

2023 GUIDE TO WATER CONSERVATION CITY OF ST HELENS, OREGON





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TYPICAL / AVERAGE RESIDENTIAL INDOOR WATER USAGE

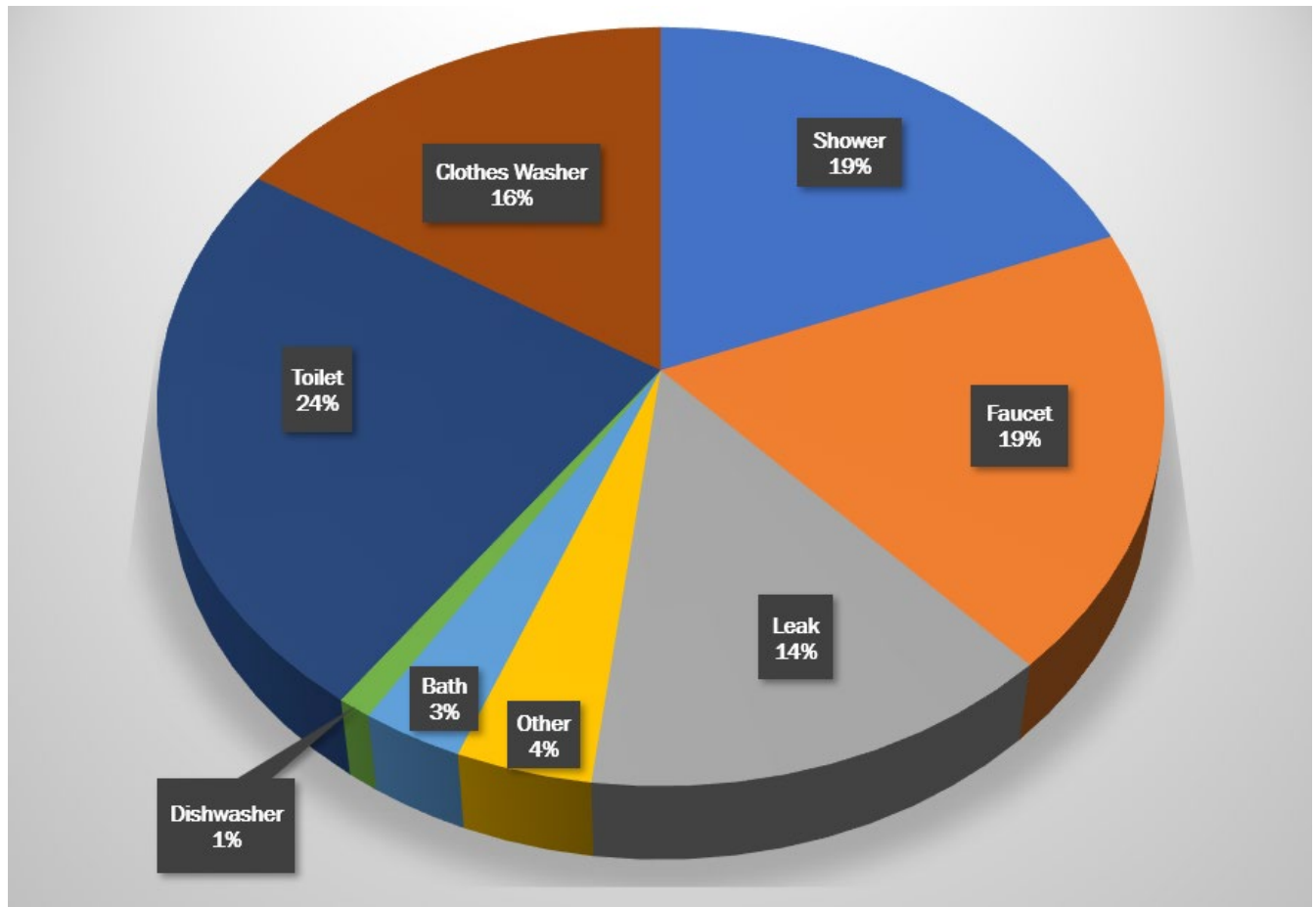


Figure 1 - Residential Indoor Water Use

The percentages above were summarized by the Water Research Foundation's definitive study. The nationwide study included over 1,000 single-family residential homes randomly selected from 23 different study sites across the United States and Canada¹.

