

# MS4 AUDIT TRENDS IN NORTH CAROLINA

PRESENTED BY



SCHOOL OF GOVERNMENT  
Environmental Finance Center

# MUNICIPAL SEPARATE STORM SEWER SYSTEM PERMITS (MS4)

- Permits are designed to ensure that jurisdictions protect water quality by meeting **six minimum control measures**

**1** Public Education & Outreach

**2** Public Involvement & Participation

**3** Illicit Discharge Detection & Elimination

**4** Construction Site Stormwater Runoff Controls

**5** Post-Construction Stormwater Management

**6** Pollution Prevention and Good Housekeeping



# I. PUBLIC EDUCATION & OUTREACH

- Provide educational information to target audiences
- Include information on the hazards associated with illicit discharges, illegal dumping, and improper disposal of waste
- Provide and maintain a website to convey the program's message
- Provide a stormwater hotline/helpline for public education and outreach

## 2. PUBLIC INVOLVEMENT AND PARTICIPATION

- Provide mechanisms for public input on stormwater issues and the stormwater program
- Provide volunteer opportunities for ongoing citizen participation
- Implement, document, & track the program to comply with State and local public notice requirements

### 3. ILLICIT DISCHARGE DETECTION & ELIMINATION

- Any non stormwater material entering the system.
- IDDE Reporting and Tracking: 1. MS4 mapping 2. Ordinance/Regulatory mechanism 3. IDDE Plan 4. IDDE Tracking 5. Staff training's 6. IDEE Reporting
- Can be very staff- and resource-intensive.

# 4. CONSTRUCTION SITE STORMWATER RUNOFF CONTROLS

- Required for projects that disturb > one acre. or smaller projects part of a common development that disturbs > one acre
- Develop, get approved, and implement an erosion and sediment control plan
- Monitoring is key in this process. The EPA and/or DEMLR can audit at any time
- Voluntary self-monitoring regularly will help ensure compliance at any point in time.
- Non-permittees can also benefit from similar programs!

## 5. POST- CONSTRUCTION STORMWATER MANAGEMENT

- Develop, implement, enforce and document a program
- Review and approve Stormwater Control Measures (SCMs)
- Monitor and inspect SCMs Provide oversight of SCMs and developments
- Act on and enforce violations of SCMs/plans
- Document the actions taken.

## 6. POLLUTION PREVENTION AND GOOD HOUSEKEEPING

- Municipal Facilities Operation and Maintenance Program
- Spill Response Program
- MS4 Operation and Maintenance Program
- Municipal SCM Operation and Maintenance Program
- Pesticide, Herbicide and Fertilizer Management Program
- Vehicle and Equipment Maintenance Program
- Pavement Management Program



# THE MS4 AUDIT SCHEDULE

- MS4 Permit holders are audited according to a **5-year schedule**
  - 20% of the State's permit holders are audited every year
- Possible outcomes of an audit are
  - Notice of Compliance (NOC)
  - Notice of Deficiency (NOD)
  - Notice of Violation (NOV)
- If issued a NOD or NOV, permit holders should rectify the infraction immediately



## OUR RESEARCH

- The EFC analyzed 29 audits completed by the NC DEQ for trends in items of deficiency and non-compliance across stormwater programs
- Since this analysis was completed, NC DEQ finished 5 more audits, the results as of June 2020 are listed here

Audit Results	Quantity
Notice of Compliance (NOC)	3
Notice of Deficiency (NOD)	3
Notice of Violation (NOV)	24
Compliance Decision Pending	5
Total Audits Completed	35

# COMMON INFRACTIONS LEADING TO NOD'S AND NOV'S

- Illegal animal feedlot operations/discharge
- Discharge of wastewater without a permit
- Fish kills
- Late/non submittal of reporting requirements
- Improperly certified laboratory
- Limits and monitoring violations of NPDES permit
- Illegal discharge of oil or hazardous substances
- Operation of a treatment works without a permit
- Failure to employ a properly certified wastewater treatment plant operator
- Violation of permit conditions other than limit or monitoring frequency
- Late registration or renewal
- Violation of stream standards
- Various violations of statutes and/or rules relating to water quality

# OUR DEFINED CRITERIA

- The EFC has defined **10 criteria** that serve to categorize the information in all audits to clarify trends in infractions
  - Current approved SWMP
  - Adequate Education and Outreach
  - Submitted Annual Reports
  - Performs Dry Weather Screening
  - Adequate Employee Training
  - Has an Updated Outfalls Map
  - Has Written Spill Response Procedures
  - Enforceable Illicit Discharge Detection and Elimination Stormwater Ordinance
  - Maintained a Written IDDE Program
  - Adequate Staffing and Funding

# TRENDS IN COMPLIANCE

	Current approved SWMP	Adequate Education and Outreach	Submitted Annual Reports	Performs Dry Weather Screening	Adequate Employee Training	Has an Updated Outfalls Map	Has Written Spill Response Procedures	Enforceable IDDE Stormwater Ordinance	Maintained a Written IDDE Program	Adequate Staffing and Funding
% Yes	72%	66%	52%	72%	52%	52%	59%	38%	59%	45%
% No	28%	34%	48%	14%	41%	24%	24%	55%	21%	34%
% Partially				7%	7%	17%	7%	3%	10%	17%
% Not mentioned/not reviewed				7%		7%	10%	3%	10%	3%

- Among 29 audited communities, more than 50% were out of compliance in seven of the ten criteria
- Most common area of infraction
  - Not having an updated Stormwater Management Plan
  - Failing to perform dry-weather screening

# NC DEQ WEBSITE



NORTH CAROLINA  
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## NPDES MS4 Permitting

- <https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permits/stormwater-permits/npdes-ms4>

QUESTIONS?

