



Harris County

Municipal Utility District

No. 81

THIRD QUARTER • 2021

HC MUD 81 Board of Directors

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Have a question?

- WATER BILL**
MUD 81 MAIN OFFICE:
281-392-8112 (M-F, 8am-2pm)
MDS: 281-290-6500 (24/7)
- WATER OR SEWER ISSUES**
MDS: 281-290-6500 (24/7)
- TRASH SERVICE**
BEST TRASH:
281-313-2378
- TAX BILL/PAYMENT**
WHEELER & ASSOCIATES:
713-462-8906
- GENERAL QUESTIONS**
ABHR/LEGAL:
713-860-6400

HARRIS COUNTY MUD 81

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Katy, Texas, 77450
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Note from the Board of Directors

Happy summer, and welcome to the third quarter Harris County Municipal Utility District No. 81 (MUD 81) newsletter. As we begin to emerge from the COVID-19 pandemic, the Board has reopened the administration building for MUD 81 Board meetings and for other governmental entities' Board meetings. MUD 81 has not resumed private rental of the administration building at this time, but please visit the MUD 81 website, hcmud81.com, for the latest information.

As discussed further below, the MUD 81 Board wishes to thank everyone who came out and voted in the May 1st bond election and helped to make it such an overwhelming success. We are excited about moving forward with drainage improvements in the community to help reduce the risk of flooding in future large rain events. The MUD 81 Board also has investigated the operational and communication issues that occurred during Winter Storm Uri. Read on for more information on the water system and communication improvements we are implementing to better serve our community.



New Email/Text Alert System Coming Soon

One of the issues experienced by many residents during Winter Storm Uri was communication difficulties due to extended power, cable, and Internet outages throughout the Houston area. In order to improve communication to our residents, the MUD 81 Board is launching a voluntary email and text alert system to deliver important MUD 81 news directly to your inbox or text app. More information regarding how to sign up for these alerts will be coming soon in upcoming water bills, and posted to the MUD 81 website, hcmud81.com.

Proposed Storm System Improvements

For more than two years, MUD 81 has been coordinating with Harris County regarding Harris County's proposed drainage improvements within MUD 81 for the Memorial Parkway Subdivision and Cimarron Subdivision – Sections 2, 3, 4, and 5, both located in Harris County, Precinct 3. Harris County has hired the MUD 81 Engineer, BGE, Inc. (BGE), to provide engineering services for both projects, and the engineering work is underway.

Cimarron Sections 2,3,4, & 5:

BGE has completed the required surveys, and the environmental work and geotechnical field work are complete. Final design of the proposed drainage improvements is underway and expected to be completed by August 2021. The proposed improvements include upsizing storm sewer lines, installing additional surface drains, and upsizing the outfall into the adjacent Harris County Flood Control District channel to help increase drainage capacity.

Memorial Parkway:

BGE has completed the field work and is continuing with the design of the Memorial Parkway drainage improvements. The proposed improvements include upsizing storm sewer lines, installing additional surface drains, and constructing

a new detention pond underneath the power lines north of Highland Knolls. In late August 2020, Harris County notified MUD 81 that the County had redefined the scope of the Memorial Parkway project to include significant additional detention/mitigation capacity, which they stated would be required due to new drainage criteria. Discussions are still ongoing regarding the design and location of new detention facilities. Because of the regional benefit that the detention facilities would provide, MUD 81 has requested and Harris County has agreed to coordinate with other nearby MUDs to request that those MUDs also share in the costs of the project.

Future Improvements to Barker Reservoir:

Improvements to the drainage systems as outlined in the two projects above are expected to impact Barker Reservoir. Barker Reservoir's operations and improvements are controlled by the US Army Corp of Engineers. Any future mitigation/detention projects within Barker Reservoir will affect all MUDs that contribute stormwater to this reservoir. It is anticipated improvements to Barker Reservoir would be considered as a regional improvement and, therefore, costs will be shared by all affected MUDs.

Results of Bond Election and Next Steps:



On May 1, 2021, MUD 81 held a bond election to ask its voters whether MUD 81 should be authorized to issue \$8,500,000 in water, sewer, and drainage facilities bonds to pay for MUD 81's share of Harris County's proposed drainage improvements for the Memorial Parkway Subdivision and Cimarron Subdivision – Sections 2, 3, 4, and 5. The MUD 81 Board is excited to report that the bond election passed overwhelmingly, with more than 84% of the voters who participated in the election voting in favor of the bonds. The MUD 81 Board would like to express their sincere appreciation to all of our residents who participated in MUD 81 meetings to discuss this important project and who came out and voted in the election.

After the MUD 81 Board completes certain legal requirements in the upcoming months, we hope to sell the bonds either in late 2021 or early 2022. The MUD 81 Board is excited to move forward with this important project, which we anticipate will improve resiliency and reduce or eliminate future structure flooding in our community.