¹ Water Research Foundation. DeOreo, William B., Peter W. Mayer, B. Deziegielwski and J. Kiefer. Residential End Uses of Water, Version 2. 2016. Table 6.14 Page 127.



SECTION 1 - DISHWASHER FACT SHEET

Using an automatic dishwasher to clean dishes instead of hand washing generally wins for both water and energy efficiency. Most conventional dishwashers installed in U.S. households today use about 6 gallons per load and account for one percent of water used in an average American home². Despite the small portion of overall water consumption by dishwashers, newer machines are substantially more water-efficient than older models. Today the most efficient (full-size) machines use less than 3.5 gallons per load³. With a more efficient dishwasher and less water consumption, the amount of energy used to heat the water is also less resulting in energy savings.

Choosing a Dishwasher

If you are considering replacing or installing your dishwasher, investigate the possibility of upgrading to a high-efficiency model. Energy Star is a national program that labels dishwashers if they are energy efficient. On average, an Energy Star dishwasher can save about 3,800 gallons of water over its lifetime. Check for the yellow Energy Guide label to determine the model's energy use. If you purchase a high-efficiency dishwasher, check with the Oregon Department of Energy to see if residential or business energy tax credits are available.

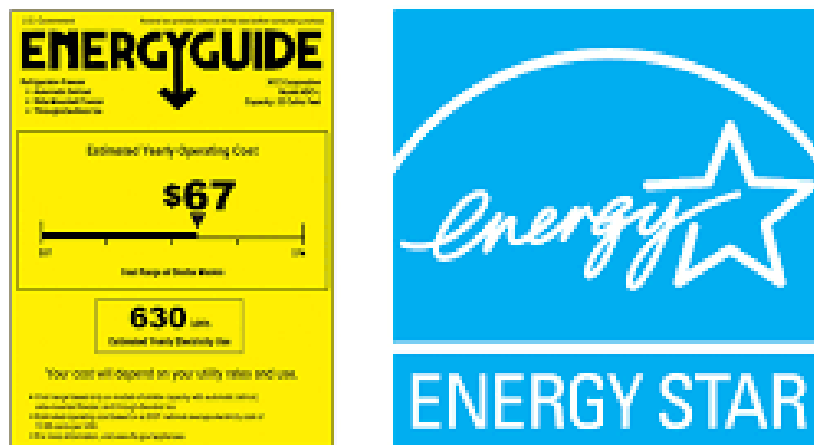


Figure 2 - Energy Guide Label and Energy Star

Pre-rinsing

Most dishwasher manufacturers recommend scraping (not rinsing) dishes before placing them in the dishwasher. Pre-rinsing dishes in the sink for five minutes can use approximately 12 gallons of water depending on your faucet. If your dishwasher has a pre-rinsing cycle to rinse dishes, it will use about one gallon of water.

² “Water Efficiency Management Guide Residential Kitchen and Laundry” *EPA WaterSense*. November 2017. Web. Page 3.

³ U.S. Environmental Protection Agency (EPA) ENERGY STAR. ENERGY STAR Program Requirements Product Specification for Residential Dishwashers. Eligibility Criteria Version 6.0. Effective January 29, 2016.



Choosing a Cycle

Most dishwashers include a variety of wash cycle choices. Choosing the right wash cycle will increase cleaning and water efficiency. Choose the shortest wash cycle for lightly soiled loads and the “heavy” or “pot/pan cycle for the heavily soiled items. Newer models include an auto-sensing cycle which has a soil-sensor that detects if the water coming off the dishes is dirty or clean and can help save water and ensure the dishes come out clean. Another great resource to help you choose the correct cycle is the dishwasher manufacturer’s recommendations.

