



SUPPORTING A SUSTAINABLE FUTURE

*An Overview of Brandon's
Water Management Efforts*

THE ISSUE:

The City of Brandon has a comprehensive approach to managing its current water resources, while also proactively planning for the future of the City's water supply, treatment, storage, and distribution system needs to *provide a safe and sustainable source of water for the essential needs of the community.*

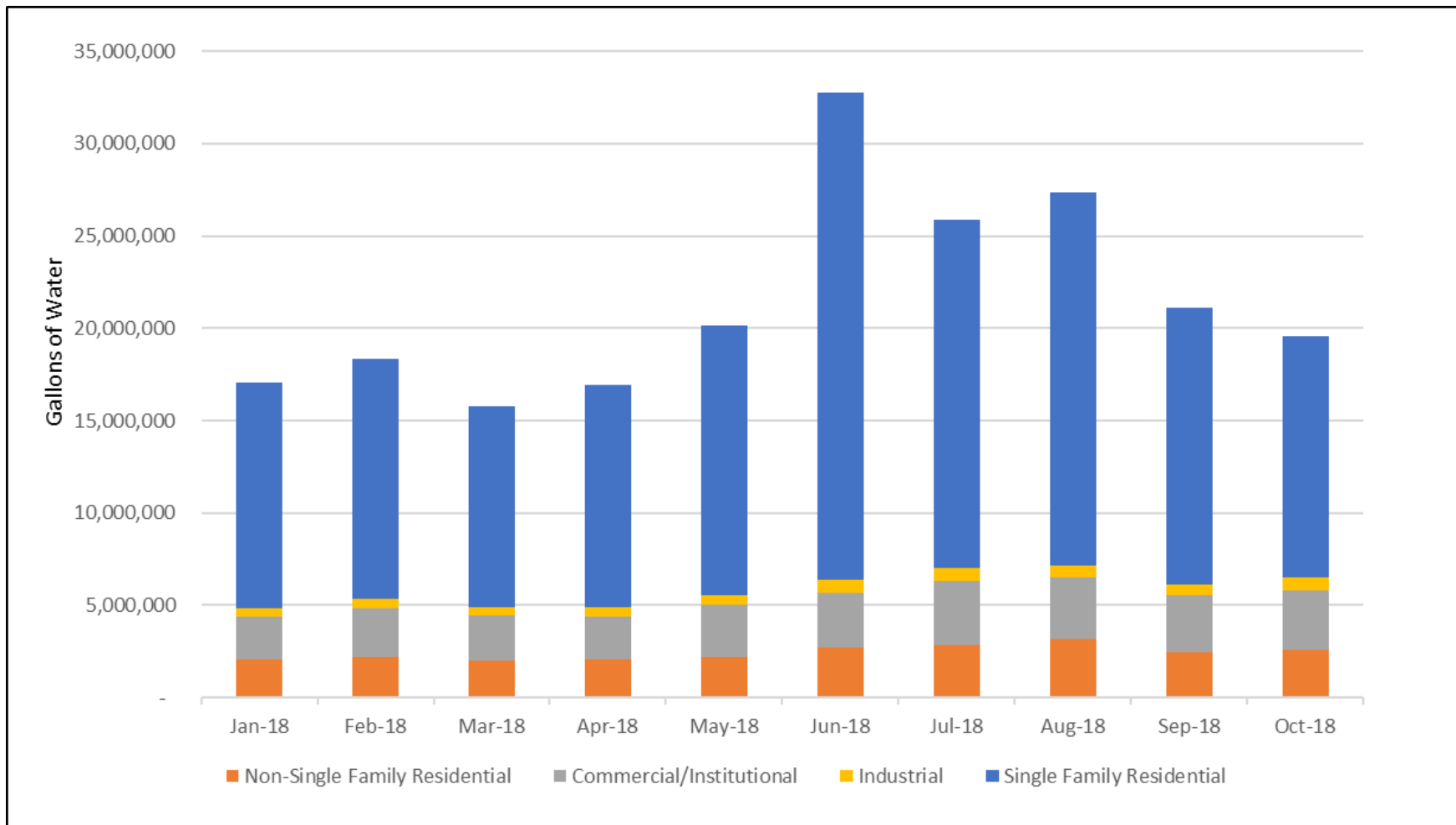
Over the course of a year, Brandon's average daily use of water is around 865,000 gallons per day. In the summer, the daily total has exceeded 1.8 million gallons. Most of the additional water being used in the summer months is for residential outdoor uses – lawn watering. The additional summer peak day demands to treat, deliver, and store that amount of water on a consistent basis is not sustainable.

