

# ENVIRONMENTAL Fact Sheet



29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • [www.des.nh.gov](http://www.des.nh.gov)

WD-DWGB-26-1

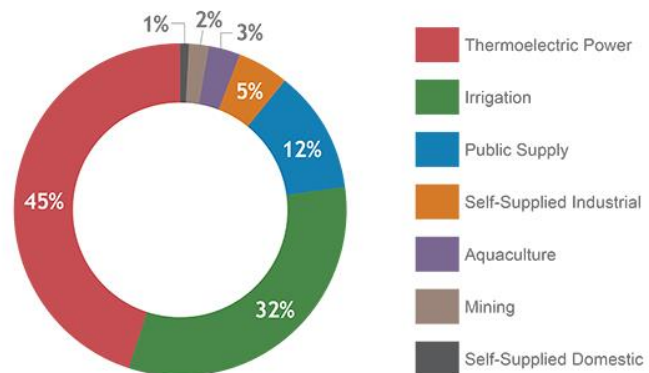
2019

## An Introduction to Water Use Management and Water Efficiency Practices

Water is essential to all life on our planet. Surface and ground waters support a variety of human uses, including drinking, irrigation of crops and landscapes, industrial processes, domestic applications and recreation.

Residents have historically thought of New Hampshire as water-rich and of conservation as something that only people in arid states need to practice. However, that perception is changing. As Benjamin Franklin said, “When the well’s dry, you know the worth of water,” which was later paraphrased by Rowland Howard as “You never miss the water ‘til the well runs dry.” In some parts of the state, wells have indeed gone dry. Water levels in some New Hampshire lakes, ponds, aquifers and streams have dropped, largely due to over-mining of groundwater supplies. When private and public water wells withdraw more water than the aquifer that supplies them can provide, surface waters may recharge the groundwater. This condition can have serious impacts on both public health and the economy.

U.S. Freshwater Withdrawals (2010)



\*Livestock is approximately less than 1% of total use and is not included.

\*Data comes from Maupin, M.A., Kenny, J.F., Hutson, S.S., Lovelace, J.K., Barber, N.L., and Linsey, K.S., 2014, Estimated use of water in the United States in 2010: U.S. Geological Survey Circular 1405, 56 p., <http://dx.doi.org/10.3133/cir1405>.

Source: EPA WaterSense

Federal regulations applicable to public drinking water quality have become progressively more stringent. Untreated water that once met federal drinking water quality standards is no longer considered potable, and public water suppliers are faced with the increasing chemical, energy, and waste disposal costs of treating water. These cost increases are passed along to their customers in the form of higher rates.

Groundwater supplies are more frequently experiencing quantity deficits. Many private and community wells in New Hampshire have been deepened, replaced, or abandoned due to dwindling production. This decline can be attributed to the stress of escalating housing and industrial development and periodic near-drought conditions. Drilling more or deeper wells, however, will not solve long-term water availability problems.

This does not mean New Hampshire residents have to do without adequate water. It simply means that we need to adopt more efficient ways of using water. States that are less water-rich than New Hampshire have practiced water efficiency methods for decades. Thousands of water-efficient products are now available. Water efficiency management techniques have also been developed, including water use and conservation audits, water fixture retrofitting, irrigation scheduling, xeriscape, and water supply maintenance programs.

Water efficiency practices are proven to save valuable water resources and protect the environment. One of the great side benefits of these practices is the simple fact that they save money. Even though the initial cost of replacements or retrofits might be high, most water users find the water-related savings result in a surprisingly short payback period.

### **Water Efficiency Success Stories**

During 2008-2009, NHDES retrofitted 22 bathrooms in its Concord office with water-efficient toilets, urinals and faucets. In all, 76 toilets, 30 urinals, and 86 faucet sets were replaced with more efficient models. NHDES anticipated saving 1.8 million gallons per year, resulting in an annual reduction of \$13,000 in water and sewer bills. Actual savings were greater than expected – 2.65 million gallons of water and \$18,500 saved each year. The payback for the project was 5.5 years.

One of the most water-intensive uses is lawn and landscape irrigation. A single lawn sprinkler operating at five gallons per minute for half an hour uses as much water as 83 low-flow toilet flushes. That's about a week's worth of bathroom visits for an average family.

These are just a few examples of how practicing water efficiency can benefit you substantially. To help you save money and protect the environment and New Hampshire's valuable drinking water supplies, NHDES has created a series of fact sheets on water efficiency practices and conservation techniques. These fact sheets can be found on the [NHDES website](#).

### **For More Information**

Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or [dwgbinfo@des.nh.gov](mailto:dwgbinfo@des.nh.gov) or visit our website at [www.des.nh.gov](http://www.des.nh.gov).

Note: This fact sheet is accurate as of August 2019. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.