









ESSENTIAL Heroes

North Texas Municipal Water District / WINTER 2021



Service Before Self

It's been over a month since the historic winter storm struck Texas creating a cascade of devastating effects throughout the region. In true North Texas tradition, District employees from across all divisions stepped up and put service before self to continue providing essential water, wastewater and solid waste services for nearly two million people in the communities we serve.

"Our employees did what was necessary during the storm to make sure the citizens and businesses we serve had the critical services we provide," said Rodney Rhoades, Interim Executive Director of NTMWD, "We are proud of their efforts, and are grateful for their sacrifices," Rhoades added.

We've collected some of the efforts of NTMWD employees and vendors, many working behind the scenes, under challenging conditions. Not every employee involved is listed, but we consider all essential heroes.

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FACILITIES AND TECHNICAL SERVICES

"It was all hands on deck," said Walter Justice, Assistant Maintenance Manager. "The Facilities and Technical Services Divisions, as well as the whole District, went into action mode. It was a team effort and everyone who worked long, cold hours during that week continued to put service above self to keep our operations running."

"The entire Maintenance group was instrumental in providing support across multiple divisions and departments," said Hunter Stephens, Water Transmission System Manager.

"It was all hands on deck."

MAJOR ACTIVITIES

- Team members responded and staged at water delivery points to provide visibility of water levels and valve control at over 18 locations throughout our service area.
- Provided emergency back-up generator power to a remote pump station which required significant effort. Within only a few hours notice, they had the generator in place and wired to power the motors and pumps.
- Responded to major leaks most notably at High Service Pump Station 2-1.
 This was a major effort requiring personnel to isolate and pump water from the flooded station. This event began around 6 p.m. on Friday, Feb. 19 after a very long day and continued for days.
- Applied ice melt and sand in foot traffic areas in an effort to mitigate slip/ fall hazards and cleared plant access roadways and parking areas across the campus.
- Assisted in delivering and refueling heaters and generators that were used across the District throughout the rolling blackouts.

"We really appreciate Facilities and Technical Services," said **Ray Cotton, Laboratory Manager**. "Walter Justice and his crew were able to supply the Lab with a generator to keep the BacT samples current which was vital to our operations that week."



CONTROL SYSTEMS

"We need more like him."

Many of our technicians were trapped at home without an effective means of transportation. Albert Hernandez, Control Systems Senior Technician, volunteered to go on call and handle any service issues even as his own family was suffering from rolling brownouts. Albert assisted the Business IT group and the electricians in bringing the data center equipment back online to provide VPN connections, phone service, and remote site SCADA connectivity. He continually provided updates on the status of the effected equipment, helped get power to the badge access system to allow personnel to enter the building as needed. Upon the failure of the Uninterrupted Power Supply (UPS) system, Albert switched the Business system servers to bypass mode and restarted the equipment. Albert also remained in communication with the electricians and with the cellular service providers.

"Albert stayed onsite during the power outages to monitor the SCADA and Business IT systems," said **Antuione Bargains, Control Systems Manager.** "He provided support whenever needed including when Water Operations lost the ability to produce reports during the outages. Albert restored reporting capability. We need more like him."

LABORATORY SERVICES

Making it work in spite of extreme conditions. "

The Environmental Services and Lab lost power for most of the week from the storm event which affected the Lab's ability to analyze samples under the circumstances. Due to the lack of electricity and, in some cases lack of heat, staff was still concerned enough to brave the inclement weather to get the job done.

"I think it is good to recognize the individuals that went above and beyond," said **Ray Cotton, Laboratory Manager**. "I want to thank all of our Lab folks for the effort and concern put forth to attempt to make it to work in spite of the extreme conditions we faced."

TEAM HIGHLIGHTS

- Senior Laboratory Technicians Harold Sanders and Bryan Eldridge showed up to work every day to help wherever they could. It sometimes took Harold over two hours to make it to the lab from his home!
- Audra Allen, Section Supervisor, braved the cold and stayed late to be sure the Bacteriological samples were analyzed, helping out certain customers and cities with data needed for their boil order notices.
- Kelly Harden, Lab Operations Manager, made sure the operation ran smoothly and while helping out wherever she could.

