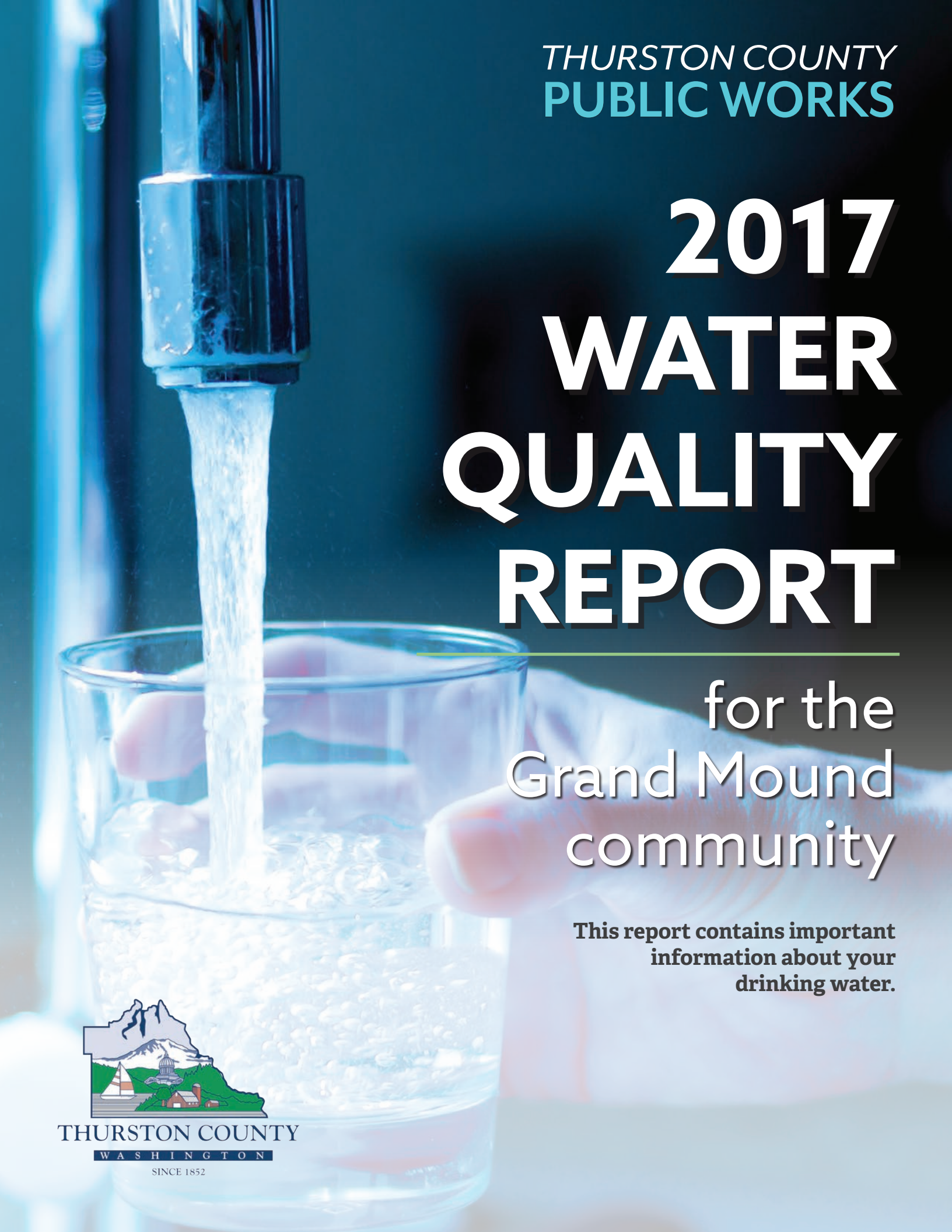

THURSTON COUNTY
PUBLIC WORKS

2017 WATER QUALITY REPORT

for the Grand Mound community

This report contains important information about your drinking water.

THURSTON COUNTY
WASHINGTON
SINCE 1852

Thurston County Public Works is pleased to present the Grand Mound annual water quality report, in accordance with the federal Safe Drinking Water Act and Washington Department of Health regulations.

