CENTRAL IOWA WATER WORKS

Stronger Together: An Innovative Regionalization Model

Faced with rapid population growth and increasing infrastructure demands, the Des Moines metro region united around a shared goal: delivering safe, reliable drinking water through regional collaboration. In 2024, twelve agencies came together to form Central Iowa Water Works, an innovative model that regionalizes water supply while preserving local control over distribution and customer service. This approach offers a cooperative framework that helps all members keep water affordable for ratepayers.

Background

For decades, central Iowa relied on a wholesale system for drinking water. The primary utility, Des Moines Water Works, managed regional water production, including setting wholesale rates, managing water operations, and planning for the expansion of source water and water treatment capacity.

This model functioned well when Des Moines Water Works was the metro area's primary water user. However, as suburban populations expanded, eventually over half of its water output was being sold to surrounding systems. These utilities sometimes faced unsustainable, double-digit rate increases in their wholesale contracts due to major infrastructure investments.

Central Iowa Water Works Founding Members



The founding members of Central Iowa Water Works include three board-governed water utilities, seven municipal water departments and two rural water providers.

- City of Ankeny
- City of Clive
- Des Moines Water Works
- City of Grimes
- City of Johnston
- City of Norwalk
- City of Polk City
- Urbandale Water Utility
- Warren Water District
- City of Waukee
- West Des Moines Water Works
- Xenia Rural Water District

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These pressures sparked new conversations about creating a formal regional water system to provide a more efficient water system for central Iowa.

After years of discussion, Central Iowa Water Works (CIWW) was established in 2024 and became the regional authority responsible for the treatment of drinking water for the Des Moines metro area, serving over 600,000 customers. Founded on the following three principles, CIWW's 12 water providers are working together to ensure a safe, strong, and efficient water system in the region for years to come.

> **Collaborative decision-making focused on conserving and protecting the natural resource of water is in the best interest of regional customers.**
>
> **Drinking water should be produced and made available in a manner that is fair to every person, business, government entity, and organization in the region.**
>
> **Risks and benefits should be shared among all regional utility members. The wise management and conservation of water is beneficial to the entire region and, over the long-term, will result in lower regional costs.**

The Reasons for Regionalization

Population growth necessitated additional long-term water capacity and infrastructure. Local leaders recognized that regionalizing water production could address rising costs, infrastructure strain, and the need for long-term resilience and reliability.

- **Cost Savings.** Financial analyses showed that regionalization could reduce capital and operating costs by up to 30% over the next 40 years for utilities like West Des Moines Water Works in comparison to costs under a non-regional model. This amounts to about half a billion dollars in savings to their customers. By collaborating on regional plans for new or expanded treatment plants, members avoid duplicating infrastructure and instead share financial risks, especially during periods of low water revenue or unexpected expenses.
- **System Reliability.** Regionalization strengthens system reliability by connecting communities through a shared network. CIWW's metro-wide system provides system redundancies. When one system encounters a disruption, such as those caused by natural disasters or mechanical failures, others can step in to maintain a continuous supply of clean, reliable water. CIWW's long-range plans will increase water treatment capacity by 25% by 2035.
- **Shared Governance**. The regional model introduces collaborative governance among the member agencies, giving all members a voice in decisions about costs, pricing, and project priorities. This transparency fosters trust and ensures that investments reflect the needs of the entire region.

Steps Toward Regionalization

Communities in central Iowa have worked together for many years to ensure the reliable management of water sources. Over the years, many of the communities in the Des Moines metro region formed contractual purchasing relationships with Des Moines Water Works. As population increased, it became clear that more source water would need to be identified and that additional treatment facilities would need to be constructed to keep pace with future demand. Furthermore, agencies were facing inevitable rate increases while not being able to directly influence how their water was managed.

In 2017, Des Moines Water Works teamed up with West Des Moines Water Works and Urbandale Water Utility to commission a model for a regional water authority by analyzing data and gathering stakeholder input. The study was completed in 2018 and proposed that a single authority acquire ownership of all water production assets in the region, with asset owners being compensated based on their assets' remaining book value and remaining reserve capacity. This compensation would be funded by members through their water rates or issuance of debt.[1]

Micro Group Discussions and Agreements (2020-2023)

