

NBU® **NEW BRAUNFELS**
UTILITIES

Water Conservation Plan

2024



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Acronyms and Abbreviations

AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
ASR	Aquifer Storage and Recovery
BMPs	Best Management Practices
CCS	Conservation and Customer Solutions
CIP	Capital Improvement Plan
FTE	Full-time employees
gpcd	Gallons per capita per day
NBU	New Braunfels Utilities
NRW	Non-revenue water
SAWS	San Antonio Water System
TCEQ	Texas Commission on Environmental Quality
TWDB	Texas Water Development Board

A Note from NBU's Conservation Team

The City of New Braunfels has long been known for its rich heritage, vibrant community, and the pristine waters of the Edwards Aquifer and the Comal and Guadalupe Rivers. As we cherish the beauty and vitality that water brings to our lives, we also bear the responsibility to protect and preserve this invaluable resource.

In this New Braunfels Utilities Water Conservation Plan, we outline the methods and practices necessary to secure the future of our city and its unique natural surroundings. It is a testament to NBU's commitment to sustainable living and responsible stewardship of our water resources.

Amidst the challenges of increasingly severe weather patterns, a rapidly growing population, and the changing demands of our dynamic community, this plan serves as our guidance document. The plan also meets requirements put forth by the Texas Commission on Environmental Quality (TCEQ) and the Texas Water Development Board (TWDB).

In the pages that follow, you will find strategies, recommendations, and actions that underscore NBU's dedication to water conservation. Together, we embark on this journey, united by our admiration for New Braunfels and a shared responsibility to protect the life-giving force of water that sustains us all. With your help, we can make a difference for our community and our environment.

Let us embrace this plan with open hearts and determined minds, for it is through our actions that we will secure a brighter, more sustainable future for New Braunfels. For more information on current NBU water conservation efforts, please visit us at nbutexas.com/conservation or call us at 830.608.8925.



Andrew Cummings
Conservation and Customer Solutions Manager
New Braunfels Utilities

1 Water Conservation Planning at NBU

The New Braunfels community has established a vision “to ensure water remains a celebrated and protected feature of our community by collaboratively managing our water resources to safeguard watersheds, waterways and groundwater” (New Braunfels One Water Roadmap). Responsible water resource planning includes a shared community responsibility to proactively pursue water conservation.

In every Central Texas community and across the state, growth is increasing demand for water. In NBU’s service area, population has been increasing at an average of more than 5% per year and rapid growth is forecasted to continue. NBU’s recent Water Resources Plan Update (2023) projects the number of residents in NBU’s service area to double by 2050. Drought conditions further exacerbate the stress on local water supplies.

To ensure sufficient water supplies are available to support residential and business water needs for current and future generations, utilities in the region are pursuing various strategies to increase water supply and decrease demand. As local water resources are generally fully allocated, communities including New Braunfels are turning to expensive measures such as importing new water supplies long distances (e.g., over 50 miles) to increase the water supply available to residents. Water conservation is the most economical and sustainable source for water because it aims to proactively reduce the amount of water required to meet customer needs. This less disruptive approach of meeting water needs through reduced demand provides additional benefits that strengthen the community and safeguard our water resources. Water conservation:

- Reduces costs required to accommodate greater demand, thereby reducing future rate increases. Cost savings come from eliminating or delaying the need for additional supplies (which are increasingly expensive as availability decreases), reducing system operating costs, and avoiding additional infrastructure required to accommodate greater demand.
- Increases watershed sustainability; reducing unnecessary usage helps ensure regional water sources remain healthy and reliable supplies now and into the future.
- Reduces environmental impacts, including by reducing the energy requirements associated with pumping and treating water.
- Preserves recreational flows, protects endangered species and local wildlife, and promotes biodiversity for future generations to enjoy by reducing reliance on the Edwards Aquifer and Guadalupe River.

1.1 Our Water Conservation Goals

NBU’s goal for water conservation is to reduce non-revenue, residential, commercial, and institutional water use to postpone or eliminate the need for additional water supplies and to protect our existing water supplies. Specific objectives for NBU’s conservation program include:

- Maintain compliance with the Texas Water Development Board (TWDB) and Texas Commission on Environmental Quality (TCEQ) water conservation and water loss requirements.
- Increase the annual volume of water saved through conservation strategies.
- Develop a robust database management system (information collection and analysis procedures) to better understand water consumption and track conservation activities impact on water resources.
- Promote innovation in water conservation while pursuing cost-effective strategies.

1.2 Conservation Plan Purpose

This Conservation Plan reviews historical water use trends and documents the conservation strategies selected by NBU for implementation from 2024 through 2029. This document also serves to fulfill the Conservation Plan requirements established by TWDB and the Texas Commission on Environmental Quality (TCEQ). Refer to **Appendices A** and **B** for more information on regulatory requirements.

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2 Water Use Trends

The water produced by NBU serves a variety of purposes as illustrated in **Figure 2-1**. There are conservation strategies that could reduce demand for each of these use types, and thus to prioritize conservation efforts and funds, more information is needed. This section describes analysis of NBU’s historical water demands to better understand the opportunities for greatest impact.





RESIDENTIAL		NON-RESIDENTIAL	
Customer Types:		Customer Types:	
 Single-Family freestanding house	 Multi-Family apartments, duplexes, etc.	 Institutional public buildings, hospitals, schools, parks, etc.	 Commercial Businesses hotels, restaurants, stores, banks, etc.
Types of Use:		Types of Use:	
OUTDOOR USE	INDOOR USE	OUTDOOR USE	INDOOR USE
Examples: <ul style="list-style-type: none"> • Landscape Irrigation • Swimming Pools • Car Washing 	Examples: <ul style="list-style-type: none"> • Bathroom • Kitchen • Laundry 	Examples: <ul style="list-style-type: none"> • Construction • Car Washes • Athletic Fields • Landscape Irrigation 	Examples: <ul style="list-style-type: none"> • Bathroom • Kitchen • Laundry • Medical Equipment • Water Cooling/Heating
NON-REVENUE WATER: Firefighting, Water System Maintenance, Water Line Breaks, Aquifer Storage & Recovery			

Figure 2-1 Customer Groups

2.1 Historical Per Capita Demand

Per capita demand is the average water consumption per resident per day, presented as gallons per capita per day (gpcd). It is calculated by taking total system usage and dividing by the number of residents within the service area. While it provides a standardized metric, this measurement is imprecise as a large percentage of system usage is not tied to the number of residents served by a utility but instead businesses (which can serve and employ individuals outside of the service area), institutions, visitors, and non-revenue water.

As shown in blue in **Figure 2-2**, the average total system water use per resident over the last ten years has varied between 120 and 140 gpcd. Variability in per capita demand from year to year is expected as usage is impacted by a variety of factors including weather and climate changes, economic conditions, regulations, conservation programs, and even pandemics like COVID-19. Due to the various factors that impact gpcd, total per capita demand can be difficult to interpret when evaluating potential conservation programs.

NBU’s gpccd has also been impacted recently by implementation of an Aquifer Storage and Recovery (ASR) demonstration in 2021. This strategic underground water reservoir is a key component of NBU’s water supply resiliency plan. However, producing water to store in this reservoir contributed an additional total per capita demand of 5 gpccd in 2022. The total per capita demand, had ASR not been underway, is shown in orange in **Figure 2-2**.

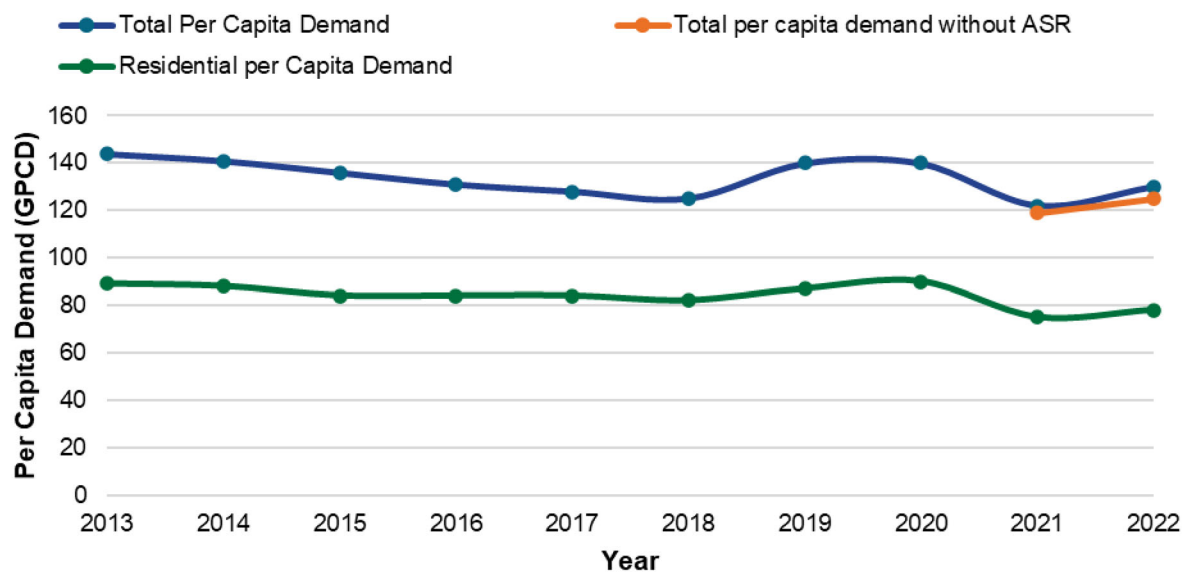


Figure 2-2 NBU Per Capita Water Demand Between 2013-2022

As an alternative metric, the residential per capita demand is also shown in green in **Figure 2-2**, which is the volume of water used by single- and multi-family customers divided by the number of residents in NBU’s service area. Over the last five years, the residential per capita demand has ranged from 75 to 90 gpccd, with water use for the most recent two years below 80 gpccd. As with overall gpccd, residential per capita demand has been slowly decreasing over the last 10 years except during 2019, 2020 and 2022 when slight increases were observed compared to the prior year. This decline could be attributable to a variety of factors including COVID-19, NBU conservation measures, water-saving appliances, and changing demographics (e.g., a larger percentage of multi-family homes). Thus, additional data are required to determine whether the recent trends are indicative of long-term reductions in use for residential customers.

What is a good per capita demand?

Recognizing the need to address the global water shortage crisis, global industry leaders have partnered with public and civil society institutions to form the 50L Home coalition¹. This coalition has adapted a goal of achieving a future at home water use of only 50L per day per person, which is equivalent to 13 gpccd! These industry leaders are striving to accelerate innovation of sustainable and financially viable solutions to achieve this goal.

Peer water systems implementing proactive conservation programs can also provide reference points for consideration. Southern Nevada Water Authority (providing water to Las Vegas) has a goal to achieve 105 gpccd as the total per capita demand by 2035. Locally in central Texas, San Antonio Water System (SAWS) aims to reduce total per capita demand to 88 gpccd and residential per capita demand to 55 gpccd by 2070. Austin Water has also projected achieving a per capita demand for potable water of 79 gpccd by 2070. However, consideration of differences in community characteristics, such as percent multi-family, are important to consider when comparing against these goals.

While progress has been made, a more significant reduction in per account water usage is needed to ensure NBU existing water supplies are not only sufficient to meet demand but are also protected and preserved. As there are no expected national or state regulations in the near-future that would restrict usage further by individual water users (the most recent was the United States Energy Policy Act of 1992 which required new structures to have water-saving appliances), intentional conservation strategies are needed to achieve the necessary decreases in per-customer water usage.

2.2 Historical Water Use per Customer Type

Total water use across each customer group for the last 10 years is shown in **Figure 2-3**. Single-family customers used the greatest total volume of water, ranging from 65% to 70% of total demand over this time period. However, water use has increased for each customer group. Increased demand of 39% for single-family customers, 38% for multi-family customers, 37% for institutional customers, and 32% for commercial customers has been observed since 2013.