INFORMATION TECHNOLOGY

Supporting the needs of all users across the District."

The February 2021 winter storm event placed a tremendous strain on NTMWD's facilities and staff. Repeated power outages and equipment failures created significant problems that required an extended effort to resolve. Members of the Business IT Department worked diligently to mitigate problems caused by loss of power to the District's IT systems, and spent several late nights onsite in efforts to preserve data. David Collins, Information Technology Technician, and Robert Munoz, Information Technology Senior Technician, made repeated trips to the Wylie campus and plants to assist the Water Operations Control Room with backup communication systems. The whole Business team collaborated to obtain and set up independent cell phones to ensure that our Member Cities and Customers could remain in communication with essential staff.

The Business IT team operated well under pressure in an effort to return systems to normal when power was restored. Proactive shutdowns were performed in order to avoid data loss from unexpected power outages as our facilities were affected by rolling blackouts. The repeated outages caused hardware failures, but the team was able to put redundant connections in place until these systems were later repaired. Planning has now begun to prevent outages of this kind in any future severe weather events or other significant disruptions. The Business IT team remains committed to supporting the needs of all users across the District.

SOLID WASTE

I think our employees did an outstanding job, and everyone deserves well-earned recognition.

"Communication was spot on," said Mike Friesen, Solid Waste System Manager. "Jerry Zumwalt, Transfer Station Manager, and Gary Higgs, Landfill Manager, coordinated with me daily by 6:30 a.m. to make sure we got information to Jeff Mayfield, Assistant Deputy-Solid Waste, who in-turn notified the Member City representatives before the start of the day."

In addition, Jerry was up before 5 a.m. almost every day to make sure he got to work on time and drove haul routes each morning to check the safety of the roads.

Our Solid Waste facilities and Fleet Maintenance stayed open for business throughout the entirety of the unprecedented event to support our customers – both internal and external. The 121 Regional Disposal Facility and all three Transfer Stations remained operational, and there was never any disruption of service.

"It's important to note the entire crew worked long, 12+ hour shifts both during the storm and after to make up for the lost week of trash collection," added Friesen. "There wasn't one complaint from our operators even though they had their own issues at home to deal with. We couldn't be prouder."

TEAM HIGHLIGHTS

The landfill crew (listed below) proactively prepared the site for expected winter conditions and stayed open late to help accept sludge from the Wastewater Department when driving conditions allowed. During the most extreme parts of the storm, our wastewater treatment plants were unable to haul sludge and their storage was almost to capacity.

Lead Operator: Pete Broyles; Operators: Rodney White, Jerimiah Smith, Craig Barrow, Wesley Guynes , Derrick Nichols, Seth Tompkins, Shannon Atteberry





SOLID WASTE CONT.

- Walter Miller, and Montague Hargrow, Transfer Station Foremen, along
 with the Equipment Operators Jeff Schie, Ryan Earhart, Gerald Mayfield,
 and Dustin Yeager, also did a lot of preparations before the storm hit
 including draining water lines, and putting out sand and ice melt for the
 safetyof our customers.
- All three stations were open for business due to the dedication of these employees and Scale Operators CC Lopez, Mason Hogue, Shanna Lewis, Steve Wiggins, Michelle Critz and Debbie Pierson who made the sacrifice driving on ice and snow to get to work.
- Equipment Operators cleared the ice and snow off the roadways and sidewalks with their loaders and shovels at each of our Transfer Stations so that our customers could dump trash without slipping and falling. Shanna and Mason filled in for scale operators at the landfill when they were shorthanded.
- Toward the end of the week when most of the ice and snow was melting, all of our Drivers, Equipment Operators, and Scale Operators were available to work including Saturday even if it was their scheduled day-off. This continued the week after the historic winter blast when everyone worked long hours for six straight days to make sure all of the trash was hauled off. The District accepted trash significantly more than normal, and we worked with our Member Cities to make sure they finished their routes at the end of the day to help them not get behind.