Loading

For optimal performance, operate the dishwasher with full loads. Load dishes properly so that water can reach all dish surfaces. Incorrect loading may cause part or the entire load to be rewashed. To help you load correctly follow these helpful dishwasher loading tips from *The Spruce*⁴:

- Face dishes with the dirtiest surface downward. This allows space for water to flow up and around each surface. Use the dishwasher rack tines to face soiled surfaces towards the spray arms, not the sides of the dishwasher.
- Do not block the detergent dispenser with a large item. If the dispenser doesn’t open properly, the dishes won’t get clean. Check for residue left in the dispenser or the bottom of the washer when the cycle is complete.
- Use the dishwasher tines to separate dishes instead placing them over the tines.
- Use the correct amount of detergent and follow the detergent manufacturer’s recommendations.
- Only load dishwasher-safe items. Look for dishwasher-safe labels, stamps, or symbols usually on the bottom of the item.
- Mix silverware in each holder compartment to prevent nesting against one another.

⁴ “How to Load a Dishwasher Correctly.” Mary Marlowe Leverette. *The Spruce*. Updated 10 Aug. 2023. Web



SECTION 2 - FAUCET FACT SHEET

About 19 percent of water used in an American Home is from bathroom and kitchen faucets⁵. Faucets that run for around 8 minutes a day will consume nearly 11 gallons of water per person per day. Reducing faucet water use and repairing leaks is an easy way to save water and money around the house.

How much water does my faucet use?

Prior to 1994, faucets used between 2.75 and 7.0 gallons per minute (gpm). Today, federal requirements state that residential bathroom and kitchen faucets have a maximum flow rate of 2.2 gpm, and non-residential public restrooms of 0.5 gpm. The flow requirements are stricter in more environmentally regulated states. For example, California passed an efficiency standard that has a maximum flow rate of 1.8 gpm⁶. Faucets are often fitted with a device called an aerator that screws onto the end of the faucet. They are designed to mix air with water and produce a fuller flow.

Retrofit Your Faucet

Installing a water-efficient aerator on your faucet is one of the easiest ways to save water and money. For bathrooms, faucet aerators that flow between 0.5 to 1.0 gpm are generally adequate for hand washing. Kitchen faucets may require a higher flow rate such as 1.5 to 2.0 gpm to fill a sink or spray food off dishes. Reducing the flow can potentially increase the wait time for hot water.



Figure 3 - Sink Aerators

Install a WaterSense fixture

If it's time for you to replace a new bathroom or kitchen faucet, consider buying a WaterSense approved faucet fixture. WaterSense is the U.S. Environmental Protection Agency's product labeling program for quality, water efficient products. Below is a link to a list of sink faucets with a certified WaterSense label:

<https://lookforwatersense.epa.gov/products/Product-Search-Results-BathroomSinkAccessories.html>

⁵ Water Research Foundation. DeOreo, William B., Peter W. Mayer, B. Deziegielwski and J. Kiefer. Residential End Uses of Water, Version 2. 2016. Table 6.14 Page 127.

⁶ California Energy Commission (CEC). California Code of Regulations Title 20. Public Utilities and Energy Division 2. State Energy Resources Conservation and Development Commission. August 2016.



Repair your leaky faucet

Leaky faucets can potentially waste a lot of water. A faucet leaking 60 drops per minute will waste about 5.7 gallons per day or 2,083 gallons per year⁷. The United States Geological Survey (USGS) has an interactive online tool that can calculate the approximate amount of water loss in faucet leaks. It can calculate the total water loss for multiple faucets assuming different drip frequencies:

USGS Faucet Drip Calculator: <https://water.usgs.gov/edu/activity-drip.html>

In some cases, the repair can be relatively simple, such as replacing a worn washer or gasket. Examine faucet gaskets and pipe fittings for any water on the outside of the pipe to check for surface leaks. Prior to repairing faucets, double check that the water is turned off from the source.

