Comprehensive Water Resource Management and CSOs

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History

- 1995 - DEP issued the first Combined Sewer System General Permit for CSOs (NJ0105023).
- 1996 – TMDL studies initiated
- 2004 – General permit renewed; engineering analyses required
- 2009 – Permit allowed to expire; administratively in effect

A Call for Action

- CSO communities subject to Federal Enforcement Actions
- EPA seeking individual permits with LTCPs
- Environmental Groups seeking action
- Deficient TMDL background study results

Above all – **Extremely high costs for 'grey' only solutions in urban areas**

Comprehensive Water Resource Management

- Watershed Assessments and Monitoring
- Improved Water Quality
  - Surface Water discharges
  - Ground water discharges
  - Stormwater
  - Wastewater collection and treatment infrastructure
- Sustainable Water Supply
  - Allocations
  - Safe drinking water
  - Water supply distribution and treatment infrastructure

Comprehensive Water Quality Management

- Address multiple pollutants simultaneously
- Maximize overall water quality improvements
- Provide incremental improvements NOW
- Address public health (e.g. sewer backups) and quality of life needs first
- Utilize green infrastructure solutions
- Consider asset management and total cost to a community
- Ultimate goal to restore water uses and reduce or eliminate CSOs

Comprehensive Strategy:

- Establish partnerships
- Identify and prioritize local issues
- Integrate planning and permitting
- Incorporate green infrastructure
- Maximize water quality improvements at affordable costs
- Maximize funding
- Monitor results

Promote Comprehensive Management

- Meet with regional wastewater utilities
- Meet with communities and other stakeholders
- Identify and prioritize local issues
- Promote Asset Management
- Promote regulatory flexibility
- Develop milestones and schedule

And then.....
a little thing called Sandy....

What did we learn/re- affirm? Opportunities

- Asset Management
- Infiltration/Inflow (I/I) reduction
- Stormwater Management
- Combined Sewer Overflow (CS0) Strategy
- Reducing Industrial Discharges During an Emergency
- Comprehensive, Integrated Planning
- Financing

Asset Management is THE KEY!! Sustainable Systems = Sustainable Communities

- Investments in water infrastructure and water industry systems can have a profound impact on the overall character and sustainability of our communities.
- Investments result in long-term benefits when decisions are ***"strategically aligned"*** with a plan for how and where a community wants to grow—or perhaps toll growth due to declining population or strategies for preservation.

CSO Strategy was on 'Right Track'

- CSO permits provide an opportunity for implementing an integrated approach
  - CSOs, stormwater, Green Infrastructure and Industrials, Reduce I/I, Improve O&M
- Acknowledges 'true costs" of water quality management and infrastructure priorities
- These efforts will take time and substantial amounts of money
- Incremental WQ improvements are important
- Green Infrastructure provides one opportunity for improvement on several levels

- *But…..individual CSO permits are just one part of the larger approach for Comprehensive Water Resource Management*

Strategy for Comprehensive/Integrated Water Resource Management

- Validated through our Sandy work
- Best way to manage is on a regional basis - watersheds
- Recognizing vulnerabilities for a 'region' is the most practical way to ensure that we are not creating cookie cutter approaches or mandating particular upgrades in areas where it is not appropriate.

Comprehensive Water Resource Management

- Water Resource Management moving forward with integrated planning process that looks at drinking water, water supply, wastewater and stormwater on a comprehensive watershed basis.
- Efforts to improve the resiliency, protection and maintenance of critical water infrastructure will be the Department's highest priority in 2013

Questions?

Thank you.