S

WINTER 2017-2018 VOLUME 22 ISSUE 1

Cooperation Builds New Mains 2018 Rate Adjustment Cooperation Yields Greener Ball Diamonds Tech Update: Top-of-the-Tower Meter Reading WDMWW Ups Security Training Did You Know?

Regional Cooperation Leads to New Mains, Capacity

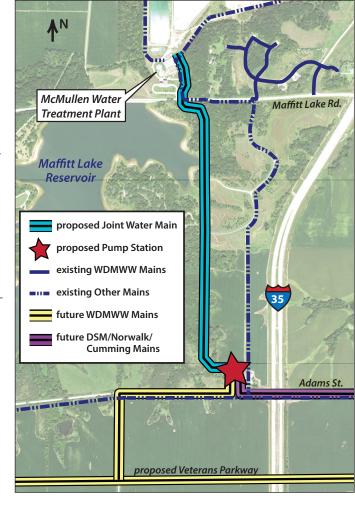
egionalization is a word that received a lot of attention in the 2017 Iowa Legislative Session, particularly as it pertains to the delivery of water in the metro area. In its simplest form, it means two or more governmental entities working together cooperatively to solve common problems and issues.

West Des Moines Water Works is embarking on a regional, cooperative effort with Cumming, Des Moines Water Works and Norwalk to build a joint water main that will service the two Warren County communities and provide 4.4 million gallons in additional capacity for West Des Moines. Shown on the map to the right, a new 24-inch joint main will be constructed starting from the McMullen Water Treatment Plant and extending south, then jogging slightly east to Adams Street.

The two water utilities and the two cities entered into 28E agreements, which allow governmental entities to work together.

In addition to the joint main, WDMWW engineering staff is reviewing the option to construct a new booster station on the

"New Mains" continued on Page 3



WDMWW Trustees Keep Water Rates Among the Lowest in Metro

hile water rates throughout the metro area are increasing by 7 percent or more, the Board of Trustees of West Des Moines Water Works has limited its rate adjustment for 2018 to just 1 percent or 5 cents per 1,000 gallons on residential accounts.

The board-approved new rate is \$4.87 per 1,000 gallons. For the typical customer using 6,000 gallons of water a month, the increase amounts to 30 cents per billing cycle. Rates for irrigation accounts will increase to \$5.82 per 1,000 gallons.

"Maintaining consistently affordable rates has been a decades-long priority for our board," said **Brian Rickert**, vice chairman of the WDMWW Board of Trustees. "Several factors combined to keep our 2018 rates low, even though Des Moines Water Works raised its price for the water we buy by 7 percent," he noted.

In late 2016, Water Works started drilling on a new 2,500-feet deep well in Holiday Park, which came on line in July 2017. The new well adds 3 million gallons a day in source water, allowing the treatment plant to run at full capacity.

"It's generally more cost-efficient to treat our own water because we can control production costs," added **Diana Wilson**, general manager.

WDMWW customers continue to pay the lowest water rates among the metro suburbs.

In 2017, Water Works had its second best pumpage year on record with 2.7 billion gallons of water sold.

DID YOU KNOW

Will a melting 6-foot Frosty cause your bathtub to overflow?

Let's check the math: A 6-foot tall snowman with spheres of 3 feet, 2 feet and 1 foot contains about 19 cubic feet of compressed snow. A cubic foot of packed snow melts into about 3.2 gallons of water.* That means the snowman would liquefy into 61 gallons of water. The average home bathtub holds 80 gallons, so your bathroom floors are safe!

WDMWW, Parks & Rec Team Up for GREENer Fields

est Des Moines Water Works and West Des Moines Parks and Recreation Department have hit a home run that will save millions of gallons of treated water each year. Their cooperative irrigation project at the Raccoon River Park Softball Complex sets an example for private and public water use.

WDMWW and the Parks and Rec Department pooled their resources to construct a pump station that pulls water from Blue Heron Lake to supply the irrigation needs for the ballpark rather than using potable (treated) water from the A.C. Ward Municipal Treatment Plant.

