program, along with other state and local agencies, to accomplish “maintenance” activities while meeting the requirements of the Endangered Species Act with minimal impact to aquatic (and other) listed species.
- The RRMP application letter was signed by General Government and Tacoma Public Utilities.
- Regional Road Maintenance Program was adopted by Tacoma through City of Tacoma Council Resolution No. 35343.
- Questions about the RRMP, appropriate BMPs, training requirements and opportunities, contact Merita Trohimovich mtrohimo@cityoftacoma.org or 253-502-2103.

Regional Road Maintenance Program Basics

“Maintenance” is defined as repair and maintenance activities that:

- Are conducted on currently serviceable structures, facilities and equipment; and
- Involve no expansion of or change in use of such structures, facilities, and equipment; beyond those that existed previously; and
- Do not result in significant negative hydrological impact.



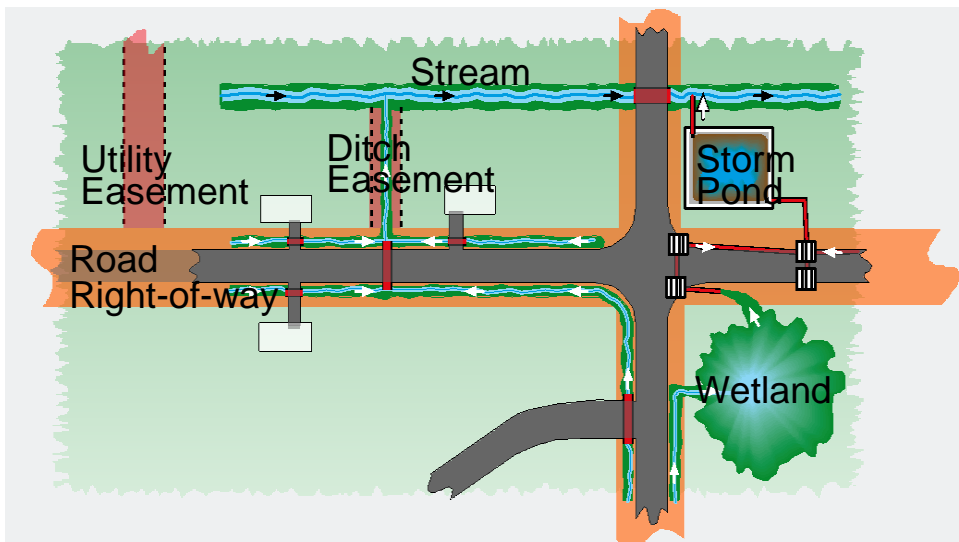
Regional Road Maintenance Program Basics

Extents of work covered by RRMP:

Any right-of-way, easement, and city owned or maintained property inside and outside the City limits in which maintenance is performed in, over, near, under or adjacent to water or wetlands.

Systems include:

- Sediment containment
- Roadway
- Utilities:
 - Stormwater
 - Wastewater
 - Water
 - Electrical
 - Gas
 - Street lighting
 - Traffic loops and signals



Regional Road Maintenance Program Basics

RRMP requirements:

1. All City staff and contractors of the City use appropriate BMPs to protect endangered species that could be present
 - BMPS in the Regional Road Maintenance ESA Manual (Full Report Part 2) and Addendums I, II and III are available at <http://wsgovme02/projects/> or contact Merita Trohimovich mtrohimo@cityoftacoma.org or 253-502-2103
2. If working in, over, near, under or adjacent to water or wetlands, complete the RRMP checklist. Part of the RRMP checklist is filled out in the project planning stage and part in the actual work stage.
 - The checklist form is available at <http://wsgovme02/projects/> or contact Merita Trohimovich.
 - Send all completed checklists to Merita Trohimovich within a week of conducting the maintenance activity.

How do we track progress?

Documentation may be required

Forms	Type of Work	Contact
ESA/RRMP Checklist Form	ONLY In-water work or work within wetlands	Merita Trohimovich, mtrohimov@cityoftacoma.org 253-502-2103
BMP Collector App (app or email)	10% to 20% of randomly selected job sites	Merita Trohimovich, mtrohimov@cityoftacoma.org 253-502-2103

BMP Collector Tablet App

- Tracking use of appropriate BMPs on a given job for NPDES compliance
- Completed for 10-20% of all jobs
- Completed by selected supervisors on Tablet or Email to Merita Trohimovich (mtrohimo@cityoftacoma.org).
- Includes the following information:

Name of person reporting:	Department/ Division:	
Date and Time:	Location:	
Type of work being performed:		
Weather:	WET	SUNNY AND DRY
Are BMPs in use	YES	NO
Comments/Photo of BMPs		

Sometimes other documentation may be required

Forms	Type of Work	Contact
Stormwater Pollution Prevention Plan (SWPPP) Report or Stormwater Site Plan (SSP) Report	Road construction or repair work that exceeds certain area thresholds. Contact ES Environmental Programs Group for thresholds.	Mieke Hoppin, mhoppin@cityoftacoma.org 253-502-2105
Special Approved Discharge Permit	For pumping/discharging wash water or water line flushing to Storm sewer or Sanitary sewer. Contact ES Environmental Compliance group for thresholds.	Mark Schuler, mschuler@cityoftacoma.org 253-320-8449
Pesticide Application Record	For each herbicide/pesticide use (under WSDA Pesticide Applicator Licensing Program)	Grounds Maintenance Supervisors

More training modules targeting specific maintenance activities

Training Module	Work Area	Type of activities
Module #2	Wastewater and Stormwater Management	<ul style="list-style-type: none">- Ditch maintenance- Pipe and culvert cleaning- Utility dewatering- Utility installation- Asphalt and concrete patching
Module #3	Water, Power, Click Utilities	<ul style="list-style-type: none">- Main flushing- Utility dewatering- Utility installation- Asphalt and concrete patching
Module #4	Streetlight/Traffic Utilities	<ul style="list-style-type: none">- Utility dewatering- Utility installation- Asphalt and concrete patching

More training modules targeting specific maintenance activities

Training Module	Work Area	Type of activities
Module #5	Grounds Maintenance	<ul style="list-style-type: none"> - Landscape maintenance, restoration and new installation - Pesticides and herbicides - Trash and pet waste management - Pressure washing/graffiti removal
Module #6	Street Operations	<ul style="list-style-type: none"> - Road repair and resurfacing - Pavement striping - Snow and ice control - Pavement flushing/street cleaning
Module #7	Building and Facility Maintenance	<ul style="list-style-type: none"> - Building and equipment cleaning and maintenance - Remodeling drywall stucco and painting - Dumpster maintenance
Module #8	BMP How-to Basics	<ul style="list-style-type: none"> - Erosion Prevention and Sediment Control Tips and Tools