

Development of Brewery Wastewater Best Management Practices

King County Industrial Waste Program

Protecting people, the environment, and the economy since 1969

A rapidly growing industry

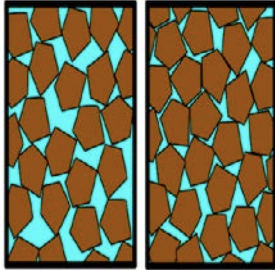


Breweries throughout service area

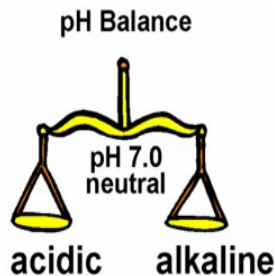
City	Number of Breweries
Auburn	1
Bellevue	3
Black Diamond	1
Bothell	3
Brier	1
Issaquah	1
Kenmore	3
Kent	1
Kirkland	2
Mountlake Terrace	1
Newcastle	1
Pacific	1
Redmond	5
Renton	2
Sammamish	2
Seattle	62
Shoreline	1
Tukwila	1
Woodinville	10



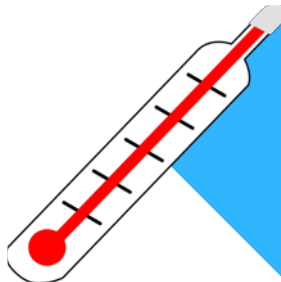
Potential impacts from brewery wastewater



High concentrations of solids and organic matter could clog pipes or cost more to treat



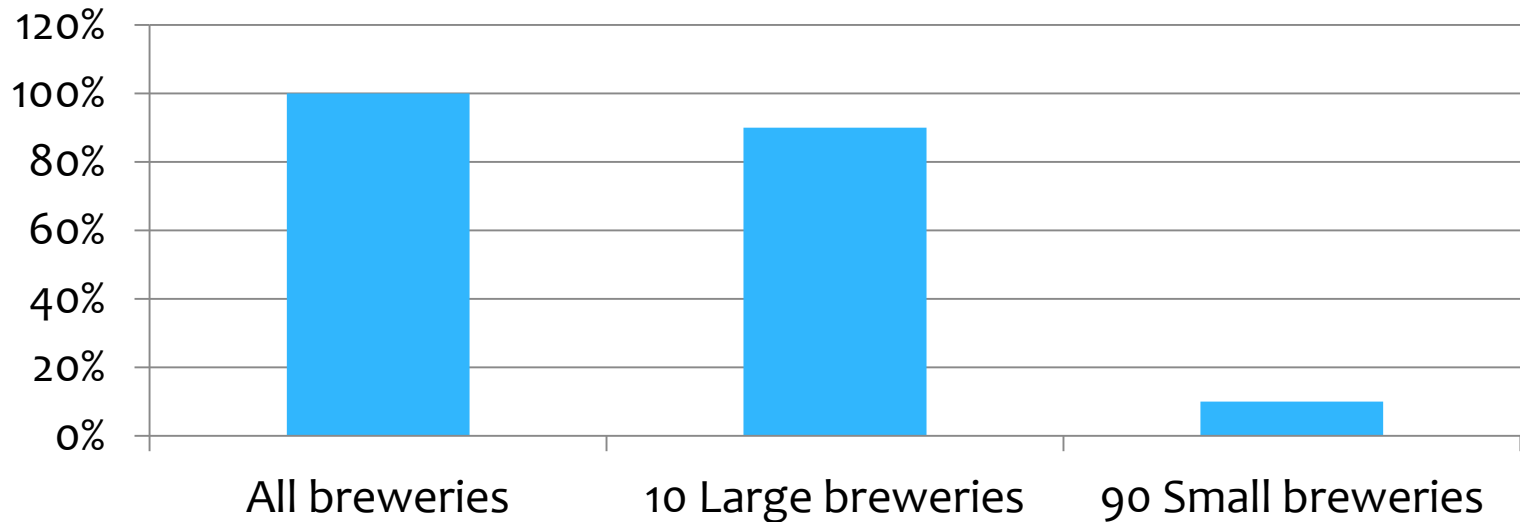
Too acidic or too alkaline could corrode the sewer system



Hot wastewater could harm small treatment plants

Ten largest breweries produce 90 percent of brewery wastewater

**Percentage wastewater from
large/small breweries**



Draft criteria for determining which breweries need a permit

- * Produces 3,000 or more barrels of beer per year;
Or
- * Sends 1,000 or more gallons of wastewater to the sewer each day;
Or
- * Located in the Carnation or Vashon Treatment Plant Service Area



Involve breweries in developing Best Management Practices (BMPs)



Survey all
breweries

Talk to KCIW
brewery
permit holders

Draft BMPs for all breweries to manage wastewater and costs

- * Reduce solids and waste beer entering the sewer
- * Consider beneficial reuse: turn these into compost, fertilizer, animal feed, or energy
- * Install systems to manage pH
- * Store chemicals safely, prevent spills, keep records, conserve water



Next Steps

Research other agencies and draft BMPs

Send draft BMPs out for comment

Consider comments and send final BMPs:

- To breweries
- To local agencies
- New webpage

Present BMPs to industry groups

We
are
here

Questions

Industrial Waste Program

Protecting people, the environment and the economy since 1969.

Phone: 206-477-5300

Email: Info.KCIW@kingcounty.gov

Web:
www.kingcounty.gov/IndustrialWaste



King County

Department of Natural Resources and Parks
Wastewater Treatment Division