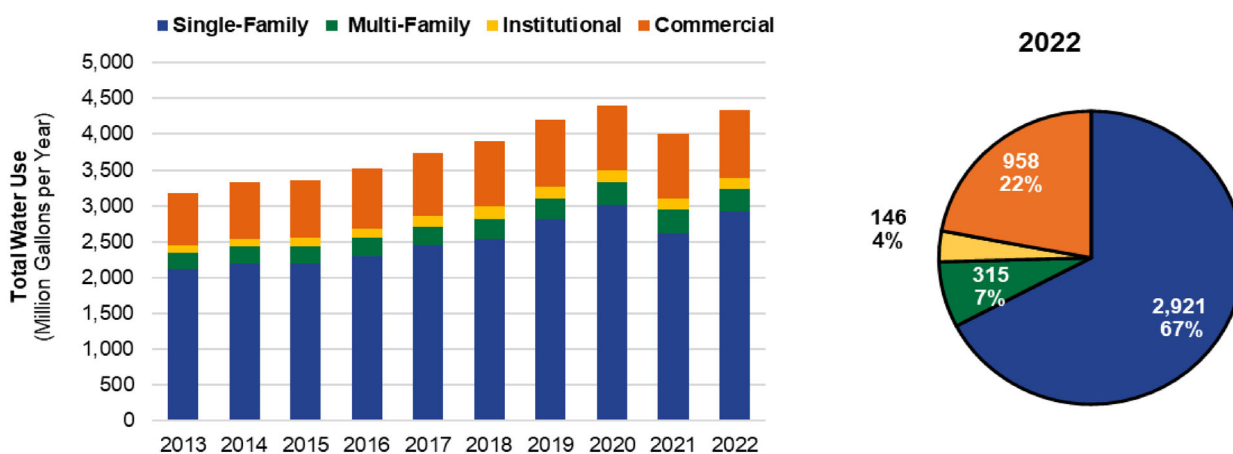


Figure 2-3 Historical Water Use Per Customer Group

This increase in system water demand correlates with the increase in the number of customers served by NBU. Between 2013 and 2022 (**Figure 2-4**), the total number of customers has increased from 29,315 to 45,588 – a 55% increase. There has been a 57% increase in single-family customers, 62% increase in multi-family customers, 9% increase in institutional customers, and 23% increase in commercial customers.

The amount of water used by individual customers varies widely by customer type. **Table 2-1** presents the total amount of water used and number of accounts in each customer group for 2022, and the resulting average usage per customer. The high system-wide water use by single-family households is due to the high percentage of NBU’s customers that are living in single-family homes, as the amount used per single-family account is significantly lower than the other account types. On the other hand, although the number of multi-family, commercial, and institutional accounts are much lower than single-family, the average water use per account is greater. Therefore, conservation initiatives focused on commercial and institutional customers could yield significant impact per customer. For example, if one commercial customer reduced their water consumption by

¹ [50L Home White Paper.pdf \(50lhome.org\)](#)

10%, it could save approximately 43,000 gallons of water annually on average. In contrast, one single-family customer reducing their use by 10% only saves approximately 8,400 gallons and thus comparable water savings would require 5 residential customers to participate. These data illustrate why conservation strategies targeting commercial customers can have a significant impact on system-wide demand while only requiring changes by a small number of customers.

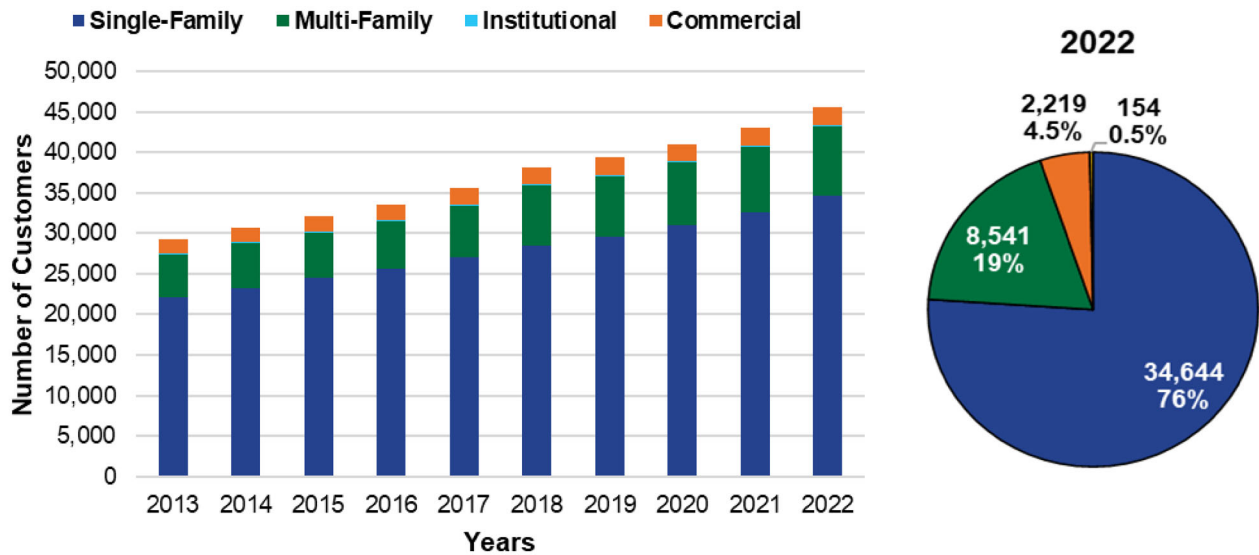


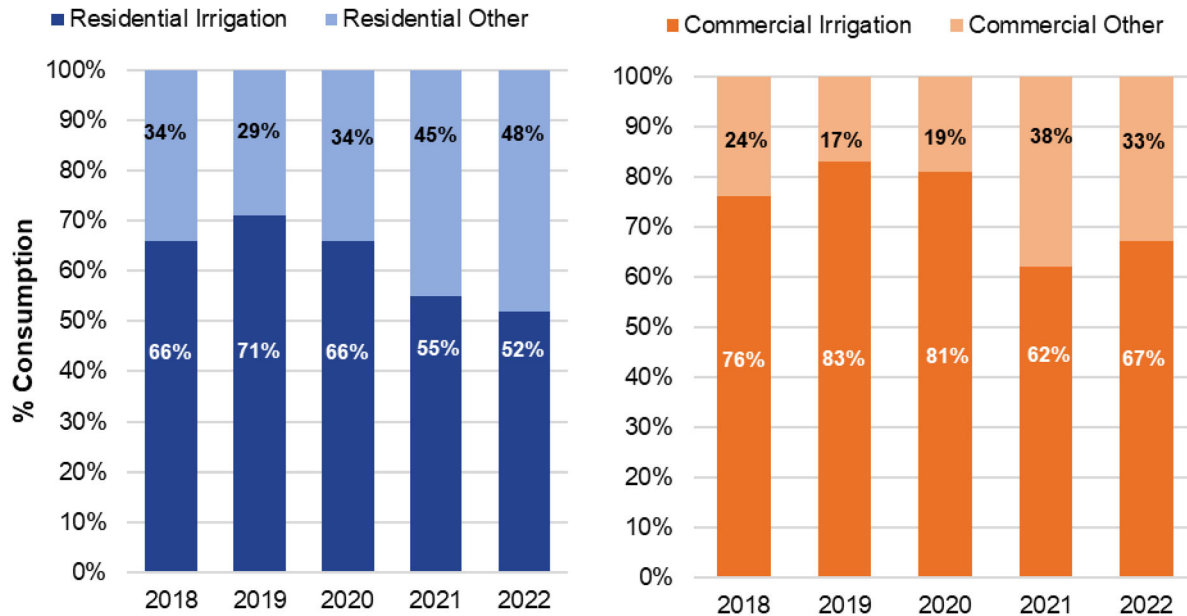
Figure 2-4 Number of Customers Per Group

Table 2-1 2022 Total Annual Usage by Customer Type

Customer Group	Total Annual Water Use per Customer Group (gallons)	Number of Customers	Average Annual Usage by Customer (gallons per customer)
Single-Family	2,921,000,000	34,600	26,600
Multi-Family	315,000,000	474	665,000
Commercial	958,000,000	2,220	432,000
Institutional	146,000,000	154	948,000

2.3 Outdoor Water Use

Especially in hot climates, a large percentage of water is used outdoors, including for landscape irrigation, watering home foundations, or filling up swimming pools and fountains. Approximately one third of NBU’s customers have a separate irrigation meter, which allows for some measurement of outdoor usage. **Figure 2-5** summarizes the water usage for this group of customers, highlighting that over half of water usage is for irrigation, on average. Note that the amount of outdoor water usage may be even higher than presented here, as water withdrawn from external spouts and for pools and fountains is generally not measured by irrigation meters.



*Figure 2-5 Percentage of Water that is Used for Irrigation
Data presented are approximate and based on average usage data for all accounts compared to average irrigation usage data for customers with irrigation meters.*

Figure 2-6 further illustrates the impact of weather on water usage. The most water is used for irrigation between August and October during warm, dry weather, and the lowest water use is in February and March. For commercial customers, the peak month’s irrigation usage is over three times that of winter month usage.

For 2022, the total estimated amount of water used for irrigation within the NBU service area was over two billion gallons, or an average of almost seven million gallons per day. These data suggest that reduction of water used for irrigation has the potential to significantly decrease NBU’s system demand.

Irrigation meters provide customers with greater awareness to encourage conservation.

Irrigation meters are a critical tool for conserving water at home and at work. Irrigation meters allow customers to better track water use by type and understand opportunities for reducing water use and water bills. For example, irrigation meters can identify irrigation system water leaks quickly. Further, irrigation water meter data also helps customers ensure lawns and plants are receiving the optimal amount of water, thereby, prevent overwatering and ensuring landscaping remains healthy and beautiful.

Since 2007, NBU’s water connection policy has required all new irrigation systems for single-family residences and small commercial buildings with a site plan of 10,000 square feet or less to have separate irrigation meters. However, it wasn’t until 2019 that the water connection policy was made enforceable by connecting it to the City’s Drought Management Ordinance. This enforcement tool has correlated with an increase in NBU’s number of customers with irrigation meters. However, today, only one third of NBU customers have irrigation meters. Greater investment in inspections and enforcement would result in an even greater number of customers with irrigation meters.

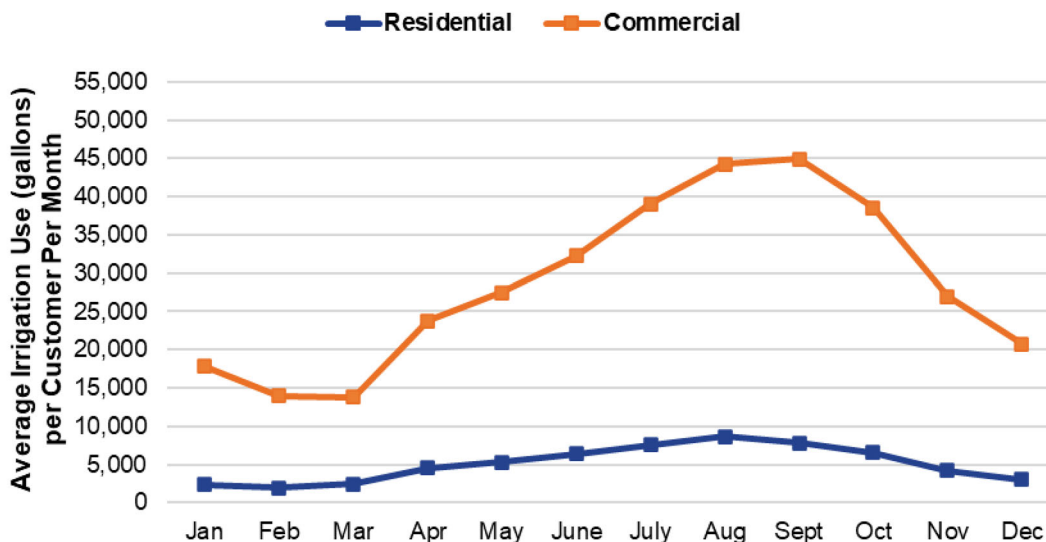


Figure 2-6 Average Monthly Irrigation Usage Based on Data from Customers with Separate Irrigation Meters (2018-2022)

2.4 Non-Revenue Water

Non-revenue water (NRW) is the total volume of distributed water which is not billed to customers. This volume can be due to actual water lost in the distribution system, such as due to a main break or theft; unmetered water such as that used for firefighting or flushing; or data errors such as those caused by inaccurate water meters. NBU has an interdepartmental team that focuses on reducing non-revenue water. Based on data from 2019 to 2021, the volume of non-revenue water for NBU’s system ranged from 820 to 860 million gallons annually. Of this volume, 480 to 640 million gallons were due to actual water losses, which translates to about 12 to 17 gallons per capita per day.

