ODOT's Updated Storm Water Management Plan and MS4 Program

Date: May 11, 2018

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Learning Objectives

Brief History of ODOTs SWM program
ODOT's Revised SWMP
ODOT's BMP Factsheets





2002 to 2018

PROGRAM HISTORY





ODOTs MS4 Program

• Why does ODOT have to do this?

- ODOT owns and operates separate storm sewer systems
- Permit allows ODOT to discharge storm water runoff from their roadway and facility storm sewer systems
- How long has ODOT be been working with implementing their Storm Water Management Program?
 - 2002 ODOT completed a preliminary program audit prior to the permit being issued in 2003.
 - 2003 Permit cycle began for ODOT.





ODOTs MS4 Timeline

- Preliminary Audit- 2002 to 2003 Looked at ODOTs existing practices, policies and operations to see what would be applicable to meet the permit requirements.
- 2003-2009 Permit Years 1st generation permit Ohio EPA added MCM performance standards.
- 2009 to 2014 Permit Years 2nd generation permit Combined BMPs, streamlined SWMP via the Annual Report
- 2014 to 2019 Permit Years 3rd generation Audit occurred w/in this term and SWMP updated.
- 2019 and beyond 2019- next permit cycle begins.
 SWMP to be updated annually as needed.





Summary of ODOT MS4 Program Revisions

ODOTs MS4 Program Overview

- ODOT has been implementing and reporting on storm water best management practices (BMPs) as part of their MS4 permit since 2003.
- ODOTs MS4 Urbanized Area recently changed due to 2010 Census information that modified ODOTs MS4 boundary.
- ODOT is finalized updates to their Storm water Management Plan (SWMP) to Ohio EPA in December of 2017.





Summary of

ODOT'S STORM WATER MANAGEMENT PLAN





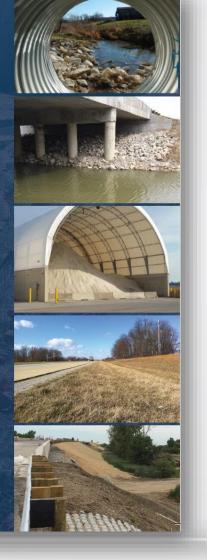
ODOT SWMP

OHIO DEPARTMENT OF TRANSPORTATION

Storm Water Management Plan

Authorization for Small Municipal Separate Storm Sewer Systems to Discharge Storm Water Under the National Pollutant Discharge Elimination System

OCTOBER 2017



- Streamlined Plan
- BMP Factsheets
- Clearly defined roles
- Updated annually with permit required annual report.





ODOT's MS4 Program



Goals

 Addressing permit requirements that include implementation, reporting and enforcement of ODOT's SWMP practices and activities.

- Continued outreach to ODOT audiences through the use of ODOT policies, manuals and specifications and internal/external training activities.
- Annual assessments of ODOT's storm water best management practices (BMPs) and SMWP revisions as necessary.
- Continued evaluation of existing or new ODOT policies, programs or operations for options to improve the SWMP reporting, implementation or best practices.

Activities

- BMP Factsheets are included to help guide MS4 program implementation and reporting. The factsheets provide a description of the practice, the office or division that shares implementation/reporting responsibilities and the activities needed to implement the practice.
- The BMP Factsheets are designed to be easily updated and portable for use in the field.
- Forms have been included with the BMP factsheets which are made to be removed, photocopied and used in the field.





ODOT's Public

ODOT is identified as a nontraditional MS4, which is defined as having storm sewer systems similar to municipal separate storm sewer systems. Ohio EPA has identified the public for non-traditional MS4s in the permit.







ODOT's Themes

- ODOT has developed mechanisms that target a five different storm water themes or messages throughout the permit term that can be documented as reaching at least 50% of ODOT's public over the five year term.
 - Pollution Prevention
 - General Storm Water Awareness
 - Water Quality
 - Storm Water Control Practices
 - Illicit Discharge