Faucet Water Conservation Tips

- Turn the bathroom faucet off while shaving or brushing your teeth.
- When washing dishes by hand, fill the sink or a pan with soapy water instead of letting the faucet run while soaping dishes. Rinse dishes in a filled sink or pan of water. Even if your sink is fitted with an aerator that restricts flow to 2.2 gallons per minute, washing dishes by hand with the water running easily can use 25 to 50 gallons or more. If your faucet does not have a good aerator or flow restrictor, you may be using over 100 gallons of water when letting the water run to wash dishes.
- To prevent clogging and mineral build up, manufacturers recommend checking faucet aerators every six months and cleaning them as needed.

⁷ Perlman, Howard. "Water Science Activities Drip Calculator: How much water does a leaking faucet waste?" *USGS*. N.D. Web.



SECTION 3 - SHOWER AND BATH FACT SHEET

Showers account for roughly 20 percent of the water used indoors adding up to about 40 gallons of water for the average family per day⁸. According to EPA WaterSense, the average American shower uses roughly 16 gallons of water and lasts for around 8 minutes⁹. Taking time to think about how you can conserve water in the shower or bath will help you save water, energy, and money.

Determine how much water your shower uses

The amount of water consumed while taking a shower depends on two main factors: the flow rate of the showerhead and how long the shower lasts.

Flow rate: Prior to the 1980s most showerheads used 5 gallons-per-minute (gpm) or more. By the mid-1990s, federal requirements mandated that new showerheads used no more than 2.5 gpm. EPA WaterSense labelled shower heads are required to use no more than 2 gallons-per-minute. Most showerheads are marked with the flow rate on a small silver button in the center of the head.

Shower length: Changing how long you spend in the shower is the least expensive way to conserve water. A 20-minute shower will use twice as much water as a 10-minute shower taken at the same flow rate. Reducing your shower time by just one minute can save approximately 2.5 gallons of water.

Replace your showerhead

In general, most showerheads last about 10 years. As showerheads start to age, they may wear and leak, or the nozzle holes can enlarge or plug, causing them to use more water or change the pattern of the spray so that the shower spray no longer feels even and comfortable. A great way to conserve water in the shower is to make sure you are using a water-efficient showerhead. If you have showerheads that are more than 10 years old, it may be time to replace them.

Today there are many well-performing showerheads on the market that flow at 1.5 gpm or less. The performance and quality of showerheads can vary greatly. Talk to a representative at your local plumbing supply store and visit the WaterSense website to make sure you purchase a showerhead that is right for you.

WaterSense Labeling

The EPA labels showerheads that have been tested for performance and water-efficiency. On average, up to 2,700 gallons of water could be saved per year by switching to a WaterSense labelled shower head¹⁰. Below is a link that will take you to WaterSense certified showerheads:

<https://lookforwatersense.epa.gov/Product-Search-Results-Showerhead.html>

⁸ “WaterSense Labeled Showerheads Factsheet” *EPA WaterSense*. October 2017. Web.

⁹ “Save Water and Energy by Showering Better” *EPA WaterSense*. N.D. Web.

¹⁰ “WaterSense Labeled Showerheads Factsheet” *EPA WaterSense*. October 2017. Web.



Energy saving

Heating water for showers is one of the biggest energy users in the home after the furnace. Switching to a water-efficient showerhead not only cuts down on water use, but also the energy required to make and keep the water hot. According to the EPA, switching to a WaterSense shower head can save up to 330 kilowatt hours of electricity annually due to the reduced demands on water heaters¹¹.

Water consumption in the bath

The amount of water used while taking a bath varies depending on the size of the bathtub and the level to which the user fills the tub. The standard bathtub size has generally decreased over time and today the typical modern bathtub (non-jetted) holds between 25 to 45 gallons. A person who only fills the tub half-way will consume approximately 20 gallons while bathers that fill the tub up to (or exceeding) the overflow valve will use 40 to 50 gallons.

To reduce water used while taking a bath, follow these helpful hints:

- Fill the tub conservatively at half full. Only fill the bathtub with as much water as you need.
- Use a small tub insert when possible. Bathing babies, small children, and pets requires much less water, so use a small tub insert or baby bathtub.
- Try to avoid overfilling the tub. Overfilling the tub forces excess water into the overflow drain.