The Texas Water Development Board recently established new non-revenue water thresholds for Texas water systems. Above the actual water loss (real loss) threshold of 30 gallons per connection per day, utilities must use a portion of any financial assistance received to further reduce non-revenue water. In 2022, NBU’s system had 50 gallons lost per connection per day. There is potential to further reduce non-revenue water volumes.

Further, conservation initiatives focused on reducing non-revenue water are attractive as they require no changed behavior by customers, provide long-term savings, and support overall utility priorities. However, even the most optimized water systems have some unavoidable water losses, and some reduction strategies can be expensive or require a high level of effort to implement.

3 NBU’s Water Conservation Program

Since 2007, NBU has been proactively implementing water conservation programs. NBU has a dedicated Water Conservation Team (Conservation and Customer Solutions) that directs these programs, which cover a range of conservation approaches including incentives, ordinances, and outreach and education. Over the last five years, NBU has implemented sixteen conservation strategies, which are described in detail in the subsequent sections. NBU continuously evaluates the effectiveness of these conservation strategies to track impact and ensure maximum return on investment. Review of potential savings, costs, and customer participation helps determine whether each program should be continued or even expanded in the next year.

Figure 3-1 summarizes estimated water savings for five of the ongoing conservation initiatives since NBU began this tracking method in 2014. Calculations incorporate the number of customers participating, the average savings observed per customer, and industry guidance. The savings for satellite leak detection are currently being calculated for the years 2021 and 2022; total savings for those years will be significantly higher once those estimates are added.

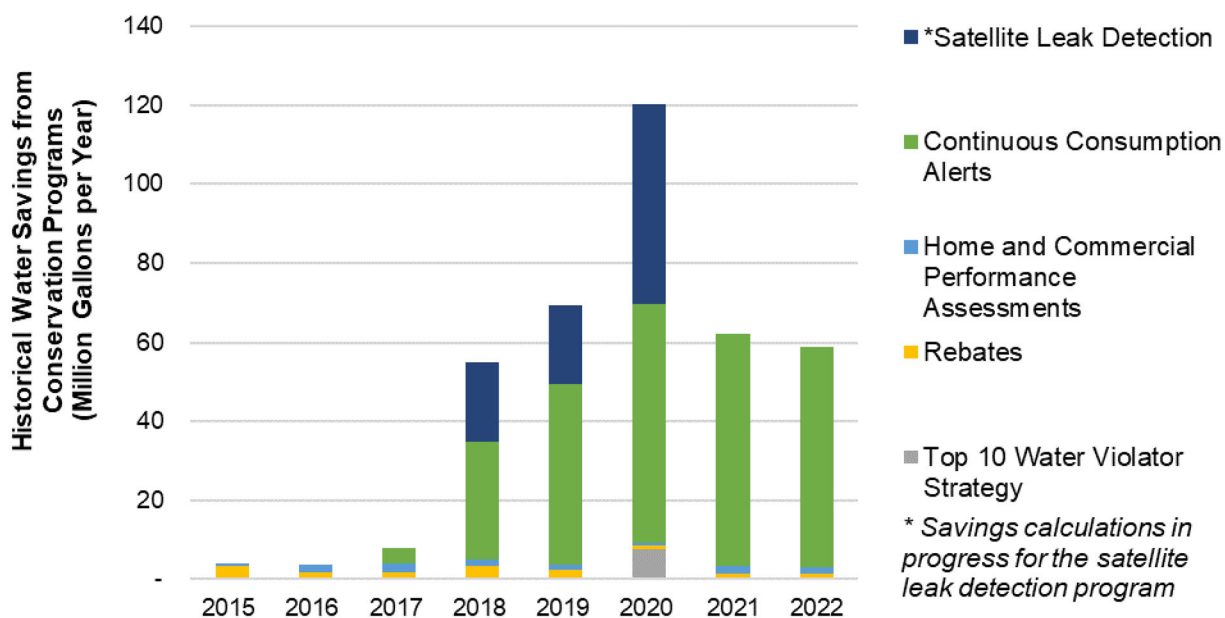


Figure 3-1 Water Savings by Conservation Strategy from 2014 to 2022

It is difficult to estimate water savings for the remaining conservation strategies, such as outreach and education, as changes in customer behavior are difficult to track to a single educational event and may require multiple points of contact before changes are realized. Thus, for other programs NBU tracks alternative measures, such as the number of NBU customers reached each year. In 2022, NBU conducted 41 outreach events, reaching 3,000 customers.

While per person water usage has decreased since inception of these conservation strategies (**Figure 2-4**), NBU has a goal to further reduce water use per person to stretch existing water supplies. Achieving further reduction will require re-evaluation of priorities and increased investment in conservation strategies. Thus, as part of this

new five-year Conservation Plan, NBU conducted an industry scan of over 50 potential conservation strategies to identify additional initiatives to implement over the next five years.

Figure 3-2 summarizes the process applied to select conservation strategies to initiate between 2024 and 2029. First, potential strategies not currently implemented by NBU were identified based on industry guidance and experience by other utilities. This long list was narrowed down by applying the five screening criteria shown in **Figure 3-2**. These criteria were selected by NBU to prioritize applicability, diversification, and effectiveness. Fourteen strategies were identified through this screening; these were further evaluated relative to resource requirements, potential benefits, and utility priorities to develop a balanced portfolio of conservation strategies to include in the Conservation Plan.

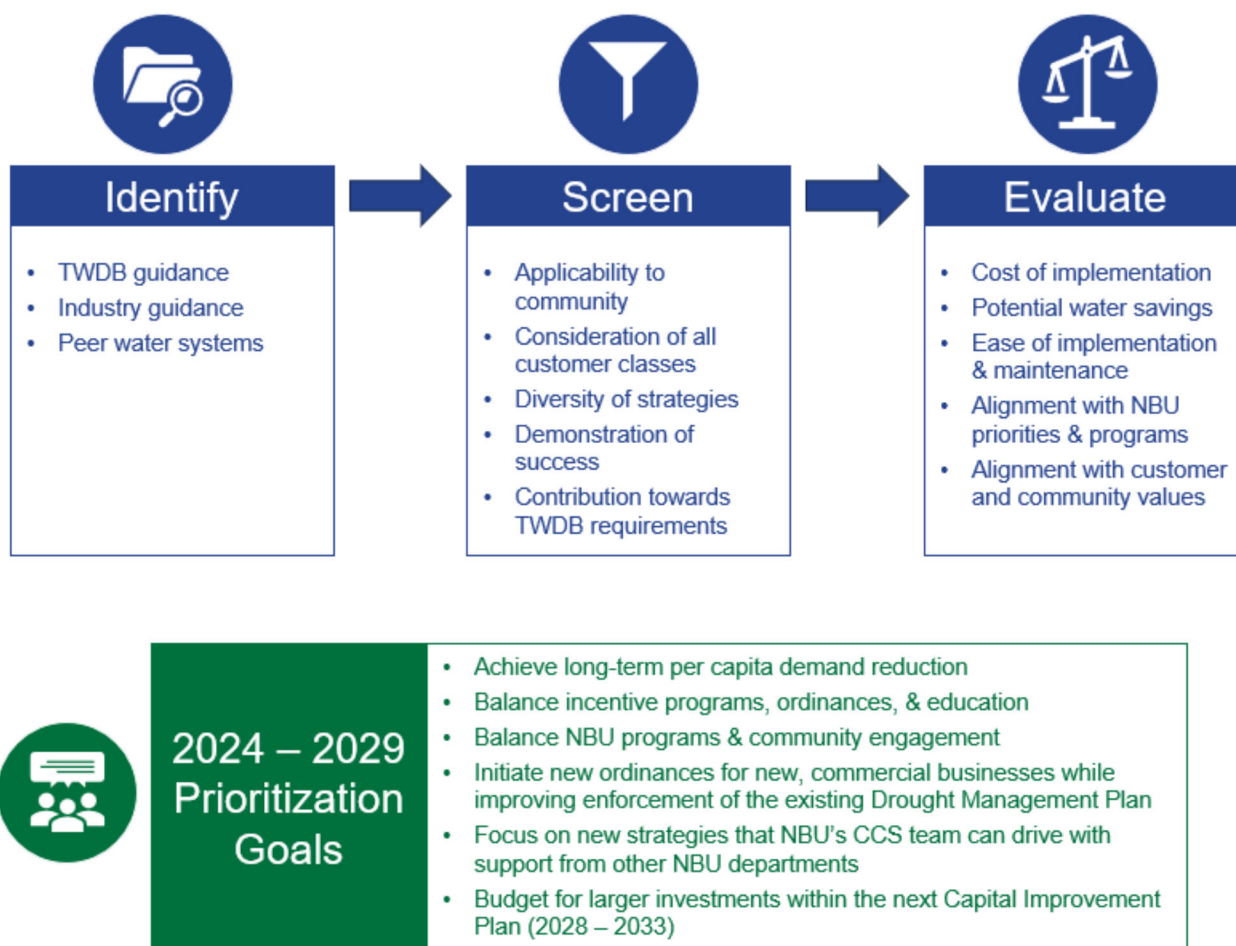


Figure 3-2 NBU's Roadmap in Reducing Water Consumption

This approach outlined in **Figure 3-2** ensured that NBU's portfolio of existing, expanded, and new conservation strategies aligned with NBU's goals and priorities for the next 5 years. Evaluation criteria and prioritization goals were established with a broad range of stakeholders including directors and managers from multiple departments, the conservation team, and NBU Executive Leadership. The resulting conservation strategies fit into six conservation priority programs for NBU:

- **Conservation Data Management (Section 3.1):** Implementation of digital tools to provide automated and actionable data to drive effective decision-making.
- **Water Conservation Rate Structure (Section 3.2):** Continue recommending water services pricing that encourages and rewards water conservation, while also ensuring that utility costs are adequately covered.
- **Non-Revenue Water Program (Section 3.3):** Reduction of water lost including through the distribution system.
- **Landscape Water Transformation Program (Section 3.4):** Expansion and optimization of rebates, ordinances, and inspections that focus on reduction of outdoor water use.
- **Indoor Water Use Rebate (Section 3.5):** Continuation of rebates intended to increase use of water-efficient appliances and fixtures.
- **Outreach and Education (Section 3.6.2):** Development and implementation of an enhanced outreach and education program, including tailored outreach to high volume users and new community partnerships.

The remainder of this section describes existing and planned NBU initiatives in these categories. All ongoing activities will be continued, and those that will be added or expanded are indicated with a water droplet (💧).

3.1 Conservation Data Management

The availability of automated and actionable data is critical to efficiently evaluate the effectiveness of conservation programs and make informed decisions about resource allocation. NBU annually calculates various conservation-related metrics including average customer usage, estimated water savings from conservation programs, and water loss. However, currently these processes are largely manual and information collection and analysis is very labor intensive. Thus, over the next year, NBU will implement a new data analytics and visualization solution that will provide continuous consumption data and automated reports and dashboards for analysis. In addition, over the next five years, opportunities to better leverage data from NBU’s advanced metering infrastructure (AMI) will be incorporated.

3.1.1 💧 Conservation Data Analytics and Visualization Solution



Figure 3-3 New Billing System Dashboard

NBU is implementing a new billing system (Figure 3-3) that will provide tools to manage water demand and conservation. For customers, the software provides easy-to-use interfaces and alerts for tracking water usage and opportunities for savings.

In addition, this software will provide NBU staff information they need to analyze customer usage in real time to support conservation planning and efforts. For example, targeted outreach could be sent to users with high or increased water usage. As a result, the database will allow NBU to keep track of programs that have been widely accepted by their customers and restart programs that were previously too laborious to conduct without automated data analytics.

3.1.2 Advanced Metering Infrastructure

Traditionally, water usage has been captured by meter readers who physically view and document usage information – typically once a quarter. Over the last 10 years, NBU has undergone an extensive effort to get more timely usage information. They have installed Advanced Metering Infrastructure (AMI) registers at 78% of customer meters to date, which provide near-real-time meter readings. An additional 22% of customers have Automated Meter Reading (AMR) which allows for automated collection of data, but not as frequently as AMI (AMR meters are generally read monthly).

