

NEW WATER TOWER

WDMWW Starts Construction on Adams Street Tower

West Des Moines Water Works is breaking ground on its sixth water tower in the distribution system. The new tower on Southeast Adams Street will serve one of the city's fastest growing areas residentially and provide essential water capacity and safety to the area including Microsoft's data centers.

The 2-million-gallon tower will help stabilize water pressure in the area known as the "South Zone" pressure district. This is the only pressure district without a tower.

"The Water Works acquired this site in 2018 with the understanding that we would need to build a tower in the near future," explained **Christina Murphy**, general manager. "The development of new data centers is driving the process to a great extent, and as a result we have been able to defray and reduce the cost to rate-payers with significant investment from Microsoft."

With three data centers operational and two under construction Microsoft has partnered with the community in mutually beneficial ways. "Microsoft has proven itself a good partner and corporate citizen," Murphy added.

Landmark Structures won the competitive construction contract for the project with a bid of \$7.54 million. Though, the Adams Street tower will function the same as WDMWW's other five elevated storage units, it will sport a different design. Rather than being supported by a fluted column steel base known as a hydropillar, the new tower will have a 130-foot-tall pedestal fabricated from concrete. To erect the pedestal, concrete will be poured and cast in place using lifts to achieve its designed height. Once the pedestal is complete the steel tank will be constructed around the pedestal and lifted into place.

"The pandemic and supply chain disruptions are affecting every segment of construction, and after considering the skyrocketing costs of certain components such as steel, the board decided to broaden

the bid specifications to include a composite tank as an alternative," noted **William Mabuce**, the utility's engineering project manager. "The alternative design reduced the cost by more than \$1.1 million."

One benefit of the cost savings with the alternative design is that the Water Works opted to paint the



Crews preparing the site of the new southeast water tower on Adams Street. A new main will supply water to the tower.

tower tank with HydroFlon, an advanced thermoset solution fluoropolymer that resists fading and wear from the sun's ultra-violet light. The coating preserves and extends color life, which reduces the time between expensive re-applications.

In addition to the tower, Water Works has contracted construction of a new large-diameter water main along Southeast Adams Street to connect the new tower to the distribution system.

ANTICIPATED TOWER CONSTRUCTION SCHEDULE

March – April 2022	Foundation work
April – August 2022	Pedestal construction
August – December 2022	Bowl construction
December 2022	Topping Out
April – July 2023	Painting
July 2023	Tower begins service
July – September 2023	Remaining items, site work completion

WDMWW Board of Trustees Vote to Move Forward and Negotiate Agreements for Metro Regionalization

WHAT'S NEXT?

Des Moines Water Works has unveiled a draft of the 28E/F agreement that could eventually create Central Iowa Water Works. The WDMWW Board of Trustees are working with legal counsel to review the documents to ensure that the provisions benefit our ratepayers and that their interests are protected.

—Christina Murphy
General Manager

The West Des Moines Water Works Board of Trustees unanimously approved a resolution to begin negotiations on agreements that would establish a regional water treatment and production utility, Central Iowa Water Works.

Leading up to the 5-0 vote, the trustees hosted seven forums and meetings to gather public comments and opinion. While the vote allows the WDMWW to negotiate 28E/F agreements to work with other water works and cities, all of the trustees were adamant in their comments that the vote does not constitute an approval of metro regionalization.

“Today’s vote is merely the first step to allow us to negotiate a framework that would govern a full metro regional water utility,” said **Scott Brennan**, chairperson of the WDMWW board.

NINE ENTITIES IN NEGOTIATION

The boards of WDMWW, Des Moines Water Works and the Urbandale Water Utility have been joined by the cities of Ankeny, Clive and Waukee in approving measures to negotiate agreements to form CIWW. In addition, rural water provider Xenia may also be joining the regional effort.

Des Moines Water Works has announced and published a draft of the 28E/F agreement. At this publication, the WDMWW board has not formally reviewed it.

“We have retained attorneys and are starting the process of reviewing the draft,” said **Christina Murphy**, general manager of WDMWW. “As the trustees repeated during the seven public meetings, this process will be done in full view of the public, and if the agreement does not adequately protect the customers of West Des Moines, they will not vote to approve it.”

SAVINGS FOR WDMWW RATEPAYERS

It is estimated that the formation of CIWW will save West Des Moines customers up to 30 percent over the next 40 years compared with building a new water treatment facility near Van Meter. WDMWW received the necessary permits to pursue that project from Iowa Department of Natural Resources in 2020. The permits carry limits during times of drought and low flow in the Raccoon River that would reduce the ability of that plant to produce its full capacity of 8 million gallons of water per day.

“Building the west regional plant was not only more expensive, it most likely would not produce all the water we will need, especially in times of severe drought,” Murphy explained.

Trustee **Mary Thomsen** pointed out that adequate water resources for the future and regionalization

“Regionalization” continued on Page 3



The WDMWW Board of Trustees meeting on January 26, 2022, attracted several ratepayers both in person and virtually. This was the seventh public forum and discussion opportunity in two months leading up to the vote.

have dominated her three years on the board. "An abundance of work and many, many alternatives have been studied. We appreciate when people come to these meetings. We hear you and what you say does matter," she assured ratepayers. "I am a skeptical person too, but this from all models and everything that we're looking at appears to be the best option for the ratepayers."

One of the salient discussions in the public meetings centered on control and transparency. While WDMWW produces 10 million gallons of water per day, it purchases additional capacity—about 30 percent from Des Moines Water Works. The areas of the city served with water produced at A.C. Ward are nearly fully developed, while the other three pressure districts served with water purchased from DMWW are growing rapidly.

