



Poor Water Infrastructure Threatens Illinois 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.

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, 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.



IN A SNAPSHOT

- Illinois’ drinking water infrastructure earns a C- and wastewater infrastructure earns a D+ grade from the ASCE. It estimates Illinois needs \$26.5 billion over the next 20 years to bring Illinois’ water infrastructure back into proper working condition.
- Industries at risk from deteriorating water infrastructure include farming (\$19 billion annually), food processing plants (\$180 billion in commodities annually), water-based tourism, especially around Chicago and Lake Michigan (\$3.2 billion annually) and breweries (\$2.3 billion annually).
- 4,180 people in the state are already employed by utility and wastewater treatment facilities, and investing in human capital to provide an efficient water infrastructure will increase these numbers.

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 Illinois residents, with resultant danger to public health, attendant legal exposure costs, and business loss.

Illinois Agriculture, Food Processing, Tourism at Risk

Illinois’ water infrastructure is in rough shape. Reporting on the condition of America’s infrastructure, the American Society of Civil Engineers (ASCE) states that Illinois’ drinking water infrastructure earns a C- and wastewater infrastructure earns a D+ grade. ASCE reports that, over the next 20 years, \$26.5 billion is needed to bring Illinois’ water infrastructure back into proper working condition. The dangers — and costs — will only get worse the longer we delay.



This situation spells trouble for Illinois businesses in a wide range of industries including farming, brewing and tourism. Illinois farms produce \$19 billion worth of agricultural commodities every year, and Illinois' food processing plants produce \$180 billion worth of commodities annually. Breweries in Illinois, including Goose Island, Revolution, and Lagunitas, produce 595,237 barrels of craft beer generating \$2.3 billion in economic impact each year. These industries and others rely on a steady, reliable supply of clean water in order to continue their daily operations. Illinois tourism in the greater Chicago/Lake Michigan area alone welcomes 20 million people each year; recreation, including boating, fishing and swimming, generate \$3.2 billion yearly and support 33,000 jobs. If Illinois' water infrastructure problems remain unaddressed, Illinois' businesses are at ever-increasing risk.

Private businesses and government leaders can both take common-sense action to restore America's safe, reliable water infrastructure. We can:

- **Increase human capital** in the water infrastructure industry. Upgrading America's water infrastructure will require increasing investment human capital. Funding is needed to train outreach staff, technical science providers, planners, watershed coordinators, designers and construction teams. A successful watershed project requires the same blueprints, structuring, supervision and trained labor of any major construction project, and requires the same investment in these resources. An investment of \$188.4 billion in water infrastructure over the next years will generate \$256.6 billion in economic activity and create nearly 2 million jobs nationwide. This could prove enormously beneficial to Illinois: Currently, 4,180 people in the state are already employed by utility and wastewater treatment facilities, and investing in human capital to provide an efficient water infrastructure will increase these numbers. Failing to update infrastructure will result in failed water delivery to millions of Illinois residents.
- **Expand availability and increase transparency** and accountability for the Clean Water State Revolving Fund (CWSRF). This state-federal partnership, administered by the EPA, provides low-interest loans for water infrastructure projects. The program can fund infrastructure efficiency, extensions to underserved communities, construction of treatment plants, or lead removal. Increasing the EPA's annual grant size would allow more investment in water infrastructure. This is especially important given that Illinois' recreational, energy, agricultural, and manufacturing industries already use surface-water sources for

their day-to-day needs. The Illinois Environmental Protection Agency administers the state revolving fund and must broaden eligibility and transparency in financing these types of loans.

- **Use the CWSRF to refurbish, rebuild, and reconstruct** Illinois' water delivery infrastructure. Piping, wells, pump stations, and water towers all contribute to how businesses of Illinois receive their water. According to the Environmental Protection Agency, the cost of updating and refurbishing Illinois' entire drinking water infrastructure is around \$19 billion over a 20-year period. Of this \$19 billion, \$13 billion would be needed to replace piping for distribution. Innovative water infrastructure, such as modern, cement-lined ductile iron piping wrapped with plastic sheeting to prevent corrosion, is expected to last over 100 years. It is tempting to continue postponing this work for budgetary reasons, but proper water infrastructure will only cost more in the future while hazarding Illinois businesses. Water delivery Infrastructure projects throughout Illinois should be funded through state-provided grants from the Clean Water State Revolving Fund.
- **Use the CWSRF to invest in wastewater and water reuse technologies.** Recycled wastewater has already been used for decades for irrigating crops. With current technological developments, it is now possible to reuse wastewater for hygienic and consumption purposes. Converting non-potable water to safe drinking water is already occurring in states experiencing drought like Texas and California. Non-potable water is extremely economical, and is useful to industries like microbreweries that are important to Illinois. Non-potable water is also used to cool water for power plants and to create artificial lakes for agriculture. Further advancements in water reuse technologies have the potential to decrease the amount of energy needed in the water treatment process.

Water reuse and recycling not only result in lower costs for business and consumers, it also can help to improve drinking water quality; critical especially with lead levels in domestic wells around the Chicago area in the 90th percentile. Benefits of reduced lead are incalculably great, and harm from not making this improvement is enormous. Another benefit of investing in water recycling technologies is an increase in amount of water available for businesses. In California, water recycling generates 21 million gallons of water per day that can be used for industrial processes. Even in states without drought problems today, smarter use of water is the wave of the future. ★



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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