An important application of these data for the conservation program are Continuous Consumption Alerts (**Section 3.6.2**). Continuous water usage often indicates an issue, such as a running toilet or break in the customer water line, and real-time customer notification allows them to investigate and address the issue and minimize water wasted. USEPA estimates that a single leaky fixture can waste 180 gallons of water per month². Over the next 5 years, NBU will be investigating additional opportunities to leverage AMI for water conservation and evaluating the feasibility of reaching 100% AMI throughout the system. Grant funding that could support full AMI implementation will also be considered.

3.2 Water Conservation Rate Structure

NBU initiated a new water rate structure beginning August 1, 2023 that varies rates for fiscal years 2024 and 2025 based upon customer water use. This rate structure was developed based on feedback from NBU's first Rate Advisory Committee (**Figure 3-4**). The Committee of 18 community members was appointed by the NBU Board of Trustees and each member represents a constituency across NBU's service territory. The Rate Advisory Committee was replaced with the Community Advisory Panel (CAP) in 2023. The CAP will be engaged in future rate structure updates.

The approved rate structure maintains the best practice of encouraging and rewarding water conservation, while also ensuring that utility costs are adequately covered. This was accomplished with an increasing block



Figure 3-4 Rate Advisory Committee

² <https://www.epa.gov/watersense/residential-toilets>

rate system which—in addition to the flat fee for fixed costs—includes a variable rate for volume of water consumed, with higher rates as water consumption increases. There are four cost rate blocks or tiers for residential customers summarized in **Figure 3-5** based on the volume of water used.

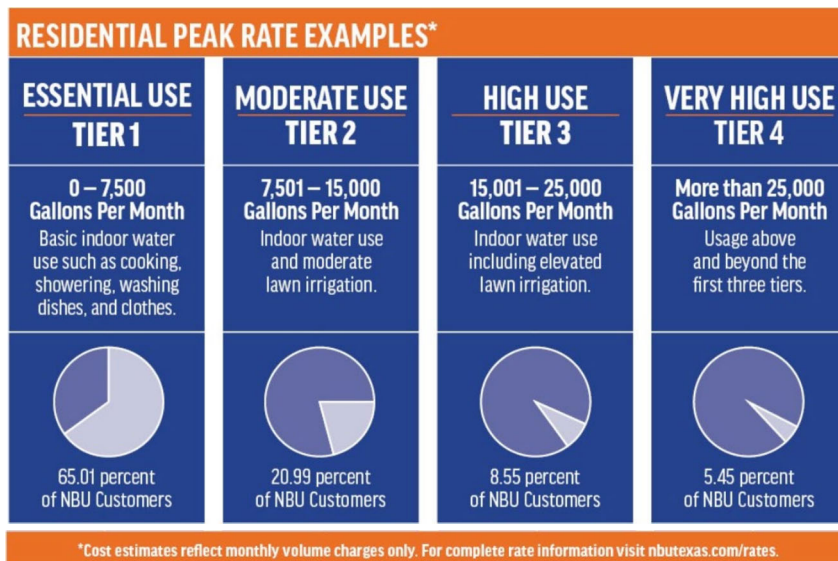


Figure 3-5 Example Rate Tier Structure for Residential Users

3.3 Non-Revenue Water Program

NBU has developed an interdepartmental approach to managing non-revenue water. Non-revenue water (NRW) is the total volume of distributed water which is not billed to customers, such as due to a main break, firefighting, or meter inaccuracies. This team is successfully implementing innovative technologies to reduce water loss, including advanced metering infrastructure (**Section 3.1.2**), satellite leak detection, and meter testing, and is focusing on increasing investment in asset management. They perform annual audits to evaluate quantities and trends in overall water loss and its components, as described **Section 2.4**. Additionally, NBU manages the distribution system pressure based on the procedures in NBU’s Distribution System Operations Manual.

NBU serves as both an electric and water provider. Thus, continuing to evaluate both NBU electric and water infrastructure for opportunities to reduce water (and electric) usage will also be an important component of NBU’s long-term management of non-revenue water.

3.3.1 Satellite Leak Detection

NBU began using satellite leak detection technology in 2018 to reduce water losses. This technology uses satellite images to identify areas that have high soil moisture which could indicate a drinking water leak. The NBU service area is scanned on a quarterly basis and NBU field crews are dispatched to areas



Figure 3-6 Leak Detection Equipment

identified as potential leaks to verify the leaks and conduct any needed repairs. **Figure 3-6** shows an interface that field staff use to identify leaks. Annual water savings due to this program have been estimated to range from 20 to 50 million gallons (**Figure 3-1**). NBU will continue this program to identify and correct new or growing leaks.

3.3.2 Meter Testing Program

Meter testing is an important component of water conservation as malfunctioning meters often underread usage and result in misidentification of actual water usage as water loss. NBU has active meter testing programs for both production meters and customer meters. Production meters measure and account for water pumped into the NBU distribution system from NBU's water supplies. NBU will continue a testing and calibration program for all production meters. Additionally, all new and existing customers are required to have a meter. NBU will continue a testing customer meters, as-needed or as requested, and replacing meters that are under-registering. NBU is also establishing a framework for future meter testing programs.

3.3.3 💧 Increase Investment in Asset Management

The threat of leaks and breaks increases as infrastructure ages, and in the next 10 years, 20% of NBU's water mains will be nearing the end of their estimated useful life. Timely repair and replacement of failing or aging assets are critical aspects of utility management that help minimize risk of failure, prevent disruptions to water service, and continue to minimize water loss. NBU is currently developing an Aging Infrastructure Plan which will provide a long-term investment plan with recommended budgets per year to achieve NBU's target level of risk and service, in alignment with the utility-wide asset management program being expanded. This plan will then inform the budgets requested in the FY 2029 – 2033 Capital Improvement Plan (CIP) for water main repair and replacement. NBU currently has \$48 million budgeted for infrastructure repair and replacement for fiscal years 2024 through 2028; projects include, but are not limited to, water meters, tank decommission, water tank rehabilitations, and infrastructure replacement packages.

3.4 Landscape Water Transformation Program

Over half of average water use by NBU customers is associated with landscape irrigation and other outdoor water use (52% of residential water use and 67% of commercial water use across the last five years as shown in **Figure 2-5**). Thus, NBU is designing a new, more comprehensive Landscape Water Transformation Program. This enhanced program will provide a combined portfolio of incentives and requirements to reduce outdoor water use in New Braunfels.

3.4.1 💧 Drought Management Plan and Enforcement

The City of New Braunfels has a Water Conservation and Drought Management Ordinance (No. 2019-17), which is enforced by NBU. Year-round landscape watering for all customers is limited to two days per week based on the last digit of the address and cannot be conducted between 10:00 am – 8:00 pm. During a drought, landscape watering is restricted further, as summarized in **Table 3-1**, based on the drought stage declared by the City. The ordinance includes additional restrictions depending on the drought. For example, installation of turfgrass is limited in Stage 3, and the refilling of ornamental lakes or fountains with potable water is prohibited during all drought stages. Additionally, park and athletic fields are required to submit water conservation plans. The ordinance further encourages additional voluntary reductions by all customers in all industries, such as only

serving water to customers at restaurants upon request. For a complete list of activities prohibited during a drought, visit [NBU Ordinance 2019-17](#).

Table 3-1 NBU Water Restrictions in Drought Stages

Drought Stage	Landscape Irrigation with a Hose-End Sprinkler or In-Ground Irrigation System is Allowed: (during designated times)	Landscape Irrigation with a Soaker Hose, Handheld Hose, Drip Irrigation System, or Bucket is Allowed:
Year-Round	Two days per week	Any day at any time
I	One day per week	
II	One day per week	Any day during designated times
III	One day every two weeks	

NBU plans to update the Drought Management Plan and increase investment for drought management to allow for more complete enforcement of the plan. Engagement of the CAP is recommended, and discussion should include potential opportunities for improving both drought and year-round irrigation watering restrictions to support the long-term conservation goal of delaying the need for additional water supply. For example, peer systems (e.g., Austin, San Antonio) have implemented year-round restrictions for watering to one day a week. Case studies^{3,4} have shown that restricting watering to one day a week can decrease water use for irrigation even further, especially for high volume users, when supplemented by an active outreach and enforcement campaign.

3.4.2 Irrigation System Inspection Program

Since 2007, NBU has required all new irrigation systems for single-family residences and small commercial buildings with a site plan of 10,000 square feet or less to have separate irrigation meters. However, it wasn't until 2019 that the water connection policy was made enforceable by connecting it to the City's Drought Management Ordinance. This has correlated with an increase in NBU's number of residential irrigation meters from approximately 6,000 in 2018 to over 10,000 in 2021 (an increase of 78%). Similarly, commercial irrigation meters increased from approximately 650 to over 800 during the same period (an increase of 16%). Other irrigation system ordinance requirements include the use of rain sensors to avoid watering during and following rain events, zonal systems to irrigate each landscape zone according to its water needs, and a minimum irrigation area and flow direction requirements to avoid watering adjacent impervious surfaces.

Inspection of new irrigation systems is currently performed by the City of New Braunfels (not NBU). However, to help support the increasing number of new irrigation meters, especially for unincorporated areas outside of the City's permitting authority, NBU plans to increase resources for irrigation meter inspections through the

³ Warner, Laura A., et al. "Insights from residents under year-round irrigation restrictions to improve water conservation impacts." *AWWA Water Science*, vol. 5, no. 4, 2023, <https://doi.org/10.1002/aws2.1348>.

⁴ Mackenzie, J. Boyer, et al. "Water Conservation Benefits of Long-Term Residential Irrigation Restrictions in Southwest Florida." *Journal AWWA*, vol. 110, no. 2, 2018, <https://doi.org/10.5942/jawwa.2018.110.0019>.

Conservation Resource Inspection Program. These additional resources would allow for streamlining the inspection process by having a single inspector licensed to complete backflow prevention inspections, irrigation inspections, and customer service inspections. Further, the increase in resourcing would provide more holistic enforcement of and education on (in collaboration with **Section 3.6.2**) existing irrigation system codes.

3.4.3 💧 Home & Commercial Irrigation Assessments with Rebates

Currently, NBU provides free irrigation assessments to both residential and commercial customers upon request. Common recommendations from these assessments include installing smart irrigation controllers, adding high efficiency sprinkler nozzles, and repairing leaks in customer lines or outdoor faucets. However, the NBU Conservation Team recognizes the opportunity to increase the impact. Over the next five years, this program will be expanded by:

- Ensuring that assessments incorporate all best practices for reduction of water usage
- Increasing outreach and education to increase the number of customers participating
- Introducing customizable rebates for customers that complete an assessment, providing incentive to implement the water-saving opportunities identified through the assessment
- Improving program tracking

3.4.4 💧 Water-Wise Landscape Rebates

Currently, NBU supports the following water-wise landscape rebates: Drought Tolerant Tree, Rain Barrel, Irrigation Zone Removal, Grass Removal, Healthy Soil, Gardening Guide, and Custom Commercial rebates. NBU is planning to develop a streamlined rebate program that combines all existing rebate options. Instead of customer applying separately for various rebate types and receiving a standard amount, the rebate can be tied to water savings expected from recommended water-saving activities. This makes applying easier for customers, more effectively ties utility investment to anticipated benefit, and allows for consideration of water-wise landscape projects beyond those specifically listed. NBU could also provide rebates through this program for installation of low impact development landscaping, such as the conversion of impervious pavement to pervious rock cover, to reduce runoff and promote recharge of our water supplies.

In collaboration with **Section 3.6.7**, NBU is planning to partner with the irrigation vendors and provide them training on various irrigation rebate programs that NBU currently enforces to their customers. As a result, when customers reach out to vendors, they can inform about the specific customer-focused irrigation rebate programs. This collaboration will assist NBU to attract more customers to adopt their rebate programs.

3.4.5 💧 New Development Ordinance Revisions

Over the next five years, NBU plans to pursue ordinance revisions that promote the use of water-wise landscaping for new residential and commercial customers. Similar ordinances by other Central Texas communities have required new customers to limit the use of turf grass, use only drought-tolerant plants and grass, and use pervious ground covers to reduce runoff and promote recharge of our water supplies. NBU will research requirements implemented by other communities and will engage community stakeholders to discuss potential requirements for the New Braunfels community. This engagement is already underway as the City of New Braunfels considers updates to the Land Development Ordinance, to be finalized by the end of 2024

3.5 Indoor Water Use Reduction Program

NBU has an existing program to support existing and new customers with reducing water use inside homes and commercial businesses. NBU staff provide support in identifying opportunities to reduce water use and also provide rebates for upgrading indoor appliances.

