

King County Industrial Waste (KCIW) Program Update

Presented to the Metropolitan Water Pollution
Abatement Advisory Committee

June 24, 2015

KCIW Update

- Program elements & services
- Annual standard fee update process
- Surcharge program evaluation



EPA, Ecology & KCIW working together

- Federal Environmental Protection Agency (EPA)
 - Delegates this responsibility to states
- Washington State Department of Ecology (Ecology)
 - Delegates this responsibility to KCIW
 - Oversees KCIW's program
- KCIW's program is required through treatment plants' National Pollutant Discharge Elimination System (NPDES) permits

Industrial pretreatment: part of the wastewater treatment process

- Sewage treatment plants are designed to treat biological waste. Heavy metals and oils will not break down.
- Keeping industrial waste out of the sewage system works.



Working with businesses to prevent pollution

- Industries do their part by:
 - Pretreating the water they use before they send it to the sewer
 - Removing substances that could harm the workers, environment, wastewater treatment process, or recycled products.



KCIW works with about 2,200 businesses

- Over 600 businesses are permitted or authorized to discharge industrial waste that meets discharge requirements.

Type of Authorization	Number issued in 2014
Discharge Permit	121
Major Discharge Authorization	196
Minor Discharge Authorization	153
Letter of Authorization	165
Total	635

- About 1,600 businesses have established or are developing best management practices (dentists, wineries, breweries, distilleries).






More than a billion gallons each year from many different industries



System-wide,
3 to 5 percent of
wastewater flow
comes from
industrial sources.



**GALLONS OF INDUSTRIAL
WASTEWATER SENT TO
COUNTY SEWER
SYSTEM: 1,400,000,000**

-  Food Processing
-  Metal Finishing
-  Construction Dewatering
-  Groundwater Remediation
-  Other: incl. manufacturing;
medical; transportation
and vehicle mgmt.

KCIW helps businesses meet regulations and prevent pollution

- Review business practices and issue approvals to send treated industrial wastewater to the sewer.
- Inspect and monitor the quality of the wastewater coming from businesses.
- Provide assistance and incentives to businesses.
- Maintain federal and local limits.
- Research new trends and investigate problems.



KCIW makes about 350 inspections each year and collects 1700 samples for analysis

Incentives for compliance

- Companies with exceptional compliance receive awards
- Over half of the eligible companies received awards in 2014.
- Three companies received awards for perfect compliance for 5 years.



KCIW fees set to recover costs

The following fees are paid by businesses:

- Permit and authorization fees
- Monitoring fees
- Surcharge fees
- Post-violation fees and fines



Circuit board manufacturers pay monitoring fees for heavy metals



Food and beverage processors pay a surcharge for high-strength wastewater

KCIW special projects

- Construction dewatering: Simplify permit process.
- Industrial User Survey: Inventory thousands of businesses to determine which need permits or authorizations to send industrial wastewater to the sewer.
- Surcharge: Update fee for businesses with high-strength (concentrated) waste.



Surcharge fee

- For businesses with high-strength waste.
- Fee covers additional cost to treat high levels of solids and organic material out of the water.
- Businesses that send high-strength waste to the sewer pay a surcharge
- The surcharge is based on the cost to remove material from the wastewater

Food and beverage processing
and pavement de-icing create high
strength wastewater