"I want to give big shout-outs to Walter Miller, Transfer Station Foreman, and Jeff Schie, Equipment Operator," said Zumwalt. "These two went out of their way to pick up two of our Scale Operators and bring them to work to minimize staff driving in such treacherous conditions."

"I think our employees did an outstanding job," said Zumwalt. "We took our mission of taking care of our Member Cities and their residents as well as those we serve within our own teams at the District very seriously. Everyone deserves well-earned recognition."

Fleet Operations

The Fleet Maintenance staff worked tirelessly throughout the storm and its aftermath to ensure Solid Waste and Wastewater trucks, trailers, and heavy equipment were working and available when needed, including traveling to remote sites to make that happen.

"Our Fleet team stepped up to help where they could during this challenging week," said Jeff Bond, Fleet Manager. "The majority of the men and women within the Fleet staff came in every day to ensure the Solid Waste and Wastewater trucks, trailers, and heavy equipment were running and ready to go at a moment's notice."



- David Bell, Fleet Maintenance Shop Mechanic, braved the elements and volunteered to work extended hours to keep bulk fueling operations up and running overnight in order to support emergency generator refueling efforts. David set aside needed repairs to his own home that had been affected by the storm to come in and help the District continue its operations.
- Pete Myers, Wylie Service Center Shop Foreman, reported to work daily
 without fail and regardless of the driving conditions. He took the extra effort
 to travel to employees' homes and work into the night to get their District
 vehicles up and running for emergency response.

WATER

"The District as a whole really came together."

Plant Operations

The treatment plants experienced several issues due to initial winter low demand, the freezing weather, power outages and drastic increase in demands to rival even summertime flows. The combination of the events was challenging but one that the team stepped up to overcome.

"The District as a whole really came together to tackle this extreme weather event," said Zeke Campbell, Water System Manager. "We had multiple employees in Water Operations that really went above and beyond to help ensure that our Member Cities and Customers had water service despite unprecedented challenges."

The entire team did an amazing job during this event. Water Operations had multiple operators who really stepped up as a team to fill the needs of our Member Cities and Customers as well as the District. We had several staff cover shifts, work longer shifts, answer calls and fill in where needed.

"Our team did an amazing job," added Campbell. "I am extremely proud of every one of our water operations staff and maintenance staff that worked through this event. They all contributed to our success in being able to continue to provide water for the region."

CHALLENGES

- There was a power loss to Raw Water Pump Station (PS) 2 that limited our production capabilities for a short time. Our team was able to bypass water from Raw Water PS 3 down to Plant II to provide some additional treatment capacity. There was a lot of discussion among plant operations staff to make this happen as this configuration hadn't been used in several years. We even called one of our recent retires Roy Cooke for consultation and confirmation on which isolation valves to configure.
- House water (potable) is used for numerous processes on the plant but one
 of the main uses is to supply a vacuum for our chlorine equipment. The cold
 weather caused numerous freezing issues on our house water lines, causing
 lines to crack, valves to split and subsequent leaks that had to be repaired
 so that production could be restored. Water Operations and the Maintenance
 team addressed these issues throughout this two-week timeframe. While
 the freeze caused numerous breaks, the thawing also resulted in additional
 breaks as well that our teams addressed.
- Various chemical lines froze throughout the plant and our team worked in the cold temperatures around-the-clock to thaw and restore service. Our ammonia tanks utilize pressure to feed into our system and temperature impacts this process, especially very cold temperatures. We had issues feeding the right amount of ammonia for our normal targeted chlorine residuals and had to lower that target in order to meet proper chlorine to ammonia ratios.

