Chapter Overview
Summarizes stormwater runoff and nonpoint source pollution issues in 1) developed/developing and 2) rural/agricultural areas (see map). Presents a series of regional recommendations/best management practices (BMPs), agency recommendations and NOACA policies to address such issues.

Developed & Developing Communities
Defined as “Urbanized Areas” by the United States Census Bureau and regulated by the United States Environmental Protection Agency’s (USEPA’s) Phase II Municipal Separate Storm Sewer Systems (MS4) National Pollutant Discharge Elimination System (NPDES) permits (see map).

MS4s
Polluted stormwater runoff is commonly transported through MS4s, and then often discharged, untreated, into local water bodies.

An MS4 is a conveyance or system of conveyances that is:
- owned by a public entity and discharges to waters of the U.S.;
- designed or used to collect or convey stormwater (e.g. storm drains, pipes, ditches);
- not a combined sewer (e.g. no sewage); and
- not part of a sewage wastewater treatment plant.

Phase II MS4 NPDES Permits
Operators must obtain NPDES permits and develop stormwater management programs (SWMPs) to prevent harmful pollutants from entering MS4s. SWMPs describe the stormwater control practices to minimize the discharge of pollutants. SWMPs must achieve goals to satisfy six minimum control measures (MCMs).

Storm Water Management Program Deficiencies
The following strategies and MS4 MCM recommendations address SWMP deficiencies.
Recommendations for Communities with MS4 permits

- Establish a dedicated funding source to support and improve SWMPs to meet MS4 permits and to address stormwater-related water quality issues.
- Fund a MS4 Program Manager position.
- Establish staffing roles and responsibilities for each MCMs.
- Identify and protect natural “green” infrastructure that provides stormwater runoff benefits.

Recommendations for SWMP MCM Updates

MCMs 1 & 2: Public Education & Outreach and Public Involvement

- Focus on public involvement/participation efforts that can measure changes in behavior.
- Engage the streets and service department in the community’s SWMP.

MCMs 3: Illicit Discharge Detection & Elimination (IDDE)

- Inventory, map and prioritize addressing illicit discharges.
- Optimize mapping capabilities (e.g. geolocation of discharging sites, mapping by outfalls, etc.).
- Establish and escalate illicit discharge elimination plans.
- Work with the entities that have the authority to address illicit discharges.
- Work with local health districts (LHDs) & Ohio EPA to determine the types of discharges and to eliminate illicit discharges from sewage treatment systems (STSs).

MCMs 4 & 5: Construction Site/Post Construction Runoff Control

- Focus on post inspection/enforcement follow up.
- Utilize/optimize free or low cost flood and water quality BMPs (e.g. riparian and wetland setbacks).
- Hire or contract certified inspection personnel (e.g. Envirocert, International or Summit Soil & Water Conservation District (SWCD) Program).
- Issue “Stop Work” orders or Notice of Violations (NOV) and escalate enforcement in a timely manner.
- Require BMPs for other construction site pollution sources (e.g. washout areas, fuel tanks, waste disposal, etc.)
- Encourage inspectors to be onsite during the installation of BMPs.

MCMs 6: Pollution Prevention/Good Housekeeping (P2GH)

- Update, submit and enforce Storm Water Pollution Prevention Plans (SWPPPs) for Service Garages.
- Implement and improve Pollution Prevention/Good Housekeeping practices (P2GH) for all of community operations.
- Proactively perform routine and scheduled maintenance and ensure implementation.
- Reduce inflow and infiltration of sanitary sewer systems through routine storm sewer system maintenance and infrastructure investments.

Comments, Suggestions or Questions?

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