3.5.1 Home and Commercial Assessment for Indoor Use

NBU provides free water assessments to both its residential and commercial customers. During assessments, NBU reviews historical data use trends, inspects the inside and exterior of the home or business for possible leaks, and provides suggestions on how to better conserve water and energy while lowering costs. Customers can go to the NBU website to schedule their assessment or contact NBU Customer Service or Conservation and Customer Solutions (CCS) to schedule over the phone.

3.5.2 Indoor Water Use Rebates

NBU continues to offer rebates to customers for improving indoor water use efficiency. Indoor rebates are available to residential customers for upgrading to ultra-high efficiency toilets and ultra-high efficiency washing machines. Additionally, NBU offers a custom commercial rebate to provide a financial incentive for commercial customers to improve indoor water use.

3.6 Outreach and Education Program

NBU outreach and education programs provide information to new and existing customers to promote water conservation and efficient use. Educational materials highlight NBU's existing conservation programs, educate the community about drought stages, provide tips for water savings and identification of leaks, and provide customers with utility contact information. NBU uses a variety of outreach formats and delivery methods including text and phone alerts, mailed brochures, emailed newsletters, hand-delivered flyers, online videos, workshops and hands-on activities such as at the Headwaters at the Comal facility (**Figure 3-7**), checklists, bill inserts, and social media posts. **Figure 3-8** shows examples of NBU'S social media posts emphasizing water conservation. NBU has four specific outreach strategies that have been and will continue to be implemented, and NBU will be evaluating three new potential outreach strategies as part of a new Water Conservation Education and Outreach Plan that will be developed. These strategies are described in the following subsections.

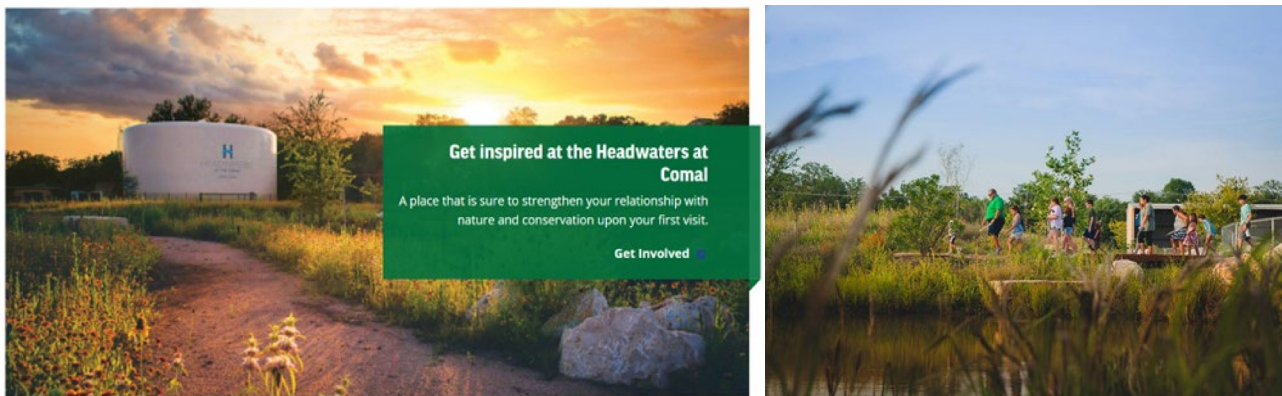


Figure 3-7 NBU Partners with Fisher Park Nature Education Center, Headwaters at the Comal, West Side Community Center, and New Braunfels Food Bank to Provide Education on Water Conservation to the Community



Figure 3-8 Example NBU Social Media Posts on Conservation

NBU has four specific outreach strategies that have been and will continue to be implemented, and NBU will be evaluating three new potential outreach strategies as part of a new Water Conservation Education and Outreach Plan that will be developed. These strategies are described in the following subsections.

3.6.1 Continuous Consumption Alerts

NBU sends alerts via automated phone calls or text messages to customers if they have continuous water consumption for 48 hours indicating that a leak is occurring. These messages provide guidance to customers on locating and repairing leaks, and customers can contact NBU for assistance in fixing the leak. Since the inception of leak alerts in 2017, NBU estimates savings of 250 million gallons of water due to continuous consumption alerts.

NBU was awarded [the 2020 Texas Environmental Excellence Award for Water Conservation](#) for its customer leak awareness outreach campaign by the Texas Commission on Environmental Quality.

3.6.2 Utility Consumption Reports

Upon request through the [NBU Utility Consumption Report webpage](#), NBU also provides customers with a report (**Figure 3-9**) that charts indoor and irrigation water use and compares it to the neighborhood average. This educational tool tracks conservation progress and helps customers identify additional opportunities for water savings.

3.6.3 Top 30 Water User Report

This strategy was implemented a few years ago, but paused as it was labor intensive to generate this list of customers using the prior billing software system. Thus, following completion of the new data analytics software (**Section 3.1.1**), NBU will re-launch the Top 30 Water User Report. The new software will automatically generate a list of the 30 customers using the most water each month. NBU will then contact each customer to discuss strategies for reducing demand and usage.

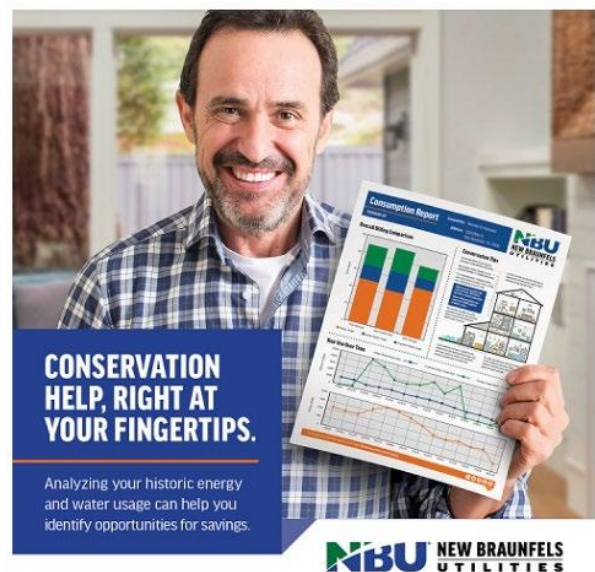


Figure 3-9 Utility Consumption Reports

3.6.4 Top 10 Water Violator Strategy

This strategy was also implemented a few years ago, but paused as it was labor intensive to generate this list of customers using the prior billing software system. Thus, following completion of the new data analytics software (**Section 3.1.1**), NBU will re-launch the Top 10 Water Violator Strategy. The new software will automatically generate a weekly list of the 10 customers with the greatest out of compliance usage (i.e., a leak or watering on the incorrect day). The top ten violators will be notified via courtesy letter or phone call.

3.6.5 💧 Water Conservation Education and Outreach Plan

Over the next couple of years, NBU will be reviewing the existing outreach and education program and developing a new Education and Outreach Plan that prioritizes the Landscape Transformation Program and aligns with the One Water New Braunfels Program. This evaluation will consider updates to messaging, outreach approaches and forums, and educational materials to align with current goals. To optimize use of resources, the Plan will also identify target audiences for tailored communication, including but not limited to, large water users, high water use areas, businesses, and low-income residents. Specific initiatives that will be prioritized include:

- Enhancing the water use assessment program (**Sections 3.4.3 and 3.5**) with new materials and resources to increase customer participation
- Enhancing the water-wise landscape rebate program (**Section 3.4.4**) with new educational materials to increase customer participation
- Developing an internal training program to increase the literacy of NBU and City staff on the existing and new water conservation programs and the role each department plays in supporting conservation

3.6.6 💧 Engage Local Officials and Community Stakeholders

NBU will enlist feedback and input from key stakeholder groups and community members on water conservation strategies. Priority discussion topics for this group will include the New Commercial Business Landscape Ordinance as well as providing feedback on new outreach and education materials developed. NBU will also be engaging with local officials, including City Council, to provide education and updates on implementation of the conservation plan as well as guidance on ways local officials can support and elevate the conservation plan.

3.6.7 💧 Establish Water Conservation Partnerships with Local Trade Organizations

Local trade organizations and professionals, such as landscapers, plumbers, and irrigators, serve a critical role in making recommendations to customers on landscaping and building improvements. Thus, NBU is planning to establish new partnerships with local trade organizations to provide education on water conservation approaches, the importance of helping customers implement conservation strategies, and the current NBU water conservation programs. On a case-by-case basis, partnerships may also include providing hands-on support for implementing business changes to better support implementation of conservation initiatives (e.g., advice on changes recommended to materials provided to customers or additional in-the-field training for local businesses).

4 Five-Year Water Conservation Implementation Plan

NBU has identified a portfolio of existing, expanded, and new conservation programs for implementation during calendar years 2024 through 2028 (**Section 3**). These strategies were selected through a multi-phased screening process to prioritize applicability, diversification, and effectiveness and were evaluated considering resource requirements, potential water savings, and other utility priorities. Strategies include new incentive programs, enhanced education and outreach, and new/updated ordinances and address both indoor and outdoor water use. However, as analysis of historical water use data (**Section 2**) demonstrated that irrigation water use accounts for over half of total water use, NBU will be prioritizing allocation of additional resources over the next five years to strategies reducing irrigation water consumption. Long-term, these strategies will reduce water demand per user, which will ultimately protect water resources and promote long term water supply sustainability for NBU customers. The following sections summarize the action plan for implementing both the existing and new/expanded conservation strategies over the next five years.

- **Implementation Plan (Section 4.1)** summarizes the timeline for implementing the new and expanded water conservation strategies as well as the budgets required, expected savings, and roles and responsibilities.
- **Water Conservation Program Metrics (Section Error! Reference source not found.)** presents metrics that will be used to track implementation progress and ensure conservation programs are effective.
- **Per Capita Demand Goals (Section 4.2)** summarizes targets for the next 5 and 10 years.
- **Approval and Distribution of the Conservation Plan (Section 4.3)** documents approval of this plan and lists the recipients of the final conservation plan.
- **Adaptive Implementation (Section 4.4)** outlines the process for regular evaluation of progress and updates to the implementation plan.

4.1 Implementation Plan

Over the next five years, NBU will continue implementation of all existing conservation programs, expand existing programs that prioritize reduction of water use for landscape irrigation, and add new programs. Conservation programs will engage both residential and commercial customers. The proposed implementation timeline, budget, savings, and roles and responsibilities for the new and expanded strategies (**Table 4-1**) are summarized below.

Table 4-1 List of New and Expanded Water Conservation Strategies

New Conservation Strategies	Expanded Conservation Strategies
<ul style="list-style-type: none"> • Conservation Data Analytics and Visualization • Irrigation System Inspection Program • New Development Ordinance Revisions • Water Conservation Education and Outreach Plan • Engage Local Officials and Community Stakeholders • Establish Water Conservation Partnerships with Local Trade Organizations 	<ul style="list-style-type: none"> • Advanced Metering Infrastructure • Increased Investment in Asset Management • Drought Management Plan and Enforcement • Home and Commercial Irrigation Assessments with Rebates • Water-Wise Landscape Rebates

Timeline: Figure 4-1 represents key milestones that are planned to be achieved each year. The first year will focus on updating the Drought Management Plan, completing the Water Aging Infrastructure Plan, and developing a new Water Conservation Outreach and Education Plan. During 2024, NBU will also complete implementation of the new data analytics software and develop the new landscape transformation conservation strategies. In 2025, NBU plans to launch the new Landscape Transformation program, including expanded and customizable rebate programs. Then, in 2026, new outreach and education strategies will be launched to engage the community in these new conservation strategies and to engage stakeholders in development of the new commercial customer landscape ordinance, which is planned to be presented to the NBU Board and City Council for approval in 2028.

