

Taunton Water Division

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Past water source

- Water system started in 1876 Taking water from Taunton River at the Harris Street Pumping Station
- In the 1890's the city began drawing water from the Assawompset pond complex via a 30" Gravity water main. This main is in excellent physical shape. |

Present Water Source

- Water is now taken from Assawompset Pond in Lakeville
- Pond holds 12.16 Billion gallons of water at capacity
- Taunton owns significant land around pond for watershed protection
- Taunton has an 1,800 foot long earthen dam to maintain a greater storage volume
- Limited recreational activity is permitted on pond to preserve water quality

Water sources

- Water is pumped from Assawompset Pond to Elders Pond in Lakeville next to the Taunton Water Filtration Plant
- The water department has a well supply source near the Myles Standish Industrial Park

Water Treatment Facility

- Water Treatment plant was recently upgraded and expanded in 2009
- Water Treatment Plant is capable of producing 14 million gallons per day to meet peak summer demands
- The water systems average day demand is presently 5.6 million gallons per day
- The city is currently permitted from MassDEP for a maximum average day withdrawal of 7.44 million gallons per day

Storage Tanks

- Water is transported from the water treatment plant to 6 water storage tanks totaling 25.5 million gallons of storage.
- The water is held in the tanks until customers draw water
- The largest and principle storage facility tank is the 22 million gallon Prospect Hill Reservoir

Distribution Pipes

- Water enters the distribution and serves the customers through a system of 371 miles of pipes
- Much of the distribution pipelines are in good condition
- Some pipe is very old dating back to 1876 and will require replacement over the coming years

Quality of water

- The State DEP and Federal EPA regulate the quantity and quality of the water that is supplied to the customers.
- Last year there were no violations of any of standards required to be met.
- Annually the water department provides a required report to each customer reporting the quality and quantity of water provided. Most recent is the calendar 2015 report which was mailed in May 2016 and is available on the city's web site.

Measuring water

- Water is sold using units of Hundred Cubic Feet (HCF)
- One HCF unit is equal to 748 gallons
- Conversely 7.48 gallons of liquid occupies the volume of one cubic foot

Metering water consumed

- Water consumption is metered at each property by city owned water meters.
- Residential water meters are read quarterly while large commercial meters read monthly.
- More than 80 percent of water meters are less than ten years old.
- A water meter program is ongoing with the goal to get all water meters modernized.

Customer water usage

- The per person water consumption is about 60 gallons per day
- The average residential water customer uses about 19 HCF per three month billing period
- 1 HCF (hundred cubic feet) equals 748 gallons

Actions a resident can take to reduce
their water consumption.

Reducing water consumption **WILL**
reduce your water bill

Water conservation measures to consider

Large amounts of water are wasted every day without the average homeowner even knowing it. Below are some ways to be more water wise and save hundreds of gallons a week and the money associated with it.

The AWWA has a Drip Calculator which can be found at this web address

<http://www.awwa.org/resources-tools/public-affairs/public-information/dripcalculator.aspx>

Small Drips Matter

- The American Water Works Association (AWWA) has a drip calculator which you can use to show how much water is lost.
- The AWWA Drip Calculator can be found online at <http://www.awwa.org/resources-tools/public-affairs/public-information/dripcalculator.aspx>
- Please remember these small leaks are on top of your regular usage and will increase your bill



*Average U.S. family per year

In the Laundry

- Run your machine when you have a full load. 30 to 60 gallons are used per load. Wait until you have a full load or adjust the water level to satisfy the smaller load.
- Depending on how dirty the load is and to avoid extra rinses, use a minimum amount of detergent.
- The newer models have a better selection of features to save water and energy. Front load machines use considerably less water than top load machines.

In the Kitchen

- Washing fruits and vegetable under run water is very wasteful. Fill your sink or basin to wash fruits and vegetables.
- The largest consumption of water in the kitchen is the automatic dishwasher. On average they will use between 10 to 15 gallons of water per load. Fill your dishwasher before running a load and select cycles that conserve water. Scrape off excess food instead of rinsing. Most dishwashers can do the job without pre-washing.
- Insulating hot water pipes saves money and energy by reducing the time it takes for hot water to reach your sink.