Beginning in 2020, the three utilities began to meet again as a "Micro Group" to discuss an alternative framework submitted by Des Moines Water Works. The new framework proposed the establishment of an intergovernmental entity, CIWW, that would manage the region's water resources and provide a wholesale supply of water to its founding members. The proposal outlined initial member contributions based on the book values of production assets acquired by CIWW and the existing excess system capacity allocated to each member. The proposal outlined that a small percentage (i.e., 9%) of future expansion costs would be allocated among all members to reflect operational efficiencies benefiting all members, but the greatest share (i.e., 91%) of capacity expansion costs would be allocated to the members proportional to each community's incremental capacity needs to meet its projected maximum day demand and allocation of required operational reserve capacity.[1]

By April 2021, the Micro Group had finalized the conceptual framework for the regionalization model which included elements from the initial proposal with some updates. Perhaps most importantly, water producing members did not want to lose their identity or destabilize their workforce. To make it as seamless a transition as possible for their customers and employees, water producing members were given operational contracts with 20-year terms. Additionally, it was determined the Board would consist of one representative from each of the founding members, and communities exceeding 100,000 in population would receive an additional representative. To address concerns about maintaining an appropriate degree of decision-making authority, the governance model also included a provision for weighted voting based on each member's annual water consumption.

Over the next couple of years, the three utilities worked collaboratively to produce an agreement to legally and officially create CIWW.

[1] Corrigan, Ted, Amy Kahler, Diane Munns, et al. 2021. "Central Iowa Water Works Regional Micro Group: Report out on Discussions, Outcomes and Considerations." Revised November 2021. https://urbandalewater.org/wp-content/uploads/2021/12/Micro-Group-Outcomes-Report-Revised-Nov-2021-Final.pdf.

CIWW Formation (2024)

After years of discussion and development, CIWW was established as an official entity in April 2024 with an operational commencement date of January 1, 2025. The founding agencies from across the metro region include three board-governed utilities, two rural water systems and seven municipal water departments. The agencies form a shared-governance production utility while each member agency retains its independence, overseeing their own staff, managing their local distribution systems, serving their retail customers, setting retail water rates, and operating their own billing systems.

Following its formation, CIWW elected its first Board chair, vice-chair, and secretary, and hired an executive director to lead the organization. The organization established committees that now advise on policy, best practices, technical matters, finance, and long-range planning. The Board also began developing a regional plan for water production and capacity expansion. One of CIWW's first major initiatives currently underway is the expansion of the Saylorville Water Treatment Plant. In addition, the Board has launched long-term planning efforts, including studies to assess regional water treatment capacity needs through 2050.

Early Lessons in Regionalization

Although formation of CIWW is relatively new, there are several lessons offered by the multi-year process creating CIWW.

Saylorville Water Treatment Plant

The Saylorville Water Treatment Plant expansion is one of the first projects approved by CIWW. The plant is the first of its size in central Iowa to use ultra-filtration and reverse osmosis systems.

The expansion of the treatment plant will double its capacity from 10 million to 20 million gallons of water a day.

While the plant is operated by Des Moines Water Works, the new regional formation of CIWW ensures that the cost of upgrades is not borne solely by Des Moines Water Works but is shared by all 12 member agencies under established cost principles. Since the formation of CIWW, all agencies involved have a voice in how and when systems are upgraded.



Image Courtesy of CIWW: Membrane filtration components at the Saylorville Treatment Plant

Ensure members maintain a sense of autonomy. One key takeaway is the importance of preserving each member's autonomy. CIWW achieved this by limiting its scope of responsibility to water supply, treatment, and long-range planning. Members continued to set their own customer rates, manage their distribution systems, and maintain direct relationships with their customers.

Work collaboratively. Members listen to one another, understand each other's challenges, and work collaboratively to find common ground. This is critical to sustain a governance structure focused on the best interests of all members.

CIWW's early successes show that preserving local control while sharing responsibility for water supply at the regional level can strengthen trust, reduce risk, and deliver measurable benefits. By aligning governance and long-range planning across 12 unique member agencies, the region has built a resilient water system that supports affordability for customers while positioning central Iowa for continued growth. As communities nationwide confront aging infrastructure and rising demand, CIWW's experience offers a compelling model for how cooperation and vision can secure safe, reliable drinking water for generations to come.

Acknowledgements and Disclaimer

EPA's Water Finance Center developed this case study in collaboration with CIWW as part of EPA's work to highlight innovative ways that utilities are addressing water affordability challenges. This document is intended to be solely informational. EPA is not endorsing any specific strategy presented. EPA's Water Finance Center would like to thank CIWW for providing information and images for this case study.

Learn More

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Image Courtesy of CIWW: Aerial view of A.C. Ward Treatment Plant