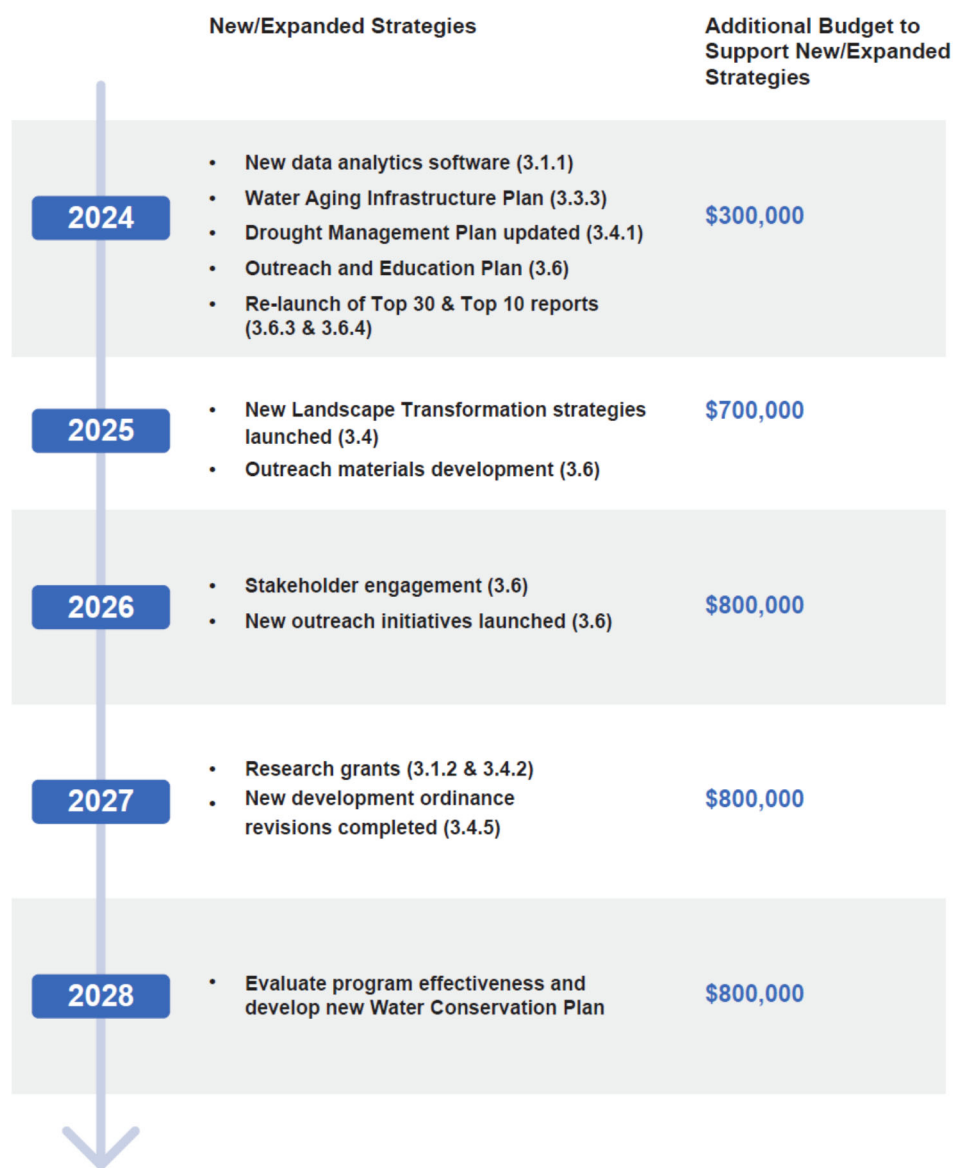


Figure 4-1 Implementation Timeline and Budget for New and Expanded Water Conservation Strategies (in addition to continuing to implement and fund the existing water conservation strategies)

Five- and Ten-Year Water Savings⁵: While estimated water savings were calculated for only seven of the twenty strategies, implementation is estimated to result in a minimum of 850 million gallons of water savings over the next five years (170 million gallons per year, on average). Of strategies that were measured, the greatest measurable water savings are expected to come from continuing continuous consumption alerts and satellite leak detection. Further, over the next 10 years, savings may total more than 2,200 million gallons (averaging more than 220 million gallons per year). The increased savings realized over time are due to the compounding advantage of long-term changes such as through the ordinance and permanent landscape conversions; the affects will increase even further past ten years. Although the new conservation strategies proposed are not anticipated to result in an immediate increase in measurable water savings, they will contribute to long-term water consumption reduction and long-term cost savings, including:

- **Delayed New Water Supply Costs:** For example, if the new development ordinance revisions are approved by 2025, the number of customers impacted each year will increase such that by 2063, when NBU is projected to need another new water supply, a savings of over 200 million gallons per year is anticipated for commercial customers alone. In 2063, this would correlate with a demand reduction of 2 gallons per capita (person) per day without requiring any change by residents at home. Similar revisions to the residential ordinances for new developments with increase these savings greatly. By reducing demand, we delay the need for developing a new water supply, which could cost hundreds of millions of dollars.
- **Lower Water Use Costs:** Over this five-year implementation period, the average cost per volume of water saved for the new and expanded conservation programs is estimated to be lower than the cost NBU has calculated for NBU's newest water supply, the Gonzalez-Carrizo Water Supply Project, which is coming online in 2024.

The conservation strategies identified vary in cost and expected outcomes. Incentive / rebate programs encourage community buy-in, increase education, and reward conservation efforts. However, water savings are limited by a relatively small number of participants and these programs require greater investment to fund rebates. On the other hand, usage ordinances result in greater water savings since all relevant customers must participate, with only minor costs for staff time for enforcement.

- **Avoided Costs:** These conservation strategies will also assist NBU and the community by increasing the avoided costs that would have otherwise been incurred, had conservation strategies not been implemented. Avoided costs can include reduced water treatment and wastewater treatment costs, reductions in water losses through distribution, and reduced staff hours.

Five-Year Budget: A modest budget of \$3.4 Million over the next five years (in addition to continuation of budgets allocated for existing conservation programs) is required to implement the recommended new initiatives effectively. The budget supports hiring new employees to support additional conservation work (e.g., additional inspections and assessments), hiring external engineering consultants and legal support, rebates to incentivize customers, and community outreach and education. None of the conservation programs selected have large

⁵ Savings and cost estimates are based on a set of assumptions that will be verified during program implementation.

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traditional capital cost expenditures due to the goal of focusing on low-cost strategies for the next five years. However, annual investment in staff and incentives for customers will be needed to make these programs successful. Several utilities have moved to capitalizing rebate costs and NBU will research and investigate the opportunity to do so for these costs. Additionally, staff will research grant programs to identify potential funding available in support of these new strategies.

Roles and Responsibilities: NBU's Conservation and Customer Solutions team will oversee implementation of the water conservation implementation plan. However, effective implementation will require participation by multiple departments across NBU and coordination with the City of New Braunfels. The lead department responsible for implementation of each conservation program is shown in **Table 4-2**.

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Table 4-2 Water Conservation Program Responsible Teams and Proposed Metrics

Water Conservation Program	Responsible NBU Team(s)	Metrics
Overall Program Management	Conservation and Customer Solutions	<ul style="list-style-type: none"> Tracking of total per capita demand (Appendix A) Tracking of residential per capita demand (Appendix A) Tracking of average use per account per customer type
Conservation Data Management	Conservation and Customer Solutions, Resource Strategy, Water Operations, and Data Strategy	<ul style="list-style-type: none"> New internal data management system and dashboard live (% complete) Continue implementation of AMI for all new customers (% customers)
Rate Structure	Finance	<ul style="list-style-type: none"> Use of an inclining block rate structure for single family customers (y/n) Effectiveness of inclining block rate structure Incorporation of peak and off-peak rates to encourage conservation among commercial and multi-family rate structures (y/n) Inclusion of a strategy for maintaining revenue stability while incentivizing conservation and efficiency (y/n)
Non-Revenue Water Program	Water Operations, Engineering, and Production	<ul style="list-style-type: none"> Tracking of number of leaks detected (y/n) Tracking of estimated water savings (y/n) Tracking of unit annual water losses (y/n) Number of breaks per mile of pipe Infrastructure Leakage Index
Landscape Water Transformation Program	Conservation and Customer Solutions	<ul style="list-style-type: none"> Decreasing trend in average irrigation water use per customer for customers with separate irrigation meters Number of water-wise landscape rebates approved per year Number of irrigation assessment rebates approved per year Area of turf removed (sf) Percent of conservation team positions filled (%) Enforcement program for each component of the updated Drought Management Plan (% of components) Percent of identified violators receiving a warning (%)

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Water Conservation Program	Responsible NBU Team(s)	Metrics
Indoor Water Use	Conservation and Customer Solutions	<ul style="list-style-type: none"> Approval of the New Development Ordinance revisions (y/n)
Education and Outreach Campaign	Conservation and Customers Solution and Communications Team	<ul style="list-style-type: none"> Number of indoor rebates approved per year Tracking of estimated water savings (y/n) Implementation of outreach plan activities (% complete) Tracking of number of customers reached per year (y/n) Tracking of estimated water savings based on engagement with top water users and top violators (y/n)

4.2 Water Conservation Program Metrics

Water conservation program metrics assist in tracking and maintaining records of implementation progress, evaluating program effectiveness, allocating time and resources, and identifying areas for further investment and further improvement in programs. Metrics may be quantifiable (e.g., the number of water-wise landscape projects) or qualitative (e.g., percent complete of a new initiative). Regardless of type, metrics selected should align with implementation priorities, be attainable, and provide actionable triggers for increased investment or resource allocation. While this plan provides an initial slate of metrics to evaluate implementation progress and conservation effectiveness over the next five years (**Table 4-2**), staff will continue amending and improving these after plan adoption.

4.3 Approval and Distribution of the Water Conservation Plan

Implementation of an effective and sustainable water conservation plan requires commitment and engagement from the community. Thus, after NBU's Conservation and Customer Solutions team has drafted the water conservation plan, with input from the NBU Executive Leadership team and NBU departments engaged in implementation of the plan, the plan is presented to the NBU Board of Directors for review and approval. Upon approval by the NBU Board of Directors, the water conservation plan is then presented to the New Braunfels City Council for review. Acceptance by both of these bodies ensures community buy-in to the proposed conservation strategies and that support and sufficient funding are allocated to ensure the success of the conservation implementation plan. This Water Conservation Plan was presented to the City Council on April 15, 2024. (**Appendix F**).

Upon approval by City Council, this Water Conservation Plan was delivered to the South-Central Texas Regional Water Planning Group (Region L) and submitted to the Texas Water Development Board and Texas Commission on Environmental Quality. Additionally, the plan was made available to the public on [NBU's Water Conservation Webpage](#).

4.4 Adaptive Implementation

NBU has an ongoing commitment to long-term water conservation that extends existing water supplies and delays the need to purchase additional supplies. NBU's Conservation and Customer Solutions team will review program metrics annually to evaluate program progress and effectiveness, and reallocate resources, as needed, in alignment with the conservation plan goals and priorities. Thus, the long-term success of the conservation program is highly dependent on the configuration and implementation of the new conservation data analytics software to allow for effective decision making.

During the last year of this implementation plan, NBU will prepare a similar roadmap for future implementation activities. Although capital and operational budgets for the current five years were already accounted for at the time of drafting this conservation plan, NBU plans to increase investment in conservation programs to support future water conservation plans. Thus, the success of this plan (and future plans) in delaying the need for additional water supplies will depend on the commitment of NBU and City leadership to increase investment in

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conservation, further grow an internal conservation culture, and ensure that communication internally and externally aligns with this commitment.

Appendix A: Per Capita Demand Goals

Continuing the existing conservation strategies will allow for maintaining NBU's current per capita demand, while savings from the new and expanded conservation strategies are expected to reduce per capita demand. As reported to TWBD, NBU's current per capita demand targets for water savings are summarized in **Table 1**. While estimated water savings were calculated for only seven of the twenty strategies in the plan (**Section 4.1**), implementation is estimated to result in a minimum of 850 million gallons of water savings over the next five years (170 million gallons per year, on average, a per capita demand reduction of 2 gallons per capita per day over five years (2028). However, as discussed in **Section 2.1**, there are many other factors that can also impact per capita demand from year to year including weather and climate changes, economic conditions, regulations, and even pandemics like COVID-19. Achieving the ten-year per capita demand goal listed through water conservation will require significantly greater investment in water conservation during the subsequent five-year period (2028-2032).

Table 1 Normal-Weather Targets for Water Savings

Per Capita Demand (gallons per capita per day)	Current 5-Year Average (2018 – 2022)	5-Year (2028 5-Year Average)	10-Year (2032 5-Year Average)
Total*	137	135	130
Residential	82	81	77

* In coordination with NBU's Water Resources Plan, NBU calculates the total per capita demand based on the water pumped from water supplies as opposed to the water produced by treatment plants.