- The Plant Operations Mechanics team of Kevin Wiseman, Brandon Petty, and Adam Kirby pulled off amazing feats keeping multiple processes running throughout the extreme conditions. They worked multiple long-hour stints, at all hours of the night and day to ensure the continuity of production at the plants. There is not enough praise to give these guys for their efforts.
- Kenneth Lattig, Plant Supervisor, worked long hours throughout this event
 to make sure our staff was coordinated. He was instrumental in helping
 address plant issues, directing staff and coordinating with management
 on updates to our activities. He also assisted staff onsite to help bring
 production up.
- Adam Bowman, Shift Supervisor, worked through most of the event and was a real team leader for plant operations. Adam helped coordinate work at the plants, reacted to new leaks and issues at the same time as working to bring up treatment capacity as soon as we could. He was even out helping thaw lines with our plant mechanics. He was critical to our success during this event through his trouble shooting efforts and persistence to get our production back up. Adam also now holds the distinction of being the first person to sleep in the new water operations conference room. Instead of leaving, he stayed at the plant, sleeping on a cot to get just enough rest to continue to support our efforts.
- John Hernandez, Water Operator, is fairly new to the District, and regularly volunteered to help. John had the most hours worked in this stretch of extreme conditions, followed by Adam.
- Matt Hollien, Water Operator, also put in some long hours to help keep us moving. He was a huge asset to our team and assisted Adam with keeping our plants running and production up.
- Lead Water Plant Operator Josh Zachary, and Water Plant Operators
 Vincent Thomas, Jens Larsen, Christopher Dulman, and Mike Baggerly, are
 all major contributors to the District maintaining and producing the high
 water production need we experienced during this extreme weather event.

WATER CONT.

- In preparation for the storm, there were staff who camped out in offices to ensure that they could be available for our operations and not have issues traveling the roads. Justin Screws, Plant Supervisor for Tawakoni WTP, did just that with a blow up mattress in his office. Tawakoni WTP experienced similar chemical line freezing issues as Wylie. Staff worked throughout the week heating and thawing lines to keep production up. Having the Tawakoni WTP running at higher capacity did help when our demands rose. Every little bit helped over those few days.
- Similar to our other facilities, Bonham WTP had a chemical line freeze. Lime is used for pH control and is crucial to the process. They were unable to transfer lime from the main tank to the day tank. There was chemical available and the team worked throughout the week on addressing this. They were able to resolve the issue by the end of the week.
- Although we were not moving water at the wetlands, staff were still checking on our pump stations. Mark Law,
 Wetlands Supervisor, was monitoring remote locations for any potential damage. The only issue that arose from the storm was an access road that washed out, temporarily limiting our access to the Main Stem Pump Station.
- Tyler Mott, Water System Asset Risk Manager, was hired in 2015 as a Water Operator II and worked for three years in the Control Room before being promoted to his current role in 2018. Despite no longer serving as an Operator, Tyler has maintained his TCEQ Water Operator license. The historic winter storm event caused a number of operational challenges that required all available operators to contribute. Without hesitation, Tyler jumped back into his old role as an operator. He used his experience and training to provide support in the Control Room and in the field around the Wylie WTP complex. Tyler is just one example of District staff rising to the occasion and doing what was necessary to keep water flowing, regardless of whether or not those duties fall within their current job descriptions.

"There are so many staff members that deserve recognition for their efforts'" said **Galen Roberts**, **Water Operations Technical Support Manager**. "There are several examples of staff who have changed departments volunteering to serve in their former capacities."

Transmission Systems

"We had far too many amazing employees to capture in a single conversation," said **Hunter Stephens, Water Transmission System Manager**. "There were multiple personnel who provided support outside of their regular job duties and jumped in wherever they could. There were so many challenges – but everyone was positive and worked toward solutions collectively. We saw major teamwork and commitment to mission success across the board."

- Matthew White, Lead Transmission System Operator, provided critical support of fast moving operational processes and offered field expertise in the control room while also updating records and answering phones. He assisted the control room operators in directing staff in the field to water delivery point infrastructure that is not easy to locate when under snow, ice or in the dark. In addition, Matt guided employees to perform in-field tasks that prevented damage to equipment and reduced the need for physical monitoring of some remote locations that lost power. Remote personnel at over 18 locations relied on Matt's direction and support. His expertise in transmission system functions and ability to communicate his knowledge to staff in the field was valuable and proved to be a critical component of keeping our customers in service.
- Jordan Williams, Lead Transmission System Operator, provided around-the-clock support by responding to multiple after-hour needs after working long hours during the day. He traveled across the District's service area responding to emergency events, leaks and outages while performing his duties safely in challenging conditions. No matter the hour, Jordan responded enthusiastically to any call for assistance and was a critical component in supporting delivery point visibility and response to emergency situations.
- Olin Schiffman, Transmission System Assistant Manager, was at work most of the time that week. However, it's important to note that Olin did not have electricity at his home throughout the event which meant that when he went home after work he did not have hot water or heat. Olin worked long hours before, during and after the winter storm event to ensure delivery of water to Member Cities and Customers was uninterrupted. His institutional knowledge of system operation was essential in supporting the control room with process changes and delivery of water during multiple concurrent system-wide issues.

