January 1 through December 31, 2024

2024 Water Quality Report
Vinalhaven Water District

PWSID# ME0091550

The Vinalhaven Water District is pleased to present a summary of the quality of the water provided to you during the past year. This report is consistent with the requirements of the Federal Safe Drinking Water Act, to report annually the details of where your water comes from, what it contains, and the risks that our water testing and treatment are designed to prevent.

The Vinalhaven Water District trustees meet quarterly. For scheduled meeting information, please contact the Vinalhaven Water District or the Vinalhaven Town Office.

Federal law allows water providers to make the annual water quality reports available online. Paper copies can be mailed to customers who request it. We will notify customers through our notification system, bill inserts, news releases, our website and social media any time a new water quality report has been posted to our website. If you have any questions about this report, please call us at 1-800-287-1643 or email customerservice@mainewater.com.

Sources of Supply & Treatment: *Round Pond serves as the public water supply for Vinalhaven and offers an adequate supply of quality water for the VWD. Folly Pond is available for use in an emergency. Current water treatment includes filtration with bag filters, primary disinfection with Ultraviolet (UV) light, secondary disinfection with chlorine (sodium hypochlorite), pH adjustment using sodium carbonate and corrosion control using Orthophosphate. Certified operators further ensure the quality of the water and that all primary and secondary drinking water regulations are met.*

Sources of drinking water include rivers, lakes, ponds and wells. As water flows on the surface of the land or through the ground, it can dissolve naturally occurring minerals and in some cases, radioactive material, and can also accumulate substances resulting from human and animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Protection Program. The assessments included geology, hydrology, land uses, water testing information, and the extent of land ownership or protection by local ordinance to see how likely our drinking water source is being contaminated by human activities in the future. Assessment results are available at town offices, public water supplies and the DWP (207.287.2070).

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban runoff, industrial or domestic wastewater discharge, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, storm water runoff, and residential uses.
- Organic chemicals contaminants, including synthetic and volatile organics, are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring, or can be the results of oil or gas production or mining activities.

In order to ensure that tap water is acceptable for drinking, the U.S. Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations established limits for contaminants in bottled water, which must provide the same protection for public health.

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 at EPA's Safe Drinking Water Hotline website https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline website https://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline**.**

Protecting Water Sources

Source water is untreated water from streams, rivers, lakes, or underground aquifers that is used to supply public drinking water. Preventing drinking water contamination at the source makes good public health sense, good economic sense, and good environmental sense. Most contaminates enter rivers, lakes and reservoirs from storm water runoff of streets, parking lots, golf courses, athletic fields, construction sites, farms and residential neighborhoods. You can be aware of the challenges of keeping drinking water safe and take an active role in protecting drinking water.

There are many ways that you can get involved in drinking water protection activities to prevent the contamination of groundwater and surface water sources:

- Restrict the use of lawn chemicals, especially before heavy rains.
- Dispose of pet or animal waste properly so that it does not wash into a nearby stream or storm drain.
- Inspect septic tanks every two years, and clean as needed. Make septic system repairs as soon as possible.
- Do not pour used motor oil on the ground or into storm drains. Contact your town for proper disposal of household chemicals.
- Report muddy runoff from construction sites to your town's zoning or wetland officials.

Educational Information on Lead & Copper

We believe it is important to provide you with information about the sources of lead and copper in drinking water and the health effects associated with them.

Our system completed a Lead Service Line Inventory as required by the Revised Lead and Copper Rule. It is publicly accessible at this location: **https://maps.ctwater.com/portal/apps/sites/#/mwc-service-line-inventory**

What is Lead?

Major Sources in Drinking Water: Corrosion of household plumbing systems.

Health Effects Statement: Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Your public water system is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact your public water system. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at: http://www.epa.gov/safewater/lead

Unregulated Contaminants: PFAS in Water Sources

PFAS (Per-and Polyfluoroalkyl substances) are a large group of man-made chemicals that have been manufactured and used around the world since the 1940s for many industrial and consumer purposes including the coating of fabrics, nonstick cookware, food packaging, and firefighting foam.