SHARED GOVERNANCE AND TRANSPARENCY

"Our most dynamic growth is occurring in the areas served with purchased water," Murphy explained. "Yet, we have no transparency or say in the cost or quality of the water we purchase from Des Moines. This regional plan addresses those concerns and should allow for transparency, shared governance over all water production, collaboration on building new treatment and production capacity and cost-sharing."

HOW WILL REGIONALIZATION WORK

CIWW will be capitalized by the participating utilities, communities and rural water districts with money and water production/treatment assets. WDMWW will contribute the AC Ward treatment plant and its source water (deep and shallow wells). Des Moines Water Works will do the same along with some core distribution mains and shared pumping stations. CIWW will own these assets within five years of the agreement being ratified by all participants. West Des Moines Water Works will continue to operate the A.C. Ward Municipal Treatment Plant as well as own and manage its distribution system, finance, billing and other business functions.

Some communities will buy into CIWW with funding depending on their asset structure. Initial funding from each entity has yet to be finalized. All participants regardless of the assets they transfer to CIWW agree to buy all of their water from the new entity.

CIWW will be led by an independent executive director, not currently tied to the existing water utilities. Each entity has a board seat, and Des Moines Water Works will have two because it represents a population of more than 100,000. Though DMWW has two seats, the composition of the board prevents any one utility—even with a weighted vote—from having a majority on its own.



Gretchen Tegeler (third from the left) made the motion to consider the resolution enabling negotiations to establish Central Iowa Water Works, a jointly owned regional production and treatment utility. Jody Smith seconded and the resolution passed 5-0.

IMPACT, New Opportunities Offer Water Bill Assistance

If you are struggling to pay your water bill, help is available in Central Iowa counties including Polk, Dallas and Warren.

Federal Covid 19 relief legislation funded the Income Household Water Assistance Program, which provides funds to assist low-income households with water and wastewater bills. In West Des Moines two different non-profits administer the program and have already helped families in need.

Customers living in Polk or Warren County can contact IMPACT Community Action Partnership at 515-518-4770, or visit <https://www.impactcap.org/utility-assistance> on the web. Customers living in Dallas County who need water bill assistance should contact New Opportunities at 515-465-5185 or visit <https://www.newopp.org/services/outreach/utility-crisis-assistance>.

DID YOU KNOW



Elevated storage towers are tall to ensure adequate water pressure. Each foot of height provides 0.43 pounds per square inch of pressure. Most major appliances require at least 20 to 30 PSI.



WDMWW Steps Up Monitoring for PFAS; All Detected Levels Remain Below Threshold for Health Concerns

West Des Moines Water Works is stepping up its monitoring of an emerging class of chemicals called per- and polyfluoroalkyl or PFAS after being notified in late 2021 by the Iowa Department of Natural Resources of detectable levels of the chemicals in certain wells and finished water.

The threshold for health concerns for two of these compounds detected is 70 parts per trillion (ppt).

The WDMWW results were a fraction of the threshold that would trigger health advisories. The remaining compounds that were detected in very low levels in shallow wells do not carry health advisories.

The sampling was conducted as part of a state-wide sampling effort being administered by the IDNR in the fall of 2021.

“Our drinking water is safe and in compliance with all standards set by the DNR and EPA,” says **Christina Murphy**, general manager of West Des Moines Water Works. “This category of chemicals, nicknamed ‘forever chemicals,’ is gaining awareness as water standards evolve. This is the first time any of our wells or finished water registered a detectable level of PFAS substances.”

In 2014, WDMWW finished water was tested for 22 PFAS compounds with no detections found. The PFAS category contains a number of compounds, two of which now carry a health advisory—perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). Finished water produced at the A.C. Ward Municipal Water Treatment Plant showed the presence of PFOA and PFOS at 2.9 ppt and 2.4 ppt, respectively—well below the health advisory levels of 70 ppt.

A part per trillion or ppt amounts to one drop of water in 13 Olympic swimming pools. In this case, the WDMWW detections of PFOA and PFOS is 2.9 drops and 2.4 drops of water in approximately 8.6 million gallons of water.

In addition to increased monitoring, Water Works will conduct research to determine whether the source or sources of PFAS compounds in the util-

ity’s raw source water can be identified. The utility has and will continue to be in regular contact with IDNR regarding the detection of PFOA and PFOS and appropriate strategies to employ, if needed. Murphy notes that the presence could be new, but it may also reflect the availability of more refined and accurate testing, which now can detect levels as low as 1.9 ppt compared with earlier methods that could only detect levels as low as 17 ppt.

“One particular shallow well reported higher numbers than the others, and we will minimize its use until we can address its issues,” Murphy adds. “We will also work with our blending processes of shallow and deep wells to achieve the lowest levels possible of these substances.”

PFAS substances emanate from man-made chemicals used in a variety of manufacturing applications and products including carpet, waterproofed cloth-



ing, cookware coatings such as Teflon, fire-fighting foam (shown above) and food packaging just to name a few. Moreover, these substances are persistent, meaning they do not degrade or break down naturally in the environment.

The full results are posted on IDNR’s PFAS web page www.iowadnr.gov/Environmental-Protection/PFAS.

“Our water resources are finite and protecting them needs to be a priority not just of utilities but for all of us,” Murphy concludes. “How we conduct our daily lives in terms of the products we use and how we dispose of them and our stewardship of the land we live on affects our source water quality. We need to be informed and work together to ensure that we continue to have safe, drinking water for future generations.”

PFAS substances
are nicknamed
“forever” chemicals
because they do
not break down or
degrade naturally in
the environment.
Testing for PFAS is
relatively new and
WDMWW will perform
regular monitoring.

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