

MDOT's Stormwater Program

House Appropriations Briefing
April 2022

Background

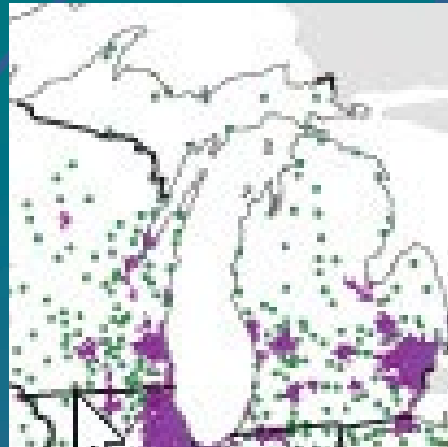
- Stormwater outfalls are regulated under the Clean Water Act through the National Pollution Discharge Elimination System (NPDES).
- EPA has delegated NPDES permitting authority to EGLE.
- MDOT is considered an operator of a Municipal Separate Storm Sewer System (MS4) and is required to have a valid NPDES permit.

- MDOT has held a NPDES MS4 permit since 2004.
- Permits are for 5-year cycles with current permit issued in 2021. Requires 6 minimum measures.
- Permit applies to any project that disturbs an acre or more of soil.

Permit requires 6 minimum measures.

- Public education
- Public Involvement
- Construction Stormwater Control
- Post Construction Stormwater Control
- Illicit Connection/Discharge Elimination Program
- Good Housekeeping

- NPDES permits typically apply to urbanized areas (2010 Census Data)
- MDOT's permit applies statewide
 - 9,600 miles of road
 - Rest areas/Park & Rides
 - Maintenance Facilities



Post Construction Stormwater Control

- Water quality requirements – Removal of 80% total suspended solids from project.
- Channel protection standard – No increase in rate or volume for the 2-year, 24-hour storm.

MDOT meets the requirements of the permit using a variety of best management practices (BMPs).

- Structural BMPs can include detention basins, rain gardens, infiltration, vegetated swales, etc.
- Operational BMPs included maintenance processes, street sweeping, specifications, etc.

All MDOT projects are reviewed for stormwater BMP inclusion if they fall under the permit provisions. Review includes:

- Determination of required treatment
- Special pollutants of concern
- BMP review
- Site/project constraints that limit treatment

BMPs apply to winter maintenance as well

- Appropriate speed of salt trucks
- Calibrating salt dispensing
- Weather dependent applications
- Pre-wetting salt
- Utilizing weather stations
- Studying liquid brine application
- Street sweeping in early spring

Challenges

- Inspection/maintenance as inventory grows.
- Green infrastructure performs differently in winter/summer.
- Infiltration is not feasible in areas with poor draining soils.
- ROW is limited and ownership can affect what is allowed.