In the Bathroom

- We have found that a leaky toilet is the largest cause of wasted water. They can go undetected for a very long time causing high water bills. Hundreds of gallons are wasted costing homeowners more money than it might cost to replace or retro-fit an existing toilet. New low flow toilets are also available on the market.
- There are devices that can be purchase to displace water in the tank. A filled plastic bottled works very well. Avoid using the old stand-by brick. They will break down over time causing damage to your plumbing fixtures.
- Check for leaks in your toilet tank by putting in 10 to 12 drops of food coloring. If the color appears in your bowl after 15 to 30 minutes, clean or replace the flapper valve.
- Shutting off the water while shaving or brushing your teeth can save several gallons each day.

OUTSIDE WATER USE

Of the estimated 29 billion gallons of water used daily by households in the United States, nearly 9 billion gallons, or 30 percent, is devoted to outdoor water use. In the hot summer months, or in dry climates, a household's outdoor water use can be as high as 70 percent.

Lawn-Watering

There are so many personal opinions and information on the web that it gets very confusing. All lawns will go dormant during drought conditions, not actually die. Most lawn kills are associated with grubs or mold and fungus issues due to over watering.

Watering every day promotes shallow root growth which will require you to water more frequently to keep the appearance you desire, wasting water and costing homeowners money. An established lawn only requires one inch of water per week even if that inch comes in the form of a single rain storm. Using an empty coffee can to measure how long it takes to water your lawn is a great tool. This will minimize the amount of time you need to run sprinklers and save time and money.

- Create a water-smart landscape that is both beautiful and efficient to give your home the curb appeal you desire.
- Healthy landscape. Timing is everything! Knowing when and how much to water allows you to maintain a healthy landscape with minimal water.
- Upgrade to a Water Sense labeled controller if you have an in-ground irrigation system.
- Find a certified irrigation professional to install, maintain, or audit your irrigation system to ensure it is watering at peak efficiency.

- Sweep driveways, sidewalks, and steps rather than hosing off.
- Wash the car with water from a bucket, or consider using a commercial car wash that recycles water.
- If you have a pool, use a cover to reduce evaporation when pool is not being used.
- Reducing water consumption WILL reduce your sewer service bill if you get city sewer service

Steps a homeowner can take to reduce the sewer bill

- NOTE that the actual metered water usage is used to calculate the sewer bill for properties on city public sewer system.
- By reducing ones water usage their sewer bill is also reduced.

REDUCTION METER

- A special meter option exists for customers, including homeowners that use a significant amount of water outside for activities such as lawn or garden irrigation systems, topping off swimming pools, or general use around the yard.
- A reduction meter separately meters the water being used outside while the main meter records all water entering the property.
- When the sewer bill is calculated, the actual sewer use is determined by subtracting the outdoor use from the total use.
- Reduction meter readings DO NOT EFFECT the calculation of the water bill.

Reduction meter

- The installation of a reduction meter including its installation is a paid for by the customer.
- The prudent consumer will calculate the payback period of the expense of installing a reduction meter versus the savings to be realized by reducing the sewer bill.

Steps for having a reduction meter installed.

- Customer is required to have a licensed plumber install the reduction meter interconnection to the plumbing system. The water pipe beyond the reduction meter must be hard plumbed to an outside sill cock or irrigation system.
- The reduction meter reading system must be compatible with the city's meter reading software.
- Customers can purchase the water meter from the DPW Water department or from an approved vendor and installed by a licensed plumber.
- Water Division inspects the approved meter installation.

Ownership responsibilities

- A reduction meter is owned by the customer. If it fails to record accurately, it is the responsibility of the customer to have it corrected.
- A customer with a reduction meter faces severe penalties if they tamper with the plumbing to avoid correct metering of their property.

Future water Projects

- The water department is planning a number of projects to begin this summer.
- County Street and Mozzone Boulevard which includes 3000 feet of new main and eliminating old 6 and 8 inch water mains.
- Danforth Street and Charles Street will also be replaced in conjunction with the on going sewer and drain improvements.

- A request has been made to transfer \$950,000 from Retained Earnings. \$300,000 to pay for the water main replacement on Danforth St. and Charles St. \$650,000 will be for the engineering and design of approximately 18,000 feet of new water main.
- The Water Department will be making a request to the council later this summer to fund 6.5 million dollars worth of water main work, and improvements at the water treatment plant.
- The Water Department will also be updating its master plan which was last updated in August of 2000. Included with this is updating the water systems hydraulic model to look for any deficiency's in the distribution system.

More Information

- This presentation is available on the City's web site.
- The web contains numerous articles and suggestions on steps folks can take to save water
- You can call the water Department and speak with a representative.