WASTEWATER

**The District's resourcefulness was on full display during snowmageddon!

"Across Wastewater operations, it was clear that our generators saved us," said Jenna Covington, Assistant Deputy, Wastewater. "They operated at a number of locations for hours on end. and none of the generators under our control ran out of fuel. Being able to sustain operations through the course of this historic storm with generators is in large part due to the vision of now-retired Ken Wesson, Wastewater System Manager. He made generators a high priority over his many years of service at NTMWD."

Wastewater operations ran off generators at four of our wastewater treatment plants: South Mesquite, Panther Creek, Sabine Creek and Bear Creek; and nine of our lift stations: Renner Road, Plano Spring Creek #2, Preston Road, Upper Rowlett, Upper Cottonwood, Beck Branch, Princeton, Dublin, and Lakeside.

The two biggest challenges faced by Wastewater operations were getting fuel/diesel to the generators that were spread throughout the vast system and keeping solids in the plants under control when the ability to remove them was halted for several days due to the storm and road conditions.

CHALLENGES

- With 13 different sites running partially or fully off generators, our Facilities Services and Wastewater Operations staff shuttled diesel throughout the day and night to keep equipment operating. This was necessary because our contracted diesel delivery company was not able to provide service to refill our diesel fuel storage at our sites. By Tuesday, Feb. 16, a multi-department team was set up to coordinate diesel supply and demand to deploy resources to sustain operations. Joel Nickerson, Asset Risk Manager in Wastewater Operations, took on the role of the Team Lead and participants included representatives from Maintenance, Engineering, Accounting, Purchasing, Fleet, Emergency Management, Energy Manager, and Wastewater Operations.
- When it became apparent that we might not be able to keep generators fueled as they continued running, our colleagues from Engineering worked with their project consultants and contractors to locate fuel supplies on project sites. Contractors that usually support the District on paving, construction, and generator testing also offered their fuel supplies and ability to transport fuel. The City of Dallas delivered fuel to a pair of our generators to top them. Overall, we had 11 different external partners willing to assist allowing utilization of stored fuel and/or providing delivery to our sites.
- By Wednesday morning, all generator sites were fueled enabling us switch into maintenance mode. We put an emphasis on refilling the depleted reserves in bulk storage at 121. Energy worked with local utilities to report outages and get power back on to facilities so that many of those sites running on generators were back on utility power by Thursday morning.

- Jamie Nichols, Facilities Services, and Dept. 34 crew hauled fuel everywhere Tuesday morning through Wednesday evening, found and delivered drop tanks to extend supply at low-margin sites, and also coordinated Mustang Paving. Steve Kennemer, Construction Inspector, hauled fuel from gas stations to South Mesquite all Tuesday night until full.
- Our Fleet Department provided thousands of gallons of diesel from their tanks, coordinated deliveries of more supply, and stayed open 24 hours to accommodate withdrawal and delivery.
- Dan Spradlin, Wastewater Plant Supervisor III, and Craig Quillen, Chief Wastewater Plant Operator at Wilson Creek RWWTP coordinated staff and trucks/tanks including drawing fuel from sludge truck tanks to get started hauling to our sites. Wilson Creek transport drivers Philip Hicks, Duane Gallagher and Luis Gonzalez hauled fuel Wednesday into the evening for Conveyance. They pumped diesel fuel from the transport trucks into Wilson Creek storage tanks, then went around the UEFIS, and filled up generators that were about to run out of fuel.
- Jason Fisher, Wastewater Plant Supervisor II at Sabine Creek WWTP and crew, and Baron Snelgrove, Wastewater Plant Supervisor II at Panther Creek WWTP and crew hauled their own fuel so we could direct people to other needs. Jason has a friend working at RaceTrac who could see fuel inventory at all of their stores, and gave us leads on where diesel was available.