ODOT's Regulated Area

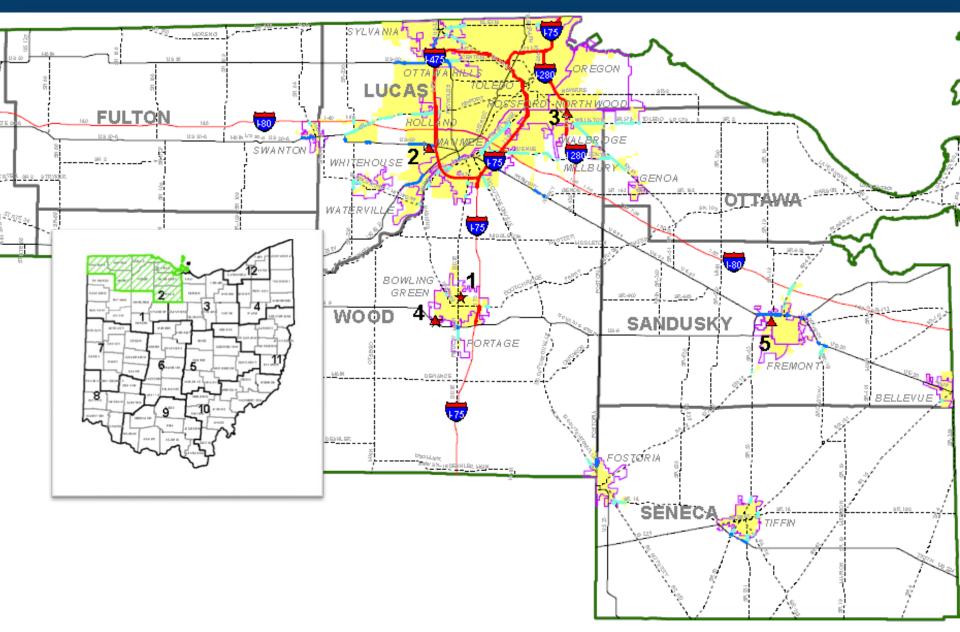
- In 2015 ODOT's MS4 boundary was updated based on the 2010 US Census Bureau Urbanized Areas.
- All ODOT owned facilities and maintained roadways within the area are subject to the MS4 permit requirements.

Facility/Roadway Fee	Impervious Area	Impervious Area
	(Acres)	(Square Miles)
Facility	890	1.4
Roadway	28,308	44.2
Total	29,198	45.6

