Overview of 2017 MS4 Stormwater Permit

Department of Public Works
Town of Ayer

December 2016
What is an MS4 Permit?

- Municipal Separate Storm Sewer Systems
- EPA Program in place since 1990 to regulate discharges from MS4s to protect water quality
- Ayer has a NPDES Stormwater Discharge Permit and the DPW has specific responsibilities required by the permit
- A new MS4 Permit has been issued and becomes effective July 1, 2017
Key Requirements:

- Submit Notice of Intent (NOI) by **September 29, 2017**, and make available for public review
- Submit **Stormwater Management Plan (SWMP)** by **July 1, 2018**
- Compile an inventory of all Sanitary Sewer Overflows (SSOs)
- Priority rank outfalls and catchment areas for Illicit Discharge Detection Elimination (IDDE) catchment investigations
- Develop IDDE Plan to conduct dry and wet weather sampling to identify illicit connections
- Develop inspection and enforcement protocols for construction erosion control
- Perform BMP inspections, more frequent street sweeping and catch basin inspections
- Additional requirements for community with impaired water resources
NOI Must Address Six Minimum Control Measures (MCMs):

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination (IDDE)
- Construction Site Stormwater Runoff Control
- Stormwater Management in New Development and Redevelopment
- Good Housekeeping and Pollution Prevention
Requirement for impaired Water Quality - Phosphorous

- **Additional Public Education Messages**
- **Additional New and Redevelopment Requirements**
- **Additional Good Housekeeping Requirements**
- **Nutrient Source Identification Report**
  - **Due Year 4**
  - **Delineate potential N or P sources**
  - **ID potential retrofits**
  - **1 demonstration project by Year 6**
  - **Tracking of N or P reductions through implementation of structural BMPs**
What Has The DPW Already Done?

- GIS mapping of storm sewer system, culverts, catch basins, outfalls (in-progress)
- Monitoring for illicit discharge in catch basins
- Inspections of outfalls and culverts (in-progress)
- Some public outreach (web site, social media)
- Water quality monitoring in ponds
- Street sweeping
- Review stormwater management systems in new development

  - Designed outfall BMPs for 3 locations
  - SWPPP plan and training for WWTP
What Will Ayer Need to Do to Meet Permit Requirements?

- Deliver annual public education materials to various target audiences
- Write catchment investigation plan and perform dry weather screening within three years
- Modify local stormwater management bylaws and site plan review regulations
- Develop source reduction plans for impaired waters
- Compliance planning and implementation of Total Maximum Daily Load (TMDL) allocation
- Develop inventory of municipally owned land for future stormwater retrofit opportunities
- Write plan for good housekeeping activities and infrastructure maintenance/inspection
- Perform Stormwater Management System Inspections
- Track catch basin cleaning, construction, and erosion control inspection and maintenance
- Develop municipal facility Stormwater Pollution Prevention Plans (SWPPPs)
EPA Estimated Costs to Implement

- Estimated average of 20% budget increase in cost to manage stormwater system
- **40%** of program funding is assumed to be used for street sweeping and catch basin cleaning
- **30%** of program funding used for engineering and system operation and maintenance
- **18%** of program funding for planning, public education and other admin. requirements
- **12%** of program funding to be used to track and remove illicit connections to the storm sewer
Budget Impacts

Capital Budget includes street sweeper, culvert, storm sewer and outfall improvements.

Operating budget impacts include:

- Need to set up and manage permitting and inspections.
- DPW will need to spend time preparing NOI, required plans, bylaws, regulations and public education.
- Water quality sampling and lab costs.
- Increased catch basin cleaning cost.
- Will need support from Conservation Agent, Building Inspector and IT.
Questions?