A key to success is *managing the peak day usage of water* in the summer months to avoid placing undue stress on the treatment, storage, and distribution system. At the heart of peak day summer use is lawn watering.

The use of conservation measures including the establishment of multiple levels of lawn watering restrictions, a tiered water rate structure, and the Water Smarter rebate program are all part of the City's ongoing efforts.

WHY WE NEED LAWN WATERING RESTRICTIONS:

As the graph below illustrates, the increase in water demand in the summer months is primarily attributable to residential users and their lawn watering habits. The blue bars represent residential water use, which can nearly double during summer months. As a result, the City identified outdoor water use by residential customers to be the primary target for peak day water use reduction.



HOW DO LAWN WATERING RESTRICTIONS WORK?

The Odd-Even Lawn Watering Schedule (Stage 1) is an effective way to manage the daily peak use of water because only half of the water customers can water their lawns on any given day. Without the restrictions there is no effective way to manage peak day water demands. If conditions worsen, the City must enact additional measures to manage usage.

LAWN WATERING PROGRAM



- Users with even-numbered addresses shall water lawns on even-numbered calendar dates and users with odd-numbered addresses on odd-numbered calendar dates.
- **NO LAWN WATERING BETWEEN THE HOURS OF 10AM - 6PM**



- Addresses ending in the following numbers are assigned to the respective day of the week for watering. * **NO LAWN WATERING BETWEEN THE HOURS OF 10AM - 6PM**

M T W TH FRI

0/1 | 2/3 | 4/5 | 6/7 | 8/9 i.e. If your address is 1629 your lawn watering day is on Friday