¹¹ “WaterSense Labeled Showerheads Factsheet” *EPA WaterSense*. October 2017. Web.



SECTION 4 - TOILET FACT SHEET

A national study by the Water Research Foundation in 2016 found that toilets can account for 26 percent of water used in an American home¹². There are charges for water and wastewater related to your toilet's consumption every time it is flushed. Federal requirements specify that all new toilets are required to use no more than 1.6 gallons per flush. There are still many old and inefficient toilets in operation that consume 3.5, 5.0, or more gallons with each flush.

Determine how much water your toilet uses

Finding out how much water your toilet uses per flush is a great first step to decide whether upgrading your toilet is a good investment. Most toilet manufacturers have specifications for specific model numbers listed online. If their information is not readily available, try looking inside the tank for a manufacturer's stamp indicating when your toilet was made. Below is a table summarizing flush volumes by manufacture date:

Table 1 - Toilet Flush Volumes by Manufactured Date

Manufacture Date	Estimated Flush Volume (gallons per flush)
1994 to present*	1.0 to 1.6
1980 to 1994*	3.5 to 4.5
1950 to 1980	5.0
Pre-1950's	7.0

***Measure the volume:** If you can't find the date, or you want to be more exact, use a tape measure to calculate the volume of your toilet tank.

1. Remove the toilet tank lid and measure the internal length and width of the tank.
2. Measure the depth of the water in the tank. Flush the toilet and measure the height of the water that remains in the bottom of the tank before it starts to refill (not all tanks will completely empty of water). Subtract the depth of the water that was left in the tank after flushing from the depth of water when the tank was full. This gives you the net height of the water.
3. Use the calculation below to determine the approximate volume of water used to flush the toilet. Note that you add an additional 0.6 gallons per flush to account for water that is used to refill the bowl.

$$L \times W \times H = V \div 2.31 = \text{Tank Volume (GPF)} + 0.6 \text{ gal in bowl} = \text{Total Gallons per flush (GPF)}$$

L = Length in inches

H = Height of water in inches

W = Width in inches

V = Volume

This calculation is approximate and actual flush volumes will vary due to variable tank shape, internal flush components, and other factors

¹² Water Research Foundation. DeOreo, William B., Peter W. Mayer, B. Deziegielwski and J. Kiefer. Residential End Uses of Water, Version 2. 2016.



Check your toilet for leaks

Sometimes it is easy to tell that your toilet is leaking. If you hear running water or a faint hissing or trickling, you most likely have a leak. However, sometimes toilets leaks can be silent and may be overlooked. To check your toilet for leaks, lift off the toilet tank lid. Without flushing, place 1 dye tablet (or 10 drops of food coloring) in the toilet tank. If water in the bowl changes colors in 15 minutes, you have a toilet leak.



Figure 4 - Leak Detection Tablets

Toilet leaks can be caused by something as simple as a worn-out flapper. The EPA has a video on how to replace leaky toilet flappers:

EPA toilet flapper replacement: <https://www.youtube.com/watch?v=TPeViXlgOPE>

Retrofit an existing toilet

In general, the EPA does not recommend retrofitting existing tank-type toilets with displacement dams or bags, early closing toilet flappers, or valves with different flush volumes because these devices could impede overall performance and require increased operation and maintenance¹³. Note that the Alliance for Water Efficiency recommends that water displacement bags should only be used in toilets manufactured between 1980-1994 with a rated flush volume of 3.5 gallons or above; using the bags in toilets with lower flush volumes could affect the flush performance of the toilet, leading to double flushing which increases water consumption.

Replace your toilet

Today it's easy to find a water saving high-performance toilet thanks to EPA WaterSense. The EPA labels efficient toilets that use a maximum of 1.28 gallons per flush compared to older toilets that use 3.5 gallons per flush or more. By replacing old, inefficient toilets with WaterSense labelled models, the average family can reduce water used for toilets by 20 to 60 percent or nearly 13,000 gallons of water savings annually¹⁴.

