



Newsletter

April 2014

SERVING PEOPLE AND THE ENVIRONMENT

WWW.LIBERTYLAKE.ORG

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Reclaimed Water

The District's Water Reclamation Facility is located on North Harvard Road just north of I-90. The plant is designed at 2 million gallons per day. Presently the daily flow is approximately 850,000 gallons per day. The Washington State Department of Ecology issues a National Pollutant Discharge Elimination System (NPDES) permit to discharge to the Spokane River. The most recent permit issued last July 2011 requires stringent new levels of phosphorus removal. Meeting these new standards will require construction of expensive filtration equipment that must be up and running in 2018. Estimated cost of this upgrade is \$12.6 million.

New discharge standards on the Spokane River will require making changes in the way we dispose of treated effluent. Reusing the water for other uses is being planned. Reclaimed water must meet certain State standards before it can be used in areas open to the public. Future upgrades to the District's wastewater treatment plant will permit reuse in areas such as golf courses, parks, wetlands, freeways, commercial and industrial uses. The term "purple pipe" is used to refer to the transmission of reclaimed water to applied areas. There are many areas in the United States already using reclaimed water for these uses without

creating risks to the public. The District has already begun installing future purple pipe conveyances under new roads. Plans are underway to install purple pipe in some new developments. The challenge is to find the locations to use the reclaimed water. The District has developed a Reclaimed Water Plan. The plan outlines steps necessary to upgrade the treatment plant to meet Class A reclaimed water standards, determine options for disposal of reclaimed water, potential funding for the project, cost projections for various options, easements, and property purchases. Potential sites for reclaimed water use are golf courses, parks, freeway aprons, stormwater swales, and wetlands.



Purple pipe used for conveyance of reclaimed water

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NEED HELP? CONTACT US

Administration Office

22510 E. Mission Ave. Liberty Lake, WA 99019
 8AM to 5PM - Monday through Friday
info@libertylake.org
 (509) 922-5443

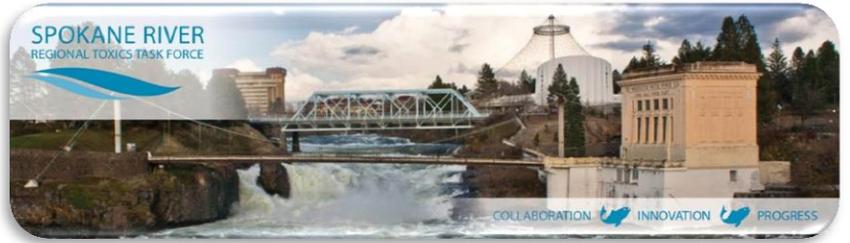
After hours emergency please call:
 (509) 623-7920

PCB's and the Toxics Task Force

The District's NPDES permit requires that all dischargers to the Spokane River participate in the Spokane River Regional Toxics Task Force (SRRTTF), a group that includes environmental organizations, Tribes, regulators and others to study Polychlorinated Biphenyl's (PCB's). Manufacture and use of PCB's ended in the mid 70's in the U.S., but the residual is ubiquitous in the environment and some are still being inadvertently produced. The Spokane River Regional Toxics Task Force leads efforts to find and reduce toxic compounds in the Spokane River. The goal of the task force is to develop a comprehensive plan to bring the Spokane River into compliance with water quality standards for PCB's. These pollutants exceed water quality standards in several segments of the river.

The Spokane River Regional Toxics Task Force is actively working to:

- Further analyze the existing and future data to better characterize the amounts, sources, and locations of PCB's and other toxics



as defined above entering the Spokane River.

- Prepare recommendations for controlling and reducing the sources of listed toxics in the Spokane River.
- Review proposed Toxic Management Plans, Source Management Plans, BMPs, and data to be used to develop performance-based limits.
- Monitor and assess the effectiveness of toxic reduction measures.