These chemicals can accumulate over time and have been found in both the environment and the human body. They do not break down easily in the environment or the human body and are sometimes called "forever chemicals".

Of these chemicals, the most extensively produced and studied have been PFOA and PFOS.

At this time, the United States Environmental Protection Agency (EPA) and states across the country are working to develop appropriate standards for these chemicals in drinking water. In 2021, the State of Maine passed LD 129 mandating that Public Water Systems test the treated drinking water for PFAS in 2022.
To see the document copy this link to your browser
http://www.mainelegislature.org/legis/bills/getPDF.asp?paper=SP0064&item=3&snum=130

The Water Company is in full compliance with Maine Drinking Water Program (DWP) and United States Environmental Protection Agency (EPA) drinking water standards and the guidelines for risk assessment of all water sources and systems as well as all the monitoring and testing requirements under the Unregulated Contaminate Monitoring Rule (UCMR) to date.

Water Quality Data

The following table lists the contaminant levels that were detected in your water system. The Safe Drinking Water Act allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. The Safe Drinking Water Act also allows monitoring waivers to reduce or eliminate certain monitoring requirements.

Microbiological Contaminants: Vinalhaven Water District is required to collect monthly distribution samples for Total coliform and E.coli (2 per month). A total of 27 samples were collected in 2024. In 2024, none of the 27 distribution system samples tested positive for coliform bacteria. Coliform bacteria are naturally present in the environment and are used as an indicator of disinfection effectiveness.

Turbidity Levels: Turbidity is a measure of cloudiness or suspended colloidal matter (silt). Excessive turbidity can interfere with water disinfection. The standard for turbidity requires that 95% of all readings in each month be less than 1.0 NTU and that a single day maximum is less than 5 NTU. These standards were met in 2024. The maximum monthly high turbidity during 2024 was 0.836 NTU and occurred in May.

Violations: MCL Violation – In 2024, our water system exceeded the MCL for Total Trihalomenthanes (TTHM) during all 4 quarterly periods of the year. The MCL is based on the running annual average (RAA) of four quarter's worth of sample data. TTHM are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water. The results of these tests revealed levels for TTHM in excess of the MCL of 80 parts per billion (ppb). We are in the process of exploring various options to reduce TTHM in your water supply. Some people who drink water containing TTHM in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. Notification was distributed to all residents in each quarter of 2024.

Waiver Information: In 2022, our system was granted a "Synthetic Organics Waiver." This is a three-year exemption from the monitoring/reporting requirements for the following industrial chemicals: Toxaphene/Chlordane/PCB, Herbicides, Carbamate Pesticides, Semivolatile Organics. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water sources.

Please share this information with anyone who drinks this water (or their guardians), especially those who may not have received this report directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this report in a public place or distributing copies by hand, mail, email, or another method.

National Primary Drinking Water Contaminants

Legally enforceable primary standards and treatment techniques that apply to public water systems

Microbiological – A total of 27 Total coliform / E.coli samples were collected in 2024.							
Test	Test date	Violation Y/N	Detection Value	Range of detections	Federal/State Standard MCL	Federal/State Standard MCLG	Typical Source
Total coliform	2024	N	0	0	See below	0	Naturally present in environment
E.coli	2024	N	0	0	See below	0	Naturally present in environment

Any routine samples that show the presence of Total coliform triggers repeat samples that must be analyzed for Total coliform and E.coli bacteria.

If E.coli is found in any repeat sample, the system is in violation of the MCL.

Compounds	Test Date	Violation Y / N	Detection Value	Range of Detection	Federal/State Standard MCL/ MRDL	Federal/State Standard MCLG/ MRDLG	Major Sources in Drinking Water
Inorganics and Radionuclides							
Barium, ppb	2/15/2024	N	0.0035	NA	2	2	Erosion of natural deposits

Disinfectants and Disinfection Byproducts -- Compliance for Haloacetic Acids and Total Trihalomethanes is based on quarterly samples.							
Residual chlorine, ppm	2024	N	0.02 avg.	0.01 – 0.04	4	4	Water additive used to control microbes
Medical Center Total Trihalomethanes (TTHMs), ppb	RAA 2024	N	85.5	67 - 107	80	0	Byproduct of drinking water disinfection
VWD Office Haloacetic Acids (HAA5), ppb	RAA 2024	N	11.6	3.2 - 17	60	0	

Lead and Copper Results– Samples are from consumer's taps. 90% of the tests must be equal to or below the action level for rule compliance.

