

Mystic River Watershed Summit 4-10-08 Bacteria & Stormwater breakout session

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PROBLEMS

1. Illegal discharge to water ways and storm drains, cross-connections to sewers and storm drains
2. permitted CSOs and CSO facilities
3. SSOs – old cracked pipes, in-flow (rainwater), basement back-up pumping to storm drain
4. Non-point discharges – pet waste management, cyano-bacteria, landscape management
5. lack of access for cleaning sewers
6. snow-frozen water – disposal – sand use – accumulated snow storage – where does it melt?
7. very high population density and age of infrastructure – exfiltrate from sewer and storm drain
8. understanding problem of separating human from animal waste
9. stormwater – phase II – impervious sites
10. urban runoff
11. pooling of stormwater – mosquitoes
12. vegetation management – waterfowl – use of banks
13. stormwater management after unforeseen natural disaster (overloaded systems – sewer or stormwater)
14. lack of natural cleansers for land and water (shellfish, vegetation, etc.)
15. concentrated animal feeding operations (CAFOs), composting operations, newly laid sod
16. fluctuating bacteria levels, frequency of sampling influences data interpretation
17. lack of public awareness/outreach
18. cross-municipality issues
19. non-daylighted storm drain channels hard to access
20. NPDS permit content and compliance including stormwater
21. lack of TMDL for bacteria and other pollutants
22. assess status of monitoring - adequate?
23. involve citizen groups – non-technical info, too

PROBLEMS VOTING TALLY (first 8 listed from multi voting - 3 dots each)

- 16 – illegal discharges/connections
- 11- lack of natural cleansers
- 8 – permitted CSOs and CSO facilities
- 8 – non-point discharges
- 7 – SSO issues
- 5 – Urban runoff
- 5 – NPDS permits
- 5 – involve citizens (non-technical information)

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TOOLS

EPA and DEP summarized some of their tools

EPA Grade based on MyRWA baseline data sites

Compare to swimming and boating (5x swim) standards

Dry and wet (25% of grade) weather data

1. EPA/DEP management – SSOs and CSOs
2. moratorium on new connection in areas tributary to CSOs
3. risk-based approach
4. CSO control plans
5. variance – long term
6. TMDL
7. land-use planning – LID – landscape tools
8. public education for non-human waste management and additional problems
9. non-structural controls – street sweep, etc.

GOALS listed for MONITORING AND SCIENCE

1. Increased monitoring to better understand sources of bacteria, tiered monitoring and outfall ID
2. analyzing data from all programs and holistic analysis of existing data source, EPA as clearinghouse of data, different types of data
3. science oversight committee to develop research projects, re-assess problems
4. model (predictive tool) for receiving waters and stormwater
5. phosphorous and nutrient data collected at same time as bacteria
6. source of bacteria affecting beaches
7. increased funding at state and federal level
8. easy method for ID'ing sewage contamination

GOALS – listed for CSOs and SSOs

1. eliminate untreated CSOs for 2-5 year storms
2. eliminate SSOs for 10-25 year storms
3. reduction of inflow to sewer system
4. green infrastructure expansion/LID
5. limit municipality inflow (income questions/water volume contribution questions)
6. must have technical and financial assistance

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GOALS – listed for STORMWATER and ILLICIT CONNECTIONS

1. Meet water quality standard for bacteria in dry weather (in-stream and outfall)
2. finalize TMDL for bacteria
3. create incentives for municipalities to reduce stormwater contamination, including expansion of stormwater utility
4. maintenance of connections from house to sewer system – all development, all tie-ins
 - a. regulations
 - b. incentives/mandates
 - c. time of sale inspection/upgrades
5. education at the municipal level, including demonstration projects
6. development of numeric bacteria action levels for setting priorities (“red alerts” or prioritization markers) – might use rolling averages. Another option would be to use a tiered system for setting priorities based on (geomean, maximum, resource affected) since one size doesn’t fit all. Must consider dry or wet-weather.

GOALS VOTING TALLY (first 2 listed for each category from multi voting - 3 dots each)

CSO

- 7 – reduction of inflow
- 7 – green infrastructure

MONITORING AND SCIENCE

- 8 – increased monitoring
- 7 – increased state and federal funding

STORMWATER

- 13 – meet water quality standard for bacteria in dry weather
- 6 – create incentives for municipality to decrease stormwater contamination

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ACTIONS and NEXT STEPS listed for top goals (identified through multi-voting)

CSOs/SSOs

Goal: Reduce inflow

Action – Use green infrastructure to reduce inflow

Next steps:

- Establish mitigation requirements and actions for development/re-development
- Educate of legislators and public with pilot or demonstration projects
- Increase funding
 - SEPs
 - Green infrastructure SEPs
 - Local by-laws, zoning
- Develop permit limits

Monitoring and Science

Goal: Increase Monitoring

Action: Increase funding for monitoring and science

Next steps:

- Educate agency head and legislators
- Establish monitoring as a SEP
- Assist with setting up more volunteer monitoring programs
- Explore inter-agency partnerships
- Increase monitoring through permits
- Promote tiered monitoring
- Make monitoring more efficient

Stormwater and Illicit Connections

Goal: Meet water quality standard for bacteria in dry weather

Actions: incentives, funding and enforcement

Next steps:

- Expand/create stormwater utility
- Obtain money from MA state revolving fund (2% loan program)

Mystic River Watershed Summit April 10, 2008 - Bacteria and Stormwater session registration list

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