

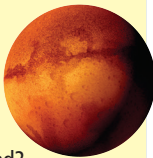
DID YOU KNOW?

Gravity Defying Water

Did you know that water can flow uphill? Through a process called capillary action, water can climb up narrow tubes or spaces, which is how plants transport water from their roots to their leaves.

Water on Mars

Did you know that there's water on Mars trapped in ice caps and possibly underground? Scientists estimate there's enough frozen water at Mars' poles to cover the entire planet in a layer 35 feet deep.



Money Down the Drain

Did you know that a leaky faucet that drips at the rate of one drip per second can waste more than 3,000 gallons per year. That's the amount of water needed to take more than 180 showers.

Dinosaur Water

Did you know that the water you drink today has been around for billions of years? Water molecules are constantly recycled through the water cycle, so you might be drinking the same water that dinosaurs once drank.

Americans Use 100 Gallons

Did you know that the average American uses about 80-100 gallons of water per day? That includes drinking, cooking, bathing, laundry, and other household uses.



Safeguarding Our Water: Cybersecurity in the Digital Age



From monitoring water quality to controlling distribution pumps, today's water utilities depend on interconnected digital systems that must be secured against evolving cyber threats.

AS WE OBSERVE National Cybersecurity Awareness Month, it's an opportune time to highlight how we at Skagit PUD are adapting our security practices to protect the essential services our community depends on every day.

Water systems have evolved significantly from the purely mechanical networks of the past. Today, Skagit PUD relies on sophisticated digital control systems to monitor water quality, manage treatment processes, and ensure reliable delivery to your home. While these technological advances have improved service reliability and efficiency, they also introduce new security considerations that we take very seriously.

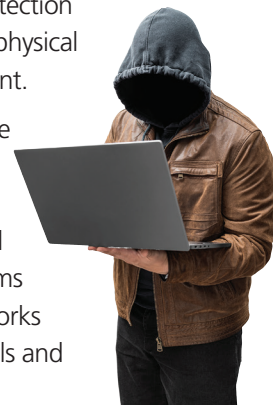
Invisible Infrastructure

Much like the pipes running beneath our streets, our digital infrastructure operates quietly in the background. Supervisory Control and Data Acquisition (SCADA) systems allow operators to monitor and adjust water treatment processes remotely, ensuring consistent water quality and pressure throughout our service area. These systems require robust protection against unauthorized access.

Multi-Layered Security Approach

Skagit PUD implements multiple security layers to protect critical systems:

- **Physical Security:** Our facilities feature restricted access controls, surveillance systems, and intrusion detection to prevent unauthorized physical access to critical equipment.
- **Network Protection:** We maintain strict separation between public-facing networks and operational technology. Critical systems operate on isolated networks with sophisticated firewalls and continuous monitoring.
- **Regular Security Assessments:** We partner with cybersecurity experts to conduct vulnerability assessments and penetration testing, ensuring our defenses remain effective against evolving threats.
- **Employee Training:** Our staff receives regular cybersecurity training to recognize and respond appropriately to potential threats, such as phishing attempts.



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Industry Collaboration

We participate in the Multi-State Information Sharing and Analysis Center (MS-ISAC), which provides early warning of threats specifically targeting water utilities. This collaboration allows us to implement preventative measures before problems arise.

Looking Forward

As technologies advance, so do our protection strategies. This year, we're implementing security upgrades to our SCADA systems and expanding our monitoring capabilities to detect unusual activity patterns that might indicate attempted intrusions.

"Our commitment to cybersecurity is an essential component of our broader mission to deliver safe, reliable water service to our community, now and in the future," explained IT Manager Alistair Boudreaux.

"Water security isn't just about dams and treatment plants anymore. It's also about software and networks. At Skagit PUD, we're protecting both."

Emergency Water Preparedness for Your Household

Water emergencies strike without warning — main breaks, contamination events, or extended power outages can disrupt service instantly. A few simple preparations today can make all the difference when disaster strikes.

Build Your Emergency Supply

Store one gallon of water per person per day, maintaining at least a three-day supply. For a family of four, that's 12 gallons minimum. Use clean, food-grade containers or sealed bottled water. Mark containers with the storage date and replace every six months. Don't forget water for pets.



Locate and Test Your Shutoff

Find your main water shutoff valve now, before you need it. It's usually located near the water meter or where the service line enters your home. Test it twice a year to ensure it works smoothly. If a pipe bursts or your water heater fails, you'll need to shut it off quickly to prevent flooding. Make sure everyone in your household knows where it is and how to operate it.

Know Your Hidden Water Sources

Your water heater holds 40-80 gallons of clean water. To access it: turn off power or gas to the heater, close the valve connecting it to your water pipes, and open the drain valve at the bottom. Let air in by opening a hot water faucet somewhere in the house.

When Service Resumes

Run cold taps for several minutes to flush the lines. Check for leaks throughout your home before restoring power to your water heater.

For emergency updates and service information, visit www.skagitpud.org.

Skagit PUD Launches Micro-Hydroelectric System at MVHS

Skagit PUD recently commissioned a micro-hydroelectric system at its 9th and Highland reservoir site adjacent to Mount Vernon High School. The HydroXS energy recovery system, developed by InPipe Energy, began operations at the end of June.

The system captures energy from water pressure reduction at our storage facility, converting excess water pressure into electricity rather than dissipating it through traditional pressure-reducing valves. The installation will generate up to 300,000 kWh annually, powering electric vehicle charging stations for students, faculty, and staff while providing net metering credits that reduce the school district's electric bill.

Over its 30-year lifespan, the system is projected to prevent more than 9.3 million pounds of CO₂

emissions. The partnership with Mount Vernon School District enables net metering arrangements since the PUD has minimal on-site electrical demand. Any electricity not immediately used on-site is fed back into the grid, generating credits that offset the school district's electricity costs throughout the year.

The project was fully funded from outside sources,

including the Washington State Department of Commerce Rural Clean Energy Grant and TransAlta's Centralia Coal Transition Grant. As a U.S.-manufactured system, it qualifies for Inflation Reduction Act incentives.

This installation follows Skagit PUD's successful East Division Street micro-hydro project, which has operated since 2020.



An InPipe Energy technician works on the HydroXS energy recovery system at Skagit PUD's 9th and Highland reservoir site.