2013 Report on King County’s Water Quality Monitoring Program

Presented to
Metropolitan Water Pollution Abatement Advisory Committee
October 23, 2013
Background

- Required by 2013 King County Budget Ordinance
- Purpose
  - Conduct strategic county-wide assessment of County’s water quality monitoring program
  - Provide “information, analysis and recommendations”
Water Quality Monitoring Program

- Includes ongoing activities to assess quality of water and sediment, health of aquatic organisms, water flow
- Report describes:
  - Components of King County’s Monitoring Program
  - Emerging issues monitoring may need to address
  - Coordination and cost sharing opportunities
  - Summary and recommendations
Wastewater Service Area and Puget Sound

- Seven monitoring categories
  - Marine
  - Large lakes
  - Stream water quality
  - Stream flow and temperature
  - Freshwater swimming beaches
  - Toxics and contaminant assessment
  - Watershed impact assessment

- Funded by Water Quality Fund
Unincorporated King County

- Four monitoring categories
  - Stream water quality
  - Stream flow and temperature
  - Groundwater monitoring on Vashon Island
  - King County’s portion of the regional stormwater monitoring program required by permit
- Funded through Surface Water Management Fund
Other Monitoring

- River flow monitoring
  - Funded through King County Flood Control District
- Marine beach bacteria monitoring
  - Funded through Public Health via U.S. Environmental Protection Agency
- Urban small lakes monitoring
  - Funded through agreements with nine cities
Emerging Regulatory Issues

- New freshwater sediment standards
  - More attention to cleanup of freshwater sites
- Human health-based water quality standards being revised to reflect higher fish consumption rates
  - May result in more stringent requirements for harmful chemicals like PCBs
Regulatory Issues (con’t)

- Incorporation of Total Maximum Daily Loads (TMDLs) into stormwater permits
  - Requires improved stormwater management
- Potential nutrient TMDL for South Puget Sound
  - Could result in very expensive requirements to reduce nitrogen discharges
Public Health Issues

- Ongoing monitoring protects public health from:
  - Improperly functioning or failing on-site septic systems
  - Sewage overflows and spills
  - Combined sewer overflows
  - Illicit discharges
  - Contaminated swimming beaches
Liability issues, Combined Sewer Overflows, Reclaimed Water

- No new monitoring needed
  - CSO Water Quality Assessment will support program implementation (post-construction monitoring)
Stormwater Permit Monitoring

- Requires regional stream & nearshore monitoring in 2015
- Will be cost-shared among permitted jurisdictions
- King County participating
  - Complements, does not duplicate, King County’s existing monitoring program
Other Regional Issues:

- Stormwater retrofits
- Floodplain management
- Puget Sound recovery
- Climate change and ocean acidification
Ongoing Coordination

- King County monitoring information shared via web, and widely used
- King County coordinates monitoring with other entities (cities, state/federal agencies, tribes)
- Interviews with cities indicate:
  - Monitoring programs not duplicative
  - Ongoing coordination, data sharing important
  - Additional cost sharing unlikely
Summary

- Monitoring program funded from multiple sources to meet a variety of programmatic needs
- Information shared and coordinated
- Program meets current needs, will continue to evolve
- No changes recommended at this time
  - Potential additional monitoring activities identified for future consideration
Questions?
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