RATE INCREASE Presentation



Undine: from Greek mythology. Undine was the Earth's Protector of Water. She often appeared before man as a Mermaid.



UNDINE TEXAS, LLC Regulated Water and Wastewater Utilities

Emphasizing Regulatory Compliance and Quality Customer Service



UNDINE TEXAS, LLC

Regulated Water and Wastewater Utilities Emphasizing Regulatory Compliance and Quality Customer Service

Founded in 2016 to acquire and renovate privately-owned water and wastewater utilities, Undine has taken on the challenging and rewarding role of bringing desperately needed improvements to utilities across Texas. We pledge to be responsive in our communications with the community, our customers, and the state regulators.

We are committed to achieving regulatory compliance in all of our systems by:

- making cost-effective improvements
- eliminating violations
- improving customer service

Undine's dedicated management team has provided proven experience and expertise in the acquisition of and the management and operation of utilities, along with bringing regulatory compliance to privately-owned water and wastewater systems for over 20 years.

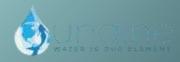
"We offer the unique ability to bring excellent customer service and sorely-needed utility benefits to residents across the state who have been without adequate water service for far too long. "

Undine Founder and President, Ed Wallace



UNDINE Benefits to Texas Utilities:

- Experienced management
- Ample capitalization
- Adherence to NARUC (utility)accounting
- Prompt regulatory compliance coordination of improvements through TCEQ
- Improved customer and regulatory affairs
- 1. Commitment to customer service and reputation
- 2. Dedication to "cost-effective" improvements and minimal rate impact
- 3. Better coordination and communication with customers and regulators



IN ORDER TO IMPROVE WATER SERVICE IN AGING UTILITIES OUR CAPITAL PLAN INCLUDES:

- Installation of: new ground storage tanks, water treatment plants, booster pumps, electrical controls, disinfection equipment, back-up generators and additional wells as needed
- Clearing and removal of the old storage tanks, water plants, equipment
- Addressing Water Loss Through: meter replacement plan, leak repairs, isolation valves, flush valves



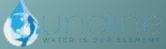
Typical Old Pump Houses "BEFORE" Replacement











We find deplorable conditions in many of the utilities we acquire





12/23/2019

New Undine Pump House / Control Room



Pumps and electrical components are protected and secured for better longevity and operational consistency





New Control Room/ Pump House

- All new electrical components
- Computerized monitoring
- Security of chemicals for water treatment
- New gauges, controls, pumps
- Protection of all of the above





12/23/2019







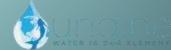




We also provide NEW storage tanks and pressure tanks wherever needed







Before After











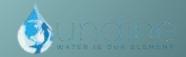
Before After











Regulated Water and Wastewater Utilities



Water – What you need to know



Regulated Privately-Owned Utilities (Investor Owned Utilities / "IOU")

- Must meet all regulatory guidelines and cleanwater standards, just like the larger city utilities
- EPA surveys have shown the small IOUs around the country have the most violations
- EPA has determined the best future for small aging IOUs is to be purchased by a large, responsible utility with capital to make **needed improvements**
- IOU rates reflect full cost of service
- Rates, service and complaint resolution are under the jurisdiction of the Texas PUC



The Texas Utility Regulators

"PUCT"

Public Utility Commission of Texas has jurisdiction over privately-owned utilities' rates, service and complaint resolution.

"TCEQ"
Texas Commission On Environmental
Quality oversees the rules, regulations and
permitting that ensure safe drinking water and clean
wastewater treatment.



Public Utility Commission of Texas

What We Do: (Rates and Service)

The Public Utility Commission of Texas regulates the state's electric, telecommunication, and water and sewer utilities, implements respective legislation, and offers customer assistance in resolving consumer complaints.

Mission:

We protect customers, foster competition, and promote high quality infrastructure.

512-936-7000 http://www.puc.texas.gov/





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

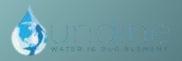
The Texas Commission on Environmental Quality strives to protect our state's public health and natural resources consistent with sustainable economic development. Our goal is clean air, clean water, and the safe management of waste.

We ensure safe drinking water:

- Reporting, monitoring, notification requirements regarding water quality
- Wastewater and storm-water permitting requirements
- Participation in the permitting process

512-239-1000

http://tceq.state.tx.us/



Primary Water Utility Issues

Capacity

Quality

Operations



Capacity

- TCEQ sets capacity requirements that must be maintained for the water well and storage, based on the number of connections. Storage must provide at least 200 gallons per connection.
- "Drought Plan": In order to always maintain a minimum household pressure of 35 psi, utilities must produce and enforce a drought plan, designed to decrease water consumption in times of very high usage. To achieve this, outside irrigation may be restricted. These plans are a requirement of the TCEQ.



Water Quality

What Causes Water to Become Discolored?

• "Brown" water – Naturally occurring minerals (primarily iron and manganese) flowing with the water are typically to blame for water discoloration. These minerals, which are heavier than water can settle in water pipelines (and storage tanks) when water usage is low. Water utilities frequently attempt to minimize water discoloration by flushing out their systems on a regular basis.*

*DrinkTap.org - By American Water Works Association



Quality Issues

Iron/manganese – these are "secondary constituents" with only an aesthetics parameter. Although, according to the EPA, these are not a health concern, it is an issue we take very seriously.

