



Poor Water Infrastructure Threatens Wisconsin Economy

Clean Water is Good for Business

America is fortunate to have thousands of municipal water systems to provide reliable, plentiful clean drinking water and sanitary waste disposal. But most of this water infrastructure is deteriorating badly. Ranging from several decades to over a century old, our water infrastructure suffers from neglect and age and urgently needs repair and replacement. In 2017, The American Society of Civil Engineers (ASCE) issued an infrastructure report card that gave the U.S. drinking water infrastructure a “D” grade for overall quality. Nationwide, an estimated 240,000 water main breaks occur every year.

To maintain U.S. drinking water service at current levels requires replacing pipes that are already past, or at, their useful lives, and expanding systems to support growing populations. The American Water Works Association says completing these updates will require an estimated \$1 trillion in infrastructure investments over the next 25 years.

Both Democrats and Republicans have stated that America’s water systems need repair. Groups ranging from the U.S. Chamber of Commerce to the AFL-CIO have called for Congress to address this issue. Unfortunately, Congress has yet to pass any substantial funding bill to address America’s ailing water infrastructure.

Business survival as well as public health depends on saving America’s water infrastructure now.

Water infrastructure is as vital to business as it is to human health. American businesses rely on municipal water systems for food production, manufacturing, energy production,



IN A SNAPSHOT

- The American Society of Civil Engineers (ASCE) states that over the next 20 years, Wisconsin will need \$7.1 billion for clean water infrastructure and another \$6.4 billion for waste water infrastructure just to bring it back into proper working condition.
- Wisconsin’s agriculture industry produces \$88.3 billion in revenue each year and employs about 413,000 residents. This industry, and these jobs, depend on ample clean water, and are at risk from our deteriorating water infrastructure.
- Wisconsin’s world-famous cheese industry produces 25% of America’s cheese and the dairy industry pumps \$43.4 billion into the state’s economy each year. About 9,000 dairy farms operate in Wisconsin — more than in any other state — and about 78,000 Wisconsinites are employed, directly or indirectly, in the dairy industry. All rely fundamentally on clean water.
- Innovative new water infrastructure, such as modern cement-lined ductile iron piping wrapped with plastic sheeting to prevent corrosion, is expected to last over 100 years and is a cost-effective solution to constant repairs on deteriorating, obsolete infrastructure.

and much more. Even companies that do not directly rely on clean water infrastructure to create their products need it to fulfill their day-to-day functions. Faulty infrastructure inflicts disruptions on business operations, including utility service interruptions, polluted drinking water, and higher water bills.

Investing in water infrastructure cannot be delayed any longer. The American Society of Civil Engineers says that the fallout from America’s water infrastructure’s degradation will result in:

- \$147 billion in increased costs to businesses due to higher water rates,
- 700,000 jobs lost due to the resulting squeeze on company budgets,
- \$416 billion in lost GDP due to increased costs and the loss of worker productivity.

ASCE says these losses will occur by the year 2020. Failing to update infrastructure will result in failed water delivery to Wisconsin residents, with the resultant danger to public health, attendant legal exposure costs, and business loss.

Wisconsin's Agriculture, Dairy, and Tourism at Risk

America's dairyland is at risk. The American Society of Civil Engineers (ASCE) states that it will take over \$7.1 to bring Wisconsin's clean water infrastructure back into proper working condition, and another \$6.4 billion for our wastewater infrastructure. The dangers — and costs — will only get worse the longer we delay.

Deteriorating water infrastructure puts many Wisconsin businesses at risk; and with it, our whole economy. Wisconsin's agriculture produces \$88.3 billion in revenue each year and employs about 413,000 residents. Wisconsin's world-famous cheese industry produces 25% of America's cheese and the dairy industry pumps \$43.4 billion into the state's economy each year. About 9,000 dairy farms operate in Wisconsin — more than in any other state — and about 78,000 Wisconsinites are employed, directly or indirectly, in the dairy industry. General agriculture, dairy farming and food processing all rely heavily on a constant, reliable supply of clean water for everyday operations. If our water systems are not taken care of now, our economy cannot endure.

To restore Wisconsin's safe, reliable water infrastructure, we should:

- **Increase human capital** in the water infrastructure industry. Upgrading America's water infrastructure requires increased investment in human capital for outreach staff, technical science providers, planners, watershed coordinators, designers and construction teams. An investment of \$188.4 billion in water infrastructure over the next few years will generate \$256.6 billion in economic activity and create nearly 2 million jobs nationwide. This could prove enormously beneficial to Wisconsin: Currently, 2,780 people in our state are employed by utility and wastewater treatment facilities, and investment in restoring our water infrastructure will add more jobs. Failing to update infrastructure will result in failed water delivery to thousands of Wisconsin residents.
- **Expand availability and increase transparency** and accountability for the Clean Water State Revolving Fund (CWSRF). The Clean Water State Revolving Fund, a state-federal partnership administered by the EPA, provides communities with low-interest loans for water infrastructure projects including infrastructure efficiency, extensions

to underserved communities, treatment plant construction or lead removal. Increasing the EPA's annual grant size would facilitate infrastructure upgrades to meet business demand: agriculture, power plants and paper goods manufacturers alone use 2 trillion gallons of water a year. The Wisconsin Environmental Investment Fund that administers the CWSRF must broaden eligibility and improve transparency in financing these essential loans.

- **Repair and reconstruct** Wisconsin's water delivery infrastructure. Piping, wells, pumping stations, and water towers work together to deliver water to Wisconsin businesses and consumers and directly affect our economy. As in other states, Wisconsin's water infrastructure elements are over 60 years old, and their deterioration is disruptive and costly. Madison, our capital city, responds to more than 200 water main breaks a year; the annual cost for repairing every water infrastructure problem in Madison would be around \$12.7 million. Innovative infrastructure, such as cement-lined ductile iron piping wrapped with plastic sheeting to prevent corrosion, is expected to last over 100 years. The Clean Water State Revolving Fund should provide grants for these cost-effective water delivery infrastructure upgrades now, before initial costs balloon out of reach.
- **Invest in water reuse technologies.** For decades, recycled greywater (water that's been treated after use in sinks, showers and washing clothes) has been used to irrigate crops. Today's technologies can make greywater reusable for bathing, cleaning, cooking and drinking. States suffering drought, including Texas and California, are already successfully cleaning and reusing graywater in beer-making, and plans are to eventually render this water, still considered non-potable, appropriate for tap water. In Wisconsin, the Clean Water State Revolving Fund should be tapped to make these improvements.

Meanwhile, extremely cost-effective, recycled graywater is used to cool water for power plants and to create artificial lakes for agriculture as well as for crop irrigation. Further advancements in water reuse technologies can decrease the amount of energy needed in the water treatment process, which would lower water costs. Currently, 14% of domestic wells in Wisconsin have higher nitrate concentrations than the recommended threshold, so water reuse and recycling could increase available water for consumption and again, lower costs. In California, water recycling generates 21 million gallons of water per day that can be used for industrial processes. Wisconsin can make good use of these technologies in our own production operations. ★



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The American Sustainable Business Council is a growing coalition of business organizations and companies committed to advancing market solutions and policies to support a sustainable economy. ASBC and its organizational members represent more than 250,000 businesses and more than 325,000 business leaders across the U.S.

To take action on clean water issues, please visit asbcouncil.org