

# 2015 Annual Water Quality Report

City of Albany, City of Millersburg, and the Dumbeck Lane Water District



**If you are a manager or owner of a business or multifamily dwelling,  
please share this report with your employees or tenants.**

If you would like additional copies, please call 541-917-7600 or visit [www.cityofalbany.net/contact](http://www.cityofalbany.net/contact).

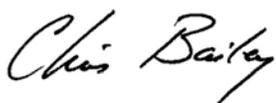
Este Reporte de Calidad de Agua contiene información importante sobre su agua potable.  
Si usted desea recibir una copia de este documento en Español, llame al 541-917-7600 o visite [www.cityofalbany.net/contact](http://www.cityofalbany.net/contact).

To Our Valued Customers,

The Albany Public Works Department is pleased to present the Albany, Millersburg and Dumbeck Lane Water District's 2015 Annual Water Quality Report. This report provides important information about the high quality of the drinking water Albany provides to homes, businesses, and industry 24 hours a day throughout the year. This information is provided to you in compliance with U.S. Environmental Protection Agency requirements.

Albany regularly monitors the quality of our drinking water to ensure our customers are getting quality water service. In 2015, Albany's drinking water met or exceeded all state and federal standards for safe drinking water. Albany places great importance on delivering excellent water and works hard to meet our goal of providing high quality and dependable water service for all of our customers.

If you have any questions about this report or the City's drinking water system in general, please contact the City of Albany at 541-917-7600 or [www.cityofalbany.net/contact](http://www.cityofalbany.net/contact). Dumbeck Lane Water District's contact, Rod Laverdure, can be reached at 541-619-6314. To provide input on our water quality, Albany invites you to join us at City Council meetings held on the second and fourth Wednesdays of each month at 7:15 p.m. in City Hall, 333 Broadalbin Street SW.



Chris Bailey  
Public Works Operations Director



Conserve water and money with a FREE outdoor water conservation kit.

Available from the Albany Public Works Department, Albany City Hall, 2nd floor, 333 Broadalbin Street SW. Sign up for a free irrigation audit and learn practical ways to reduce water usage! If you have a home or business in Albany and irrigate your lawn, you qualify. Call 541-220-0312 to schedule your audit or visit [www.cityofalbany.net/wateraudit](http://www.cityofalbany.net/wateraudit).

Kits available June 1 – August 31 in limited quantities

#### **Around Your Yard**

- Lawns only need about one inch of water per week
- Mow with a sharp blade set high
- Established plants and shrubs need a half inch of water per week

For more information, visit [www.cityofalbany.net/conservewater](http://www.cityofalbany.net/conservewater).

## Checking for a Water Leak

**Step 1.** Make sure that all water fixtures and water-using appliances are off. This includes sinks, showers, washing machines, ice machine in the refrigerator and any other appliances that use water.

