

King County Sediment Management Plan Update

King County's 2018 Sediment Management Plan is an updated version of the 1999 plan. The plan is an assessment of sediment quality at all of King County's Combined Sewer Overflows (CSOs) and will help King County make decisions about their work to control CSOs and address any sediment pollution problems.



Overall, what did we learn from the study?

King County's past investments in CSO control have paid off. Sediment quality is good at most CSOs and sediment quality overall has been improving in spite of growing population, increased development and thriving economy. The data suggests that once CSOs are controlled, they will not create sediment pollution problems.

We also learned that there is still further investigation at some locations that needs to be done before we can say that we are not creating or contributing to sediment pollution problems at those locations. We will need to continue to monitor several other sites to determine if they are affecting or may in the future affect sediment quality.



Five Strategies for Management

King County has categorized the CSOs into five categories. The locations of CSOs that fall into each category are shown in the enclosed map.



No Further Action

No cleanup is needed at these CSO sites. These fourteen CSOs are mostly located in the central basin of Puget Sound and Lake Washington.







Part of Area-Wide Investigation

Five CSOs in Lake Washington Ship Canal/Lake Union are sited in highly developed areas where sediments have been impacted from multiple sources of contamination. Because of this, they need to be evaluated as part of an area-wide investigation to determine how to proceed. While contamination was measured in surface sediment, our modeling does not show that the CSOs created the problem. King County will participate as one contributor in part of a larger cleanup of the polluted waterway.



Additional Monitoring

At these five CSOs, the data does not show the need for cleanup, but modeling suggests we keep an eye on them for possible problems.



Cleanup Needed

According to our data and models, there is one CSO that is contributing to sediment pollution that will require cleanup.



Part of Existing Cleanup

Berny CSO cleanup

At these locations, KC WTD did not necessarily create the problem, but they are located in more broadly polluted areas. Any contribution we have made and potential for recontamination will be addressed by a cleanup that is already planned or in process.

Fourteen CSOs and two CSO treatment plant outfalls are being addressed as part of an existing cleanup or through the original SMP. Twelve of these are part of the CERCLA cleanup process for the Lower Duwamish and East Waterway.

Background - What caused the problem?

During the past 20 years, sewage and stormwater discharges through CSOs to Elliott Bay and the Duwamish River were reduced substantially. Despite that achievement, however, historical, persistent chemical contaminants in sediment continue to pose a risk to aquatic life, wildlife and human health at some locations.

Areas with contaminated sediment exist near some CSOs now operated by King County. Most of that contamination is historical—from the first half of the 20th century. Since the 1960s, the county's Industrial Waste Program and CSO Control Program have dramatically reduced pollutants from CSOs.

When a cleanup is needed, part of the process is to identify sources of pollution, both past and present. In previous cleanups, many of the sources of contamination have come from historic uses upstream of King County CSOs, this includes sewer outfalls built early in Seattle's history that are now intercepted and treated at one of the regional treatment plants. King County, along with other agencies, has been proactively addressing industrial waste and other hazardous waste to reduce the amount of waste with the potential to contaminate sediments near wastewater facilities.



What is a CSO?

When heavy rains fill the "combined sewers," relief points (outfall pipes) send the extra sewage and stormwater out into rivers, lakes, or Puget Sound.

For more information

King County is committed to doing our part, sharing what we learn, and partnering with others to achieve our region's water quality goals.

Please contact: Caryn Sengupta by phone (206) 477-2514 or email caryn.sengupta@kingcounty.gov if you have any questions.



Alternative Formats Available 206-477-5371 / TTY Relay: 711

1803_8975E_Sediment_Management_Plan_Fact-Sheet.ai

