

Failure to Act: The Economic Benefits of Investing in Water Infrastructure, 2020



Client

American Society of Civil Engineers

Facts

Period

2020

Project Country

United States

For the American Society of Civil Engineers and the U.S. Water Alliance, EBP (formerly EDR Group) developed report assessing the long-term adequacy and economic development implications of investment in drinking water and water treatment across the US.

The **2020 report** updates a study conducted by EBP (then EDR Group) in 2011. The focus of this report is on the pipes, treatment plants, pumping stations, and other infrastructure that make up the nation's public drinking-water, wastewater and stormwater systems. The study examines the availability and cost of public drinking water and wastewater treatment, focusing on municipal water infrastructure availability, capacity, condition and quality across the US.

The study looks at likely future growth in water and water treatment demand requirements, given expected changes in the economic and demographic profile of regions, as well as evolving and emerging shifts in business technology. It also examines aging of infrastructure and roles of climate change in changing water quality and availability. From these and other elements, the 20 year needs of infrastructure investments are estimated, and using trends of recent years investments in water-related infrastructure, the "gap" is estimated between needs and projected spending. Based on the "gap", the study updates estimates of the economic costs over 20 years (2020-2039) borne by businesses and households when infrastructure failures impede delivery of safe drinking water and prevent reliable wastewater and stormwater treatment.

These direct business and household costs are then used to estimate macroeconomic impacts of inefficient water-related infrastructure in terms of lost employment, lower income, reduced GDP and changes industry output by applying the Long-term Interindustry Forecasting Tool of the University of Maryland (LIFT). LIFT is also used to estimate the national economic stimulus if the projected investment gap is resolved with added water related infrastructure investment.

This analysis of water, wastewater and stormwater is one in a series of four volumes concerning infrastructure investment in the Failure to Act series. The other studies address electricity, transportation and port infrastructure. These reports will examine the long-term consequences of under-investing in infrastructure, in terms of effects on American economic competitiveness and growth of jobs and income.

Contact Persons



Steven Landau

steven.landau@ebp-us.com