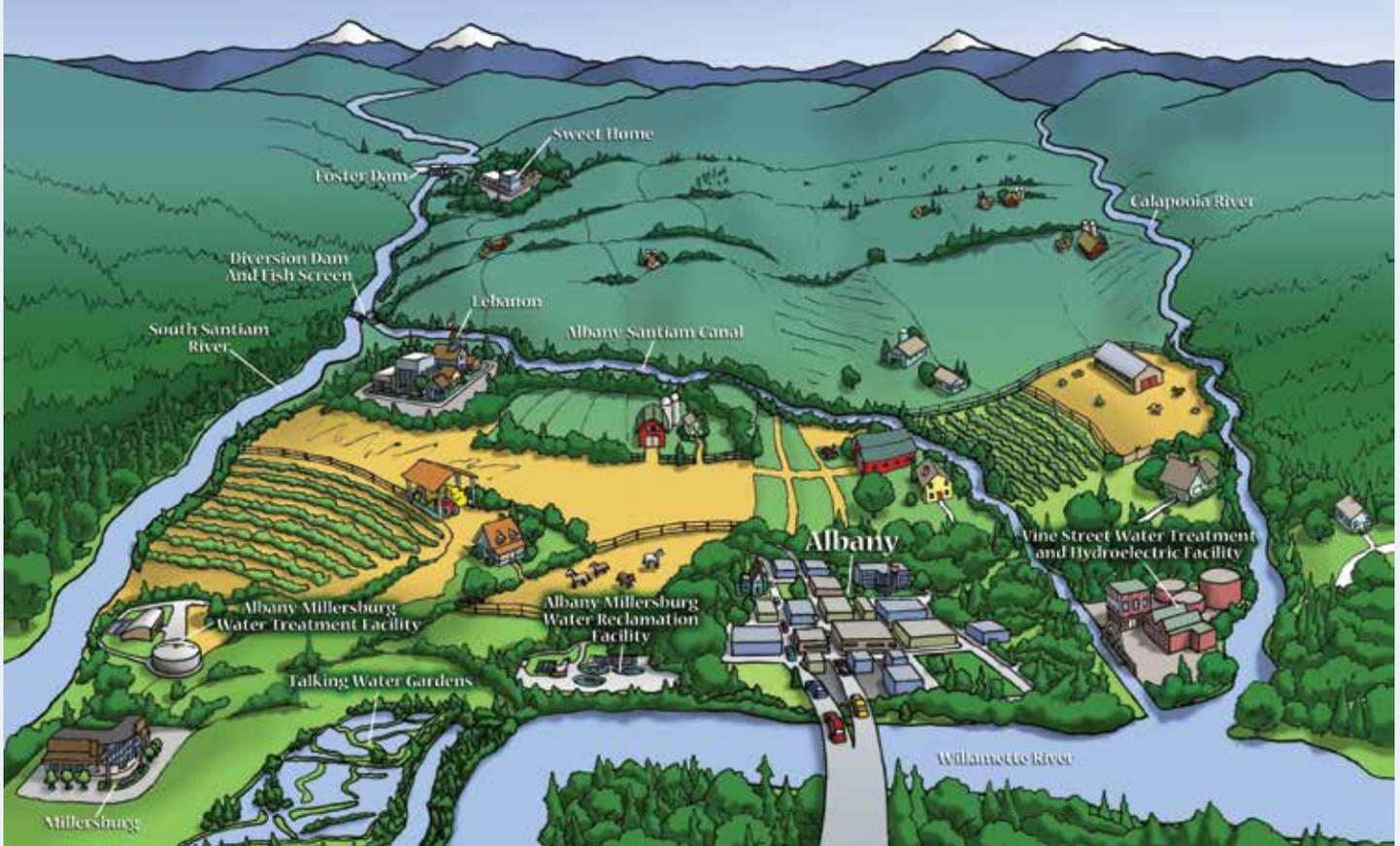
**Step 2.** Locate your meter box, normally in the sidewalk or parking strip in front of your home. Remove the meter box lid and identify the type of water meter you have. There are currently two types of meters:



The first type of water meter will have a register with a low flow indicator. These meters will have a small white, black, or red triangle on the face. With all water off, if this low-flow triangle is spinning, it is an indication of a leak.



The second type of water meter has an electronic or digital register with a series of numbers much like an odometer in your car. With all water off, look at the numbers on the far right. If the numbers continue to turn, it is an indication of a leak.



# Where do we get our drinking water?

The cities of Albany and Millersburg and the Dumbeck Lane Water District receive their drinking water from the Santiam River system through one of two water treatment plants.

The Albany-Millersburg treatment plant uses membrane technology to filter water from the Santiam River. Membranes are made up of thin layers of material that separate out dirt, sand and micro-organisms from the water. This plant is designed to produce up to 12 million gallons of treated water per day. The Vine Street treatment plant uses mixed-media filter technology to treat water from the South Santiam River. Mixed-media filters are made up of

different sizes of sand, anthracite coal, and garnet to attract and trap dirt, sand and micro-organisms in the filter. This plant is designed to produce up to 16 million gallons of treated water per day. After filtration, the water is disinfected to inactivate any remaining micro-organisms, the pH is adjusted to reduce corrosion of piping and plumbing components, and fluoride is added to help prevent dental cavities. The water is then ready to distribute to our customers. The water distribution system consists of seven reservoirs, six pumping stations and about 300 miles of pipeline that serve Albany, Millersburg and the Dumbeck Lane Water District.

A Source Water Assessment Report was completed by DEQ in 2002 for the Vine Street water treatment plant. The Report concluded that the source water may be susceptible to contamination from sediments (turbidity), microbiological sources and nutrients. Because Albany's water is highly treated, drinking water quality impacts are not likely to occur from these potential contaminants. The Source Water Assessment document is available upon request by calling 541-917-7600 or visiting [www.cityofalbany.net/contact](http://www.cityofalbany.net/contact).



**Do you keep a fish tank?**

Most fish tank owners, including hobbyists, restaurants and fish markets, know that tap water contains chlorine and other chemicals that will kill fish, so it's necessary to add a neutralizer. These products are readily available through pet and aquarium stores, as well as from companies that service commercial fish tanks.

