King County
Protecting Our Waters
Doing our part on rainy days

Water Quality Assessment and Monitoring Study Update

Fall 2017

Study documents published: Major new resource for water quality planning and action

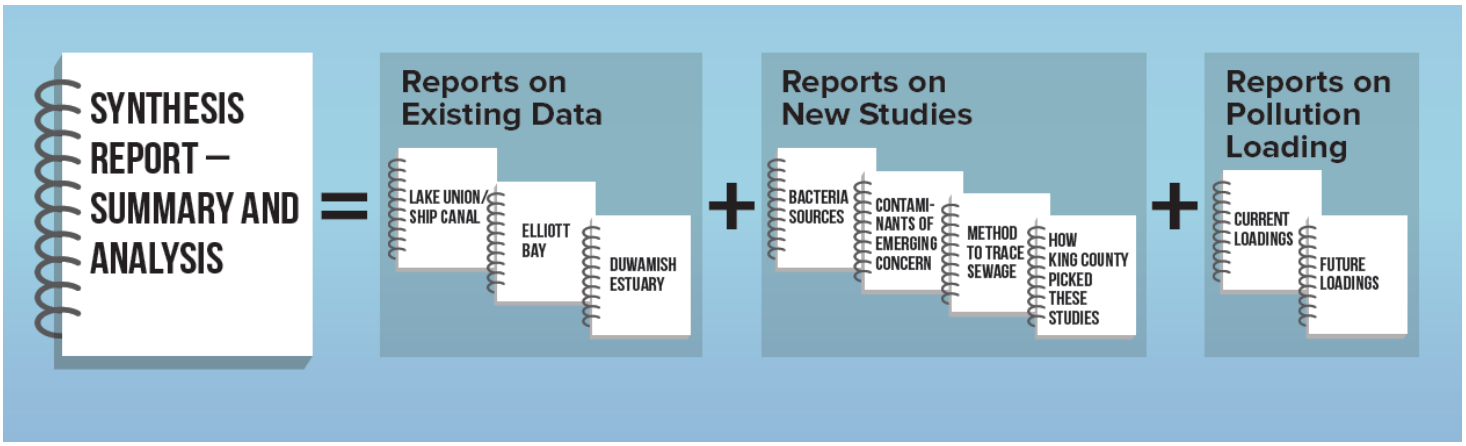
King County has just published a comprehensive look at water quality in Elliott Bay, Lake Union, the Lake Washington Ship Canal, and the Duwamish Estuary. The study's 12 volumes provide detailed analysis of decades of data and results of new studies. This information is now easily available for anyone working on water quality issues.

> King County has been monitoring many local lakes and streams for several decades. They have the most detailed and high-quality dataset for urban lakes that I am aware of.
> *– Mike Brett, PhD, University of Washington, member of Science and Technical Review Team*

A short graphic summary and a longer Synthesis Report provide overviews of the findings. The other reports give the technical details. The project website now has links to all these reports.

Why an assessment?

The study was designed to inform King County's **Combined Sewer Overflow (CSO) Program**, called **Protecting Our Waters.** The assessment will help ensure that investments in CSO control are well planned to optimize water quality improvements in Elliott Bay, Lake Union, the Lake Washington Ship Canal, and the Duwamish Estuary.



Results support plans to reduce combined sewer overflows

King County did the study to inform its plan to control combined sewer overflows (CSOs). CSOs happen on very rainy days, when sewage mixed with stormwater overflows into water bodies. King County and Seattle are scheduled to complete projects to meet state CSO standards by 2030. The study shows that this will reduce bacteria loading to the water bodies by 80 percent.

Findings can support other water quality efforts

> CSOs are just one of the problems. Other pathways – stormwater and upland sources – need to be addressed in order to really improve the overall water quality of Puget Sound
> *– Jay Davis, U.S. Fish and Wildlife Service, member of Science and Technical Review Team*

The study looked at 14 pollutants from 15 pollution pathways, including CSOs. Completing CSO projects will have the biggest impact on bacteria. Different pathways need attention to address other pollutants. People working to improve water quality can use the study findings on efforts like these:

- Stormwater Management
- Contaminated sediment remediation
- Land use and source control
- Boat paint controls
- Creosote –treated pilings removal
- Ballard Locks Upgrade
- Methods for lowering surface water temperatures
- Actions individuals can take to protect water quality

Next steps

King County will use the Water Quality Assessment and Monitoring Study to inform its plan to control combined sewer overflows (CSOs). As a leader in water quality, the County will share the assessment with partner organizations, including the City of Seattle, other scientists, and interested parties for use in their water quality programs.

Find out more on the web at www.kingcounty.gov/water-quality-assessment or by contacting **Erika Peterson, at 206-477-5525 or Erika.peterson@kingcounty.gov**.