

**Testimony of Frank Manzo IV**  
**Policy Director of the Illinois Economic Policy Institute**  
**Before the Appropriations-Capital Committee**  
**Illinois House of Representatives**  
**Illinois General Assembly**

**At a Hearing Titled “Subject Matter: Agriculture, Natural Resources, Environmental  
Green Energy”**

**March 21, 2019**

**Introduction**

Good afternoon, Mr. Chairman and Members of the Committee. My name is Frank Manzo IV. I am the Policy Director of the Illinois Economic Policy Institute (ILEPI), a nonprofit research organization that provides candid and dynamic analyses on major subjects affecting the economies of Illinois and the Midwest. ILEPI focuses on high-road economic development policies that promote public investments and sustainable, broad-based economic growth.

My testimony today addresses three key points. First, I address Illinois’ current drinking water and wastewater infrastructure needs. Then, I briefly discuss the economic research on the impacts of investing in water infrastructure. Finally, I present results from a study ILEPI conducted with Professor Robert Bruno at the University of Illinois at Urbana-Champaign on how clean water infrastructure investments support good jobs in Illinois.

**Needs Assessment and Environmental Threats**

Critical investments are needed in Illinois’ drinking water and wastewater infrastructure systems. There are more than 1,700 community water systems in Illinois that serve over 12 million residents. While the vast majority of these systems are safe, there are still 204,000 people in Illinois who are at risk of water pollution, toxins, and diseases due to aging infrastructure. That is double the amount of people affected by the Flint water crisis. The Illinois Section of the American Society of Civil Engineers, which gives Illinois’ drinking water infrastructure a C- grade, estimates that maintaining the state’s water infrastructure through 2030 will require over \$21 billion, or nearly \$2 billion per year ([ISASCE, 2018](#)).

The Illinois Section of the American Society of Civil Engineers also gives Illinois’ wastewater infrastructure a C- grade. Illinois has over 800 wastewater treatment facilities. Many of these wastewater and stormwater systems were built decades ago for a much smaller population. In fact, 39 of Illinois’ community collection systems have reached or are approaching design capacity. In these areas, sewage often overflows into the state’s rivers and lakes during periods of high precipitation. These sewer overflows carry pollutants and can damage the environment. In total, Illinois needs over \$6 billion to meet the water quality goals of the Clean Water Act, which can be achieved by a modest increase in funding to the State Revolving Loan Fund ([ISASCE, 2018](#)).

These problems are only exacerbated by the observable impact of climate change in the Midwest ([Craighead, 2017](#)). In the past three decades, the average temperature in the Midwest had increased by 4.5 degrees. Consequently, the number of days with “very heavy precipitation” in Illinois has increased and Lake Michigan has experienced less ice coverage, both of which cause flooding. This weather-related flooding has resulted in sewage overflow, property damage, and

business closures. Illinois' infrastructure must be updated to reflect both the needs of the current population and the scientific realities of a changing climate.

## **Research on the Impacts of Investing in Clean Water Infrastructure**

Research demonstrates that clean water infrastructure investments positively impact both the environment and public health. These investments ensure that water is safe for consumption, reduce pollutants and contaminants, and minimize sewage overflow events. Investments in clean water systems also help preserve natural environments such as forests, floodplains, and wetlands (Gordon et al., 2011). These investments diminish the potential for disease outbreaks, resulting in high rates of return in terms of costs avoided, lives saved, and lower health care expenses (UN-Water, 2011).

In addition, research convincingly demonstrates that clean water infrastructure investments boost the economy (Manzo & Bruno, 2016). Investing in water infrastructure supports local businesses. Illinois' farmers require water to irrigate crops and feed livestock, brewers rely on clean water to craft a perfect drink, and the manufacturing sector uses large volumes of water in production and cooling. Every industry generates wastewater that must be treated before it is returned to the hydrologic cycle.

As a result, for every dollar invested in water infrastructure, the economy improves by about \$1.60 (Quinn et al., 2014; Gordon et al., 2011; Zandi, 2008). This is a larger stimulus effect than almost every other public policy. Moreover, the gains from investments in water and sewage infrastructure consistently exceed the interested rates on 10-year and 30-year Treasury bonds, offering ample long-term financial returns for public bodies (Frank, 2012). Researchers have also found that every \$1 billion invested in clean water infrastructure results in the creation of between 5,000 and 15,000 new jobs (DeGood, 2013; Quinn et al., 2014; Gordon et al., 2011).

## **Investing in Water Infrastructure Boosts the Economy and Promotes Good Jobs in Illinois**

A 2016 study by the Illinois Economic Policy Institute and the Project for Middle Class Renewal at the University of Illinois at Urbana-Champaign finds that clean water infrastructure investments boost the economy and promote middle-class careers in Illinois (Manzo & Bruno, 2016). The workers who build, maintain, and operate water infrastructure are employed in a variety of skilled professions. These include individuals in management positions, architecture and engineering careers, and office and administrative support occupations. Production and transportation workers also carry out many of the day-to-day functions at water facilities. However, nearly half of all jobs related to water infrastructure are in construction—mainly from the laborers, plumbers, pipefitters, and operating engineers trades.

Construction of water infrastructure provides a pathway into the middle-class for blue-collar workers in Illinois. Employment in the water infrastructure sector boosts a worker's income by about 10 percent, on average, compared to comparable workers. This is primarily due to their high levels of productivity. Data from the *Economic Census of Construction* reveals that the average blue-collar construction worker in water infrastructure contributes \$163 per hour to the Illinois economy (Manzo & Bruno, 2016).

Investments in water infrastructure and improving both environmental and health outcomes have ripple effects in the rest of the economy, providing value for employers and for workers who are not directly impacted by the investments. For every \$1 billion invested in clean water infrastructure in the Chicago area, for example, approximately 11,200 total jobs are created or saved, including 6,200 direct construction and water treatment jobs. Moreover, in 2014, operations

and construction expenditures by the Metropolitan Water Reclamation District and the Chicago Department of Water Management created 19,500 jobs and boosted the Chicago metropolitan economy by nearly \$2 billion (Manzo & Bruno, 2016).

Finally, clean water systems also increase worker productivity by reducing sick days. Data from the World Health Organization can be used to provide general parameters on the social and environmental benefits of these investments in Illinois. The numbers suggest that every \$1 billion invested in clean water infrastructure systems, over 400 cases of diarrhea are averted and the number of hours worked improves by nearly 500,000 hours— keeping employees healthy and at work (Manzo & Bruno, 2016).

### **Increasing Funding for Clean Water Capital Projects is a Win-Win-Win for Illinois**

Despite major progress that has been made over the past few decades, Illinois is still underinvesting in clean water projects (Cotton, 2019). By reducing pollution and contaminants, mitigating stormwater runoff, restoring natural waterways, and upgrading systems to meet current demands and climate realities, increasing funding for clean water capital projects would promote a healthy and growing economy. The result would be a win for workers and their families, a win for local businesses, and a win for the environment.

I thank you for allowing me the opportunity to submit my testimony.

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