After the tank is set up, aquarium water quality should be checked on a regular basis for pH, ammonia (from fish waste and excess food), chlorine (if reintroduced during water changes), and aeration.

# What the EPA Wants You to Know About Contaminants in Source Waters

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791 or at [www.epa.gov/safewater](http://www.epa.gov/safewater).

The sources of drinking water (both tap water 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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

*Contaminants in drinking water sources may include:*

**Microbial contaminants** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

**Inorganic contaminants** such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

**Pesticides and herbicides** which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

**Organic chemical contaminants** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, and septic systems;

**Radioactive contaminants** which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## Definitions

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

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs 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 microbial contaminants.

**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 contamination.

**Nephelometric Turbidity Units (NTU):** The units of turbidity from an instrument that measures the propensity of particles to scatter a light beam focused on them.

**Parts Per Million (ppm):**

One part per million corresponds to one penny in \$10,000 or approximately one minute in two years. One part per million is equal to 1,000 parts per billion or one milligram/liter (mg/L).

**Part Per Billion (ppb):** One part per billion corresponds to one penny in \$10,000,000 or approximately one minute in 2,000 years. One part per billion is equal to one microgram/liter (ug/L).

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

# Regulated Contaminants

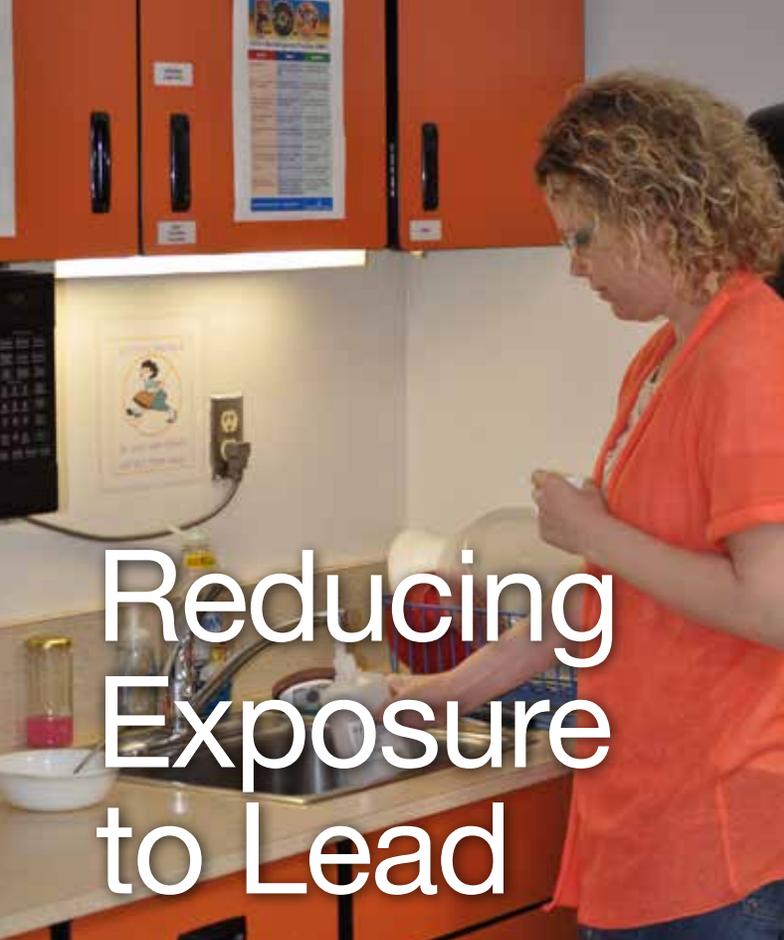
The City of Albany sampled for 88 regulated contaminants on a continuous, daily, monthly, quarterly, annual, or reduced monitoring program in 2015. The Environmental Protection Agency requires disclosure of any regulated contaminants that were detected in the Albany-Millersburg and Dumbeck Lane public water systems. Where allowed to monitor less often than once a year, the City of Albany is required to report contaminants detected within the last five years.