"This project serves West Des Moines residents and Water Works customers with a green solution that also will keep the softball fields green, lush and attractive," said **Diana Wilson**, Water Works general manager. "If not for the cooperation between our boards and staffs this project wouldn't have made it to first base."

Completed this fall, the irrigation upgrade included installation of a low-profile submersible pump mounted on a skid that was placed in the water at a depth of approximately 10 feet, explained **David Sadler**, superintendent of parks.

"Direct bury and directional boring piping was installed under the park trail. This underground system carries the water from the lake and connects it to the existing irrigation system at the softball complex," Sadler said. "We modified the plumbing to convert the irrigation system from potable water to lake water."

Of all the city's buildings and facilities, irrigation at the Raccoon River Park Softball Complex

accounted for the highest water usage by the city at approximately 3.3 million gallons this past year, according to Sadler. "With these modifications, drinking water savings will equate to more than one and a half water towers," he explained.



Department has a "Green

Team" that is tasked with continually finding ways to be more efficient and sustainable, Sadler said. "When we do these kinds of projects, we also look at it as leading by example and use these opportunities to educate residents and businesses on the use of sustainable practices."

Total cost for the project was about \$180,000, with WDMWW and Parks & Rec splitting the bill evenly, Wilson said. "This investment by Water Works and the city pays for itself over time both in in terms of actual cost and environmental benefit."

Wilson pointed out that she hopes private companies with large campuses will consider using their retaining ponds and lakes for irrigation as well. "It's the ultimate way to reduce, reuse and recycle," she said.

New Technology Turns Water Towers into Meter Readers

n ad for a meter reader at West Des Moines Water Works these days would include the phrase, "No shoe leather required."

Thanks to an initiative approved by the Board of Trustees in 2014, WDMWW no

longer walks house-to-house to read meters. Rather, it has upgraded its meter reading system and is replacing or reprogramming all of its water meters. The advancements in new technology and systems are already providing significant advantages to water customers.

While there haven't been any walking routes for meter reading for more than a year, today WDMWW does fewer than 3,800 drive-by readings. Instead, the lion's share of WDMWW meters are read via radio signal from a FlexNet "collector" atop the WDMWW water towers.

*Melt Volume Source ratnik.com/snow-science

Program Prepares WDMWW Employees for the Unthinkable

What do the words "run, hide, fight" mean to you? West Des Moines Water Works is working in cooperation with the City of West Des Moines to ensure that employees know what that phrase means and how to respond to a breach of security, an active shooter or workplace violence.



Building assessments of the Water Works Plant and City Hall and mandatory employee training are underway starting in December 2017. The Facility and Employee Security Plan (FESP) was developed by city employees working together with former Des Moines Police Captain Kelly Willis, founder of KJW Diversified Services.

"It's not just water safety that we take very seriously," said **Diana Wilson**, West Des Moines

Water Works general manager. "The safety of our employees is of highest importance to us as well. We are so pleased to cooperate in launching the Facility and Employee Security Plan. This training not only teaches our own employees what they should do in the face of danger at a city facility, but they also will learn how to respond in any location and how to assist others to safety."

The FESP was presented to the Public Safety Subcommittee on Oct. 6, 2017, and a one-year contract with KJW Diversified Services was approved by the mayor and city council and signed on Oct. 16, according to West Des Moines City Manager Tom Hadden.

The FESP will include RUN/HIDE/FIGHT and workplace violence training, teaching all city employees skills that can be used at home, at work, or any public venue to protect themselves, their families, co-workers or anyone caught in a dangerous situation.

Employees will participate in a two-hour training program and trainers will follow up with a "drop-in" visit to ensure that security measures have been implemented, Hadden added.



The water in a snow globe isn't JUST water.

When snow globes first became popular in the 19th century, porcelain "snow" particles would fall from the "sky" through water. Over the years, the liquid inside the globe has

viscosities aimed at slowing the snow and prolonging the awe of the gazer.

Today, snow globes contain a combination of water, oil, corn syrup and antifreeze (glycol) proportioned accordingly to create the ultimate, artful snow ballet.