Lead and Copper	Test Date	90th Percentile	Range of Detections	Total Number of Samples	Samples Exceeding Action Level	Federal/State Standard Action Level	Federal/State Standard MCLG	Major Sources in Drinking Water
Copper, ppm	7/19-26 2023	0.205	0.015 -0.326	10	0	1.3	1.3	Corrosion of household plumbing
Lead, ppb	7/19-26 2023	1.5	0 – 3.8	10	0	15	0	

The table above provides information on the levels of lead and copper detected in your drinking water system. For general information on lead and copper, please refer to the Educational Information about Lead and Copper section of this document. Complete lead tap sampling data available upon request.

All other regulated drinking water contaminants were below detection levels.

National Secondary Drinking Water Contaminants

Non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Parameter	Test Results 2/15/2024	Secondary MCL	Noticeable Effects above the MCL
Chloride, ppm	18	250	Salty taste
Sodium, ppm	15.7	No limit	Salty taste
pH	7.24	6.5 – 8.5	Neutral = 7
Iron, ppm	<0.1	0.3	Rust color; sediment; metallic taste; reddish orange staining
Manganese, ppm	0.0046	0.05	Black to brown color; black staining; bitter taste
Hardness, ppm	8.61 Soft	No limit	Scaly residues; soaps that don't lather

Unregulated Water Contaminants

Contaminants that are suspected of being present in drinking water and do not have health-based standards set under the Safe Drinking Water Act (SDWA)

Parameter	Sampling Point	Test Results 7/26/2022	Sources in Drinking Water
Per & Poly- fluoroalkyl Substances (6 PFAs chemicals regulated by the State of Maine) (ppt)	Treated Water	Not Detected	By-product of man-made industrial process and consumer products such as stain and water-resistant fabrics, carpeting, non-stick cookware, cleaning and paint products, Class B firefighting foam.

PFAS (per-and polyfluoroalkyl substances) are not regulated under the Safe Drinking Water Act (SDWA) and therefore have no federally established Maximum Contaminant Level (MCL) that require action such as treatment to remove these compounds from drinking water. EPA has established a Health Advisory of 70 parts per trillion (ppt), combined, for two PFAS compounds: perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).

PFOA and PFOS are fluorinated organic chemicals that are part of a larger group of chemicals referred to as perfluoroalkyl substances (PFASs). PFOA and PFOS have been the most extensively produced and studied of these chemicals. They have been used to make carpets, clothing, fabrics for furniture, paper packaging for food and other materials (e.g., cookware) that are resistant to water, grease or stains. They are also used for firefighting at airfields and in several industrial processes.

To provide Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS from drinking water, EPA established the health advisory levels at **70 parts per trillion**. EPA's health advisories are based on the best available peer-reviewed studies of the effects of PFOA and PFOS on laboratory animals (rats and mice) and were also informed by epidemiological studies of human populations that have been exposed to PFASs.

UCMR 5 Monitoring Results 2024:

Unregulated contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of these contaminants in drinking water and whether future regulation is warranted. In 2024 we participated in the fifth round of the Unregulated Contaminant Monitoring Rule (UCMR 5). We had no detections of any of the contaminants in this round of testing.

EPA uses the Unregulated Contaminant Monitoring Rule (**UCMR**) program to collect nationally representative data for contaminants suspected of being present in drinking water, but that do not have regulatory standards. One set of each test was sampled at the entry point to the distribution system after treatment. 4 sets of tests (one set each quarter) were collected in 2024.