Another resource for choosing a new toilet is the Maximum Performance Testing study of toilet performance. It is an excellent, unbiased source for information about the performance of popular toilet models and brands. You can search for toilet brands and their scores at this location:

¹³ "Sanitary Fixtures and Equipment Section 3.1 Toilets (Water Closets)" *EPA WaterSense*. May 2023. Web

¹⁴ "WaterSense Labeled Toilets Factsheet" *EPA WaterSense*. February 2013. Web.



MaP Toilet Search Database: <https://www.map-testing.com/map-search/>

Dual flushing toilets

A dual-flush toilet is designed to give the user a choice between a standard volume flush for solid waste (usually 1.28 to 1.6 gallons), and, a lower volume flush for liquids and toilet paper (0.8 to 1.0 gallons). Dual-flush toilets are becoming more common for residential use and can be found at several commercial and institutional facilities. Dual-flush toilets certified by EPA WaterSense are required to use a maximum of 1.28 gallons and no less than 1.0 gallons per flush to allow enough flow to clear drainlines¹⁵.



Figure 5 - Dual flushing toilet

Bidet Toilets

EPA WaterSense has also certified a fair number of bidet toilets as well. Most bidet toilets will flush at 1.28 gallons per flush and will use about 0.125 gallons or less per bidet use. If you are thinking about choosing a bidet toilet, the Maximum Performance Testing database also includes bidet style toilets.

MaP Toilet Search Database: <https://www.map-testing.com/map-search/>

¹⁵ “Sanitary Fixtures and Equipment Section 3.1 Toilets (Water Closets)” *EPA WaterSense*. May 2023. Web



SECTION 5 - WASHING MACHINE FACT SHEET

On average about 31 gallons of water are used per load of laundry and older models before 2011 can use upwards of 40 gallons per load¹⁶. Estimates say that a four-person household with a standard washing machine will generate more than 300 loads of laundry per year, consuming 12,000 gallons of water. A high efficiency front-loading washing machine can reduce water consumption and use as little as 14 gallons of water per load, saving you energy and money¹⁷.

Top loading versus front-loading washing machines

Top-loading or vertical-axis washing machines are designed to suspend clothes in soapy water while an agitator moves laundry around, dissolving and removing dirt and stains. Design has slightly changed since the 1940s, but many top-loading washing machines still use up to 40 gallons per load because they require large amounts of water to keep the clothing in suspension.

Horizontal-axis, or front-loading washing machines, use 15-30 gallons of water to wash the same amount of clothes as a top-loading washing machine. A rotating drum cycles clothing in and out of the water removing dirt and stains, eliminating the need to suspend them in water. According to a study by the New York Times, front loaders removed more soils from fabric than top-loaders and use about 2,000 gallons less per year¹⁸. Below are examples of Top Load and Front Load Washing Machines:



Figure 6 - Top Load and Front Load Washing Machines

¹⁶ Water Research Foundation. DeOreo, William B., Peter W. Mayer, B. Deziegielwski and J. Kiefer. Residential End Uses of Water, Version 2. 2016.

¹⁷ "Clothes Washers Overview" *ENERGY STAR*. N.D. Web.

¹⁸ McCabe, Liam. "Should You Get a Front-Load or Top-Load Washing Machine?" *The New York Times*, 25 Oct. 2016, Web.



High-efficiency Energy Star washing machines

Washers built before 2003 use significantly more water than newer ones. Water Sense does not certify clothes washers, but Energy Star has established criteria for energy and water efficiency on residential models and commercial models. If you are considering the purchase of a high efficiency washing machine, do your research to find an efficient model that works for you. Residential Energy Star certified top loaders use approximately 19.4 gallons per load whereas certified front loaders use approximately 14.8 gallons or less per load.

