

198th Technical Committee Meeting

Agenda Item 5: Abatement of Wet Weather Sources

b. Status of MS4

Steve Braun



Status of MS4

MS4 – Municipal Separate Storm Sewer Systems

Regulation of Stormwater is Intended to reduce pollutants that are carried to waterways via storm sewers from urbanized areas, Industrial and Construction Activities

Carried out in two Phases

- Phase I
- Phase II



Phase I MS4's

- Began in 1990
- Permit needed if:
 - Medium to Large Communities serving a population of >100,000
 - Industry falls within one of 10 categories
 - Construction Sites disturbing more than 5 acres of land
- Must have an approved Storm Water Management Plan with 6 minimum controls measures (MCM)
- Must Conduct some analytical Monitoring
- Louisville MSD is only Phase I MS4 along Ohio River (Cincinnati and Pittsburgh have a CSO exemption, now included in Phase II)

Phase II MS4's

- Began in 1999
- Permit needed if:
 - Designated a small MS4 in urbanized areas defined by the US Census (>50,000 & Density of 1000 people/sq-mile)
 - Construction sites disturbing 1-5 acres of land
- Usually a general Permit that can cover multiple nearby MS4 communities (co-permittees)
- Have an approved Storm Water Management Plan with 6 minimum controls measures (MCM)
- Usually does not require monitoring but reduce pollutants to the “Maximum Extent Possible”

6 Minimum Controls Measures

- Public Education and Outreach
- Public Participation/Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post-Construction Runoff Control
- Pollution Prevention/Good Housekeeping

WHEN YOU'RE FERTILIZING THE LAWN,
REMEMBER, YOU'RE NOT JUST
FERTILIZING THE LAWN.



You fertilize the lawn. Then it rains. The rain washes the fertilizer along the curb, into the storm drain, and directly into our lakes, streams and into coastal waters including the Chesapeake Bay. This causes algae to grow, which uses up oxygen that fish need to survive. So if you fertilize, please follow directions and use sparingly.

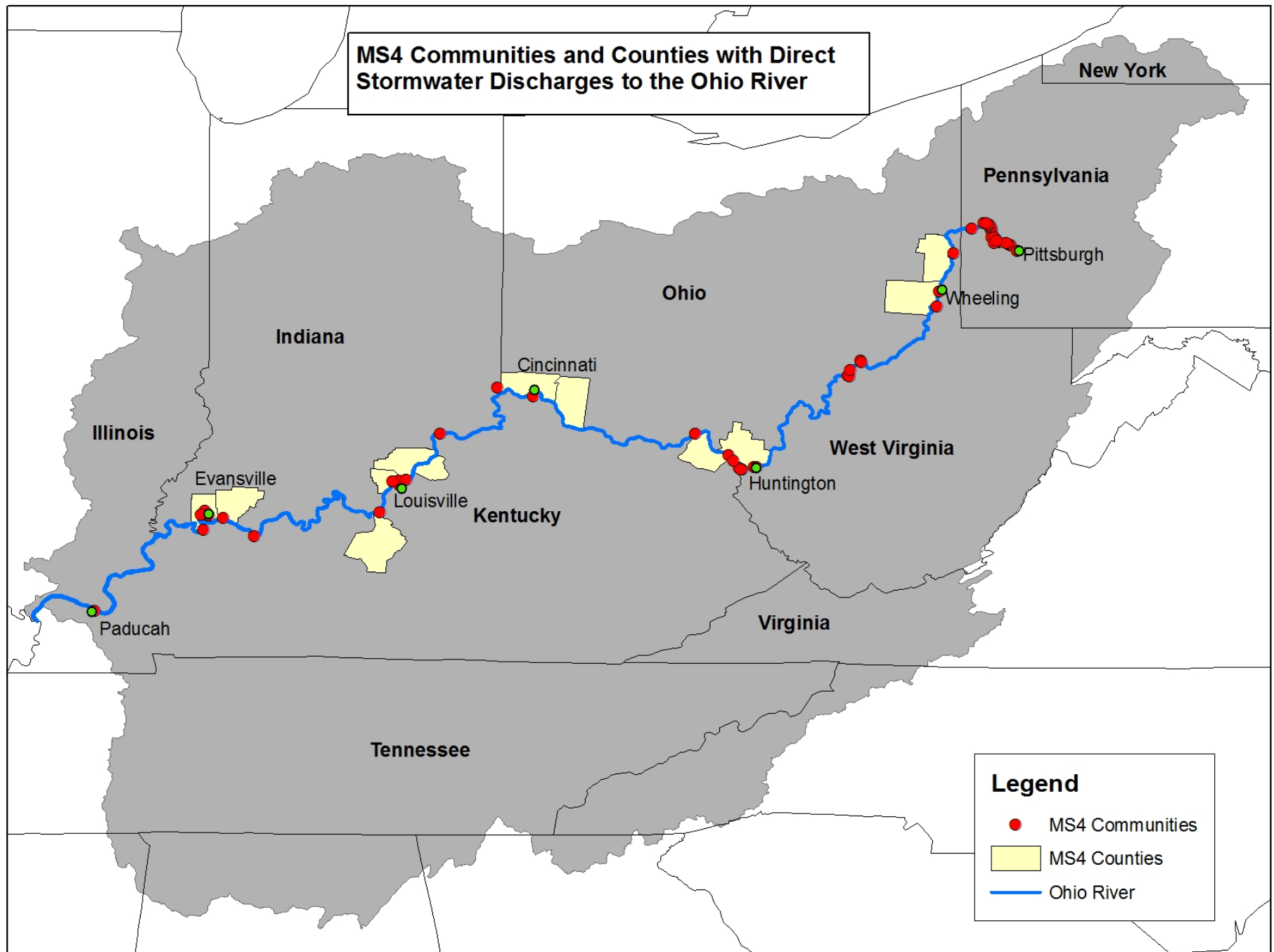
If you have questions regarding storm water, please contact your municipality or Pennsylvania Department of Environmental Protection's Regional Office. For general questions, you may also contact DEP's Bureau of Water Management at (717) 772-5460 or visit www.dep.state.pa.us. Thanks to the Washington State Water Quality Consortium for permission to adapt and use this poster.