WASTEWATER CONT.

- Josh Boyd, Chief Wastewater Plant Operator at Rowlett Creek WWTP
 thought of the idea to draw from two big generators at Rowlett Creek with
 thousands of gallons of diesel in their tanks that were not yet in use and
 coordinated with the project contractor was willing to share it. We didn't use
 it, but it was a backup in case fuel delivery didn't come through.
- Marty Luke, Chief Wastewater Conveyance Operator and crew met fuel deliveries, provided tank levels and generator status, transferred fuel, and operated the conveyance system.
- Ashley Burt, Wastewater Project Coordinator coordinated partners
 beginning early on. She found the Flow-Line source and coordinated their
 hauling efforts, directed hauling by Wilson Creek staff, worked potential fuel
 suppliers, located retail sources of supplies, prioritized sites, among many
 others.
- Our Accounting Department got us set to buy large quantities of fuel in a hurry, and their work continues as they will process dozens of \$150 gas station receipts in the coming days.
- Sam Friar, Emergency Operations Program Manager, worked with EOC community, who offered whatever needed to get suppliers to deliver on Wednesday.
- Our Purchasing Department turned around new vendor setup in a hurry.
- Our Engineering Department put us into contact with many contractors, which turned into help hauling, delivering fuel supplies, and having backup supply. They offered their time coordinating, and cleared the Rowlett Creek generator tanks for us.
- So many of our managers, wastewater personnel and others assisted by contacting neighbor governments to locate resources.

"This cross departmental team stepped up to a huge challenge," added Covington. "And we hit a homerun!"

CONTRACTOR HELP

- Mustang Paving provided a person, fuel trailer, and hauled fuel Tuesday
 afternoon and night when we needed it most. They were ready to haul again
 Wednesday afternoon, but we were catching up by then.
- Flow-Line used their supply sources and delivered 2,000 gals to South Mesquite WWTP Tuesday night, then filled their tanker from gas stations (took several hours for each fill), and hauled fuel all day Wednesday. They hauled fuel on Thursday from 121 RDF's supply.
- McKee Utility delivered 7,500 gals of fuel from their facility near Oklahoma
 City on Wednesday to replenish Fleet's big tanks at 121 RDF when we were
 having trouble getting our local supplier to deliver.
- KW Power Systems delivered fuel Tuesday afternoon when most needed.
- Canary bought gas station fuel and hauled to our southern lift stations Wednesday, and were ready to help Tuesday when we needed it.
- Ark, PLW, Garney, Archer, Eagle all offered their onsite fuel tanks. These
 were our last resort resources if delivery didn't work out on Wednesday.
- Andrew from Garney coordinated their fuel supplier with us Wednesday while at the hospital having a baby.
- City of Dallas Fleet put us on their fuel delivery route to fill a pair of large generator tanks Thursday.

Fuel Supply Effort

"The District's resourcefulness was on full display during snowmageddon, and Wastewater benefitted from help by people across the District and beyond," said Joel Nickerson, Asset Risk Manager. "So many were involved in keeping our generators running to power our infrastructure."

The team setup mechanisms to track operating hours until empty to be able to deploy fuel to the most critical locations on a priority basis. Our conveyance operators were moving between lift stations 24/7 to collect information on fuel levels so we could direct fuel when needed. Purchasing and Accounting provided support through an emergency purchasing declaration that was approved to make these emergency large quantities of fuel possible from a variety of sources quickly. Internal and external fuel resources were identified including some of the Wilson Creek WWTP staff who started hauling for us by drawing fuel from the tanks of their sludge trucks, and Fleet who shared their supplies of fuel when locating other sources became increasingly difficult.

"The list of people who contributed to the effort is long," added Nickerson. "They offered their time, resources, contacts and information. They were so generous, we were able to make backup plans several layers deep to rely upon as the situation changed."

WASTEWATER CONT.