The Freeze of February 2021: Lessons Learned

As you know, during Winter Storm Uri in February 2021, MUD 81 issued a boil water notice. This occurred because the pressure in the MUD 81 water supply system dropped below the state-mandated minimum threshold when power outages and freeze-related equipment failures caused certain water plant facilities to go offline at the same time water demand surged due to a combination of voluntary faucet dripping and unexpected leaking and burst pipes.

The MUD 81 Board is committed to improving our water system to reduce the risk of these types of failures if we experience a similar freeze event in the future. In particular, the MUD 81 Board directed the engineer and operator to conduct a detailed review of MUD 81's water supply facilities, and they have made recommendations to the MUD 81 Board for ways to enhance the resiliency of our water system to prevent or reduce the risk of a recurrence of the issues experienced during Winter Storm Uri. Some of the important improvements MUD 81 will be undertaking to our water system include:

- **Sensing Lines:** These are small diameter copper lines used to control the filling and use of water in ground storage tanks. They also contain sensors that help to minimize the risk of certain water system equipment becoming over-pressurized. Even though these lines were insulated, the extreme low temperatures experienced during Winter Storm Uri caused these lines to freeze and effectively shut down operations for several of our water plants. MUD 81 currently is investigating installing wireless transmitters/receivers to replace the lines or installing heating elements to prevent future freezing events.
- **Disinfection Systems:** The type of disinfection is currently used at all of MUD 81's water plants requires the control buildings to have significant ventilation to prevent the build-up of potentially harmful gases in the air. Each building was equipped with a heater, but the extreme low temperatures experienced during Winter Storm Uri combined with the ventilation system caused numerous pipes to freeze and break. MUD 81 currently is replacing the disinfection systems at all water plants to eliminate the need for such robust ventilation and allow the building heaters to function as intended in low temperature conditions.
- **Valves:** Several large, 12-inch valves froze and cracked during Winter Storm Uri, including at water plant no. 3. Due to expected conditions in the Houston region, typically we only insulate 3-inch or smaller diameter pipes. MUD 81 is looking into purchasing and storing pipe segments, which could bridge the gap and allow our water plants to continue functioning if valves freeze and crack in the future. These would be left in place until new valves could be obtained and installed once the freeze event has ended.
- **Emergency Generator Fuel Supply:** Historically in the Houston area, it was standard engineering procedure to convert diesel-powered backup generators at water plants and other facilities to natural gas. This is because natural gas flows through permanent lines, whereas diesel fuel tanks require periodic refueling during extended power



outage events. The extreme low temperatures during Winter Storm Uri resulted in very high natural gas usage throughout the Houston area and Texas. This extreme demand reduced the pressure in the natural gas supply lines to low enough levels that some of MUD 81's natural gas-powered emergency generators would not start. The District currently has natural gas emergency generators at Water Plants No. 1, No. 3, and No. 4. A natural gas powered emergency generator was scheduled to be installed at Water Plant No. 2; due to issues with the freeze this emergency generator will be diesel powered.

Ongoing Construction Projects

- **Sanitary Sewer Rehabilitation – Memorial Parkway Sections No. 1 & No. 2.** MUD 81 advertised for competitive bids for the Memorial Parkway Sections 1 and 2 sanitary sewer rehabilitation project and has awarded the project to the lowest qualified bidder, Texas Pride Utilities, LLC. Work is in process.
- **Alternate Fill Lines for Ground Storage Tanks at Water Plant No. 1, No. 2, and No. 4.** MUD 81 advertised for competitive bids for the addition of an additional fill line for the ground storage tanks at water plant nos. 1, 2, and 4 and has awarded the project to the lowest qualified bidder, Blastco Texas, Inc. Work is expected to begin in July 2021.
- **Disinfection System Upgrades at WTPs No. 1, No. 2, No. 3, and No. 4.** MUD 81 advertised for competitive bids for the upgrade of disinfection systems at all four water plants and has awarded the project to the lowest qualified bidder, W.W. Payton, Inc. Work is expected to begin in July 2021.

Water Conservation

As we enter the hot summer months, water usage generally increases as sprinkler use increases for your yard and landscaping. But water conservation is something that all of us can engage in year-round. Below are some tips to help conserve water inside your home and outdoors in your yard. Conserving water not only helps to protect our potable (drinking) water resources, but it also helps to save you money by reducing your water bill!