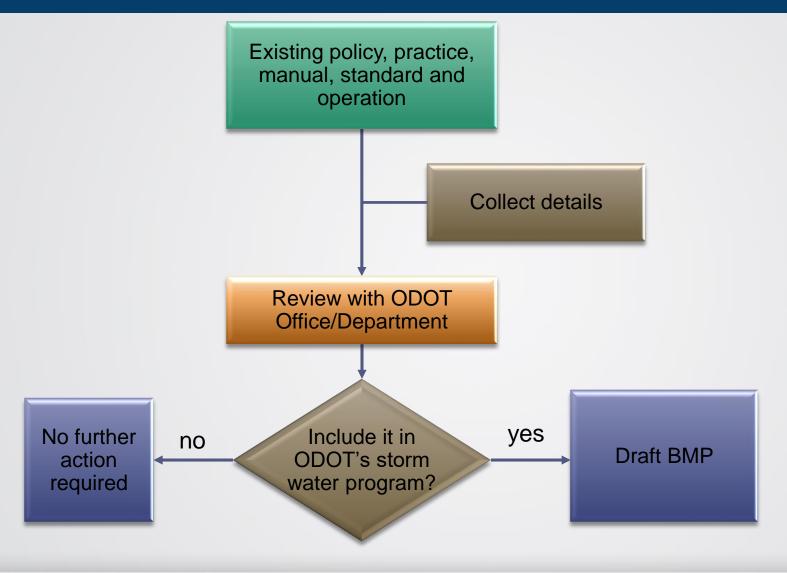




ODOT's Regulated Area



MCM Evaluation and BMP Selection







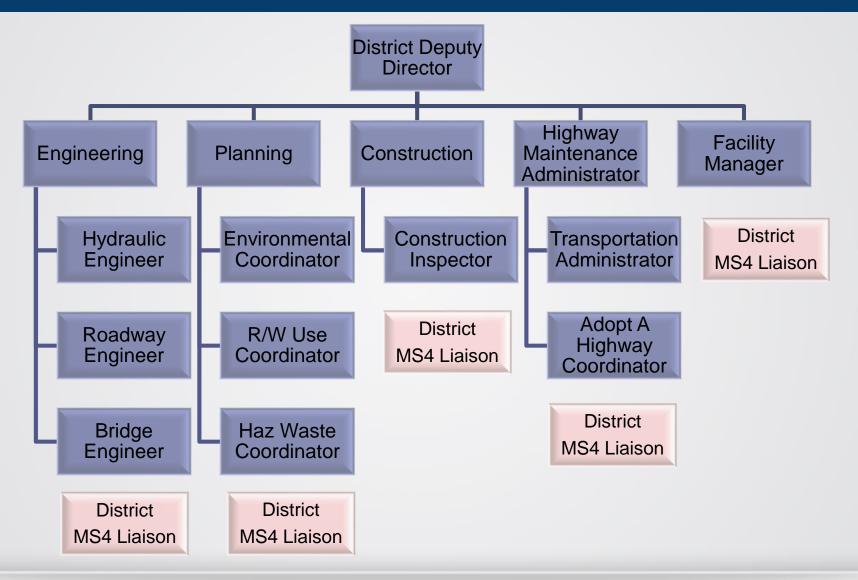
ODOT's Central Office

Hydraulic Engineerin lagement elivery ent Management **Division of Operations Division of Construction Management** ffice Central ivision of Engineering Uivision Technical Services





ODOT's District







ODOT's Updated MS4 program BMPs

MCM 1 Public Participation and Outreach



MCM 2 Public Involvement/Participation

MCM 3 Illicit Discharge Detection and Elimination



MCM 4 Construction Site Storm Water Runoff Control



Better Data

etter Decisions

MCM 5

Post-Construction Storm Water Management in New Development and Re-development



MCM 6 Pollution Prevention and Good Housekeeping for Municipal Operations





ODOT's Updated MS4 MCM 1 and 2



MCM 1

Public Participation and Outreach

- •BMP 1.1 Publications
- •BMP 1.2 Storm Drain Stamping
- •BMP 1.3 SWM Program Website
- •BMP 1.4 Training and Presentations



MCM 2 Public Involvement/Participation •BMP 2.1 Public Involvement Programs •BMP 2.2 Storm water Research



Duplicate BMPs consolidated

New BMP to capture research activity

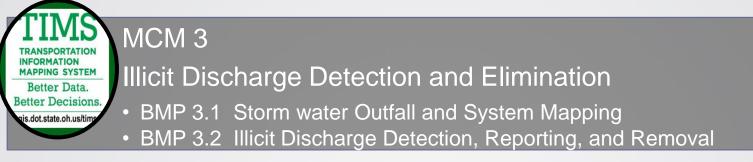




Ohio, the Heart of it All !!



ODOT's Updated MS4 - MCM 3

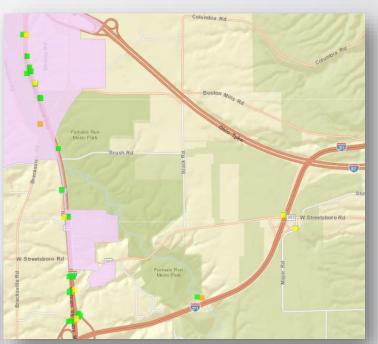


Overlapping BMPs consolidated

- All the offices impacted including the District offices informed of the requirements
- Outfall inventory updated
- Dry weather screening





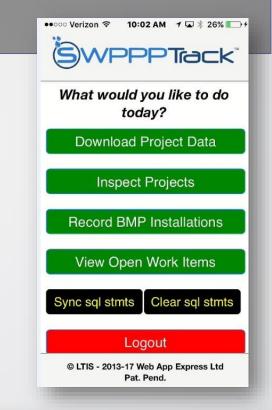




ODOT's Updated MS4 - MCM 4

MCM 4 Construction Site Storm Water Runoff Control

- BMP 4.1 Preconstruction SWPPP Review
- BMP 4.2 Inspection and Maintenance
- BMP 4.3 Enforcement
- Three new BMPs
- All the offices impacted including the District offices informed of the requirements







ODOT's Updated MS4 – MCM 5



- MCM 5 Post-Construction Storm Water Management in New Development and Re-development
- BMP 5.1 Design of Post Construction BMPs
- BMP 5.2 Operation and Maintenance PCBMPs
- BMPs reviewed and updated
- All the offices including the District offices informed of the requirements