Wastewater Facilities Operations

"There are so many notable stories about our cold weather heroes," shared **David Brewster**, **Assistant Regional Wastewater System Manager**. "From across numerous facilities, teams braved the elements, worked together and kept operations running."

TEAM HIGHLIGHTS

Wastewater Treatment and Small Plants

- The whole team at Panther Creek WWTP worked outside in the freezing temperatures both day and night to continuously refueling their generator with 100 gallon loads from local stations. Their diligence to maintain the generator fuel level involved always keeping nearly 20 hours of reserve operating time available. Lead Wastewater Plant Operator Raymond Reynolds came in on his days off to when the washer compactor chute froze. He dug by hand or small tools the cold frozen and wet rags out of the chute to clear the frozen rags and debris. In addition, Rowlett Creek's Josh Boyd and Jason Pittsinger were able to get their wet hauling trucks ready and their driveway cleared to support alternative re-seeding from Panther Creek.
- At Muddy Creek WWTP, Mike Curry, Lead Wastewater Plant Operator, Ben Caudle, Wastewater Plant Operator II, and Anson Suarez, Wastewater Plant Operator III, each clocked 60+ hours. In fact, everyone that made it in to work ended up staying late each day to help with moving heaters around, keeping equipment clear of ice, and repairing water line breaks. David Earls, Chief Wastewater Plant Operator, coordinated the replacement of a blower motor to be able maintain activated sludge operations. The team also found several step screen lamellas that were bent or broken and required replacement. David Earls coordinated the work with Division 34 and the screens went from "found" to "fixed" in a single day!
- Although Stewart Creek WWTP suffered a wash out of the solids in Plant #2, the team worked together to re-seed aeration basins #1 and #2, restoring MLSS yield to over 5000 mg/L within two days.
- Across our small plants, and with the exception of one, Plant Supervisor Jason Fisher's whole team made it to work to keep all them operational. We had multiple members shuttling fuel to Lakeside Lift Station, which remained on generator for most of the cold weather event. The team worked extremely hard to keep Bear Creek WWTP processes fully operational. Even when Plant 1 WAS lines froze, the team worked tirelessly to thaw the line and get the plant back in service. Several members worked at the Sabine Creek WWTP not once, but twice to thaw the washer compactor on an elevated platform in freezing temperatures. Our Small Plants team is grateful to Technical Services and the Mechanic shop who lent the use of Tyler Matthews, Maintenance Shop Assistant, who was instrumental in maintaining the work load.







WASTEWATER CONT.

"We saw many examples of teamwork and dedication by all of the employees at Wilson Creek," said Morgan Dadgostar, Regional Wastewater System Manager. "We had operators picking others up when they couldn't get out of their driveways, and those with 4 wheel drive vehicles followed others home to make sure they were safe. Everyone looked out for each other, and I'm proud of all of them."

TEAM HIGHLIGHTS

Wilson Creek Regional Wastewater Treatment Plant

- In addition to Wilson Creek team members mentioned earlier assisting in the generator refueling effort, Micah Posey, Wastewater Plant Operation II, took action to continue working on the dewatering building heater to get it working, even after the HVAC contractor had given up on fixing it and left the plant site. His additional efforts were successful in raising the temps in the building from 10 degrees to 58 degrees.
- Joey Thorp, Chief Wastewater Plant Operator, and Lead Wastewater Plant Operators Daniel O'Brien, Randall Jenkins, Allen Spruill, and Joshua Forte, all made it to work every day even when the roads were terrible. O'Brien, Spruill, and Forte had all lost power at home for days during the storm, but got their families prepared to stay warm and fed, and then came in to work. We believe their wives should also be commended for their actions as well!
- Wastewater Plant Operators Gerry Mahrer, Joe Rivas, Andre Tyus, Dustin Bailey, Jeff Black, and Jonathan Doonan, also all made it to work despite their power being off and road conditions were dangerous. They cleared the plant roadways and parking lots, as well as plant structures. They applied sand and deicer at all the platforms where sampling needed to be done to provide safety to each shifts operators.
- Wastewater Plant Operators Randall Jenkins, Ryan Thompson, Ryan Biar, and Duane Stailey together fixed nonpotable waterline breaks throughout the plant as well as had to deal with the headworks spill and cleanup aftermath
 during some of the coldest days of the storm.
- When we needed to transfer power, John Henley, Plant Electrician, drove his own 4-wheel drive to the plant when his District vehicle wouldn't start. Henley came a second time help get the step screens running to stop the overflow.
- Robby Widboom, Wastewater Plant Operator worked from 7 a.m. to 10 p.m. overtime when the headworks overflowed. On his way home, the icy conditions caused him to slide off the road and hit a large rock. Widboom was back at work the next morning like nothing happened.