TIPS FOR SAVING WATER INDOORS

- Verify that your home is leak-free. Many homes have hidden water leaks. Read your water meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, there likely is a leak.
- Repair dripping faucets by replacing washers. If your faucet is dripping at the rate of one drop per second, you can expect to waste 2,700 gallons per year, which will add to the cost of your water bill.
- Check for toilet tank leaks by adding regular (not gel) food coloring to the tank. If the toilet is leaking, color will appear in the bowl within 30 minutes. Check the toilet for worn out, corroded, or bent parts. Most replacement parts are inexpensive, readily available, and easily installed. (Flush as soon as the dye test is done because food coloring may stain the tank.)
- Avoid flushing the toilet unnecessarily. Dispose of tissues, insects, hair, and any other waste other than toilet paper and human waste in the trash can rather than the toilet.
- Consider replacing your showerhead with an ultra-low-flow version.
- Don't let water run while shaving or washing your face. Brush your teeth first while waiting for water to get hot, then wash or shave after filling the basin.
- Operate dishwashers and clothes washers only when they are fully loaded, or properly set the water level for the size of load you are using.
- When washing dishes by hand, fill one sink or basin with soapy water. Quickly rinse under a slow-moving stream from the faucet.
- Insulate your water pipes. You'll get hot water faster plus avoid wasting water while it heats up. And it could help prevent freezing if we have another event like Winter Storm Uri!

TIPS FOR SAVING WATER OUTDOORS

- Don't overwater your lawn. As a general rule, lawns only need watering every 5 to 7 days in the summer and every 10 to 14 days in the winter. A hearty rain may eliminate the need for watering for as long as two weeks. For more information, or to sign up for customized watering tips and alerts, visit www.IrryGator.com.
- Water lawns during the early morning hours when temperatures and wind speed are the lowest. This reduces losses from evaporation.
- Don't water your street, driveway or sidewalk! Position your sprinklers so that your water lands on the lawn and shrubs, not the paved areas.
- Install sprinklers that are the most water-efficient for each use. Micro and drip irrigation and soaker hoses are examples of water-efficient methods of irrigation.
- Regularly check sprinkler systems and timing devices to be sure they are operating properly.
- Consider raising your lawn mower blade to at least three inches. A lawn cut higher encourages grass roots to grow deeper, shades the root system and holds soil moisture better than a closely-clipped lawn.
- Avoid overfertilizing your lawn. The application of fertilizers increases the need for water. Apply fertilizers which contain slow-release, water-insoluble forms of nitrogen.
- Mulch to retain moisture in the soil. Mulching also helps to control weeds that compete with plants for water.
- Do not leave sprinklers or hoses unattended. Your garden hoses can pour out 600 gallons or more in only a few hours, so don't leave the sprinkler running all day. Use a kitchen timer to remind yourself to turn it off.
- Check all hoses, connectors and spigots regularly.



County Judge Lina Hidalgo
DIRECTOR

EMERGENCY ESSENTIALS KIT

» www.readyharris.org

Believe it or not, hurricane season is right around the corner! Whether it is flooding or a hurricane or tropical storm, emergency preparedness isn't just smart planning, it is a necessity. It only takes one catastrophic event impacting the Houston area to cause damage to your home or business. One step you can take is to assemble an emergency essentials kit now to avoid the large crowds later! Please visit Harris County's emergency preparedness website, readyharris.org, to sign up for emergency alerts and for more important information.

Preparedness in Harris County is not just for Hurricane Season. Avoid panic buying by stocking up on these items over the entire year. It is safer, more efficient and less expensive than waiting until disaster strikes.

FOOD:

- 7-day supply of non-perishable food
- Hand-operated can opener
- Plastic plates, cups & utensil

WATER:

- 1 gallon of drinking water per person, per day enough for 7 days

FIRST AID:

- American Red Cross approved first aid kit
- Backup prescriptions for essential medications

PERSONAL HYGIENE:

- Hand sanitizer (minimum 60% alcohol)
- Dental care and vision products
- Travel-size soaps and other beauty supplies
- Change of clothes, shoes & blanket per person

CLEAN AIR ITEMS:

- Cloth face coverings (N-95 masks if available)
- Plastic sheeting
- Duct tape

BABY ITEMS:

- Formula, bottles and powdered milk
- Diapers
- Baby wipes
- Diaper rash ointment

HOUSEHOLD ITEMS:

- Disinfectant wipes
- Toilet paper, paper towels and garbage bags
- Non-scented bleach for sanitization

LIGHTING:

- Flashlights per person with extra batteries
- Fluorescent lanterns for each common area
- Waterproof matches or a utility lighter

COMMUNICATION:

- Portable, battery-powered radio
- Landline phone with long cord
- Extra batteries for flashlights, lanterns and radio
- Extra cell phone battery or car charger
- Whistle

FAMILY SAFETY ITEMS:

- Smoke detector with battery for each floor
- Carbon monoxide detector with battery backup
- Fire extinguisher
- Sunscreen
- Insect repellent
- Shovel and basic tools

TRANSPORTATION ITEMS:

- State and regional road maps
- Basic repair items (tools, tire patch kit, engine oil)
- Games, books and puzzles

PET NEEDS:

- 7-day supply of non-perishable pet food & water
- Crate or pet carrier and leash
- Pet medications and pet first aid kit
- Current photo in case you are separated
- Cat litter and box
- Pet bed and toys



ReadyHarris

Be #ReadyRoundtheClock