

January 2015
Volume 4,
Issue 1



SAVING WATER



It's everybody's business.

**Wisconsin's Water
Reduction Trend**
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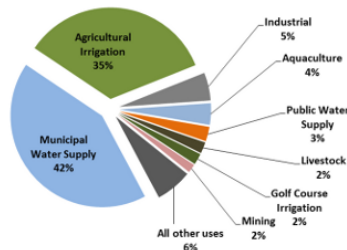


**Do Americans Pay too
Little for Our Water?**
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Is Wisconsin On A Water Reduction Trend?



What a difference a year makes.

Two years ago, drought conditions spurred unprecedented water use in Wisconsin. People were hot, crops were parched, and golf courses were in desperate need of artificial precipitation.

Groundwater pumping for agriculture alone jumped 83%, spurring worries that farms in some areas were taxing aquifers and waterways that are fed by groundwater.

For the first time in years, agriculture has edged out communities as the biggest user of water from underground sources.

Now figures from the Wisconsin Department of Natural Resources are in they show that a return to more normal weather conditions which have driven down water use in key sectors.

Agricultural irrigation — the No. 1 user of groundwater — dropped nearly 25% in 2013. The second largest groundwater users — municipalities — fell by nearly 12% and water use for golf courses in Wisconsin was down 39%.

The agency also tracks the use of surface water, which is dominated by power plants,

paper companies, cranberry farms and municipalities.

Taken together, the use of groundwater and surface water last year totaled 2.12 trillion gallons. That's enough to cover the surface of the state with 2 inches of water.

Water use from lakes and rivers fell by 5%. About 8 of every 10 gallons taken from lakes and rivers are used for power generation.

In Milwaukee County, demand for Lake Michigan water fell by 3%, DNR figures show.

"The weather really drives it," said Bob Smail, water supply specialist with the DNR.

The agency has no figures for 2014, but Smail estimates that water use across the state will be down from 2013, largely due to weather.

The DNR must review all applications for wells that withdraw at least 100,000 gallons per day or 70 gallons a minute. There are more than 14,000 high-capacity wells in Wisconsin. More than 3,000 wells are for farming uses — a figure that continues to grow. Smail said the DNR approved 377 applications last year — the highest since 1977.

In both years, Smail said the surge in water requests was due to drought the previous year as farmers, burned by parched crops, looked for insurance by tapping into underground supplies.

Even without drought condi-

tions, demand for groundwater will grow, according to Smail.

For example, canneries in central Wisconsin have changed practices and give better contracts to farmers who irrigate crops because irrigation ensures a steady supply of vegetables, he said.

The central sands region, centered around Stevens Point where groundwater use is the heaviest, is one of the largest producers of potatoes in the United States. It also has a large vegetable crop industry.

Another factor is growth in irrigation in new parts of the state. Irrigation is growing on the periphery of the central sands and portions of western Wisconsin.

A third factor is changing climate patterns. In the western United States, that has meant protracted drought, which Smail said might push production to states with more rainfall.

"We will see increased pressure as other areas of the country get stressed," he said.

Despite the drop in groundwater use, some counties saw an increase. Monroe and Pepin counties — where sand mining and farming are both prevalent — had 51% and 14% more well water use, respectively, last year.

Even with year-to-year changes, water issues remain controversial, especially in central

Wisconsin. The six-mile-long Little Plover River in Portage County fell below minimum levels, known as public rights flow, last summer. The river is closely watched because it flows through the state's most heavily irrigated county and depends on groundwater to maintain water levels.

In January 2014, the DNR launched a study of groundwater use in the central sands. Also, the Wisconsin Geological and Natural History Survey is designing a groundwater flow model of the Little Plover River basin, to better understand the relationship between water use and streams, rivers, wetlands and lakes.

Both are expected to be made public in 2015. "The current situation in some areas is not sustainable," said Ken Bradbury, a hydro-geologist and assistant director of the survey. Farmers "understand they are part of the problem and they are part of the solution," he said.

Source: <http://www.jsonline.com/news/wisconsin/state-water-use-drops-again-after-2012-drought-b99381346z1-282223511.html>

Do Americans Pay Too Little For Water? The answer is, "Yes."

Americans pay far too little for water, according to a recent column in *Ensisia*, a leading magazine showcasing water environmental solutions.

"Water is the most essential utility delivered to us each day, meeting our drinking and sanitation needs and many others, from fire protection to irrigation. Incongruously, it is also the resource we value least," the column said.

Americans pay less than people in many other countries. "In the U.S., we pay less for water than for all other utilities. That remains true in these times of increasing water stress," said Janice Beecher, director of the Institute of Public Utilities at Michigan State University. Beecher's research shows that the average four-person household spends about \$50 a month for water, compared with closer to \$150 for electricity and telephone services," the column said.

The price of water is a key issue as utilities

face the question of how to fund water infrastructure upgrades.

"Americans have gotten used to paying a little for a whole lot of pristine water. At the same time, many utilities delayed the long-term capital investments needed to maintain their pipes and plants," the *Ensisia* column said.

Water rates are going up, but that may not suffice. "Increases in U.S. cities' water rates have risen faster than the cost of living since 2007, but not fast enough to fund the estimated \$1 trillion in projected new investments and repair costs for water resource infrastructure," the *Ensisia* article continues. At the local utility level, higher prices and tiered price structures, in which households that use more pay more, are both working to encourage conservation.

Many in the water and conservation industry believe that ratepayers should have to face higher bills. "Water should be more expensive overall, and heavy users should pay much more. The impact of realistic pricing will be on water's major consumers—agriculture and industry.

Furthermore, a number of industry leaders believe that more accurate pricing will allow the creation of a market in water rights, too. The value of water is of pivotal importance to the water industry. In 2014, the American Water Works Association (AWWA) ranked value-of-water issues as top concerns among water professionals. Numbers four and five on AWWA's list, respectively, were "public understanding of the value of water resources" and "public understanding of the value of water systems and services."

Think about it. Most of us undervalue not only the cost of our water, but also our availability to an abundance of clean, safe, and on-demand water. We obsess over the price of a gallon of gasoline, grouch about the cost of a soda, and become indignant over the cost of a gallon of milk, but a case (24 bottles) of bottled water costs still costs under \$4.00. That same case of soda would cost you nearly

\$10.00. The cost of our availability to seemingly unlimited amounts of safe, potable water is really a pittance, especially when you compare it to the same quarterly cost of your other utilities, such as electricity and natural gas. And, if you compare the cost of what you pay in quarterly cable television or internet access in comparison to the same period of your water utility, the cost ratio jumps to nearly 3:1.

There seems to be a growing school of thought that we should all start paying more for our access to and usage of clean, safe, potable water. Certainly, as required repairs become mandatory to our aging water infrastructure throughout the United States, the funds necessary for such upgrades are going to have to come from somewhere. It would seem logical that the consumers of such resources are going to be asked to carry their fair share of the budgetary burden. It will be interesting to watch the changes that the next few years bring.

No wonder "public understanding of the value of water resources" and "public understanding of the value of water systems and services" are number four and five of the AWWA's Value-of-Water issues list. It's definitely food for thought.

Source: http://www.wateronline.com/doc/do-americans-pay-too-little-for-water-0001?sectionCode=News&templateCode=SponsorHeader&user=3056297&source=nl:41752&utm_source=et_10759433&utm_medium=email&utm_campaign=WOL_2014-11-20&utm_term=93a0bba4-ce25-4143-9be6-6335691cf0db&utm_content=Do%2bAmericans%2bPay%2bToo%2blittle%2bFor%2bWater%253f