In addition, dischargers are conducting testing within their own systems to determine sources of PCB's. Testing for PCB's at the levels required in the permit cannot be done locally. In fact, there are only a couple of labs in North America that can test to the levels required, i.e. parts per quadrillion. The District is sending samples to a lab in Vancouver B.C. at a cost of nearly

\$1,000 per sample. Additional testing is also required for dioxins, metals and other elements. The increased cost in sampling annually is nearly \$40,000. The net result of the District's treatment facility upgrades and increase in sampling costs will result in increased sewer rates. The Board of Commissioners authorized a 7.9% increase (\$2.77/mo) for 2014 effective December 1, 2013. This rate was based on our sewer rate study conducted in 2012.

For more information on the Spokane River Regional Toxics Task Force visit: <http://www.srrttf.org>

FAST FACTS

We are sampling PCB's to the parts per quadrillion. How small is parts per quadrillion? The Vancouver lab gave the analogy that a parts per quadrillion is like taking the entire area of Canada and place a dollar bill on the ground. The dollar bill would represent the one part per quadrillion. A part per quadrillion is expressed as 0.000,000,000,000,001.



Sensus SR2 meter that is used in the District

Most of the water meters serving homes in Liberty Lake Sewer and Water District are Sensus brand meters. The reading information is used to determine the amount of your water bill. We read the "odometer" or register on the meter and subtract the last reading to determine the water usage. This item is intended to enable you to read your own meter, so you can monitor your own

How to Read Your Own Meter

water use and determine if the use meets your goals for maintaining your property and keeping your water bill under control.

The register is the dial and looks a little like a speedometer in a car. It has a red needle that sweeps around the dial and an "odometer" that registers the total of the water used. It also has a white triangular flow indicator in the center of the red needle that shows if the meter is detecting any water flow.

One revolution of the red needle registers one cubic foot of water flow. One cubic foot is equal to 7.48 gallons. One revolution of the red needle will increase the reading of the "odometer" by one. The white triangle will rotate many times for each revolution of the red needle so it will indicate small flows.

If you have a high bill, you may want to read the meter to check that the reading by the District is correct. If the reading on the meter is higher than the reading on your bill, then the District's reading is correct. One possible cause of a high reading would be a leak in your system. If you think all your plumbing is off and the white triangle is turning, you may have a leak. You should contact the District for assistance if you think you have a leak. The District has FREE dye kits available at the District office for testing leaks.

FAST FACTS

A pinhole size leak will lose 10 gallons per hour, a pencil size leak can use up to 140 gallons per hour and a 3/16 inch leak more than 300 gallons per hour. A dripping faucet that fills a cup in 10 minutes wastes 3,280 gallons per year.

DID YOU KNOW?



Michelle McGinnis

Kids in the Creek

Since 2004, Central Valley School District has conducted the "Kids in the Creek" program at Liberty Lake. This program provides environmental education to over 850 fifth graders annually. District employee Jeremy Jenkins provides environmental education regarding streams, aquifer, forestry and ropes courses. The program begins April 28th and runs to June 3rd.



Grinder Pump Care

Many residents located around the lake have grinder pumps to lift sewage to the gravity mains in the street. Proper care of grinder pumps will prevent breakdowns and/or expensive repairs. The District has user information pamphlets available at the District office.



Electronic Newsletter

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FAST FACTS

56%

From June through September, over 1/2 of the water used within the District is applied to landscapes.

95.6%

Did you know that the LLSWD Water Reclamation Facility removes 96% of PCB's from the waste water?



FAST FACTS

The Spokane Valley-Rathdrum Prairie Aquifer was designated as a "sole source" aquifer in 1978 by the Environmental Protection Agency. "Sole Source" means that the aquifer is our only affordable source of drinking water in a bi-state region, serving drinking water to more than 500,000 people every day.

Bottled Water vs. Tap Water

In comparing bottled water to tap water, we should be able to ignore cost considerations because there is simply no comparison. In Liberty Lake, safe and high quality water is delivered to your house for less than two tenths of a cent per gallon. So if you drink a half-gallon per day, your drinking water cost per month is \$0.02. Even the least expensive type of bottled water is more expensive by a factor approaching one hundred and that's not counting delivery!