**At no time were any of the detected contaminants found to be above the maximum level allowed in drinking water (MCL).**

Vine Street and Albany-Millersburg Joint Water Treatment Plants Public Water System (PWS) #4100012 (serving the Albany, Millersburg and Dumbeck water customers)								
	Contaminant	Maximum Level Reported	Range of Detections	MCL	Unit of Measurement	Recommended Health Goal (MCLG)	Major Sources	Does our water meet the standard?
MICROBIAL	Turbidity – Vine Street WTP <sup>1</sup>	0.21 (99% of samples below MCL in August)	0.02 – 0.21	0.15	NTU (TT)	N/A	Soil runoff	Yes
	Turbidity – AM Joint WTP <sup>1</sup>	0.14	0.01 – 0.14	1	NTU (TT)	N/A	Soil runoff	Yes
CHEMICALS	Fluoride <sup>2</sup>	0.72	0.40 – 1.11	4	PPM	4	Additive which promotes strong teeth	Yes
	Total Organic Carbon (TOC) <sup>2</sup>	1.04	0.58 – 1.76	N/A (TT)	PPM (TT)	N/A	Naturally present in the environment	Yes
	Nitrate	0.2	0 – 0.2	10	PPM	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	Yes
Albany-Millersburg Water Distribution System PWS #4100012								
	Contaminant	Maximum Level Reported	Range of Detections	MCL	Unit of Measurement	Recommended Health Goal (MCLG)	Major Sources	Does our water meet the standard?
CHEMICALS	Chlorine (Free Cl <sub>2</sub> Residual) <sup>2</sup>	0.7	0.12 - 1.03	4 (MRDL)	PPM	4 (MRDLG)	Water additive used to control microbes	Yes
	Total Trihalomethanes (TTHM) <sup>3</sup>	59	17.2 – 63.4	80	PPB	N/A	Byproduct of drinking water disinfection	Yes
	Haloacetic Acids (HAA5) <sup>3</sup>	29	12.6 – 37.4	60	PPB	N/A	Byproduct of drinking water disinfection	Yes
	Lead <sup>4</sup>	3	0 – 20.4	15 (AL)	PPB	0	Corrosion of household plumbing	Yes
	Copper <sup>4</sup>	0	0 – 0.14	1.3 (AL)	PPM	1.3	Corrosion of household plumbing	Yes
Dumbeck Lane Water Distribution System PWS #4101319								
	Contaminant	Maximum Level Reported	Range of Detections	MCL	Unit of Measurement	Recommended Health Goal (MCLG)	Major Sources	Does our water meet the standard?
CHEMICALS	Chlorine (Free Cl <sub>2</sub> Residual) <sup>2</sup>	0.4	0.20 – 0.36	4 (MRDL)	PPM	4 (MRDLG)	Water additive used to control microbes	Yes
	Total Trihalomethanes (TTHM) <sup>3</sup>	44.5	N/A	80	PPB	N/A	Byproduct of drinking water disinfection	Yes
	Haloacetic Acids (HAA5) <sup>3</sup>	21.5	N/A	60	PPB	N/A	Byproduct of drinking water disinfection	Yes
	Lead <sup>5</sup>	1.5	0 – 2.95	15 (AL)	PPB	0	Corrosion of household plumbing	Yes

N/A = Not Applicable

- Turbidity is a measure of the cloudiness of the water. Turbidity is monitored because it is a good indicator of the effectiveness of Albany's filtration system at removing contamination. Albany monitors turbidity at each filter on a continuous basis and records the value every 15 minutes. The highest single measurement detected is reported. For compliance, 95% of monthly samples must be below the MCL. If the Maximum Level Reported for turbidity had exceeded the MCL, the percent of monthly samples that met the turbidity limits for our filtration technology is also reported.
- Compliance levels reported for fluoride, total organic carbon (TOC), and free chlorine are calculated by averaging the sample results over a running 12-month period from all sampling sites. The range is determined by individual tests at single sites.
- The detected level of TTHMs and HAA5s is the highest average at any of the individual monitoring locations and the range of all monitoring locations.
- A total of 30 homes were tested for lead and copper at the customer's tap in August of 2014 in the Albany-Millersburg distribution system. One of those homes exceeded the action level for lead. None of the homes exceeded the action level for copper. All home owners were notified of their test results. Lead and copper standards are met if at least 90 percent of the samples have lead levels less than or equal to 15 ppb and copper levels less than or equal to 1.3 ppm. The 90th percentile was 3 ppb for lead and non-detect for copper in the Albany-Millersburg distribution system. The 90th percentile is reported to the Oregon Health Authority.
- A total of 5 homes were tested for lead and copper at the customer's tap in September of 2015 in the Dumbeck Lane distribution system. Lead was detected at only one home and was below the action level. Copper was not detected in any of the homes. All home owners were notified of their test results. Lead and copper standards are met if at least 90 percent of the samples have lead levels less than or equal to 15 ppb and copper levels less than or equal to 1.3 ppm. The 90th percentile was 1.5 ppb for lead and non-detect for copper in the Dumbeck Lane distribution system. The 90th percentile is reported to the Oregon Health Authority.



