

DID YOU KNOW?

Why Ice Cubes Float

Water expands by 9% when it freezes. Frozen water (ice) is lighter than water, which is why ice floats in water. Over 68% of Earth's freshwater is locked up in ice and glaciers.



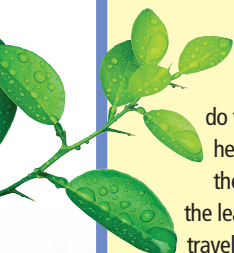
Our Bodies Are Mostly Water

A newborn baby is 78% water. Adults are 55-60% water. Water is involved in just about everything our body does. It's a big part of the blood that brings nutrients to all our cells. We use it to get rid of wastes. It helps us regulate our body temperature. It acts as a shock absorber for our brain and spinal cord. We're very dependent on water.



Water Defies Gravity in Plants

Water has an interesting characteristic. It's sort of "sticky." It likes to stick to itself and other things. That's why water forms round droplets. Not all liquids do that. This "stickiness" helps get water from the roots of plants up to the leaves. Water molecules travel up thin straws called xylem in the plant by holding onto each other and the walls of the tube. They're pulled upwards as water evaporates from the leaves at the top.



Don't Let Cold Weather Catch You Unprepared This Season

Every winter, many homeowners face the expense and inconvenience of frozen water pipes. But you can cross that off your list of winter worries by taking a few simple precautions.

Disconnect and drain outdoor hoses.

Detaching the hose allows water to drain from the pipe. Otherwise, a single hard, overnight freeze can burst either the faucet or the pipe it's connected to.

Insulate pipes or faucets in unheated areas. If you have pipelines in an unheated garage or cold crawl space beneath the house, wrap the water pipes before temperatures plummet. Hardware or building supply stores have good pipe wrapping and materials available.

Consider installing "heat tape" or similar materials on exposed water pipes. These are relatively easy to install, and hardware or building supply stores have many brands to fit almost any need. Use only UL-listed products and follow the manufacturer's instructions carefully.

Seal off access doors, air vents, and cracks. Repair broken basement windows. Winter winds whistling through overlooked openings can quickly freeze exposed water pipes. However, don't plug air vents your furnace or water heater needs for good combustion.

Keep the heat on. If you're going to be away from home for an extended period, make sure your thermostat is not set lower than 55 degrees.

Allow the faucet to drip. A dripping faucet relieves pressure on your home's water system. You can leave on only one dripping faucet, but you want to ensure it's in the right location. If you know where your water comes into your house, turn on a cold water faucet at

the other end of the house to allow for water to travel through the entire system.

Find the master shutoff. It's most likely where the water line comes into your house from the street. If it's not there, it may be near the water heater or the washing machine. If a pipe bursts anywhere in the house — kitchen, bath, basement, or crawl space — this valve turns it off.

So, find it now and paint it a bright red color or hang a tag on it. Be sure everyone in the house knows where it is and what it does.

What if it's too late?

What if you wake up one day to find the pipes are frozen anyway? During an extended cold spell, it could happen despite precautions.

If you think you know where the freeze-up occurred and want to try thawing it out yourself, don't under any circumstances use a torch with an open flame! The whole house could catch fire. Also, overheating a single spot can burst the pipe. Heating a soldered joint could allow it to leak or come completely apart.

The easiest tool is probably a hair dryer with a low heat setting. Wave the warm air back and forth along the pipe, not in one spot. If you don't have a hair dryer, you can wrap the frozen section with rags or towels and pour hot water over them. It's messy, but it works.

Be careful because the pipe may already be broken. It's not leaking because the water is frozen. But, when you thaw it out, water could come gushing out. Be ready to run for the master shutoff valve if necessary.



Budget Focuses on Capital Projects

Ongoing access to clean, safe water is critical to our economy, health, and way of life. Our community depends on this valuable resource and the infrastructure that connects, protects, and supports it.

To continue providing clean and reliable drinking water while maintaining and replacing the PUD's existing assets, a rate increase of 5% or approximately \$6.46 per billing cycle for the typical residential customer is proposed for 2023. With the rate increase, the average customer's two-month bill will be \$135.33, with 62% earmarked for funding capital improvement projects.

