

# ENVIRONMENTAL Fact Sheet



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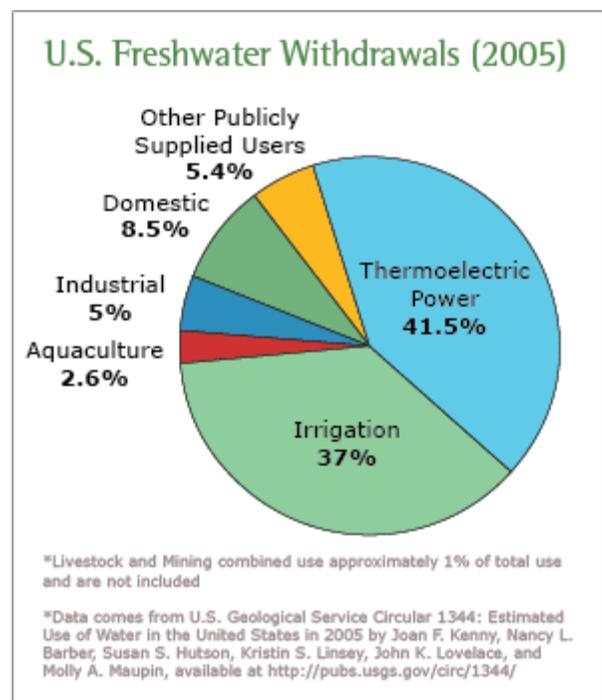
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## An Introduction to Water Use Management and Water Efficiency Practices

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 landscape, industrial processes, domestic applications, and recreation.

Residents have historically thought of New Hampshire as water rich and that conservation was something only people in arid states needed to practice. However, that perception is changing. As Ben Franklin said, “When the well’s dry, you know the worth of water,” 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.



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 raw water. This increase is 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. Hundreds 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, DES 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. DES anticipates saving 1.8 million gallons per year resulting in an annual reduction of \$13,000 in water and sewer bills.

Even homeowners can realize astounding savings. One New Hampshire household reported replacing a dripping kitchen faucet and reaping a \$30 drop in the monthly electricity bill. The payback period on the new faucet was less than two months.

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, DES has created a series of fact sheets on water efficiency practices and conservation techniques.

Water efficiency fact sheets may be found at

<http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm#efficiency>.

### **For Additional 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

<http://des.nh.gov/organization/divisions/water/dwgb/index.htm>. The bureau's fact sheets are online at

<http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm>. More information about

the DES Water Conservation Program can be found at

[http://des.nh.gov/organization/divisions/water/dwgb/water\\_conservation/index.htm](http://des.nh.gov/organization/divisions/water/dwgb/water_conservation/index.htm)

### **References:**

New England Interstate Water Pollution Control Commission (NEIWPC), *MRI Water Conservation Technical Bulletin #1, Water Conservation Best Management Practices General Practices and References*; NEIWPC, Lowell, MA; 1996.

Vickers, Amy; *Handbook of Water Use and Conservation*; WaterPlow Press, Amherst, MA; 2001; pp 2-9, 276.

Note: This fact sheet is accurate as of January 2013. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.