Appendix B: TWDB and TCEQ Water Conservation Plan Requirements

The TWDB provides a list of conservation strategies in the *TWDB Water Conservation Plan Guidance Checklist 2020*. The TCEQ also provides a list of conservation plan components in the Texas Administrative Code (30 TAC §202.B). The location of these components within this Conservation Plan is summarized in the table below.

TWDB Checklist	TCEQ Checklist	Section
Utility Profile	Utility Profile	Appendix D
Conservation Coordinator	-	1.2
Inclusion of 5-year and 10-year targets	Specific, quantified 5- and 10-year targets	Appendix A
Schedule for plan implementation	-	4.1
Tracking implementation and effectiveness of plan	Record management system	3.1 & 4.2
Master meter	Metering device	3.3.2
Universal metering for meter testing, repair and periodic replacement	Universal metering	3.3.2
Measures to determine and control water loss	Measures to determine and control water loss	3.3
Program for leak detection, repair, and water loss accounting	Leak detection and repair	3.3.1
Continuing education and information regarding water conservation	Continuing public education and information	3.6
Water rate structure	Non-promotional water rate structure	3.2
Implementation and enforcement evidenced by plan adoption (Signed Official Ordinance)	Enforcement procedure and plan adoption	4.3 and Appendix F & G
Furnish water or wastewater services to another supplying entity (Wholesale or Contract)	Contract requirements	N/A
Regional Water Planning Group Notification	Coordination with Regional Water Planning Groups	Appendix E
Drought Contingency Plan	-	3.4.1
Adoption	-	Appendix F
Reporting responsibility	-	4.3
-	Operation of any reservoirs	N/A

Appendix C: TWDB and TCEQ Conservation Strategies

The TWDB provides a list of conservation strategies in the *TWDB Water Conservation Best Management Practices and Best Management Practices for Municipal Water Users 2020*. The of these strategies within this Conservation Plan are summarized in the table below.

TWDB Category	TWDB Listed Conservation Strategies	Section
Conservation Analysis and Planning	• Conservation Coordinator	1.2
	• Cost-Effectiveness	4.1
	• Water survey for single and multi-family customers	2.2
Financial	• Water Conservation Pricing	3.2
	• Wholesale Agency Assistance Program	N/A
System Operations	• Metering of all new connections and retrofit of existing connections	3.3.2
	• System water audit and water loss control	3.3
Landscaping	• Athletic Field Conservation	3.4.1
	• Golf Course Conservation	3.4.1
	• Landscape Irrigation Conservation and Incentives	3.4.3 & 3.4.4
	• Park Conservation	3.4.1
	• Residential Landscape Irrigation Evaluation	3.4.2 & 3.4.3
Education and Public Awareness	• Public Information	3.6
	• School Education	3.6
	• Partnerships with Non-Profit Organizations	3.6.7
Rebate, Retrofit, and Incentive Programs	• Conservation programs for ICI account	3.4.3 - 3.4.5
	• Residential Clothes Washer Incentive Program	3.5
	• Residential Toilet Replacement Program	3.5
	• Showerhead, Aerator and Toilet Flapper Retrofit	3.5
Conservation Technology	• New Construction Graywater	N/A ¹
	• Rainwater Harvesting and Condensate Reuse	3.4.3
	• Water Reuse	N/A ¹
Regulatory Enforcement	• Prohibition on Wasting Water	3.4.1
	• Conservation Ordinance Planning and Development	3.4.1

1. Planned for future evaluation

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The TCEQ also provides a list of conservation strategies in the Texas Administrative Code (30 TAC §288.2). The location these strategies within this Conservation Plan are summarized in the table below.

TCEQ Checklist	Section
Conservation-oriented water rates and rate structure (uniform or increasing block rate schedules)	3.2
Adoption of ordinances, plumbing codes, and/or rules requiring water-conserving plumbing fixtures	City of New Braunfels Plumbing Code Sec. 14-50. - Irrigation systems
Program for replacement or retrofit of water-conserving plumbing fixtures	3.5
Reuse and recycle of wastewater / graywater	N/A ¹
Program for pressure control / reduction in distribution systems	3.3
Program for ordinance for landscape water management	3.4.1 & 3.4.5
Method for monitoring effectiveness and efficiency of water conservation plan	4.2
Water conservation plan prepared according to TWDB	1 - 4
Other water conservation practice, method, or technique to achieve conservation plan goals	3.1, 3.4.2, 3.4.3, 3.4.4 & 3.6

1. Planned for future evaluation

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

CONTACT INFORMATION

Name of Utility: **NEW BRAUNFELS UTILITIES**

Public Water Supply Identification Number (PWS ID): **TX0460001**

Certificate of Convenience and Necessity (CCN) Number: **10677, 10691**

Surface Water Right ID Number: **3823-A, 3824-B, 3830-A**

Wastewater ID Number: **20282**

Contact: First Name: **Andrew** Last Name: **Cummings**

Title: **Conservation and Customer Solutions Manager**

Address: **333 E Klingemann** City: **New Braunfels** State: **TX**

Zip Code: **78130** Zip+4: Email: **acummings@nbutexas.com**

Telephone Number: **8306088990** Date: **5/13/2024**

Is this person the designated Conservation Coordinator? Yes No

Regional Water Planning Group: **L**

Groundwater Conservation District:

Our records indicate that you:

- Received financial assistance of \$500,000 or more from TWDB
- Have 3,300 or more retail connections
- Have a surface water right with TCEQ

A. Population and Service Area Data

1. Current service area size in square miles: **140**

Attached file(s):

File Name	File Description
2023-NBU-Impact-Fee-Report -- Water Service Area Map.pdf	New Braunfels Utilities Water Service Area Map

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

2. Historical service area population for the previous five years, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Water Service
2023	120,555	0	79,086
2022	113,712	0	75,285
2021	114,738	0	76,852
2020	94,600	0	64,583
2019	89,200	0	62,070

3. Projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Water Service
2030	154,200	0	102,852
2040	201,300	0	134,268
2050	245,500	0	163,749
2060	300,200	0	200,234
2070	311,500	0	207,771

4. Described source(s)/method(s) for estimating current and projected populations.

Population projections were taken from New Braunfels Utilities 2021 Water Resource Plan done by our consultant. The wastewater service population was calculated at 2/3 of the water population being served. Prior datum gave approximately that NBU wastewater connections were 2/3 of water connections.

Attached file(s):

File Name	File Description
2021 WRP Update - Final_9.1.21.pdf	NBU 2021 Water Resource Plan

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. System Input

System input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Water Produced in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2023	5,207,494,980	164,072,100	0	5,371,567,080	122
2022	4,946,310,678	312,107,925	0	5,258,418,603	127
2021	4,450,585,026	474,670,598	0	4,925,255,624	118
2020	3,083,818,000	2,120,001,000	0	5,203,819,000	151
2019	4,878,357,680	143,874,000	0	5,022,231,680	154
Historic Average	4,513,313,273	642,945,125	0	5,156,258,397	134

C. Water Supply System

1. Designed daily capacity of system in gallons 33,200,000
2. Storage Capacity
 - 2a. Elevated storage in gallons: 10,559,000
 - 2b. Ground storage in gallons: 18,841,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Projected Demands

1. The estimated water supply requirements for the next ten years using population trends, historical water use, economic growth, etc.

Year	Population	Water Demand (gallons)
2025	131,744	6,399,297,370
2026	138,756	6,683,686,823
2027	142,458	6,832,968,807
2028	142,265	6,985,984,415
2029	150,179	7,142,834,079
2030	154,203	7,303,621,115
2031	158,341	7,468,451,808
2032	162,596	7,637,435,510
2033	166,971	7,810,684,727
2034	171,471	7,988,315,219

2. Description of source data and how projected water demands were determined.

Population projections were based on historical population growth of New Braunfels and peer cities, then multiplied by per capita demand projections.

E. High Volume Customers

1. The annual water use for the five highest volume

RETAIL customers.

Customer	Water Use Category	Annual Water Use	Treated or Raw
Millennium Operations, LLC	Commercial	26,416,095	Treated
Comal County	Institutional	20,794,492	Treated
Orchard Property III, LLC	Commercial	20,046,238	Treated
Millennium Operations, LLC	Commercial	17,083,604	Treated
Resolute Hospital Company LLC	Institutional	16,210,033	Treated

2. The annual water use for the five highest volume

WHOLESALE customers.

Customer	Water Use Category	Annual Water Use	Treated or Raw
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UTILITY PROFILE FOR RETAIL WATER SUPPLIER

F. Utility Data Comment Section

Additional comments about utility data.

Based on water production data.

Attached file(s):

File Name	File Description
5 Largest Users by H2O Usage - No Irrigation Dec 2023.pdf	5 largest users

Section II: System Data

A. Retail Water Supplier Connections

1. List of active retail connections by major water use category.

Water Use Category Type	Total Retail Connections (Active + Inactive)	Percent of Total Connections
Residential - Single Family	36,329	75.22 %
Residential - Multi-Family	9,529	19.73 %
Industrial	0	0.00 %
Commercial	2,279	4.72 %
Institutional	157	0.33 %
Agricultural	0	0.00 %
Total	48,294	100.00 %

2. Net number of new retail connections by water use category for the previous five years.

Net Number of New Retail Connections							
Year	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2023	1,685	988		60	3		2,736
2022	2,012	462		22	0		2,496
2021	1,702	305		31	0		2,038
2020	1,400	213		28	1		1,642
2019	1,036	178		35	1		1,250

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. Accounting Data

The previous five years' gallons of RETAIL water provided in each major water use category.

Year	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2023	2,941,830,778	313,451,824	0	974,936,458	143,603,831	0	4,373,822,891
2022	2,336,098,127	307,524,840	98,812,077	667,855,186	77,759,105	0	3,488,049,335
2021	2,628,456,636	321,329,770	18,132,011	1,098,335,296	0	0	4,066,253,713
2020	2,410,210,695	282,608,701	85,897,933	737,272,189	0	1,004,480,784	4,520,470,302
2019	2,232,656,859	283,048,465	22,208,946	822,986,799	0	887,711,248	4,248,612,317

C. Residential Water Use

The previous five years residential GPCD for single family and multi-family units.

Year	Total Residential GPCD
2023	74
2022	78
2021	70
2020	87
2019	77
Historic Average	77

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Annual and Seasonal Water Use

1. The previous five years' gallons of treated water provided to RETAIL customers.

Month	Total Gallons of Treated Water				
	2023	2022	2021	2020	2019
January	343,819,594	343,133,063	358,225,656	323,592,840	296,260,292
February	333,999,344	330,613,812	383,207,125	343,445,235	272,940,856
March	420,567,750	415,463,602	425,124,938	409,243,238	362,548,162
April	397,422,937	456,745,670	463,987,468	404,441,508	402,270,629
May	423,837,719	488,219,314	415,751,168	466,800,491	401,377,807
June	524,702,594	628,601,610	499,524,914	516,769,460	394,691,351
July	636,198,500	659,970,593	473,801,716	638,932,523	531,659,302
August	654,147,875	572,151,317	516,425,687	603,989,429	658,625,113
September	587,671,875	523,826,253	500,940,812	439,397,262	575,880,463
October	448,737,142	499,438,107	415,368,355	478,986,614	484,822,375
November	652,726,188	332,479,609	345,597,907	428,866,179	359,463,064
December	341,474,375	367,439,688	358,359,531	346,282,046	335,538,522
Total	5,765,305,893	5,618,082,638	5,156,315,277	5,400,746,825	5,076,077,936

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

2. The previous five years' gallons of raw water provided to RETAIL customers.

Month	Total Gallons of Raw Water				
	2023	2022	2021	2020	2019
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Total					

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)
2023	1,815,048,969	5,765,305,893
2022	1,860,723,520	5,618,082,638
2021	1,489,752,317	5,156,315,277
2020	1,759,691,412	5,400,746,825
2019	1,584,975,766	5,076,077,936
Average in Gallons	1,702,038,396.80	5,403,305,713.80

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

E. Water Loss

Water Loss data for the previous five years.

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2023	787,777,277	18	14.00 %
2022	661,128,737	16	12.00 %
2021	634,749,888	15	12.00 %
2020	609,469,840	18	11.00 %
2019	676,019,148	21	13.00 %
Average	673,828,978	18	12.40 %

F. Peak Day Use

Average Daily Water Use and Peak Day Water Use for the previous five years.

