



## Water Quality

### Objective:

Protect and restore water quality, biodiversity, open space, and ecosystems

### Strategy:

Protect water quality through reducing pollution at its source, wastewater treatment, low impact development practices, and stormwater management

### Why is this strategy important?

Clean water and ecosystems depend on wastewater, stormwater, and other facilities operating at high standards, implementing best management practices, and supporting low impact development practices through project prioritization. These efforts protect the health of our environment and our public health and safety.

### How is our performance?

King County achieves nearly 100 percent compliance for both wastewater and storm water permitted systems. This level of compliance is supported by ongoing planning and prioritization efforts for water quality improvement projects of all types.

King County stormwater best management practices (BMPs) provide detailed information on what we are all (public and private) required to do to reduce the contamination of surface water, groundwater, and stormwater from our properties. BMPs are methods of improving stormwater quality, and thus surface water and groundwater. BMPs encompass a variety of managerial, operational, and structural measures that will reduce the amount of contaminants in stormwater and improve the quality of our water resources.

Low Impact Development (LID) strategies offer methods to manage stormwater differently: by focusing on the natural site condition, minimizing impervious surfaces and the effect of impervious surfaces, and infiltrating rather than collecting and conveying stormwater, runoff is managed at the source. Most constructed LID Best Management Practices (BMPs) function to reduce pollutants as well as runoff volume, through filtering and biological treatment. Low impact development techniques include but are not limited to green roofs, rain gardens, rain barrels, pervious parking lots and roadways.

King County and Seattle together, through independent and joint efforts, have reduced the annual volume of untreated wastewater discharged to waterways from around 30 billion gallons to less than 1 billion gallons since the regional wastewater system began operating in the 1960s. King County alone has reduced its CSO volumes from 2.3 billion gallons when the CSO Control Program began in the early 1980s to less than 800 million gallons in 2011.

## **What can you do?**

Learn more about stormwater services and how to reduce runoff pollution.

## **Moving forward**

Many King County activities contribute to success in NPDES compliance, such as: performing preventive maintenance, providing employees with training and tools, developing asset management plans for major equipment maintenance, and many other coordinated NPDES compliance efforts.

King County created an air quality compliance team to oversee and facilitate compliance issues at all Wastewater Treatment facilities. This compliance team will continue an active role in responding to permit compliance requirements for the Brightwater Treatment Plant's air quality control program. An Air Quality Environmental Management System (AQ-EMS) was developed and approved by PSCAA for South Plant, to enhance the implementation of compliance, odor control, and best practices initiatives, including identifying training and safety issues. King County will continue to evaluate modifications of equipment and operating changes to improve air quality and improve reliability of equipment operation at treatment plants.

King County will continue to follow a Combined Sewer Overflow Control Plan to reduce wastewater overflow into Puget Sound. The plan, based on analysis of environmental impact and financial data, includes community input and approval by local, regional, state, and federal agencies and regulators.

## **Related Links**

**[King County KingStat Wastewater and Storm Water Permit Compliance Performance](#)**

**[Combined Sewer Overflow status real time data](#)**

**[King County Combined Sewer Overflow Control Plan](#)**

### King County Water Quality Compliance for State and National Standards

	2011 Compliance	Target
Compliance with <b>air quality</b> limits and conditions as regulated via Puget Sound Clean Air Agency (PSCAA) permits on regional wastewater plants and offsite stations	99.90%	100%
<b>Wastewater</b> (Effluent) Limit compliance with National Pollution Discharge Elimination System (NPDES) permit limits for the county's major regional wastewater treatment plants	100%	100%
<b>Reclaimed water</b> permit compliance	98.90%	100%
<b>Storm water</b> System National Pollutant Discharge Elimination System (NPDES) permit	100%	100%

### King County Combined Sewer Overflow Events

	Combined Sewer Overflow Events	Volume of Wastewater (Millions of Gallons)
<b>2011 actual</b>	196	666.4
<b>2011 predicted</b> (based on Hydraulic modeling)		800
<b>1980s</b>		2,300