Parameter	Sampling Point	Average of 4 Test Results	Range of Test Results	Sources in Drinking Water
PFAS Chemicals	Treatment Plant; Treated water	Not detected	Not detected	By-product of industrial process and consumer products
Lithium	Treatment Plant: Treated water	Not detected	Not detected	Lithium is a naturally occurring metal, has numerous commercial uses including as a main component of batteries, and is likely found in a variety of foods. Lithium is also used as a pharmaceutical to treat certain medical conditions

Notes:

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

Arsenic: While your drinking water may meet EPA's standard for Arsenic, if it contains between 5 to 10 ppb you should know that the standard balances the current understanding of arsenic's possible health effects against the cost of removing it from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

E.coli: E.coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

Fluoride: For those systems that fluoridate, fluoride levels must be maintained between 0.5 -1.2 ppm. The optimum level is 0.7 ppm.

Gross Alpha: Action levels over 5 pCi/L requires testing for Radium 226 and 228. Action levels over 15 piCi/L requires testing for Uranium. Compliance is based on Gross Alpha results minus Uranium results = Net Gross Alpha.

Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level.

Locational Running Annual Average (LRAA): A 12-month rolling average of all monthly or quarterly samples at specific sampling locations. Calculation of the RAA may contain data from the previous year.

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

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 contaminants.

NA: Not applicable.

ND: Not detected.

Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health provider.

PFAS: The degree of risk depends on the level of chemicals and duration of exposure. Laboratory studies of animals exposed to high degree of PFAS have shown numerous negative effects such as issues with reproduction, growth and development, thyroid function, immune system, neurology, as well as injury to the liver. Research is still relatively new, and more needs to be done to fully assess exposure effects on the human body.

Picocuries/Liter, pCi/L: A unit of concentration for radioactive contaminants.

ppb: A unit of concentration equal to one part per billion. Equal to micrograms per liter (**ug/L**).

ppm: A unit of concentration equal to one part per million. Equal to milligrams per liter (**mg/L**).

ppt: A unit of concentration equal to one part per trillion. Equal to nanograms per liter (**ng/L**).

PWSID: Public water supply identification number.

Radon: The State of Maine adopted a Maximum Exposure Guideline (MEG) for Radon in drinking water at 4000 pCi/L, effective 1/1/2007. If Radon exceeds the MEG in water, treatment is recommended. It is also advisable to test indoor air for Radon.

Running Annual Average (RAA): A 12-month rolling average of all monthly or quarterly samples at specific sampling locations. Calculation of the RAA may contain data from the previous year.

Secondary Maximum Contaminant Level (SMCL): Non-mandatory water quality standards

TTHM and HAA5: Total Trihalomethanes and Haloacetic Acids are formed as a byproduct of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water. Compliance is based on LRAA.

Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take < 40 samples per month.