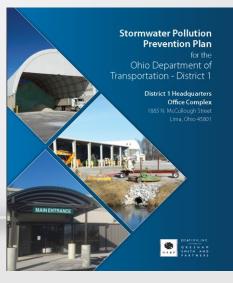


ODOT's Updated MS4 – MCM 6



- MCM 6 Pollution Prevention and Good Housekeeping for Municipal Operations
- BMP 6.1 Roadway Infrastructure
- BMP 6.2 Deicing
- BMP 6.3 Facilities
- BMPs reviewed and updated
- New Deicing BMP added
- All the offices impacted including the District offices informed of the requirements







MCM Summaries

Annual Reporting requirements Target Pollutants ANNUAL REPORTING FROM MS4 PERMIT: ODOT's annual report shall document the following: (1) Number of dry-weather flows investigated (2) Number of dry-weather flows investigated (3) Number of illicit discharges identified (4) Number of illicit discharges eliminated (5) Summary of system outfall mapping revisions RESPONSIBLE FOR MANAGEMENT AND IMPLEMENTATION: Hydraulic Engineering, Technical Services, Construction Administration, Maintenance Operations, Facilities Management and Districts Targets Pollutants	Permit Section	MCM 3 ILLICIT DISCHARGE DETECTION AND ELIMINATION PERMIT SECTION: Part III.8.3.b (p.8) and Part III.8.3.j PERFORMANCE STANDARDS FROM MS4 PERMIT: ODOT's storm water outfalls over the 2003 to 2009 permit term. ODOT's program shall continue current practices for long-term system-wide surveillance of the MS4 area, as well as for specific investigations of outfalls and their tributary area where previous surveillance demonstrates a high likelihood of illicit discharges. Data collected each year shall be evaluated and priorities and goals shall be revised annually based on this evaluation.	Performance Standard
(2) Number of dry-weather flows investigated (3) Number of illicit discharges identified (3) Number of illicit discharges identified (4) Number of illicit discharges identified (5) Summary of system outfall mapping revisions Responsible Office or Hydraulic Engineering, Technical Services, Construction Administration, Maintenance Operations, Facilities Management and Districts Pollutants	Annual	ANNUAL REPORTING FROM MS4 PERMIT:	
(2) Number of dry-weather flows investigated (3) Number of illicit discharges identified (3) Number of illicit discharges identified (4) Number of illicit discharges identified (5) Summary of system outfall mapping revisions Responsible Office or Hydraulic Engineering, Technical Services, Construction Administration, Maintenance Operations, Facilities Management and Districts Pollutants	Reporting -	ODOT's annual report shall document the following:	
Target Non-storm water discharges Pollutants Non-storm water discharges		(2) Number of dry-weather flows investigated	
Target Responsible for MANAGEMENT AND IMPLEMENTATION: Office or Hydraulic Engineering, Technical Services, Construction Administration, Maintenance Operations, Facilities Personal Management and Districts TARGET POLLUTANTS: Personal Non-storm water discharges Non-storm water discharges Personal	requirements	(4) Number of illicit discharges eliminated	Responsible
Target Hydraulic Engineering, Technical Services, Construction Administration, Maintenance Operations, Facilities Personal Pollutants Non-storm water discharges Personal			•
Target Target Pollutants: Pollutants Non-storm water discharges			
Pollutants	Target	Management and Districts	Personal
Pollutants			
	Pollutants	Non-storm water discharges	- ·
TARGET AUDIENCE: Target			larget
Themes	Thomas	ODOT staff, contractors, consultants and facility users	Audience
ODOT STORM WATER THEME(S):	Themes	• •	
Pollution Prevention, General Storm Water Awareness, Water Quality, Storm Water Control Practices, and Illicit Discharge		•	
MINIMUM CONTROL MEASURE SUCCESS EVALUATION: Measure of Measure of		MINIMUM CONTROL MEASURE SUCCESS EVALUATION:	Measure of
ODOT selected the measurable goals through an evaluation of existing practices, policies and programs already in			-
place at ODOT. The measurable goals for each BMP were selected based on the following were documentable and over time ODOT could demonstrate an increased awareness, understanding and integration of storm water requirements into ODOT's processes, policies, manuals and standards.		over time ODOT could demonstrate an increased awareness, understanding and integration of storm water	Success
Implementation	Implementation		
Implementation of DMDs associated with this MCM accur continuelly throughout the normit term PMD			
Schedule implementation is collected annually and reported on through the development and submission of ODOT's annual report.	Schedule	implementation is collected annually and reported on through the development and submission of ODOT's annual	





BMP Factsheet

Summary -

Measurable Goal

Implementation Guidance

INSPECTIONS AND MAINTENANCE



SUMMARY/OVERVIEW

Construction inspections are completed by qualified contractor personnel in accordance with SS 832. The inspections are performed using an inspection software developed to ensure quality of each inspection. The P.E./CPESC who prepared the SWPPP reviews each inspection report and provides a monthly inspection of the project to ensure the SWPPP is accurate. All inspections are reviewed for quality by the ODOT Project Engineer. Completeness reviews are performed by Central Office technical staff on a representative number of projects in each District to assess quality of inspections being performed by the contractor's personnel.