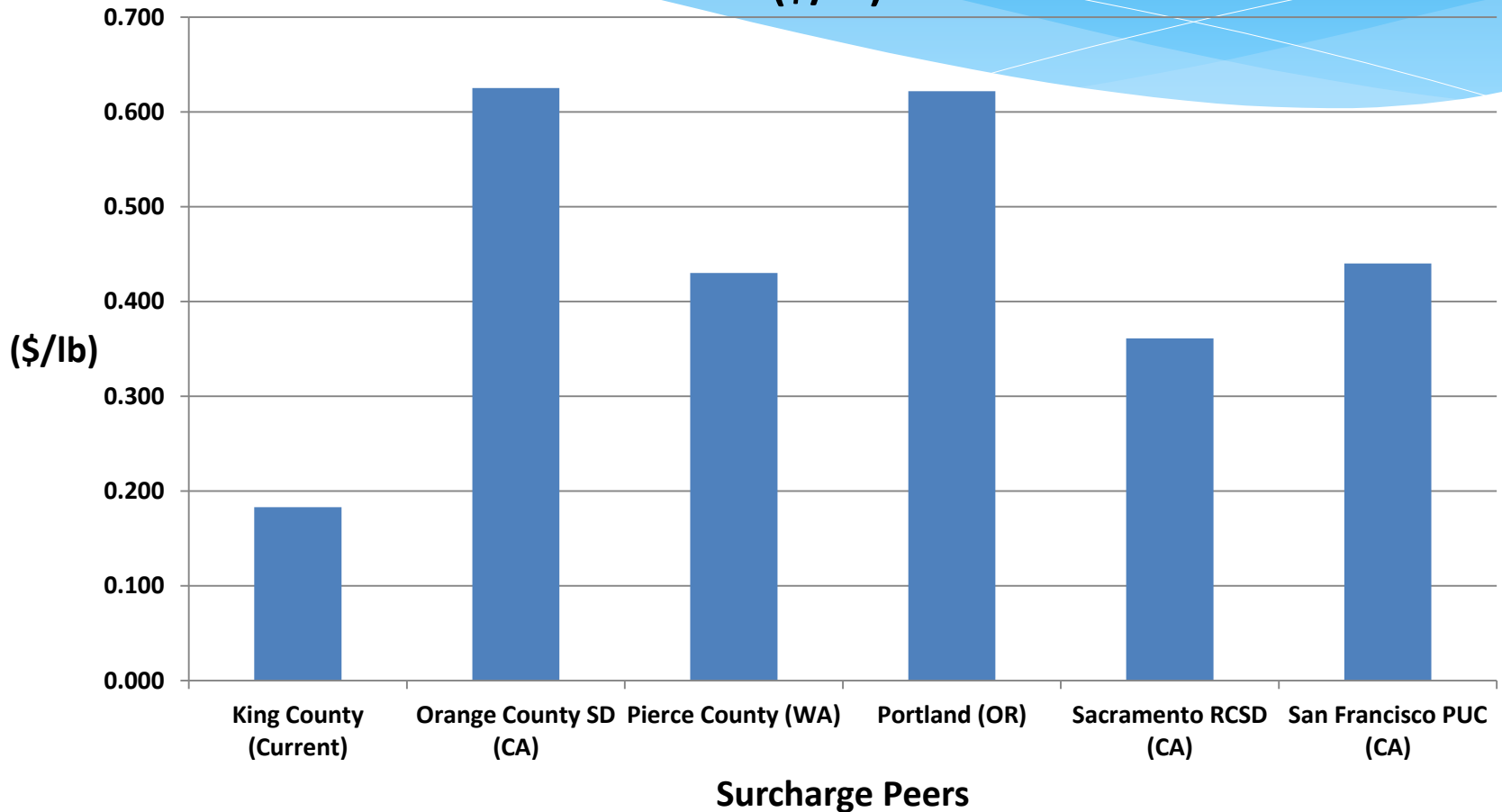


Surcharge Update

- Goal is to distribute costs of treating wastewater fairly among ratepayers

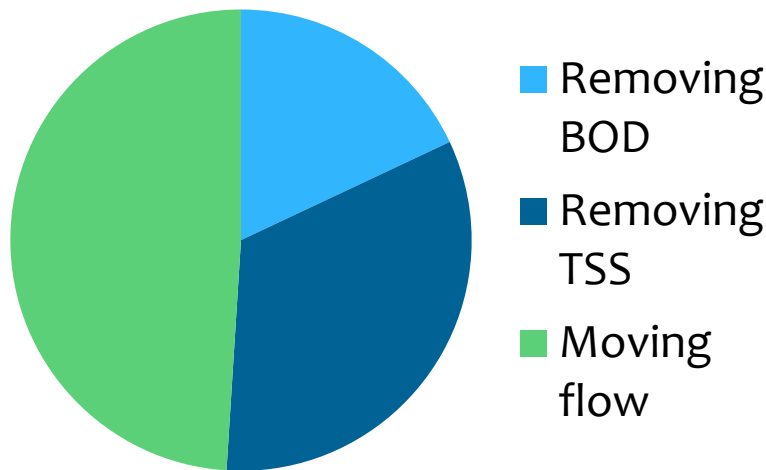
How We Compare to Our Peers

BOD (\$/lb)



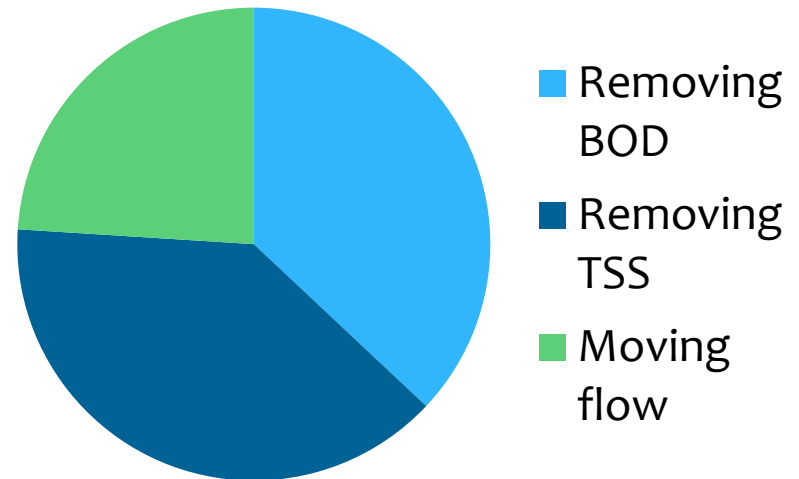
Breakdown of the cost of treating wastewater

1990



\$31.5M

2014



\$127.2M

Today, we spend much more removing material from wastewater than moving flow.

Establishing New Surcharge

- * Update how much it costs to treat high-strength waste (BOD, Soluble BOD, TSS).
- * Use recent data to evaluate the concentration of waste sent by each business.
- * Address other issues that can impact treatment plant operations.
- * Coordinate with local agencies to implement change over time to be sensitive to the needs of affected businesses.

Surcharge Communications

- Direct communications with affected businesses
 - Letters and briefings
 - Phased implementation
- Fact sheets to help answer questions
 - For King County staff
 - For local agency billing staff
- Web updates
- King County contact for additional questions

Industrial Waste Program

Working cooperatively with businesses to protect people, the environment, and the economy since 1969.

Contact us:

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