Treatment Options:

- **1. Flushing** helpful in removing discolored water, but can be problematic for systems with low water capacity or pressure issues
- **2. Sequestering** a polyphosphate solution is added to the raw water to keep particles from becoming "discolored"
- **3. Filtration** very expensive, high water loss
- 4. **Reverse Osmosis** prohibitive in most smaller, non-municipal systems due to high cost, water loss and discharge requirement





National Secondary Drinking Water Regulations (NSDWRs)

- Guidelines for regulating contaminants that may cause cosmetic effects, aesthetic, or technical effects that are not health-threatening.
- If present in your water the contaminants may cause the water to appear cloudy, colored, or to taste or smell bad.

Boil Water Notices

A Boil Water Notice (BWN) is issued as a precaution or notification to protect consumers from drinking water that may have been contaminated.

Delivery Method Options

Furnish copy to Radio/TV in the service area Publication in a local, daily newspaper Direct delivery or continuous posting (door hangers, neighborhood signs) Electronic delivery or alert systems (text or email notices)

Recension of BWN

Once the distribution system has been flushed, disinfectant residuals are consistently maintained above the minimum regulatory requirements (o.2 mg/L free chlorine or o.5 mg/L total chlorine) in each finished water storage tank and throughout the distribution system and microbiological samples are collected throughout the system and analyzed by an accredited lab are found negative for total coliform organisms, THEN, the BWN is rescinded.



Operations

Undine is highly committed to:

- Maintaining regulatory and environmental compliance (testing, reporting, etc.)
- Achieving utility "best practices", problem solving, keeping costs down, minimizing rate impact
- Regular customer communications and responsiveness



Food and Water in an Emergency





Emergency Water Supplies

Having an ample supply of clean water is a top priority in an emergency. A normally active person needs to drink at least two quarts (half gallon) of water each day. People in hot environments, children, nursing mothers, and ill people will require even more. You will also need water for food preparation and hygiene. Store at least one gallon per person, per day. Consider storing at least a two-week supply of water for each member of your family. If you are unable to store this quantity, store as much as you can.

To view the Full Article: https://www.fema.gov/pdf/library/f%26web.pdf



Rates

How and Why Rates Change

Rates must cover all the components and costs of providing water:

- Additional investment in the utility system (repairs, replacements, improvements)
- Reasonable Increases in Operations & Maintenance costs
- Earning a reasonable rate of return ensures continued investment and compliance by private utility owners

The Rate Process:

- File an application with the PUC
- Provide notification to customers
- Expenses must be "used and useful", "reasonable and necessary"
- The PUC conducts an audit of the company expenses
- A hearing is held where customers may provide input



PROPOSED RATES

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Base Charge
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water \$ 58.30

wastewater 131.65 (flat rate, not subject to usage)

Water bill for 5,000 gallons would be \$ 72.30 10,000 gallons would be \$ 90.58

Subsidence and Conservation Districts"Pass Through" Fees

- The use of well water in Texas is causing the ground to subside, or SINK, in some areas.
- In 1985 Texas began requiring the use of Groundwater Conservation Districts to reduce the use of groundwater. To reach required goals, Subsidence or Conservation Districts are established, placing fees on use of ground water. These fees are charged to utility companies who pass them directly on to their customers, based on customer usage.
- There are many different Conservation districts throughout the Undine utility systems. Their fees for water usage varies widely. Not all Undine systems have these pass through fees.

Rising Water Rates in America

Reference: February 2012 CNN Money Report

- A study by the American Water Works Association found that repairing and expanding the U.S. drinking water system between 2011 and 2035 will cost at least \$1 trillion, an amount that will be paid by increasing household water bills.
- Many consumers could see their water bills double or even triple, as the country attempts to overhaul its aging water systems.

http://money.cnn.com/2012/02/27/pf/water_bills/index.htm?source=cnn_bin



COMMUNICATIONS

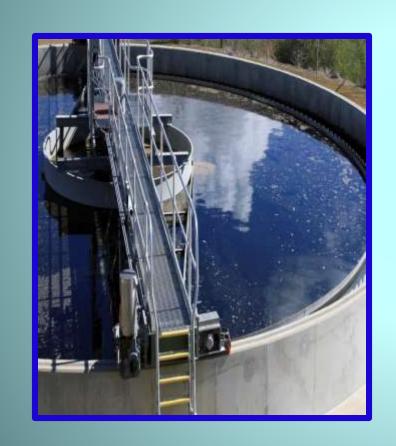
"IRIS" Alert Notification System – Coming Soon. We're very pleased to be able to provide our customers with up-to-the-minute communications in the future! Look for our letter regarding how to sign up for text and email messages.

"Service Agreement" -

The service agreement is a part our Application for Service. It's a TCEQ requirement that protects the water supply from outside contamination.

UNDINE

Also Owns and Operates Regulated Wastewater Utilities



What is the environmental problem with "FOG" (FATS, OIL, GREASE) in our sewers?

EPA's report to congress on sewer overflows identifies grease from "restaurants, homes and industrial sources" as the most common cause of blockages (47%). Grease is problematic because it solidifies, reduces system capacity and blocks flow*.

*EPA's Office of Water -2007





Avoid putting fats, oils or grease down the drain!

Grease solidifies and causes sewer spills





12/23/2019

Proper Sewer Spill Cleanup:

vacuum, flush, vacuum, disinfect



Final Thoughts

- We appreciate our customers' thoughts and concerns!
- Anytime you experience low water pressure or water quality problems, please call our customer service department so we can take proper action.
- Our website also contains useful information regarding conservation tips, links to the State Regulatory Agencies, answers to your Frequently Asked Questions, and each system's rates, charges and applications for service.
- You will also find the link to Pay Your Bill online.