CSRC

4.2

VEASURABLE GOAL(S):

- Number of qualifying projects receiving an initial inspection
- Number of qualifying projects receiving required weekly and monthly inspections
- Number of qualifying projects receiving ODOT technical process reviews

MPLEMENTATION GUIDANCE:

- Construction Administration
- Update SS832 for E&S inspection procedures
- Perform quality assurance inspections
- Provide training to district staff and contractors
- Maintain SWPPPTrack Website

Hydraulic Engineering

Collect data for annual reporting

ADDITIONAL INFORMATION

TARGET AUDIENCE:

ODOT Staff, contractor consultants and contractors

District Staff/MS4 Liaison

MS4 Liaison

Support quality assurance inspections
 Track active projects in the District within MS4 area

RESPONSIBLE OFFICE/POSITION

Construction Administration

District Construction personnel

Hydraulic Engineering

 Ensure NOI and NOT are submitted appropriately

MS4 LIAISON ACTIVITY

- Monitor active construction projects for implementation of E&S required inspections
- Review SWPPPTrackwebsite monthly
- Notify ODOT construction administration and Ohio EPA liaison of poor performing projects
 Verify NOT submittals
- Verity NOT submittais
- Verify and document construction close out

Responsible Office/Position

MS4 Liaison Activity





BMP Factsheet

INSPECTION AND MAINTENANCE FORMS - JANUARY TO DECEMBER 2017

Send Completed Form to Office of Hydraulic Engineering (OHE) – Storm Water Project Manager

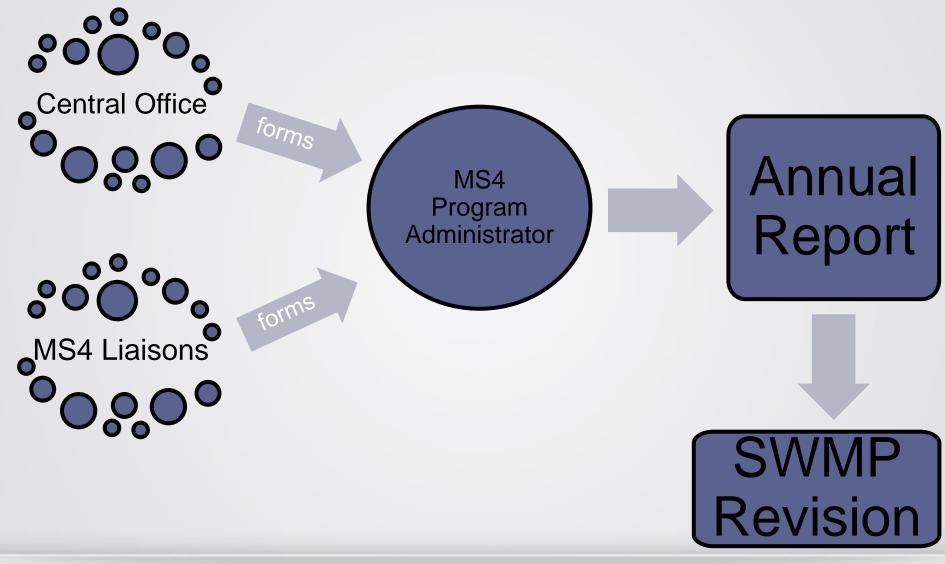
Project Inspections and Reviews	Number
Number of qualifying projects receiving an initial inspection	
Number of qualifying projects receiving required weekly and monthly inspections	
Number of qualifying projects receiving ODOT technical process reviews	
Number of qualifying projects receiving an initial inspection	
Number of completed construction projects	
Number of NOTs submitted	

Forms to be used for collecting annual reporting information





MS4 Annual Report Information Flow







Important dates and milestones

LOOKING TO THE FUTURE





Upcoming Permit

Construction General Permit renewal 2018
General MS4 Permit renewal 2019





Questions/Comments

