



MS4: The Planner's Strategy

OCTOBER 17, 2016

RETTEW
We answer to you.



Presenters

- ▶ H. Scott Russell, PE, RETTEW
- ▶ Andrew Stern, AICP, East Hempfield Township
- ▶ Frank Chlebnikow, AICP, RETTEW
- ▶ Kara Kalupson, RLA, RETTEW



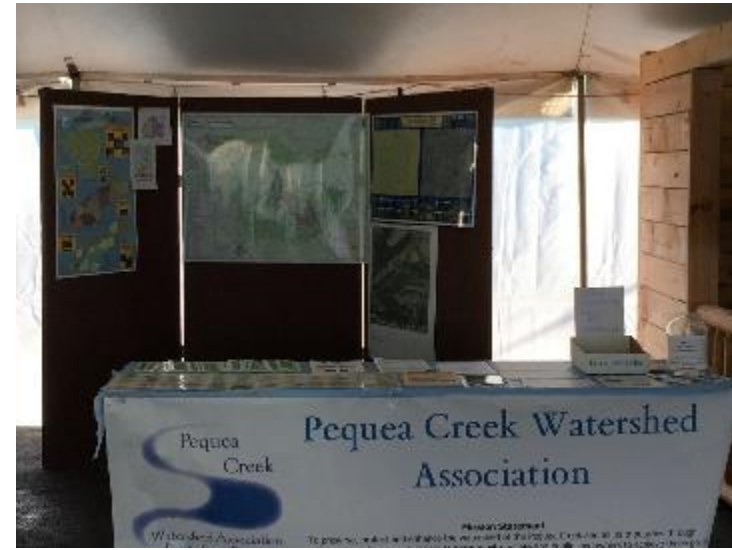
Topics

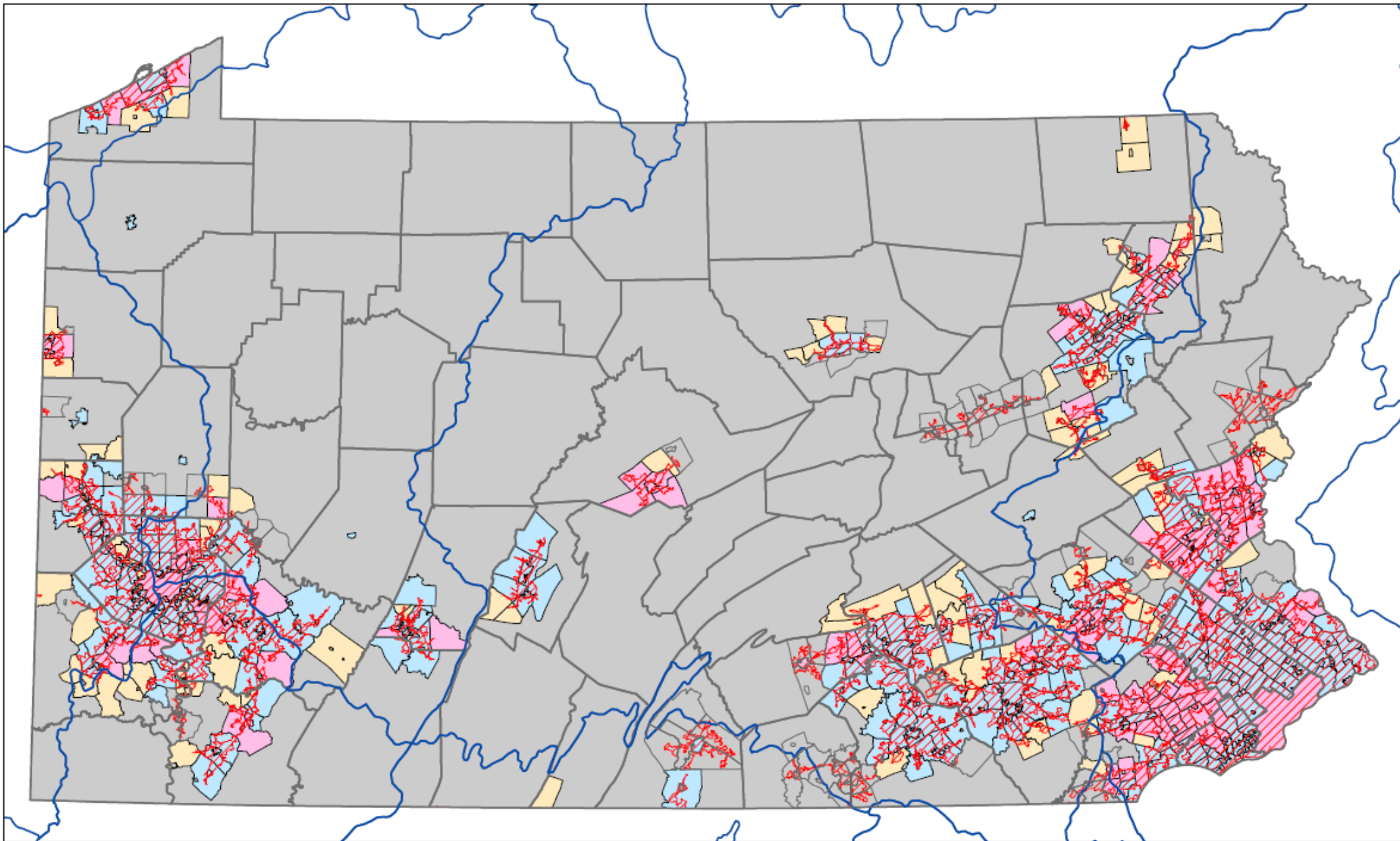
- ▶ The MS4 Permit
- ▶ The MS4 Permit – municipalities and planners
- ▶ When does the MS4 Permit come into play?
- ▶ Incorporating MS4 policy into a planning program
- ▶ Reporting and mapping requirements
- ▶ Effective implementation and compliance strategies
- ▶ Policy and legislation
- ▶ Non-compliance and enforcement
- ▶ Lessons learned



