Major Regulatory Issues Arising with EPA/DEP MS4 Permits

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Federal Regulatory Tsunami

- Nutrients (all waters) – no cause and effect necessary
- Still dictating plant design/operation – blending prohibition
- Copper - still regulating non-toxic metals
- Antidegradation Rule Modification (“Practicable” def’n)
- TMDLs mandating runoff to pre-European levels
- Minimum Test Sensitivity Mandate

These actions will bankrupt PA communities unless you stop them

MS4 Permit Puts These Issues on Steriods

Recent EPA "Innovations" on MS4 Permits (No Analysis or Rule)

- May not "cause or contribute" to WQS exceedance
- Impaired Waters-No TMDL – assume the MS4 impacts the area
- Regulate flow as pollutant
- Land use decision subject to MS4 permit approval and antidegradation review

Anyone who accepts permits with these unfounded requirements is going to be sorry!!! Case law enforces permit "conditions" strictly

TMDL Concerns Impacting MS4

Indian Creek/Goose Creek TMDLs

- Concluded 40 ug/l WQS applies in streams
- Background exceeds this value
- Applicable to all of Southeastern PA
- Stream studies confirmed TP reduction ineffective (periphyton growth)
- EPA rejected site-specific evaluations
- Effluent limits/MS4 reductions to 40 ug/l

Lawsuits are ongoing

Sediment TMDLs

- Several are beyond ridiculous
- Most used “reference waters” approach with no relationship to actual ecological needs
- Regulating flood conditions and natural bank erosion

2003 Wissahickon TMDL Conclusions

- ***EPA's experts confirmed regulating nutrients would <u>not</u> produce ecological benefits:***
  - Paul and Zheng, 2007:
    - The highest algal biomass [in PA targeted watersheds] occurred at sites where TP concentrations were relatively low (14 – 35 µg/L). [*Upstream of POTWs*]
  - Dodds *et al.*, 2006:
    - Attached algae might be able to attain impressive bio-mass *in nutrient-poor water* because periphyton can use the small amounts of nutrients that continuously flow by.

EPA (2015) Proposes to Modify the Wissahickon TMDL to Control Periphyton

- Stormwater control measures are capable of achieving a *94% load reduction of TP*
- *Effect: Must meet Pre-European conditions*

Table E-1. Annual TMDL loads for TP for the Wissahickon Creek watershed.

Source Group	Baseline TP Load* (lbs/year)	Allocated TP Load (lbs/year)	Percent Reduction (%)
Total Point Sources: WWTP	**187770.08**	**1661.84**	**99.1**
Total Point Sources: MS4	**157510.18**	**9224.99**	**94.1**
Total Nonpoint Sources	**2289.11**	**274.69**	**88.0**
Total	**347569.37**	**11161.52**	**96.8**