This report provides detailed results from drinking water tests taken in 2016, and compares the results to federal and state standards. Results from 2017 tests will be published in 2018.

We are proud to report that your water meets or exceeds quality and safety standards. If you have any questions about this report, or your water system, please contact me at 360-867-2330 or parsont@co.thurston.wa.us.

Theresa L. Parsons
Utility Operations Manager

PARA NUESTROS CLIENTES HISPANOHABLANTE:

Este informe proporciona los resultados de los análisis efectuados en el agua potable durante el año 2016. Dicho resultados demostraron que su agua potable cumplió con los normas de seguridad estatales y federales. De acuerdo a los requisitos en el procesamiento de los informes, los resultados del año 2017 serán enviados por el website co.thurston.wa.us/publicworks en el año 2018.

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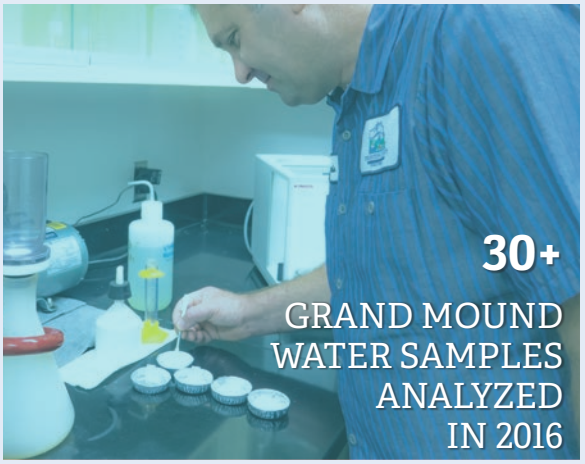


WATER SOURCE AND TREATMENT

Grand Mound's drinking water comes from groundwater within the Scatter Creek aquifer - part of the Chehalis River watershed. The water is pumped from the aquifer through two wells: one located off 201st Avenue SW, and another located off Tea Steet.

To protect public health, your water is disinfected with chlorine. Disinfection is vital to eliminating bacterial and viral contaminants that can cause illness to you, your family, and your pets. Chlorine is particularly effective in killing the microbial organisms that cause cryptosporidiosis, cholera, giardia, salmonella, and other illnesses. By acting as a protective barrier, chlorine prevents recontamination of water while it is in your pipes.

Thurston County Public Works regularly conducts water quality testing to ensure the safety of your drinking water. We test for the following contaminants:

Inorganic contaminants, such as nitrates, salts, and metals, which can occur naturally or result from urban stormwater runoff, industrial or domestic wastewater discharges, and farming.

Copper and lead, which can leach from your household plumbing system.

Microbial contaminants, such as bacteria, parasites, and viruses, that may come from sewage treatment plants, septic systems, agriculture, or wildlife.

Pesticides and fertilizers, which may come from agriculture, stormwater runoff, and residential uses.

Organic chemical contaminants, such as petroleum products and byproducts from industrial manufacturing.

Radioactive contaminants, which can occur naturally or are the result of oil and gas production.

Disinfection byproducts, which are compounds that form in the presence of chlorine or other disinfectants.

WATER QUALITY AND HEALTH

Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791.

EPA SAFE DRINKING WATER HOTLINE 800-426-4791

To ensure that tap water is safe to drink, the Washington Department of Health and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration and the Washington Department of Agriculture establish limits for bottled water contaminants that provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants, may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

GRAND MOUND WATER QUALITY IN 2016

Grand Mound's drinking water is monitored and tested extensively throughout the year. After testing nearly 200 chemical compounds, only a few were detected - they are presented in the following tables. Some of the information is older because not all contaminants are tested each year. If you would like a complete list of the chemical compounds tested but not detected, please call Thurston County Public Works at 360-867-2300.

READING THE REPORT TABLES

CONTAMINANT TESTED					
CONTAMINANT	VIOLATION (Y/N)	HIGHEST LEVEL DETECTED	ACTION LEVEL (AL)	IDEAL GOAL (MCLG)	LIKELY SOURCE OF CONTAMINATION

Contaminant
tells you the chemical sampled.