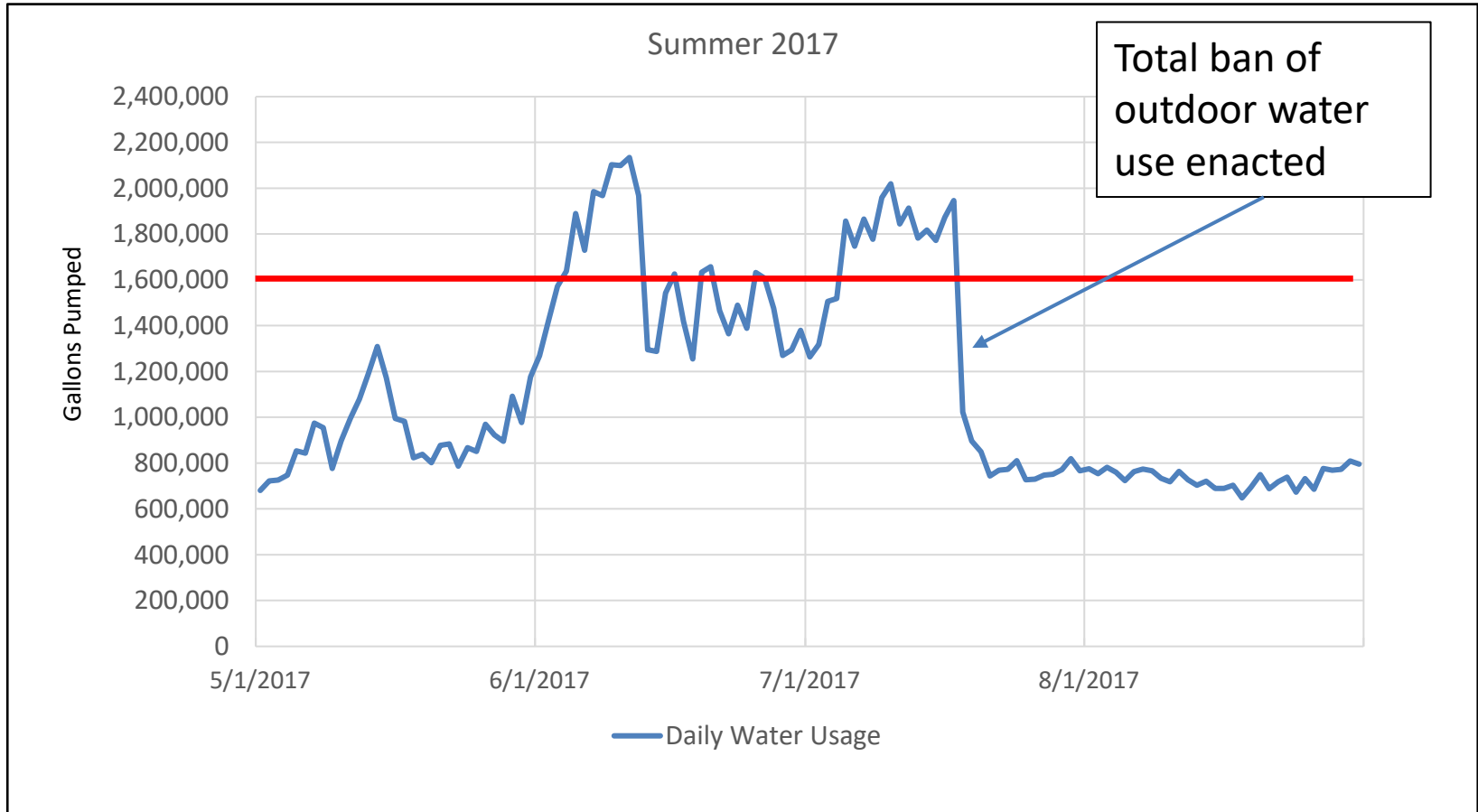


- Lawn watering for all residential, commercial, industrial and City facilities served by the municipal water system **is not allowed at this time.**

Visit cityofbrandon.org for current lawn watering stage and to sign up for email notifications.
Opt in for text notifications by texting "Brandon" to 33222.

THE NEED FOR ACTIVE MANAGEMENT OF OUR WATER USE – A LESSON LEARNED:

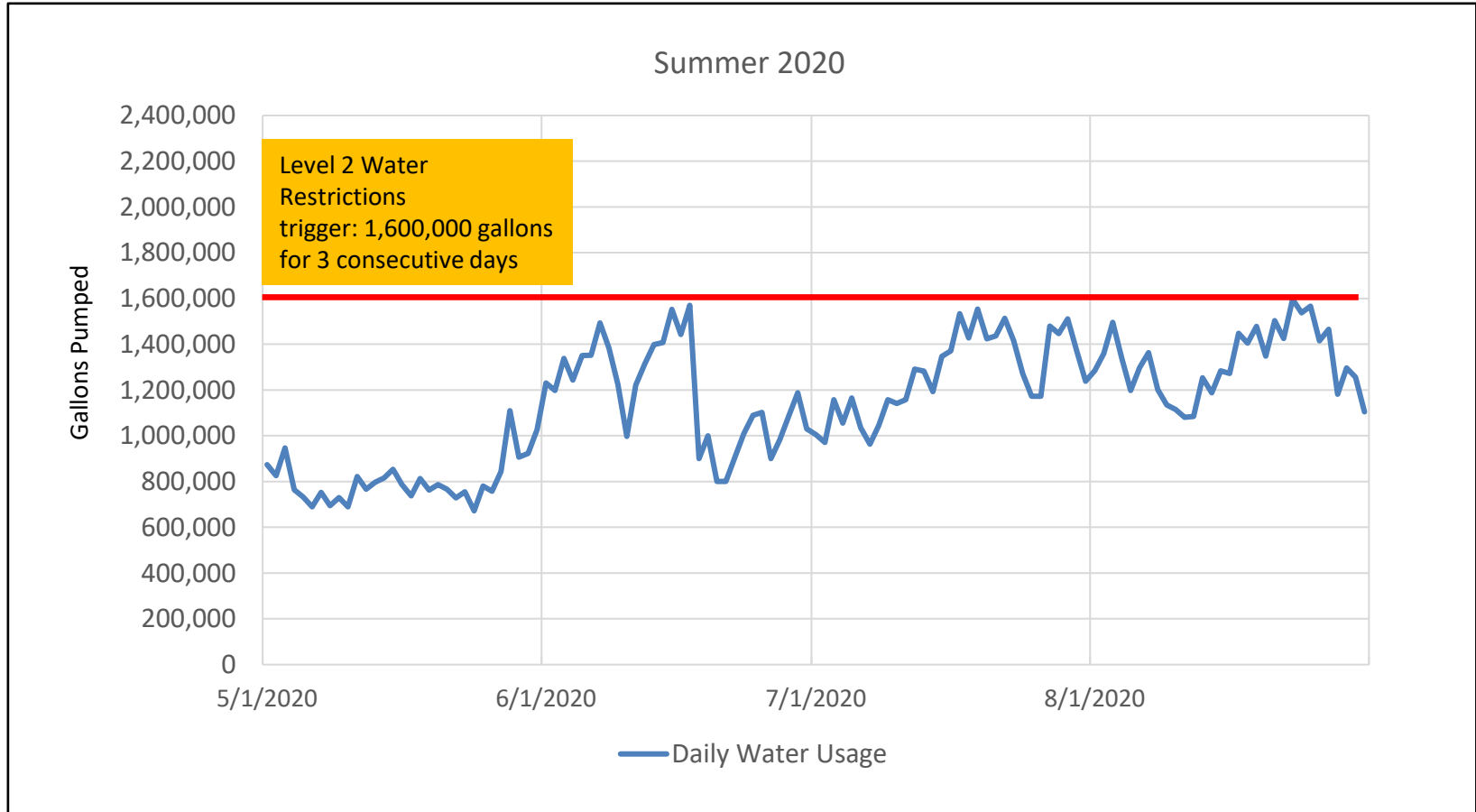
In July of 2017 the City experienced daily water usage that exceeded the ability of the water system to sustain the daily needs of the community. As a result, the City enacted a ban on outdoor water use which resulted in a nearly 50 percent drop in daily water use. At the same time, the City undertook a multi-faceted approach to addressing the future water needs; including an evaluation of future water supply, storage, and treatment options.



CAN THE DAILY SUPPLY OF WATER REALLY BE MANAGED?:

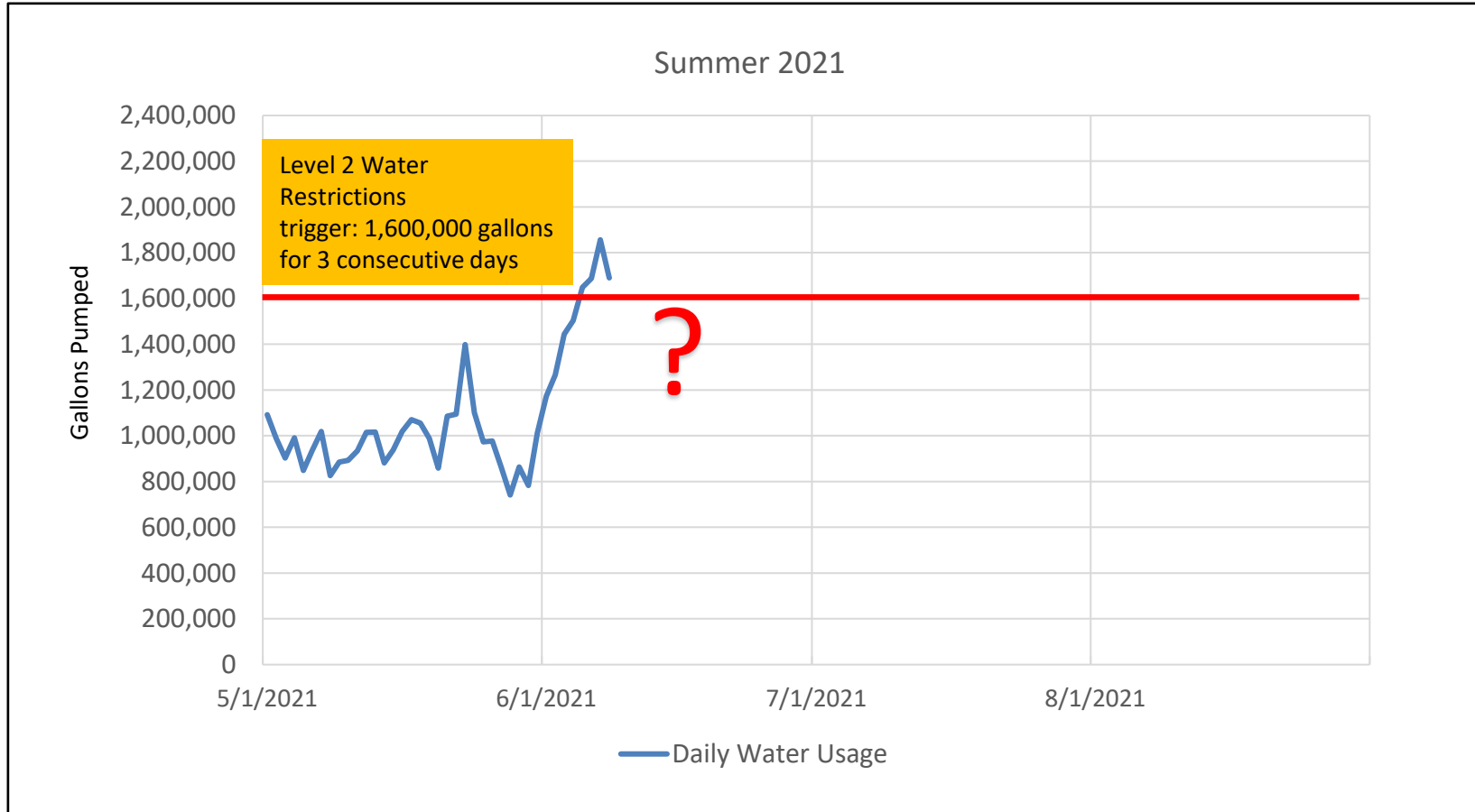
The answer is yes; the daily use of water can be managed, but the citizens of Brandon need to be part of the solution by understanding and adhering to the lawn watering restrictions.

As the graph below shows, in 2020 Brandon did not exceed 1.6 million gallons of daily water use, despite the weather conditions.



WHAT ABOUT 2021?