Clearly Erroneous Stormwater Impact Analysis

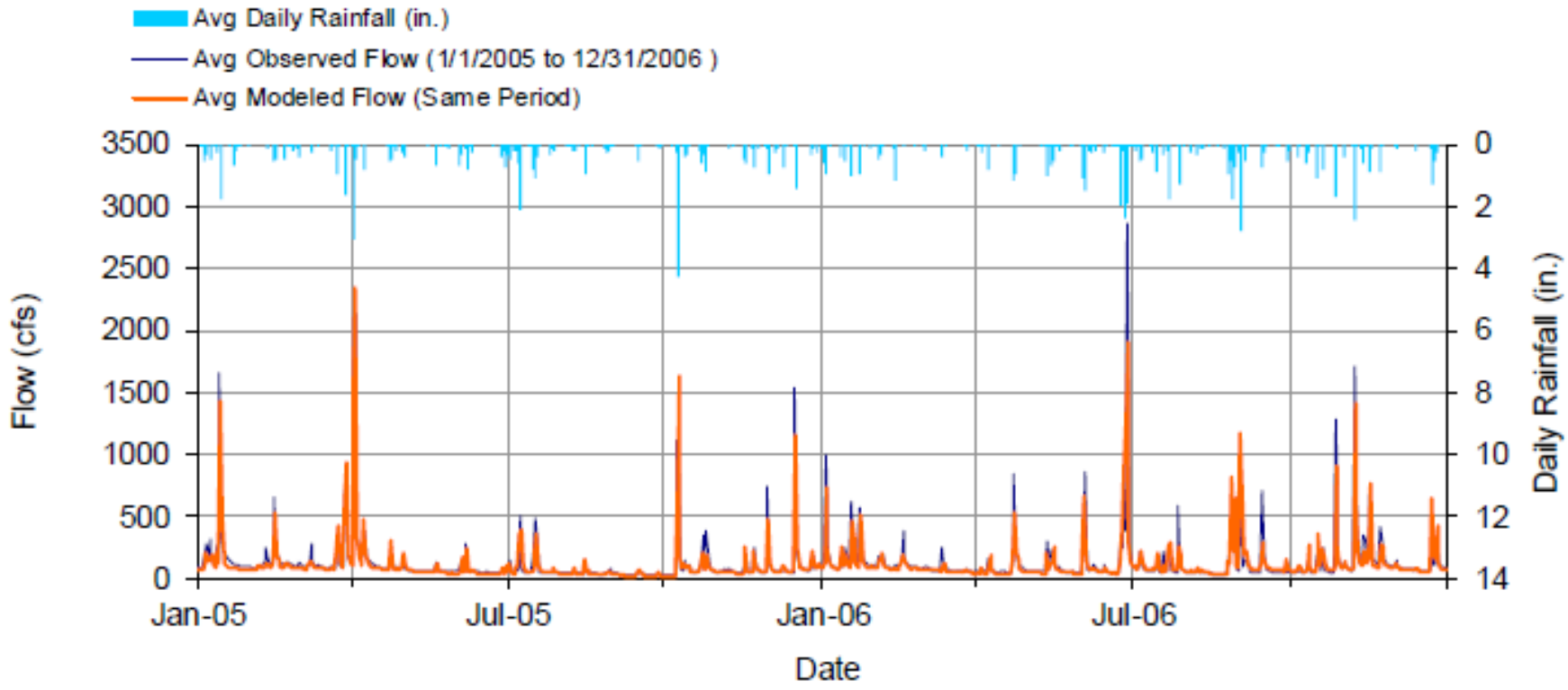

Figure F-8. Mean daily flow: Model Outlet 1 vs. USGS 01474000 Wissahickon Creek at Mouth, Philadelphia, PA

Development of Nutrient Endpoints for the Northern Piedmont Ecoregion of Pennsylvania: TMDL Application

Follow-up Analysis

Prepared for

United States Environmental Protection Agency

Region 3

Philadelphia, PA

Prepared by

Michael J. Paul, James Robbiani, Lei Zheng, Teresa Rafi, Sen Bai, and Peter Von Loewe

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Nice Letterhead
Thank You John Brosious!!!

Peer Review of Proposed Science Requested
Awaiting DEP Response

Stormwater

Yes, this story actually gets worse

Key Issues with PA MS4 Permit

(Provisions Creating Immediate Liability and Citizen Suit Exposure)

- MS4 "must comply with all applicable requirements in PA Code"
- May not "cause or contribute" to WQS exceedance
- Presumed WQ impairment and additional BMP reductions even without permit writer analysis
- General permit inapplicable if discharge "is not or will not result in compliance with… water quality standard" (40 ug/l TP?? – As criteria??)

Key Issues with PA MS4 Permit

(Provisions Creating Immediate Liability and Citizen Suit Exposure), cont'd

- No schedules of compliance, contrary to "iterative approach" and all other NPDES permits
- Creates "de facto" permit modification with no right of review or appeal
- No credit given for prior pollutant reduction BMP measures
- Established more restrictive antidegradation mandate, regulates pollutant in rainwater (PCB/Hg)

PA TMDL Stormwater Compliance Concerns

- DEP adding concentration limits from EPA Stormwater TMDLs (*e.g.*, aluminum)
- Setting daily maximum and short term limits
- Facilities meet annual mass limits but violate the concentration (hundreds of violations)

EPA clarified this was unnecessary!!

You must request permit mods!!!

EPA MS4 Permits Under Appeal

- Established similar prohibitions - may not "cause or contribute" to WQS exceedance
- Local land use decision subject to "antidegradation review" (part of WQS compliance demonstration)
- Same immediate compliance mandate

Multiple lawsuits filed –

EPA has agreed to mediation

Problems with Waiting for Shoe to Fall

- Litigation/permit appeal is defensive, costly, and time consuming
- Unfavorable review standard
- Agency creates the record
- Political assistance not available
- Unfavorable press

Southeastern Pennsylvania
Nutrient Coalition

Letters to EPA and DEP

EPA - Peer Review the Science

DEP - Reconsider Small MS4 Permit

What Should You Do?

- *Join Local Coalition Efforts*
- *Demand Expert Peer Reviews* of junk science used in the nutrient/sediment TMDLs
- *Support Request for Modification* to illegal MS4 provisions

Questions?

For Further Information, Contact:

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