Violation
tells you whether or not the amount of contaminant present in the sample exceeded state and federal standards.

Highest Level Detected
shows you the highest amount of the contaminant detected during sampling.

Maximum Level Allowed or Action Level
shows you the greatest amount of a contaminant allowed before treatment is required or regulations are exceeded.

Ideal Goal
shows you the contamination level the county strives to stay below.

Likely Source of Contamination
tells you the likely origin of the contaminant.

DEFINITIONS AND UNITS OF MEASURE

Action Level (AL)
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL)
The highest level of a contaminant that is allowed in drinking water. MCLs are set at very stringent levels. To understand possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Maximum Contaminant Level Goal (MCLG)
The "goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. These goals allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)
The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbiological contaminants (e.g. chlorine).

Maximum Residual Disinfectant Level Goal (MRDLG)
The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Micrograms Per Liter (ugl)
A unit of measurement equivalent to parts per billion. One part per billion is roughly one second in 32 years.

Milligrams Per Liter (mgl)
A unit of measurement equivalent to parts per million. One part per million is roughly one second in two years.

Treatment Technique (TT)
A required process intended to reduce the level of a contaminant in drinking water.

WATER QUALITY REPORT TABLES

COPPER & LEAD (2015 DATA)

CONTAMINANT	VIOLATION (Y/N)	HIGHEST LEVEL DETECTED	ACTION LEVEL (AL)	IDEAL GOAL (MCLG)	LIKELY SOURCE OF CONTAMINATION
Copper	N	0.14 mgl	1.3 mgl	0 mgl	Corrosion of household plumbing systems.
Lead	N	0.0019 mgl	0.015 mgl	0 mgl	Corrosion of household plumbing systems.

In Washington State, lead in drinking water comes primarily from materials and components used in household plumbing. The more time water has been sitting in pipes, the more dissolved metals, such as lead, it may contain. Elevated levels of lead can cause serious health problems, especially in pregnant women and young children.

To help reduce potential exposure to lead: for any drinking water tap that has not been used for 6 hours or more, flush water through the tap until the water is noticeably colder before using for drinking or cooking. You can use the flushed water for watering plants, washing dishes, or general cleaning. Only use water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. If you are concerned about lead in your water, have your water tested. Information on lead in drinking water is available from EPA's Safe Drinking Water Hotline 1-800-426-4791 or online at epa.gov/safewater/lead.

INORGANIC CHEMICAL CONTAMINANTS (2016 DATA)

CONTAMINANT	VIOLATION (Y/N)	HIGHEST LEVEL DETECTED	MAXIMUM LEVEL ALLOWED (MCL)	IDEAL GOAL (MCLG)	LIKELY SOURCE OF CONTAMINATION
Nitrates	N	2.7 mgl (average level detected over one sample period)	10 mgl	0 mgl	Runoff from fertilizer use; leaching from septic tanks; sewage; and erosion of natural sources.

MICROBIAL CONTAMINANTS (2016 DATA)

CONTAMINANT	VIOLATION (Y/N)	HIGHEST LEVEL DETECTED	TREATMENT TECHNIQUE	IDEAL GOAL (MCLG)	LIKELY SOURCE OF CONTAMINATION
Fecal indicators (*E. coli*)	N	No detect (24 samples taken)	Chlorination	n/a	Human and animal fecal waste.

CHEMICAL BYPRODUCTS OF DISINFECTION (2016 DATA)

CONTAMINANT	VIOLATION (Y/N)	HIGHEST LEVEL DETECTED	MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL)	IDEAL GOAL (MRDLG)	LIKELY SOURCE OF CONTAMINATION
Trihalomethanes	N	not detected	80 ugl	n/a	Byproduct of drinking water disinfection.
Haloacetic acids	N	<6 ugl	60 ugl	n/a	Byproduct of drinking water disinfection.

2017-2018 PROJECTS

NEW WATER RESERVOIR

Thurston County Public Works will installing a second 50,000 gallon reservoir to enhance service, improve fire flow, and accommodate future area growth. The new reservoir will be located adjacent to the existing reservoir off Ivan Way.