The MS4 Permit

- ▶ Federal Law – Clean Water Act
 - Authorizes point-source discharges
- ▶ Stormwater Discharges
 - 1987: Phase 1-Large Municipalities >100,000
 - 1999: Phase 2-Urbanized Areas
- ▶ Improve Water Quality





2010 Urbanized Area (U.S. Census Data)



The MS4 Permit

- ▶ Individual Permits

- High Quality / Exceptional Value streams / TMDL

- ▶ General Permits

- ▶ 5-year Permit Terms

- 2003/2008/2013/2018



The MS4 Permit and Municipalities

- ▶ EPA and DEP Audits
- ▶ Minimum Control Measures
- ▶ Pollution Reduction Plans
 - Sediment/Phosphorus/Nitrogen
- ▶ Pollutant Control Measures
 - Metals/PH/Pathogens/PCBs
- ▶ Agriculture Community
- ▶ Business Community



The MS4 Permit and Planners

What is MS4 to Planners?

► It is not:

- A Foreign Spy Agency
- MS4 8GB Spy Watch Video Camcorders – Black Rubber Band



► It is:

- An inclusive and required SWM Program that Planners must engage in



The MS4 Permit and Planners-Planner to Planner

- ▶ Understand the MS4 Permit and your role in implementation
- ▶ Take it seriously! The permit cannot be ignored
 - EPA audits result in large fines
- ▶ Review growth patterns
 - Will your municipality be an MS4 permittee after the 2020 census?
 - Plan for mapping, ordinance amendments, documentation
- ▶ Advocate importance of compliance to manager/official
- ▶ Do not become the “poster child” for non-compliance



The MS4 Permit and Planners-What can we do?

▶ Be the MS4 Coordinator and implement MCMs

- Public Education and Outreach: *newsletters, brochures, webpages*
- Public Participation: *clean-ups, tree plantings, inlet stenciling, pollution watch*
- Pollution Prevention/Good Housekeeping: *work with public works staff*

▶ Resources

- EPA: <https://www.epa.gov/water-research/storm-water-management-model-swmm>
- DEP: <http://www.elibrary.dep.state.pa.us/dsweb/View/Collection-8305>
 - <http://www.dep.pa.gov/Business/Water/PointNonPointMgmt/StormwaterMgmt/Stormwater/Pages/default.aspx>
- Berks County: <http://www.co.berks.pa.us/Dept/Planning/Pages/MS4%20Links.aspx>
- Penn Twp: <http://www.penntownship.us/township-services/stormwater-management/>



The MS4 Permit and Planners- What can we do?

▶ Comprehensive Plan

- Include an MS4 strategy
- Stormwater fees
- Smart growth and LID
- Work with partners on a regional approach

▶ Zoning Ordinance

- Riparian buffers, environmental protection overlays, open space

▶ Subdivision and Land Development/ SWM Ordinances

- Incorporate stormwater BMPs and green infrastructure
- Limit curb-gutter sections
- Limit storm sewer pipes
- Reduce street widths



When does the MS4 Permit come into play?

- ▶ Pre-Land Development/Subdivision Discussions
 - Discuss MS4 requirements with applicants
- ▶ Zoning Permits
 - Inform residents of SWM requirements
 - Track impervious coverage
 - Coordinate SWM Plan review, O&M agreements, BMP inspections
- ▶ Municipal Projects
 - Washing vehicles
 - Street sweeping and inlet cleaning
 - Material storage: salt, topsoil, stone



Incorporating MS4 Policy into the Planning Program

- ▶ Comprehensive plan
- ▶ Official map
- ▶ Pollution reduction plans



Reporting and Mapping Requirements

- ▶ Annual reports
- ▶ Stormwater system maps
 - Inlets
 - Pipes
 - Swales
 - BMPs
 - Watersheds
 - Streams
 - Land Use



Effective Implementation and Compliance Strategies

- ▶ Partnering organizations
- ▶ Regional partnerships



Policy and Legislation

- ▶ Comprehensive planning
 - Establish water quality standards
 - Forest, steep slopes, stream protection zones
 - Farmland preservation
- ▶ Ordinance amendments
 - Overlay zoning districts
 - Streambank stabilization
 - Stormwater management for small projects





Non-Compliance and Enforcement



▶ Lessons Learned

- LCATS garage audits
- BMPs are not equal
- Fines = costs to comply
- Rely on partnering organizations



Contact Information

H. Scott Russell, PE, RETTEW

- ▶ srussell@rettew.com

Andrew Stern, AICP, West Hempfield Township

- ▶ manager@westhempfield.org

Frank Chlebnikow, AICP, RETTEW

- ▶ fchlebnikow@rettew.com

▶ Kara Kalupson, RLA, RETTEW

- ▶ Kara.Kalupson@rettew.com

