



King County

## Protecting Our Waters

*Doing our part on rainy days*

# Water Quality Assessment and Monitoring Study Update

June 2016

## Future activities will affect pollution loadings

“What activities are planned through 2030 that could affect water quality in the receiving waters?” That is one of [the study questions](#) the Water Quality Assessment and Monitoring Study is exploring in the areas where King County combined sewer overflows (CSOs) discharge.

## What is changing?

Stricter regulations for stormwater, air quality, boating practices, and the use of copper in brakes and boat paint could influence future water quality. Many projects are planned that could also affect water quality:

- CSO control projects
- Stormwater treatment and control projects
- Transportation projects (SR520, Alaska Way Viaduct, Elliott Bay Seawall)
- Creosote-treated piling removal
- Upstream projects

Other factors are harder to predict, including population, economic, and land use change; climate change; behavior change; and a variety of unanticipated events.

## Study methods

Estimating current and future pollution loadings has uncertainty. Existing data have limitations and future loads will be affected by unpredictable circumstances.

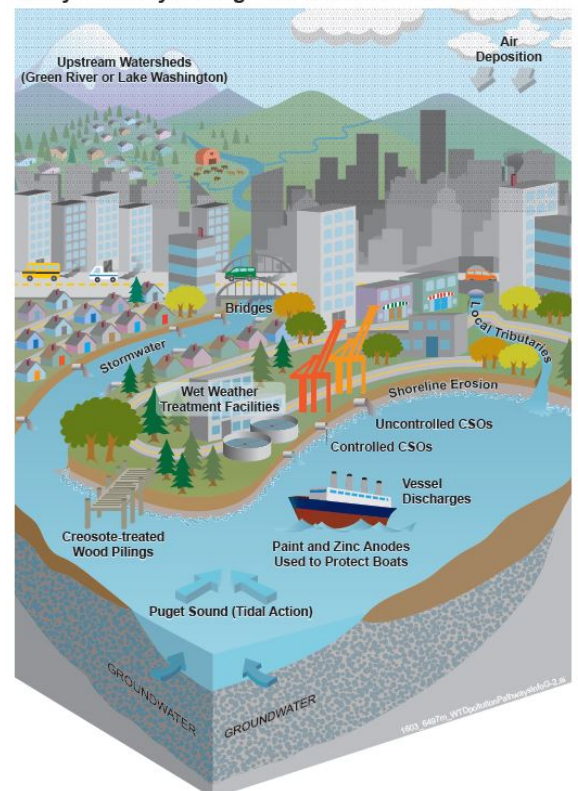
The project team did not estimate future changes in pollution loads from development, population growth, climate change, or regulations yet to be developed. Instead, the team focused on estimating changes in loads that can be predicted and measured with confidence – such as planned projects and regulations about to be implemented.

To do this, they used estimates of the current relative magnitude of contaminant loadings from major pollution pathways. (These estimates will be described in the project’s Loadings Report – see [March 2016 Project Update](#).) Then the team estimated how the anticipated changes

### Why an assessment?

The assessment will inform King County’s [Combined Sewer Overflow \(CSO\) Program](#), now 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/Ship Canal, and the Duwamish River.

### Many Pathways Bring Pollution to our Water Bodies



could affect the loadings from these pathways. The effort included review of about 150 planned projects and estimation of future loadings from 33 projects scheduled to be completed by 2030.

## Key findings

- King County and the City of Seattle plans for controlling CSOs will have the biggest effect on reducing bacteria (fecal coliform) in the water bodies during wet weather.
- State regulation of copper antifouling paint on small boats will lower copper loads to waters. Anti-fouling paint on non-regulated boats will continue to be a pathway for copper loading.
- Stormwater will remain a major contributing pathway of contaminants. (This may be partially addressed by future stormwater control requirements that may occur before 2030.)
- Planned removal of some creosote pilings will reduce loading of PAHs (chemicals found in creosote tar and fossil fuels). Remaining pilings will remain a pathway for pollution.

## Next steps

The report on the estimated changes in contaminant loadings will be published later in 2016, along with the rest of the Water Quality Assessment and Monitoring Study. In the meantime, you can [see slides describing the draft report](#) online. Check the presentation that the [Science and Technical Review Team](#) reviewed on March 21, 2016.

Find out more on [the Web](#) at <http://www.kingcounty.gov/services/environment/wastewater/cso/projects/water-quality-study.aspx> or by contacting **Erika Peterson**, at 206-477-5525 or [Erika.peterson@kingcounty.gov](mailto:Erika.peterson@kingcounty.gov).