# Reducing Exposure to Lead

Lead-contaminated drinking water in Flint, Michigan recently has drawn national attention to the issue of controlling lead exposure in public drinking water systems. The City of Albany has worked to control lead in its water system for many years; it is one of our standard operating procedures for keeping drinking water clean and safe. Many Albany water customers may not know what we do to control lead, or why. Please keep reading:

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead in drinking water can cause serious health problems, especially for pregnant women and young children. In 1991, the Environmental Protection Agency (EPA) published a regulation to control lead and copper in drinking water. The Lead and Copper Rule requires the City to collect water samples at customer taps to be analyzed for lead and copper, which can be present in drinking water if materials in a water system's distribution pipes or a building's plumbing contain either metal. Certain characteristics of drinking water (primarily the pH) can cause fixtures with lead-based solder and brass faucets to corrode. When water is in contact with these fixtures over time, lead or copper can be released into the water. The amount of lead and/or copper can increase when water is in contact with such fixtures for extended periods. If lead or copper concentrations exceed the action level in more than 10% of customer

samples, the City must take additional steps to control corrosion.

To comply with the Lead and Copper Rule, Albany has taken a systematic approach to remove all known lead connections from the public water distribution system. When the Rule went into effect, Public Works staff identified homes that were built between 1983 and 1985, considered by the EPA to be at higher risk of lead and copper corrosion because of plumbing materials that were used at that time. Staff began sampling 60 of these homes every six months in 1992, as the Rule requires. Operators in Albany's two water treatment plants also adjust the pH of water entering the distribution system to make it less likely to corrode plumbing components in the homes we serve. Based on our past sampling history, the Oregon Health Authority allowed Albany to reduce sampling to 30 homes once every three years. Sampling at Dumbeck Lane Water District was also reduced to five homes once every three years. Albany, Millersburg, and Dumbeck Lane Water District are in compliance with the Lead and Copper Rule (see page 5 for Regulated Contaminant Data).

While the Lead and Copper Rule applies to water utilities, the Reduction of Lead in Drinking Water Act sets standards for the amount of lead allowed in pipe, plumbing fittings, fixtures, solder, and flux. In January 2014, the Act was amended to reduce the allowable lead content in these components from 8% to 0.25% or less. All system components purchased and installed since this amendment are in compliance.

The City of Albany Public Works Department is responsible for providing high-quality drinking water, but cannot control the variety of materials used in private plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested.

Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead). You can review the City of Albany and the Dumbeck Lane District water quality results any time by visiting the Oregon Health Authority Drinking Water Services Water Online website at <https://yourwater.oregon.gov/>. If you have questions or believe the plumbing in your home dates from 1983-1985 and would like to be in our sampling plan, please contact the Water Operations Supervisor at 541-917-7628.

# Boil Water Advisories

A boil water advisory or boil water order is a public health advisory or directive issued by a public drinking water system or by health authorities to consumers when a community's drinking water is, or could be, contaminated by disease-causing organisms. It is a preventive measure that is intended to protect the health of water consumers when there is an actual or significant possibility that contamination may be present within the drinking water system.

In early October, 2015, the City of Albany issued a boil water advisory to approximately 386 homes in North Albany. The advisory was issued in response to a complete loss of water pressure in the main from repair work on a water service line in the area. The loss of water pressure could have resulted in the backflow or infiltration of objectionable water into the City's water main, posing a potential risk to the health of our customers. City staff communicated the advisory to the public in the following ways:

- Door hangers left on each property in the affected area.
- Media release issued to local outlets
- City web site updated with media release and map of affected area
- Updates to the City of Albany social media sites
- Linn-Benton Alert Emergency Notification System



The water service was repaired and water pressure restored within 2 hours. However, the advisory lasted for one day because of the time it takes to analyze the water for the presence of bacteria. Once the results were received showing no presence of bacteria, City staff used the same methods of communication to notify the public the water was safe for consumption.

In the 29 years that the City of Albany has operated the drinking water system, this was the first time Albany staff has issued a boil water advisory. We learned many lessons from the experience and new procedures have been developed to make the process more efficient should we need to issue an advisory in the future. The health of the community is our top priority and Albany will continue to follow Best Management Practices to reduce the risk of contamination entering the water system.