MS4's along the Ohio River

- 68 Permitted MS4 Communities/Counties
- Only one Phase I community (Louisville MSD)



**MS4 Communities and Counties with Direct
Stormwater Discharges to the Ohio River**



Ohio River MS4 Details

- Indiana

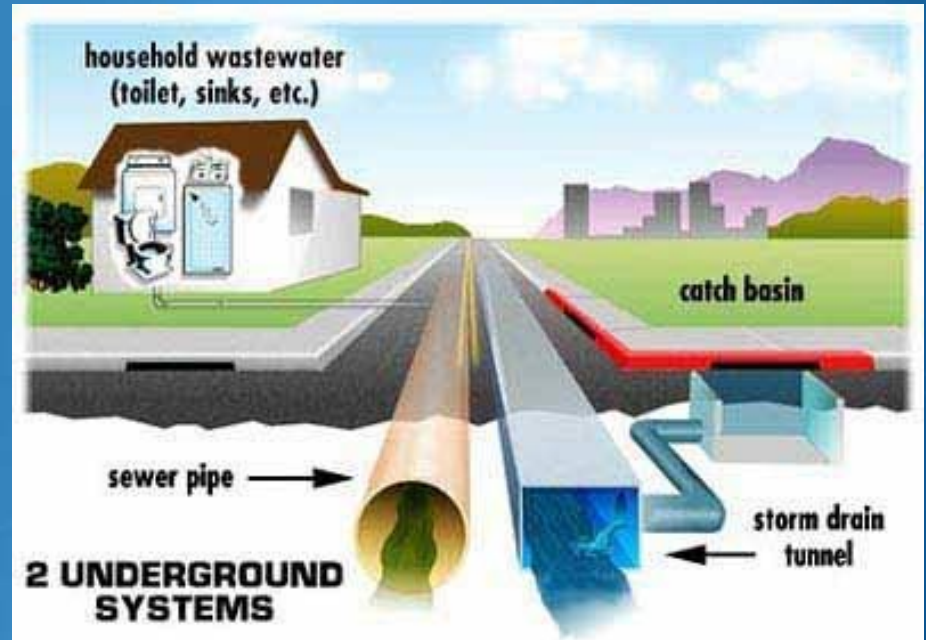
- 15 Permittees
- All 6 MCM Completed

- Illinois

- No Ohio River MS4 Communities

- Kentucky

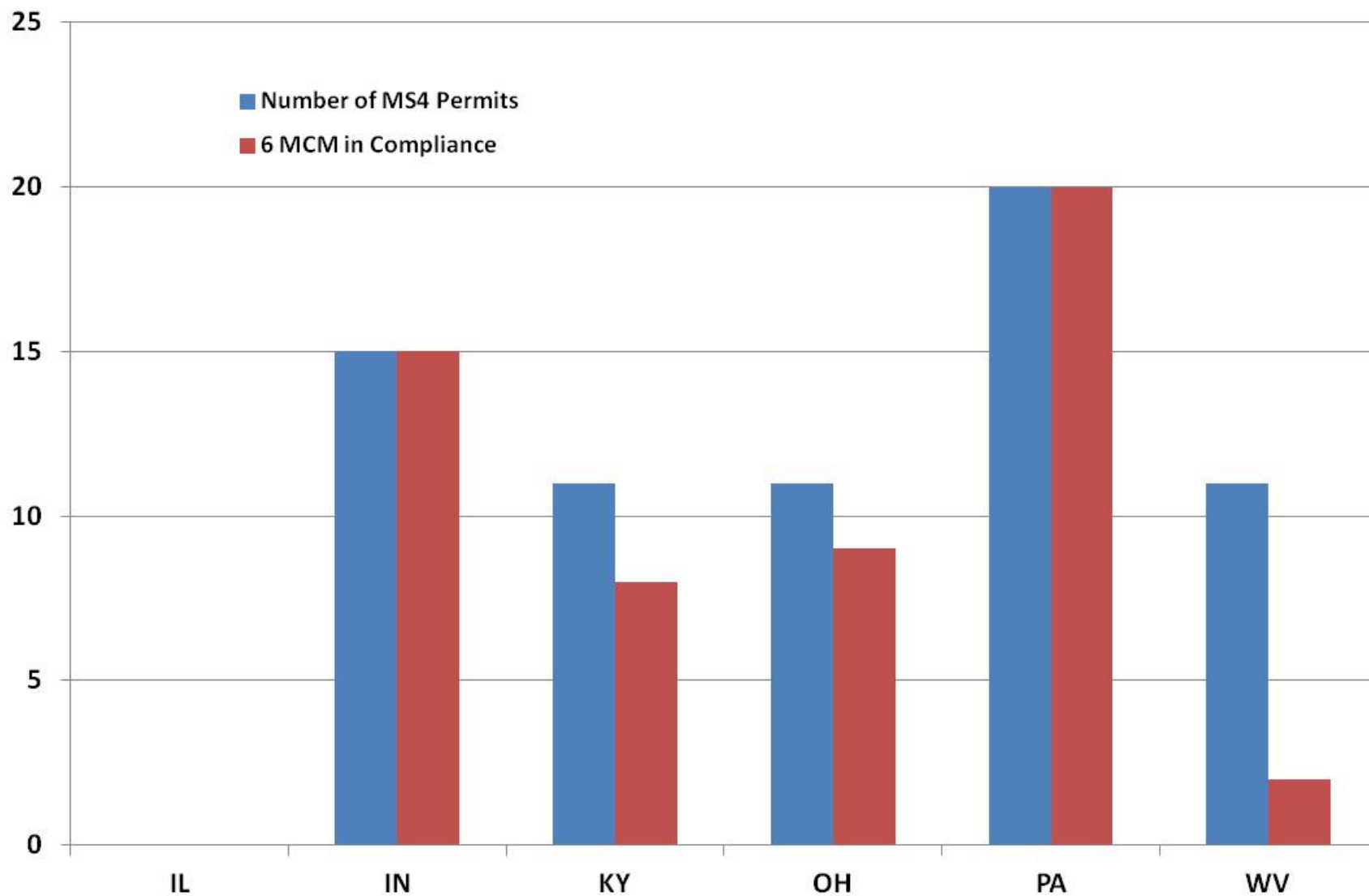
- 11 Permittees
- Compliance: 8 have completed all 6 MCM
- Phase II not required to monitor but will in next cycle (2015)
- Louisville MSD (Phase I) is monitoring cond, pH, temp, DO, flow, algae, fish, macro invertebrates, bacteria, etc.



Ohio River MS4 Details cont.

- Ohio
 - 11 Permittees
 - All Storm Water Management Plans are approved
 - 9 have completed all 6 MCM
 - No monitoring requirements
- PA
 - 20 Permittees
 - All Storm Water Management Plans are approved
 - All have completed the 6 MCM
 - Requires periodic visual inspections and limited chemical sampling
- WV
 - 11 Permittees
 - Only 2 have approved Storm Water Management Plans, others are under review
 - City of Kenova has not submitted a Plan, facing possible enforcement action, attempting to claim CSO exemption
 - Monitoring for TKN, Nitrite, Nitrate, Total Phosphorus at one main outfall per MS4 Community

Compliance Status of MS4 Communities/Counties Along the Ohio River (2012)



Questions?