A Cost-Effective Solution for New Mains, Booster Station

"New Mains" continued from Page 1

north side of Adams Street that will later help to serve major commercial customers and the city's predicted residential growth. A booster station takes water from a main with lower pressure and increases the pressure for delivery to another area. Water Works has six other booster stations in use.

"This project defines regional cooperation among communities and water utilities," noted Karen Novak-Swalwell, chairperson of the WDMWW trustees. "While Norwalk is experiencing the most immediate need for additional water infrastructure, each entity involved has its own needs that motivate, if not necessitate, a cooperative effort. We are all mutually benefiting from the cost-sharing."

West Des Moines growth patterns indicate the city's future growth may include additional large-scale water users such as Osmium as well as new residential developments that are just now moving from the drawing board to site prep. To meet that demand, WDMWW plans to build its own mains extending west of the planned pumping station and south to the proposed Veterans Parkway.

"If we waited a few years to make these expansions and improvements, the cost of the infrastructure and distribution assets would be significantly higher and a measurably larger burden to our ratepayers," said **Diana Wilson**, general manager of WDMWW. "We know the growth is coming. Now, we'll be ready."

* **Source**: Better Homes & Gardens and Northern New England Poison Center

New Meters, System Aids in Early Detection of Leaks and Problems

"Meter Reading" continued from Page 2

"It's not that long ago that we had to rely on walk-by reads, which didn't provide real time information about water use," said Josh Heggen, WDMWW business relations manager. "With the new FlexNet system, I can point to several examples where we were able to look at meter data electronically and identify huge spikes in usage that signaled leaks and other problems. We can address these issues much sooner and significantly reduce water waste and customer frustration."

One of these spikes occurred right in front of City Hall when the water fountain started using 500 gallons of water an hour.

"That water feature normally wouldn't use 500 gallons in a whole day," Heggen said. We discovered that the culprit was a broken pipe. Without our new metering and FlexNet system, a massive amount of water would have been lost before we knew there was a problem."

The most notable advantages of the new system center on efficiency—fewer vehicles, fewer miles, reduced emissions and more tech time devoted to other projects. For instance, at the end of the month it is not unusual to receive several work orders detailing customers moving out, moving in, transferring service and ending service. Recently, 45 such notices came in. Under the old system, two meter techs would have spent most of the day driving to each location to read the meter.

"With the new tower reading system, those same two techs conducted the final water meter readings from their desks in about 15 minutes," Heggen noted. "For us, it means our meter techs can focus on a more important project, which is replacing older water meters throughout the community."

WEST DES MOINES

By the end of 2019, Heggen expects to read all of the city's meters with FlexNet and drive-by readings will go the way of the flip phone.

Coinciding with the upgrade in meter reading technology, Water Works has also embarked on an ambitious plan to replace all of the city's old meters, many of which are years past their prime. The new meters carry a lifespan of 20 years and offer a host of benefits to water customers including more precise measurement of water used.

Of the nearly 25,000 meters in use, WDMWW techs have replaced close to 3,500 this year. When the meter replacement program is complete, Water Works will realize annual savings of \$125,000.

WEST DES MOINES
WATER WORKS

Customers

START/STOP SERVICE

WATER WORKS
4200 Mills Civic Pkwy
Tel.: 515-222-3460
Fax: 515-222-3378
www.wdmww.com

TREATMENT AND DISTRIBUTION
1505 Railroad Ave.
Tel.: 515-222-3465
Fax: 515-222-3469
TDD: 515-222-3334

Going GREEN begins with a Click

WDMWW offers a variety of ways to "Go Green." With a click of the mouse and a simple online registration customers can save time, postage and paper. Some of the services you will receive by registering are:

- Online Bill Delivery
- Bill Review
- E-Check Payments (Free!)
- AUTO-PAY (Free!)
- Payment History
- Usage History

Start the registration process by logging into www.wdmww.com and simply following the prompts in the aqua Customers section under *PAY BILL* or *GO PAPERLESS*. Registration may also be completed in the green My Account section; a Click Here will allow you to register your account. Once registered the My Account Login button is the "go to" place to access all the GREEN benefits.