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2023	15,795,358	19728793	1.2490
2022	15,392,007	20225255	1.3140
2021	14,126,891	16192959	1.1463
2020	14,796,566	19127080	1.2927
2019	13,907,062	17227997	1.2388

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	2,509,850,619	75.22 %	60.63 %
Residential - Multi-Family	301,592,720	19.73 %	7.29 %
Industrial	45,010,193	0.00 %	1.09 %
Commercial	860,277,185	4.72 %	20.78 %
Institutional	44,272,587	0.33 %	1.07 %
Agricultural	378,438,406	0.00 %	9.14 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

H. System Data Comment Section

Prolonged drought.

Section III: Wastewater System Data

A. Wastewater System Data

Attached file(s):

File Name	File Description
NBU19664_Master_Plan Report - Volume I - WW System.pdf	NBU WW System Map

1. Design capacity of wastewater treatment plant(s) in gallons per day: 12,300,000

2. List of active wastewater connections by major water use category.

Water Use Category	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal	33,968	22	33,990	93.91 %
Industrial	0	2	2	0.01 %
Commercial	2,194	10	2,204	6.09 %
Institutional	0	0	0	0.00 %
Agricultural	0	0	0	0.00 %
Total	36,162	34	36,196	100.00 %

3. Percentage of water serviced by the wastewater system: 89.00 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

4. Number of gallons of wastewater that was treated by the utility for the previous five years.

Month	Total Gallons of Treated Water				
	2023	2022	2021	2020	2019
January	198,629,000	209,845,000	215,497,000	202,196,000	230,245,000
February	187,061,000	197,084,000	208,783,000	188,242,000	190,172,000
March	205,128,000	202,383,000	208,877,000	207,875,000	204,599,000
April	220,085,000	206,403,000	205,143,000	198,995,000	211,433,000
May	239,354,000	214,556,000	248,855,000	223,888,000	228,931,000
June	223,421,000	206,041,000	232,887,000	205,558,000	220,346,000
July	223,697,000	214,646,000	251,474,000	207,731,000	220,986,000
August	216,314,000	215,057,000	232,186,000	200,531,000	208,972,000
September	210,666,000	206,527,000	209,350,000	203,222,000	196,011,000
October	230,526,000	204,063,000	232,073,000	192,885,000	206,489,000
November	236,867,000	206,957,000	207,903,000	195,617,000	200,078,000
December	224,611,000	206,061,000	208,165,000	192,148,000	199,070,000
Total	2,616,359,000	2,489,623,000	2,661,193,000	2,418,888,000	2,517,332,000

5. Could treated wastewater be substituted for potable water?

Yes
 No

B. Reuse Data

1. Data by type of recycling and reuse activities implemented during the current reporting period.

Type of Reuse	Total Annual Volume (in gallons)
On-site Irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (park,golf courses)	0
Agricultural	
Discharge to surface water	
Evaporation Pond	
Other	
Total	0

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

C. Wastewater System Data Comment

Additional comments and files to support or explain wastewater system data listed below.

Used daily flow data from each NBU WWTP.

Attached file(s):

File Name	File Description
Copy of WWTP Flows 2019 thru 2023-monthly sums.xlsx	5-year daily WWTP flow data

Appendix E: Distribution to Water Planning Groups



Wednesday, May 1, 2024

Texas Water Development Board
Attn: Region L Planning Group
1700 North Congress Avenue
Austin TX, 78701

Re: New Braunfels Utilities 2024 Utility Profile and Water Conservation Plan

To whom it may concern:

The enclosed Utility Profile and Water Conservation Plan was developed by New Braunfels Utilities to fulfill Texas Commission on Environmental Quality (TCEQ) requirements as outlined in Texas Administrative Code Title 30, Chapter 288. This plan, which New Braunfels Utilities' Board of Trustees approved on March 28, 2024 is being forwarded to TCEQ.

If you have any questions on the enclosed plan, please contact me at 830.608.8990.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andrew Cummings'.

Andrew Cummings
New Braunfels Utilities
Conservation and Customer Solutions Manager



Appendix F: Informational Presentation to City Council



CITY OF NEW BRAUNFELS, TEXAS
CITY COUNCIL - SPECIAL MEETING



CITY HALL - COUNCIL CHAMBERS
550 LANDA STREET
NEW BRAUNFELS, TX

MONDAY, APRIL 15, 2024 at 5:00 PM

Neal Linnartz, Mayor
Andres Campos, Councilmember (District 1)
Christopher Willis, Councilmember (District 2)
Harry Bowers, Mayor Pro-Tem (District 3)

Lawrence Spradley, Councilmember (District 4)
Mary Ann Labowski, Councilmember (District 5)
April Ryan, Councilmember (District 6)
Robert Camareno, City Manager

MISSION STATEMENT

The City of New Braunfels will add value to our community by planning for the future, providing quality services, encouraging community involvement and being responsive to those we serve.

AGENDA

CALL TO ORDER

CALL OF ROLL: CITY SECRETARY

INVOCATION: COUNCILMEMBER WILLIS

PLEDGE OF ALLEGIANCE & SALUTE TO THE TEXAS FLAG

1. PROCLAMATIONS

A) National Therapy Animal Day [24-505](#)

2. WORKSHOP

A) Presentation on the Texas Recreation and Parks Society [24-463](#) Award.

Geronimo Aguirre, Assistant Parks Director

B) Presentation and update from the Humane Society of the [24-524](#) New Braunfels Area.

Sarah Hammond, Executive Director HSNBA

C) Presentation on the Updated NBU Five-Year Water [24-513](#) Conservation Plan as Required by the Texas Commission on Environmental Quality (TCEQ).

Andrew Cummings, Conservation and Customer Solutions Manager

D) Presentation and discussion on the New Braunfels [24-450](#) Urban Transit District.

Gary Ford, Transportation and Capital Improvements Director

- E) Presentation and update on City of New Braunfels [24-514](#) Capital Projects and Initiatives.
Scott McClelland, Assistant Transportation and Capital Improvements Director
- F) Presentation and update on the upcoming TxDOT [24-444](#) project with an estimated construction start date in 2025 or 2026.
Greg Malatek, Public Works Director

3. **EXECUTIVE SESSION**

In accordance with the Open Meetings Act, Texas Government Code, Ch. 551, the City Council may convene in a closed session to discuss any of the items listed on this agenda. Any final action or vote on any executive session item will be taken in open session.

4. **RECONVENE INTO OPEN SESSION AND TAKE ANY NECESSARY ACTION RELATING TO THE EXECUTIVE SESSION AS DESCRIBED ABOVE.**

5. **ADJOURNMENT**

CERTIFICATION

I hereby certify the above Notice of Meeting was posted on the bulletin board at the New Braunfels City Hall.

Gayle Wilkinson, City Secretary

NOTE: Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services such as interpreters for persons who are deaf or hearing impaired, readers, or large print, are requested to contact the City Secretary's Office at (830) 221-4010 at least two (2) work days prior to the meeting so that appropriate arrangements can be made.

Appendix G: NBU Board Approval of the Water Conservation Plan



NOTICE OF OPEN MEETING
MARCH BOARD OF TRUSTEES
NBU Board Room, 263 Main Plaza, New Braunfels, Texas 78130
March 28, 2024 at 1:00 PM
www.nbutexas.com

AGENDA

AMENDED

CALL TO ORDER

PLEDGE OF ALLEGIANCE AND INVOCATION

Board President Wayne Peters

NBU VISION: Be a Trusted Community Partner Dedicated to Excellence in Service

Dawn Schriewer, Chief Financial Officer

PUBLIC COMMENT

RECOGNITIONS

1. New Braunfels Utilities ("NBU") Kinderschuhe 5K Check Presentation to Communities in School of South Central Texas

ITEMS FROM THE CHAIR

1. American Public Power Association (APPA) Legislative Rally Update
2. Any Other Items Permitted Under Section 551.0415 of the Texas Government Code

ITEMS FROM STAFF

1. CEO's Update
 - a. Update on Electric Operations: Materials and Project Status Updates
 - b. NBU Control Center Ribbon Cutting Ceremony
 - c. Customer Service Real-Time Survey
 - d. NBU Leadership Team Participation in Project Management Professional Bootcamp Training Update
 - e. Update on the Participating Solar Contracting Program
 - f. Leadership Announcements: Jacob Cleland named Interim Communications Manager
 - g. Any Other Items Permitted Under Section 551.0415 of the Texas Government Code
 2. Financial Update and Report
-

3. Discuss NBU Outage Notification Protocols

CONSENT ITEMS FOR ACTION

1. Approve Minutes of the NBU Regular Board Meeting of February 29, 2024
2. Approve the Change Order Log from January 15, 2024, through February 15, 2024
3. Approve the Reports for Water and Electric Engineering Contracts from August 1, 2023, through February 15, 2024
4. Approve the Electric Line of Business Alternative Procurements from January 15, 2024, through February 15, 2024
5. Authorize CEO or His Designee to Negotiate and Execute a First Amendment to the Professional Services Agreement for Construction Management and Inspections for the FM 306 Pump Station & Discharge Line Project with Freese and Nichols, Inc.
6. Authorize CEO or His Designee to Negotiate and Execute a Second Amendment to the Professional Services Agreement with Freese and Nichols, Inc. for the Design of the Gruene Wastewater and Inverted Siphon Improvements as part of the Gruene Road Sewer Main Rehabilitation/Relocation Project
7. Authorize CEO or His Designee to Negotiate and Execute a Materials Agreement for Annual Steel Pole Purchases with KBS Electrical Distributors

ACTION ITEMS

1. Discuss and Consider Authorizing CEO or His Designee to Negotiate and Execute a Treated Water Sharing Agreement with Guadalupe Blanco River Authority for the Resale of Water from the Gonzales Carrizo Water Supply Project on a Temporary Basis
2. Discuss and Consider Approving the Updated NBU Five-Year Water Conservation Plan as Required by the Texas Commission on Environmental Quality (TCEQ)
3. Discuss and Consider Authorizing CEO or His Designee to Negotiate and Execute an AIA Standard Form of Agreement Between Owner and Construction Manager as Constructor with SpawGlass, Contractors, Inc. for the Construction of the Proposed NBU Headquarters Facility Project Located on a 76-acre Tract of Property at the Intersection of Engel Road and IH-35

PRESENTATION ITEMS

1. Presentation on the Future Population Growth and Economic Outlook in the Texas Area from Real Estate Research Firm, Zonda Intelligence Corporation
2. Presentation Regarding the Transfer of Real Property Located at 263 Main Plaza, New Braunfels, Texas (the "Property") from NBU to the City of New Braunfels (the "City") and Lease of the Property from the City to NBU

EXECUTIVE SESSION

The Board of Trustees may recess into Executive Session for any purpose permitted by the Texas Open Meetings Act, including but not limited to:

1. Power Supply Resources – Competitive Matters
(Section 551.086 – Texas Government Code)
2. Consultation with Attorney Regarding Pending or Contemplated Litigation, Settlement Offer, and/or Matters Protected by Attorney Client Privilege
(Section 551.071 – Texas Government Code)
 - a. Discuss the Pending Litigation Styled *Skyblue Utilities, Inc. v. New Braunfels Utilities*, Comal County, 433rd Judicial District Cause No. 2024-0253D
 - b. Discuss Legal Matters Related to the Texas Open Meetings Act

The Board of Trustees upon reconvening in Open Session, will discuss and consider any action, if necessary, regarding closed session items.

RECONVENE INTO OPEN SESSION AND TAKE ANY NECESSARY ACTION RELATING TO THE EXECUTIVE SESSION AS DESCRIBED ABOVE

ADJOURN

If you require assistance in participating at a public meeting due to a disability as defined under the Americans with Disabilities Act, reasonable assistance, adaptations, or accommodations will be provided upon request. Please contact the Board Relations Coordinator at least three (3) days prior to the scheduled meeting date at (830) 629-8400 or NBU Main Office at 263 Main Plaza, New Braunfels, Texas, for additional information.

CERTIFICATE OF POSTING

I, Ryan Kelso, Secretary to the Board of Trustees, do hereby certify that this Notice of Meeting was posted at the City of New Braunfels City Hall, 550 Landa Street, New Braunfels, Texas, and New Braunfels Utilities Main Office, 263 Main Plaza, New Braunfels, Texas, on the 22nd day of March 2024, and remained posted continuously for at least 72 hours preceding the scheduled time of the meeting.



Ryan Kelso, Chief Executive Officer
Secretary to the Board of Trustees