So why would you drink bottled water? Convenience, taste, added ingredients in bottled water missing from tap water, ingredients in tap water you don't want? Your choice may be based on some or all of these reasons.

So, to make the decision that bottled water is a better choice for you than tap water, you would need to have a good idea what you are leaving behind and what you are receiving in its place.

Liberty Lake supplies Spokane Valley-Rathdrum Prairie Aquifer water which is hard water and typical for groundwater. It also means it is mineral water because it contains calcium, magnesium, potassium, and the other good minerals, but not nearly in the quantities that would meet recommended dietary intake. That's the bad news. The good news is that cadmium, mercury, arsenic, lead and the other scary minerals are way below the levels that are a concern for even sensitive individuals. Liberty Lake works very hard to protect our water source and works hard to keep the water clean after we pump it into the system.

Bottled water is held to the same standards for cleanliness as tap water but bottlers don't have the same consumer notification

requirements if there is a problem. Many of the bad minerals are also present in bottled water because many bottled water sources are municipal water systems. The minerals remain unless the water has been distilled. Some independent testing has found problems with quality from bacteriological and chemical contamination (see the link below for more information). And then there are the bottles. What do we do with all those bottles? For more information on your drinking water quality visit:

<http://libertylake.org/consumer-confidence-reports>

This article isn't meant to convince you that tap water is a better choice than bottled water. It is intended to help you make an educated choice. Having a water source of the quality of our aquifer available for tap water is our good fortune and using bottled water as a substitute without having the facts about water quality could be an expensive mistake.

<http://www.ehso.com/ehshome/DrWater/drikingwater.php#Overview>

The District's water system is licensed by the Washington State Department of Health and must meet certain standards of construction, maintenance, frequency of water sampling, employ State Certified operators, provide certain water availability and quantity, source control, wellhead protection, cross-connection control, fire protection, water conservation and facility security.

We at Liberty Lake Sewer and Water District work around the clock to provide top quality water to every tap. We ask all our customers to help us protect our water resources, which are the heart of our community, our way of life, and our children's future.

Sustainable Water and Energy

The time of year when water use in the District peaks is fast approaching. It is the perfect time to assess whether you have water leaks in your house and outdoor irrigation devices so you can minimize any overages on your upcoming water bills. Did you know that over 50% of the water we pump annually is used for irrigation, during June, July, and August? That is more than 500,000,000 gallons of water applied to the landscape alone! The District would like to remind you that we always have resources available to help our customers reduce their water use and bills. Some of these resources include: low-flow kitchen and bathroom devices, leak identification kits, irrigation self-audit tools, and on-site consultations.

As residents of Spokane County, another way you can reduce your utility bills is by tapping into a local non-profit, SustainableWorks. The organization, which is funded by Washington State Legislature's Community Energy Efficiency Program, provides subsidized energy assessments, retrofits, and low-interest financing to

homeowners. SustainableWorks' "Save Energy Today" program combines a one day energy assessment of your home with immediate energy-saving upgrades such as duct sealing, air sealing, and installation of energy saving light bulbs. You will also receive a detailed report outlining how your home is using energy and offering suggestions for improvements. The "Save Energy Today" program is only a \$95 cost to the homeowner (\$1200 value).

The District is working with SustainableWorks to provide water conservation devices to any of our customers within the District who receive an Energy Audit, as part of the "Save Energy Today" program.

Learn more about SustainableWorks and sign up for an energy assessment by visiting www.sustainableworks.com or calling 509-443-3471.

For additional information, please visit: <http://libertylake.org/water-conservation/>

Sustainable Works



FAST FACTS

The average American uses 80 to 120 gallons of water per day. The District's Equivalent Residential Unit (ERU) is 240 gallons per day.

Liberty
Lake Sewer
and Water
District #1

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