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

Turbidity: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

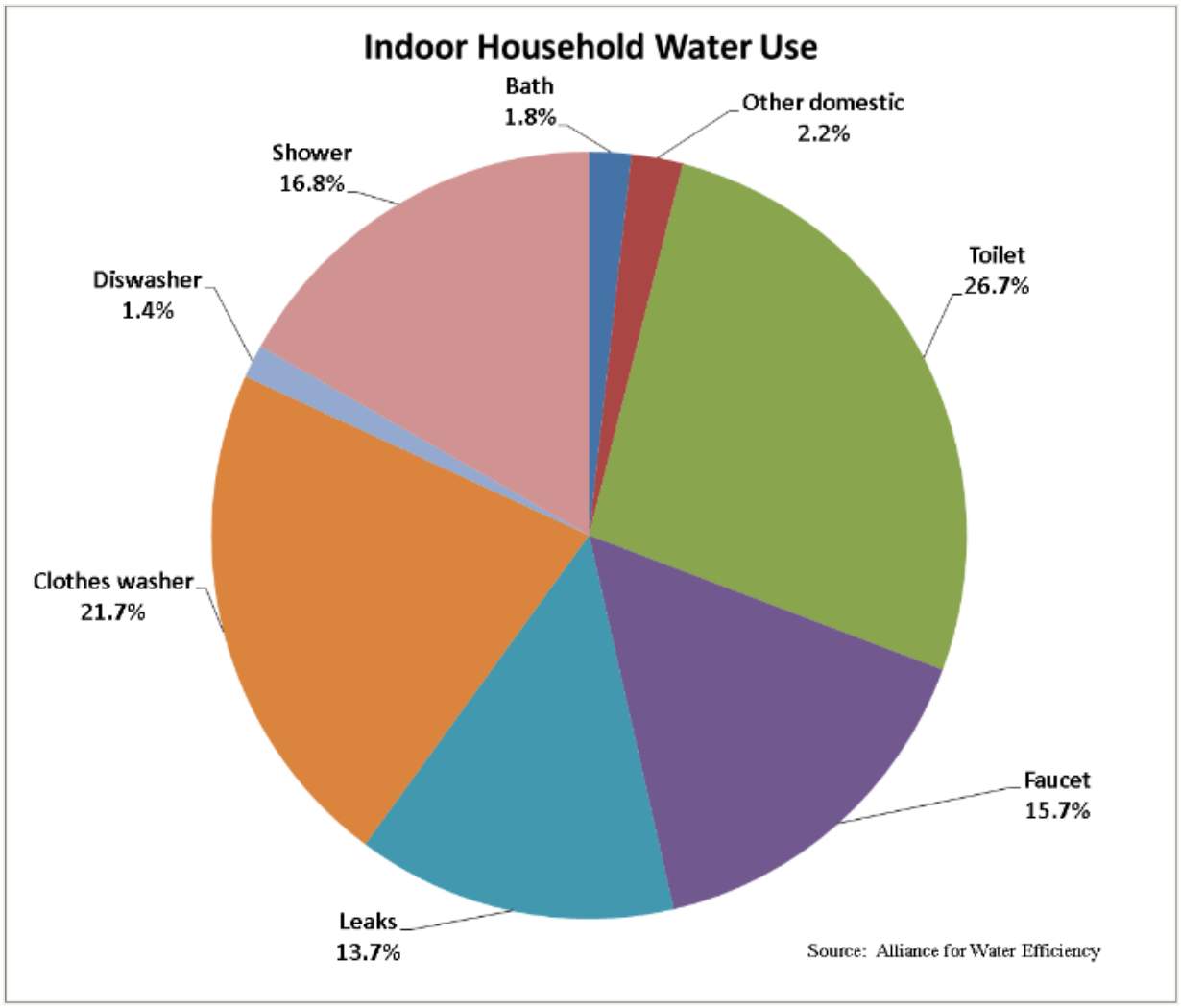
Our water systems are designed and operated to deliver water to our customers' plumbing systems that complies with state and federal drinking water standards. This water is disinfected using chlorine, but it is not necessarily sterile. Customers' plumbing, including treatment devices, might remove, introduce or increase contaminants in tap water. All customers, and in particular operators of facilities like hotels and institutions serving susceptible populations (like hospitals and nursing homes), should properly operate and maintain the plumbing systems in these facilities. You can obtain additional information from the EPA's Safe Drinking Water Hotline at 800.426.4791

Water Conservation

Conserving water helps to ensure that we have an adequate supply of water for public health and safety and reduces demand on the state's water resources. The typical residential home uses 125 gallons of water per day; you can play a role in conserving water by becoming conscious of the amount of water your household is using. Conserving can lower your water bill and may reduce your sewer bill.

Here are some things you can do to conserve:

- Repair leaking toilets - check for toilet leaks by putting a drop of food coloring in the tank. If the food coloring seeps into the bowl without flushing, there is a leak.
- Consider installing a low-flow 1.6 gallon per flush toilet.
- Don't use toilets as a wastebasket.
- Fix leaking fixtures.
- Run full loads in the dishwasher.
- Set the water level in the washing machine to match the amount of clothes being washed.
- Water lawns and gardens in the early morning.
- Use mulch around plants and shrubs.
- Use a bucket rather than a running hose to wash cars.


Indoor Household Water Use
Bath
1.8%
Other domestic
2.2%
Shower
16.8%
Toilet
26.7%
Diswasher
1.4%
Clothes washer
21.7%
Faucet
15.7%
Leaks
13.7%
Source: Alliance for Water Efficiency