Incentives for efficient washing machines

If you purchase a high efficiency washing machine, check with the Oregon Department of Energy and Energy Trust of Oregon for residential or business energy tax credits and rebates. Below is a link from Energy Trust of Oregon that lists the locations of retailers who offer rebates for efficient clothes washers and dryers:

Energy Trust Retailers: <https://www.energytrust.org/retailers-offering-point-of-purchase-incentives-on-clothes-washers-and-dryers/>

Multi-family laundry facilities

Central laundry facilities in multi-family buildings typically use far less water per occupant than providing in-unit washing machines and dryers. The convenience of having a washing machine at hand combined with the fact that most apartments dwellers do not pay their own water and sewer bill creates conditions in which tenants tend to wash smaller loads more frequently. If tenants are not charged directly for water use, central laundry facilities can reduce water use and therefore water and sewer fees. Of course, in-unit washing machines and dryers are generally offered as a convenience to tenants for marketing purposes in which case, consider purchasing high-efficiency machines. High-efficiency washing machines use 45 percent less water and 60 percent less energy than a typical washing machine¹⁹.

Combination All-in-One Washer-Dryers

There are many combination washer-dryers in the market today with Energy Star certifications. Washer-Dryer combination appliances are a great solution if space is limited, and most models can wash and dry clothes in about 2 hours.

Washing Machine Energy Saving Tips

- Wash only full loads of laundry or use the appropriate water level or load size selection on the washing machine.
- Set your washing machine to use cold water whenever possible rather than hot or warm water.

¹⁹ “Water Efficiency Management Guide Residential Kitchen and Laundry” *EPA WaterSense*. November 2017. Web. Page 4



SECTION 6 - OUTDOOR LANDSCAPING & IRRIGATION FACT SHEET

Outdoor Water Consumption & Benefits of Micro irrigation

The EPA estimates that average American home uses nearly 30 percent of its total water consumption outdoors and it is estimated that as much as 50 percent of the water used outdoors is lost due to wind, evaporation, and runoff caused by inefficient irrigation methods and systems²⁰. Micro irrigation delivers water directly to the root zone of plants at a lower flow rate to allow the water to soak into the soil.

EPA Homeowner Guide to Micro Irrigation: <https://www.epa.gov/watersense/microirrigation>

If you decide to choose a contractor to install an irrigation system for your home, the EPA has a tool that will provide a directory of certified WaterSense Irrigation Professionals. The tool lists contact information based on zip codes and searching distance.

EPA WaterSense Professionals search: <https://lookforwatersense.epa.gov/pros/>

WaterSense Irrigation Controllers

Replacing a standard clock-based irrigation controller with a WaterSense Irrigation Controller can save an average home up to 7,600 to 15,000 gallons of water annually²¹. Most clock-based irrigation controllers will water lawns and gardens despite the weather conditions outside. Newer weather-based and soil moisture-based irrigation controllers can sense local weather conditions and sensors that can be placed in the ground to determine if watering is required. Some irrigation manufacturers provide apps for smartphones to control irrigation systems and set irrigation parameters.



Figure 7 – Sample Weather-Based Irrigation Controller

In September 2021, the EPA released a revised version of the WaterSense Specification for Weather-Based Irrigation Controllers. In February 2021, the EPA also released the WaterSense Specification for Soil Moisture-Based Irrigation Controllers. For more information on how an irrigation system achieves a WaterSense Certification, see the links below:

²⁰ “Saving Water With Microirrigation: A Homeowner Guide” *EPA WaterSense*. May 2018. Web.

²¹ “Get Smart With a WaterSense Labeled Irrigation Controller” *EPA WaterSense*. February 2021. Web.



Weather-Based: <https://www.epa.gov/watersense/weather-based-irrigation-controllers>

Soil Moisture-Based: <https://www.epa.gov/watersense/soil-moisture-based-irrigation-controllers>

For a list of EPA approved Watersense Irrigation Controllers, see the link below:

<https://lookforwatersense.epa.gov/Product-Search-Results-IrrigationController.html>

Mowing and Watering Lawns

When maintaining a lawn, it is important to consider weather, watering frequency, and soil saturation. Oregon State University recommends the following lawn watering tips²²:

- Don't apply more than one-half inch of water at a time.
- Plan to water three or four times per week. Each watering should be between one-quarter and one-half inch.
- Adjust the amount of water you provide each week through the season. Determine a baseline. Add more when the weather is hot and dry. Water less when it is cooler.
- Use several range gauges placed around your lawn to measure how much water is applied.
- Use a screwdriver to measure the penetration of the soil to determine if additional watering is required. If the screwdriver easily penetrates to the handle, reduce the amount of water. If the ground is hard and it is difficult to insert the screwdriver, increase the amount of water.