"Everyone at Rowlett Creek did an amazing job during the week of the snow, ice, and extremely cold weather," said Dadgostar. "However, the efforts of **Josh Boyd, Chief Wastewater Plant Operator, and Seth Pettit, Lead Wastewater Plant Operator,** need to be recognized as excellent and outstanding!"

TEAM HIGHLIGHTS

Rowlett Creek Regional Wastewater Treatment Plant

- During the worst of the cold weather, Rowlett Creek had to accept flow into the plant from Lower Rowlett Lift Station because of an issue at Wilson Creek RWWTP. The discharge pipes for the dedicated pumps from Lower Rowlett LS were frozen and had to be thawed out in the middle of the night. Once notified of the request to accept all flow from Lower Rowlett LS, the operators called Josh and informed him that the wet well level wasn't going down. Josh and Seth Pettit, Lead Wastewater Plant Operator, then proceeded to come out at 10 p.m. to resolve the issue to help Wilson Creek and get the pumps going.
- After Josh and Seth thawed out and got the Lower Rowlett LS pumps pumping into Train A, a missing plug on the Plano Lift Station influent line caused raw sewage to exit the wet well into the excavation for the Plano LS tie-in. The plus was missing because of the construction project. Josh and Seth then had to get the UD stopped, mitigate, pump out the excavation, and clean up/disinfect the excavation. Josh and Seth ended up working in -10 degree weather (or colder) that night taking care of these issues. Once done, it was 3:30 a.m. and since the roads were frozen over, they decided it was best to get some sleep at the plant instead of going home since they were due back later that day. Josh and Seth clocked out, somehow got some sleep, and then ended up operating the plant that same morning for operators that couldn't make it because of the icy road conditions. During that day's operation, they found frozen and busted sump pump discharge lines in the Lower Rowlett LS and Plano LS. These have to be repaired as soon as they are discovered otherwise they can cause the dry wells to flood, and then the pumps will fail. Josh and Seth subsequently had another very busy day in the ice and extreme cold, after a very long night in those same conditions.
- Each day, there were several operators that reached out to **Josh Boyd, Chief Wastewater Plant Operator**, for help getting to work. He went out of his way to give these operators rides to and from work.

COMMUNICATIONS and PUBLIC RELATIONS

In every disaster or emergency situation, providing critical information to strategic partners and the press rarely gets a break. When the situation extends for days and days, effective strategic communication and combating misinformation requires a dedicated team who is at the ready for every surprise.

"NTMWD's communications team really stepped up during the February storm," commented **Billy George**, **Assistant Deputy Water**. "The cross-departmental team did a fantastic job throughout the emergency to keep a worried public informed with accurate information at a time when water systems all over Texas were failing and the dedicated professionals at NTMWD were winning the battle against the storm."

TEAM HIGHLIGHTS

- Recently retired Water Resources and Public Education Manager, Denise
 Hickey stepped up to take on numerous interviews as she had done
 throughout her entire career at NTMWD. She provided timely, accurate
 information to reporters and press throughout the week.
- Kathleen Vaught, Public Relations Specialist, was exceptional in writing
 essential releases, website updates, and social media updates in real-time
 to not only provide critical updates for the general public but help correct
 misinformation and reassure residents during very challenging conditions.
- Jeff McKito, Public Relations Specialist, stepped into the lead public relations role for a sanitary sewer overflow when Denise and Kathleen were both working equally critical and timely matters.

"They are all to be commended," continued George. "And their dedication to regional service was evident throughout. Our Member City and Customer communities benefitted from their efforts!"



