

# Indiana Stresses Collaboration And Innovative Approaches To Address Water Infrastructure And Technology Issues

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Better coordination of water policy, innovative approaches and adoption of new technologies are gaining support to improve water supply and infrastructure in the state of Indiana, which is home to 6.5 million people with diverse water sources and needs.

The state's water resources range from the sandy shores of Lake Michigan in the northwest to rivers that flow across the flat central part of the state to the hilly regions of the Ohio River that serves as its southern border. Drinking water in Indiana is provided by some 555 water utilities of various types, including investor-owned, municipal and not-for-profit entities, across 92 counties.

As is common in the United States, regulation of water is decentralized and state agencies with such responsibilities include the Indiana Department of Environmental Management (IDEM), Indiana Utility Regulatory Commission (IURC), Indiana Department of Natural Resources (IDNR) and Indiana State Department of Health (ISDH). However, a greater emphasis on

collaboration is taking place in Central Indiana with city and utility leaders.

Indianapolis Mayor Greg Ballard, who has served as Co-Chair of the U.S. Conference of Mayors Water Council, cites progress in water infrastructure as one of the most significant accomplishments during his two terms. As an example, he notes the transfer of the city's water and wastewater utilities to Citizens Energy Group, a public charitable trust that is now the state's largest water and wastewater utility. Citizens is now making significant investments to upgrade its infrastructure, including a massive \$1.6 billion underground tunnel system that has been expanded to store 250 million gallons of wastewater below the city.

That tunnel system, known as "DigIndy," was part of a city agreement with U.S. EPA to reduce combined sewer and storm water overflows by 2025. In the past, as little as 0.25 inches of rain on the flat city topography could exceed sewer capacity and cause overflows into the White River. "We're

building 28 miles of tunnels that will prevent sewage overflows from polluting our rivers and streams. Over the next two years, our investments will support more than 13,000 good-paying jobs to help fuel economic development in our community," said Jeff Harrison, who became CEO of Citizens Energy Group in July. The combined water, wastewater and natural gas utility serves 800,000 residential, commercial and industrial customers in Central Indiana.

Such infrastructure improvements are also creating new awareness of water issues in Indianapolis, including Reconnecting Our Waterways, a grassroots effort that has drawn dozens of organizations to use a collective impact model to improve neighborhoods by better appreciating water resources. Another effort in Indianapolis is a "living laboratory" model that has been organized by Global Water Technologies in partnership with Indiana University – Purdue University at Indianapolis, the urban campus of the state's leading research institutions.

The living laboratory concept seeks to demonstrate the benefits of new technologies by deploying them in a real-world setting where results can be monitored and shared with other utilities in the state. Initial efforts are focused in better water usage data tools, advanced leak detection and pipeline rehabilitation methods developed in Europe and the United States.

One area identified for the living lab runs along a new corridor just northwest of downtown Indianapolis that is being



A major development along the White River just northwest of downtown Indianapolis, the 16 Tech initiative highlights Indiana's strength in technology and life sciences.

planned to highlight the state's strength in technology. This "16 Tech" initiative began to take shape in the past year after property from the city's former water company headquarters had been made available for a major mixed-use development expected to include a world-class bioresearch institute and technology space. State and private funding totaling \$50 million has been pledged for this effort.

Another innovative effort to address future water supply issues in Central Indiana involved the unusual approach of creating a major new water source by flooding an 88-acre stone quarry to repurpose it into a new reservoir. The 230 feet deep quarry is expected to hold 2.7 billion gallons and provide water for more than 15 years of future growth in the region.

At an Indiana Water Summit held over the summer, collaboration in the state was also

a major topic, with the announcement of a regional planning initiative involving several utilities and communities. The Indiana Utility Regulatory Commission also announced a fall billing symposium to identify best practices and better service for utility customers, and state legislators have highlighted the need to leverage opportunities with regional water clusters which drive local innovation in water technologies.

"I believe today represents material progress in how we put water at the center of economic development," said Indiana Governor Mike Pence at the summit, as he signed several new state laws to monitor the state's water supply and better enable water infrastructure funding. "Our water resources are a vital part of our future economic success."



Erik Hromadka is the CEO of Global Water Technologies, a company based in Indiana that is developing solutions to improve water efficiency. More information about the company is available at: gwtr.com



Repurposing a limestone quarry as a new reservoir will secure Central Indiana's water supply for 15 years.