For additional lawn care tips from Oregon State University, refer to the link below:

<https://extension.oregonstate.edu/gardening/lawn/how-grow-maintain-healthy-lawn>

Local Resource – Columbia Soil and Water Conservation District

The Columbia Soil and Water Conservation District lists some helpful handbooks and brochures for outdoor landscaping, identifying invasive plant species, and protecting nearby streams and creek banks. For Rain Gardens, they recommend watering during the coolest times of the day and using native plants to decrease the amount of supplemental water required during drought periods²³. Native plants also handle annual temperature changes because they are acclimated to the local climate. The links below will take you to their handbooks and their 2020 Native Plant Information Sheets:

Handbooks & Brochures: <https://www.columbiaswcd.com/handbooks-brochures>

Native Plant Information Sheets: <https://www.columbiaswcd.com/native-plants>

²² “How to Grow and Maintain a Healthy Lawn” *OSU Extension Service*. N.D. Web.

²³ “The Oregon Rain Garden Guide: Landscaping for Clean Water and Healthy Systems” *Sea Grant Oregon*. 2010. Web.



Local Resource - City of St Helens

The City of St Helens has resources available for water meter testing and leak detection. City Public Works crews are available 8am – 4:30pm Monday through Friday and after-hours emergency for all other times. Someone is on call 24 hours a day, 7 days a week. Public Works crews can check water meters for free upon request to see if they are functioning properly. They can pull information data logs from the water meters to see if any leaks can be identified at the meter.

If you are considering installing a lawn sprinkler system, the City requires the installation of an approved backflow assembly to help protect your drinking water and the City's water system. Contact the City's Building Department to find out more information at 503-397-3532.

Each year the City of St Helens Water Department publishes a Water Quality Report that summarizes the City's water quality, sources, testing, and additional health and water service information. The Safe Drinking Water Act (SDWA) requires that utilities issue an annual "Consumer Confidence" report to customers in addition to other notices that may be required by law. The City is continually upgrading and improving water quality and service by installing new water mains and performing leak detection surveys to help reduce water loss.

City Water Quality Reports - <https://www.sthelensoregon.gov/publicworks/page/water-quality-reports>



SECTION 7 - BREAKDOWN OF YOUR BILL

The City of St Helens' customers bills include two components:

- Fixed rate
- Volume Charge for the amount consumed

The two components are added together to compute an invoice for each customer. Fixed rates are based on costs associated with maintaining/reading meters and costs associated with billing and are charged per connection to the water system. Volume rates are based on the customer class for each 100 cubic feet (ccf) of water. The following table lists rates for customers within the City of St. Helens, outside city limits, and wholesale customers:

Table 2 - Water Utility Rates

WATER UTILITY RATE COMPONENTS	INSIDE CITY LIMITS	OUTSIDE CITY LIMITS
Fixed Rate		
Residential	11.71	23.42
Multifamily	11.71 multiplied by number of Equivalent Dwelling Units (EDU)	23.42 multiplied by number of Equivalent Dwelling Units (EDU)
Commercial / industrial	11.71	23.42
Wholesale		23.42
Volume Rate		
Residential	5.8294	11.6589
Multifamily:		
Duplex	5.6273	11.2547
Apartments	5.5144	11.0289
Commercial / Industrial	4.7272	9.4543
Wholesale		3.5229

Table is per City Resolution No 1981 adopted June 7th, 2023.

For additional water utility rate information, please visit the City's website for utilities located at: <https://www.sthelensoregon.gov/utilities>