Incentive Program Helps Pay for Backflow Devices

Skagit PUD's Cross-Connection Control Incentive Program provides eligible customers with financial assistance when installing backflow prevention devices at an existing water service.

It's logical to assume that because water is always under pressure, it can only flow in one direction. However, sometimes it can flow oppositely from its intended direction, and when it does, it can cause disastrous results. Water will always flow toward the point of lowest pressure.

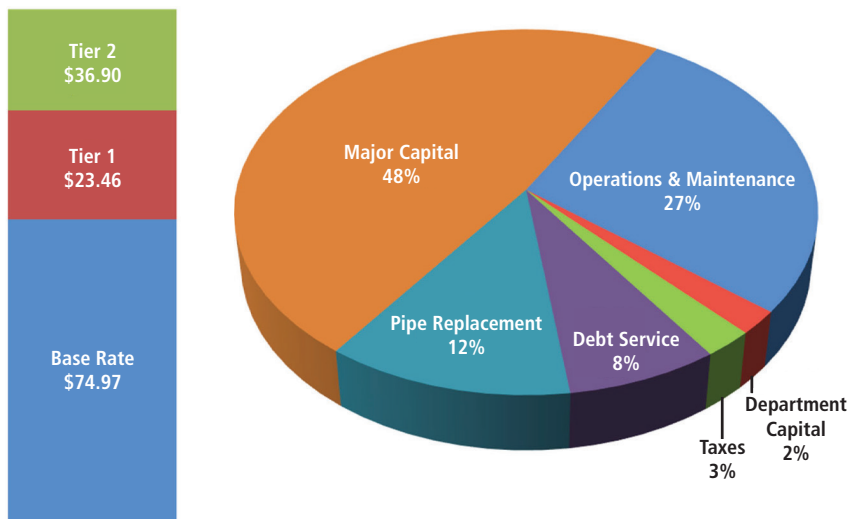
When plumbing is connected to the potable water supply and piping carrying another fluid or gas, such as an air conditioner containing chemicals to kill algae, the contaminant could be drawn back into our water mains. A garden hose submerged into a hot tub or swimming pool, inserted into your car's radiator to flush out antifreeze, or attached to a fertilizer sprayer, could siphon these contaminants back into our water mains. Lawn irrigation systems can also pose a risk due to bacterial or chemical contaminants on lawns. Incidents such as these have been documented throughout the country and have happened all too often.

Fortunately, backflow from a cross-connection can be prevented. Skagit PUD's Cross-Connection Control Program protects the water system from contaminants by ensuring that customers have correctly installed and maintained backflow prevention devices.

The incentive program's application process is simple. A lump-sum reimbursement is provided upon successful installation, testing, and submission of required cost documentation. For more information, contact Cross-Connection Control Coordinator Courtney Shilling at (360) 848-2138 or shilling@skagitpud.org.

Breakdown of Average Residential Bi-Monthly Bill

12 CCF (8,976 gallons) of water every two months



Multi-Year Financial Plan

In 2019, Skagit PUD engaged the services of FCS Group to complete a cost-of-service analysis and water utility rate study. The study provided the PUD with a sustainable, multi-year financial plan that meets the projected total financial requirements of the utility. Financial needs include expenses to operate and manage the water system, capital project funding, funds for new and existing debt obligations, and the fiscal policy goals established by the Board of Commissioners.

On October 11, the 2023 proposed budget was submitted to the board at a public hearing. The PUD anticipates spending \$38 million on capital projects, such as completing the Judy Reservoir to Mount Vernon Transmission Line Project, PUD campus facilities construction, improvements to the Water Treatment Plant, and various pipe replacement projects.

"The 2023 budget implements the strategic objectives and Capital Improvement Plan that was adopted as a result of the rate study," Finance Manager Brian Henshaw said.

"The budget continues and expands programs that preserve the life of infrastructure and assets," Henshaw explained. "It invests in priority replacement projects identified in the CIP and, through resource conservation, allows us to maximize existing capacity and delay expansion projects until they are absolutely necessary."

Rate increases would take effect for all bills on January 1, 2023. A copy of the 2023 proposed budget is available online at SkagitPUD.org.