UPDATING WATER METERS

Water meters in Grand Mound will be replaced with models that transmit water usage readings electronically. This will enhance leak detection, saving you time and money should a leak occur. The new meters will also help reduce the amount of time spent reading meters so staff can focus on maintenance and operation tasks.

WELL PUMP UPGRADE

The pump for Grand Mound's Well 1, off of Grand Mound Way, has reached the end of its intended lifespan. Thurston County Public Works is replacing the pump and upgrading to a model that will increase capacity and efficiency.

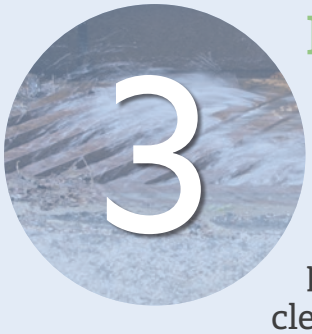
HELP PROTECT WATER QUALITY

PREVENT BACKFLOW

Did you know that water from your drain could end up flowing into Grand Mound's drinking water system? When your water system loses pressure, used water from your plumbing fixtures - such as sprinklers, hot tubs, and swimming pools - can get drawn back into the drinking water pipes and contaminate the whole neighborhood's water supply. Make sure to install and maintain a backflow preventer where connections exist between your drinking water and wastewater pipes. For more information, contact Kevin Patching at 360-867-2288 or patchik@co.thurston.wa.us.

PICK UP PET POOP

Did you know that Thurston County dogs generate around six tons of pet waste every single day? Make sure your pooch's waste doesn't lay around wrecking havoc on the environment or the bottom of people's shoes. Pet poop contains bacteria, viruses, and parasites that can make their way into your drinking water supply. Make sure to scoop it, bag it, and trash it - every dog, every poo, every time.



KEEP STORMWATER CLEAN

Storm drains prevent flooding in our streets and neighborhoods by draining rain water into the nearest body of water. Along the way, rain water can pick up pollutants on streets and in storm drains - polluting our drinking water sources with paint, oil, toxic chemicals, fertilizers, pesticides, soaps, yard waste, and litter. Keep storm drains and ditches clear of yard waste and litter. Use common sense lawn care practices described at co.thurston.wa.us/health/ehcsg/index.html. And, never hose or dump anything into the storm drain.

TIPS TO SAVE WATER & MONEY

KITCHEN.

- Use a dishwasher in lieu of hand washing dishes.
- Install an instant water heater so you don't waste water waiting for it to heat up.

BATHROOM.

- Upgrade older toilets with WaterSense® models and install aerators on all your faucets.
- Shorten your shower by a minute or two and you'll save up to 150 gal/month.

LAUNDRY.

- Consider purchasing a high efficiency washing machine to save water and energy.
- When doing laundry, make sure to match water level to the size of the load.

OTHER INDOOR.

- Run your washer and dishwasher only when full - could save you up to 1000 gal/month.
- Monitor your water bill for unusually high use. It can help you discover leaks.

LANDSCAPING.

- Use native plants in your yard to significantly reduce irrigation needs.
- Aerate your lawn periodically to allow greater water percolation.

OTHER OUTDOOR.

- Use a commercial car wash to save water and prevent soaps from entering storm drain.
- Use a broom instead of a hose to clean patios, sidewalks, and driveways.

WATER SAVING RESOURCES.

- Check out wateruseitwisely.com for 100+ water and energy saving tips.
- Visit gracelinks.org/1297/how-to-save-water for even more water-saving tips.

CONTACT US

360-867-2300

co.thurston.wa.us/publicworks

Thurston County Public Works
9605 Tilley Rd. S
Olympia, WA 98512

@Thurston_PW

Water service: Kevin Patching - patchik@co.thurston.wa.us
Customer service & billing: Sandy Griffin - griffis@co.thurston.wa.us

If you are a Grand Mound property manager, please pass this information on to your tenant or guest. Thank you!

THURSTON COUNTY
WASHINGTON
SINCE 1852