The Linn-Benton Alert Emergency Notification System is the quickest way to be notified of a water emergency or other types of emergencies, in our area. Users of the system can set several methods to receive notifications, providing a way for a parent to receive information that may affect their child's school, or a family member to receive notifications about events near an elderly parent's home. All local residents are encouraged to sign up at: [www.cityofalbany.net/lbalert](http://www.cityofalbany.net/lbalert).

## Special Notice for Immuno-Compromised Persons

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

## Albany Families Benefit From Low Income Assistance Program

Albany's Low-income Assistance Program is dedicated to helping qualified individuals and families facing financial difficulties in paying their water bills. Every single-family residential water customer pays 35¢ per month to fully fund this program exclusively for low-income assistance. In 2015 this program provided assistance to 182 families.

Assistance is available for qualified low-income senior or low-income disabled water customers in the City of Albany. Those that qualify receive a credit for part of their water use (up to four units) on each monthly bill.

If you meet all the criteria at [www.cityofalbany.net/incomeassist](http://www.cityofalbany.net/incomeassist) and wish to apply, call Community Services Consortium at 541-704-7644.



# At Samaritan Albany General Hospital, water is essential to nearly every aspect of operations.

The hospital, a landmark in the riverfront neighborhood west of downtown, relies on the City of Albany as its source for safe and clean water to care for surgical equipment, prepare celebration meals for new moms and keep the campus green.

Hospitals use lots of water: in 2015, Samaritan Albany General Hospital used 10.15 million gallons. That's enough to fill an Olympic-size swimming pool 15.4 times, or the equivalent of 3.2 million cases of bottled water. To ensure water delivery to the hospital, the City of Albany surveys valves twice a year to make sure the water distribution system is properly functioning and flushes water mains once a year. If a water main breaks, the hospital has two separate points of water delivery to the facility to assure water service is not interrupted.

Inside the hospital, water is key to providing a safe, clean environment for patients, visitors and staff, said Patty Jones-Stanley, manager of Environmental Services. "We work 24 hours a day, seven days a week, 365 days a year to maintain a safe and clean environment," said Jones-Stanley.

More than 40 staff members clean 60 patient rooms, 13 emergency department rooms, seven surgery rooms, several conference rooms and many bathrooms. Cleaning disinfectants are made with Albany water. "We keep our costs down by buying disinfectant in a concentrated form," Jones-Stanley said. The hospital uses an automatic mixing machine connected to the water supply to ensure the right ratio to effectively clean, kill germs and prevent the spread of infection.

Water is also critical in every phase of surgery cases. Patients take a shower at home before surgery; surgeons and surgical staff scrub up at a hospital sink. "Hand washing is the No. 1 most important thing we

do in every area of the hospital to keep our patients, visitors, co-workers and ourselves safe," said Jones-Stanley.

The hospital's heating and ventilation system uses water to cool and warm rooms and maintain the right humidity in the operating room. Water is used to wash and sterilize surgical equipment, said operating room nursing supervisor Allison Reid, R.N. "A sterile field, safe surgical environment and excellent patient outcomes are our ultimate goals," said Reid.

*If a water main breaks, the hospital has two separate points of water delivery to the facility to assure water service is not interrupted.*

Water is extremely important in nutrition services, said department manager Jessica Davis. "Not only do we use water in most areas of food service, but clean water is also critical to prevent food-borne illness," Davis said. Each month, an estimated 27,000 meals are prepared for patients, staff and hospital guests. That's a lot of dishes to clean and sanitize, and one of the higher volume uses for water at the hospital, Davis said.

Samaritan Albany General Hospital is taking steps to reduce its water consumption. In 2016, the hospital will upgrade its dishwashing equipment to cut water usage by 58 percent, saving about 12,000 gallons per month. During warm, dry months, water is needed to maintain more than 100 trees, plants and flowers on the hospital campus. A bulb garden lines Seventh Avenue, a rose garden is across the street at the Hospital Foundation building, and blooming annuals and hanging baskets are brought in seasonally. To conserve water, groundskeepers use drip irrigation, timers and zones to get just the right amount of water to each area.

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Samaritan Health Services provided this information at the request of the City of Albany Public Works Department. As one of Albany's largest employers, SAGH demonstrates the value of a safe and consistent water supply to the health of those using and visiting the hospital as well as the local economy and the healthcare industry. Albany Public Works would like to thank Samaritan Health Services for their ongoing partnership in keeping our community healthy.