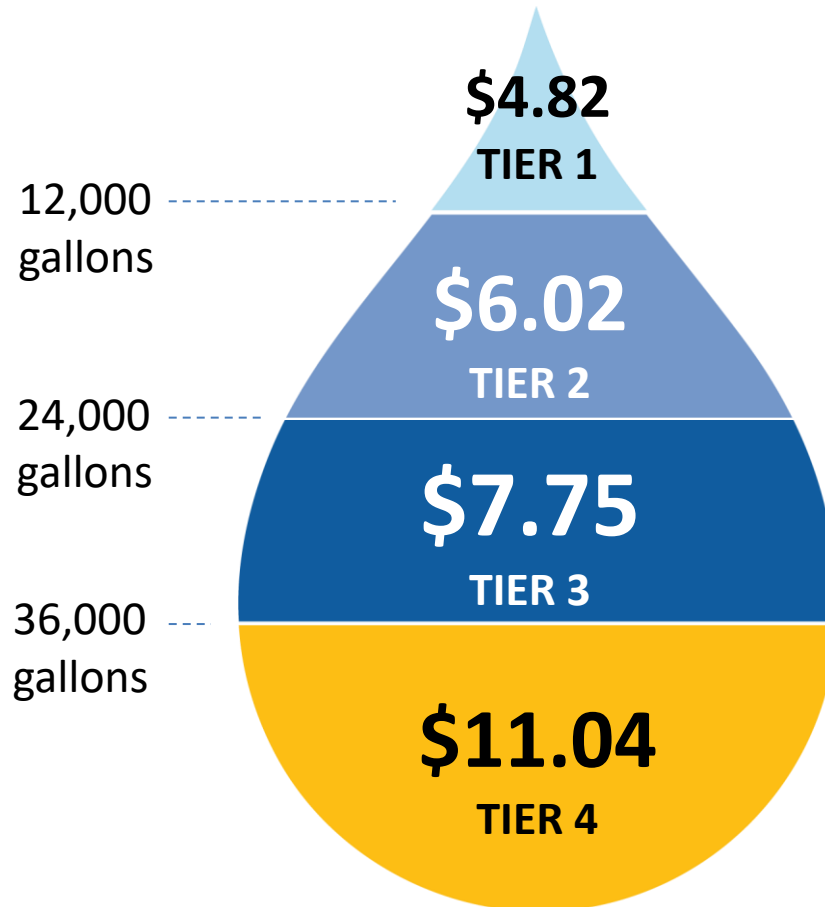
By comparison, in 2021 Brandon has exceeded 1.6 million gallons of water use for three consecutive days, triggering the Stage 2 restrictions. By actively reducing the overall outdoor use of water, we can ease the water restrictions and return to Stage 1 restrictions. If water usage habits do not change, the City may need to move to Stage 3 restrictions.



WHAT ROLE DO WATER RATES PLAY IN THE CONSERVATION PROGRAM?

A key component to any successful water conservation program is the adoption of a conservation-based rate structure to send appropriate pricing signals for inefficient use of water and to ultimately increase water use efficiency over time.

Brandon's Water Rate Tiers were established to target reduction in excessive water use and avoid unduly penalizing large families.



Residential Rate Structure Facts:

- Peak day demands = charged accordingly for their impact.
- Brandon's water rate structure was designed to address peak usage, while allowing a reasonable amount of water for lawn watering.
- Residential customers who use a moderate amount of water (between 12,000 to 24,000 gallons per day) are least impacted.
- Water use in Tier 4 recognized as excessive.

What Else is the City Doing?

The City continues to expand the Water Smarter Incentive Program that provides rebates for several water-conserving devices for utility customers.

High Efficiency Washer

Up to \$125 Rebate



High Efficiency Toilet

Up to \$100 Rebate



Rain Barrel

Up to \$50 Rebate



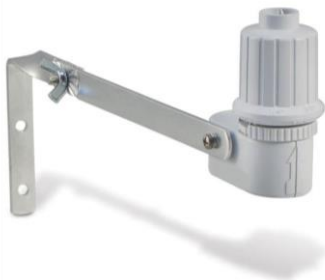
Weather-Based Irrigation Controller System

Up to \$100 Rebate



Rain Sensor

Up to \$50 Rebate



Irrigation Timer

Up to \$75 Rebate

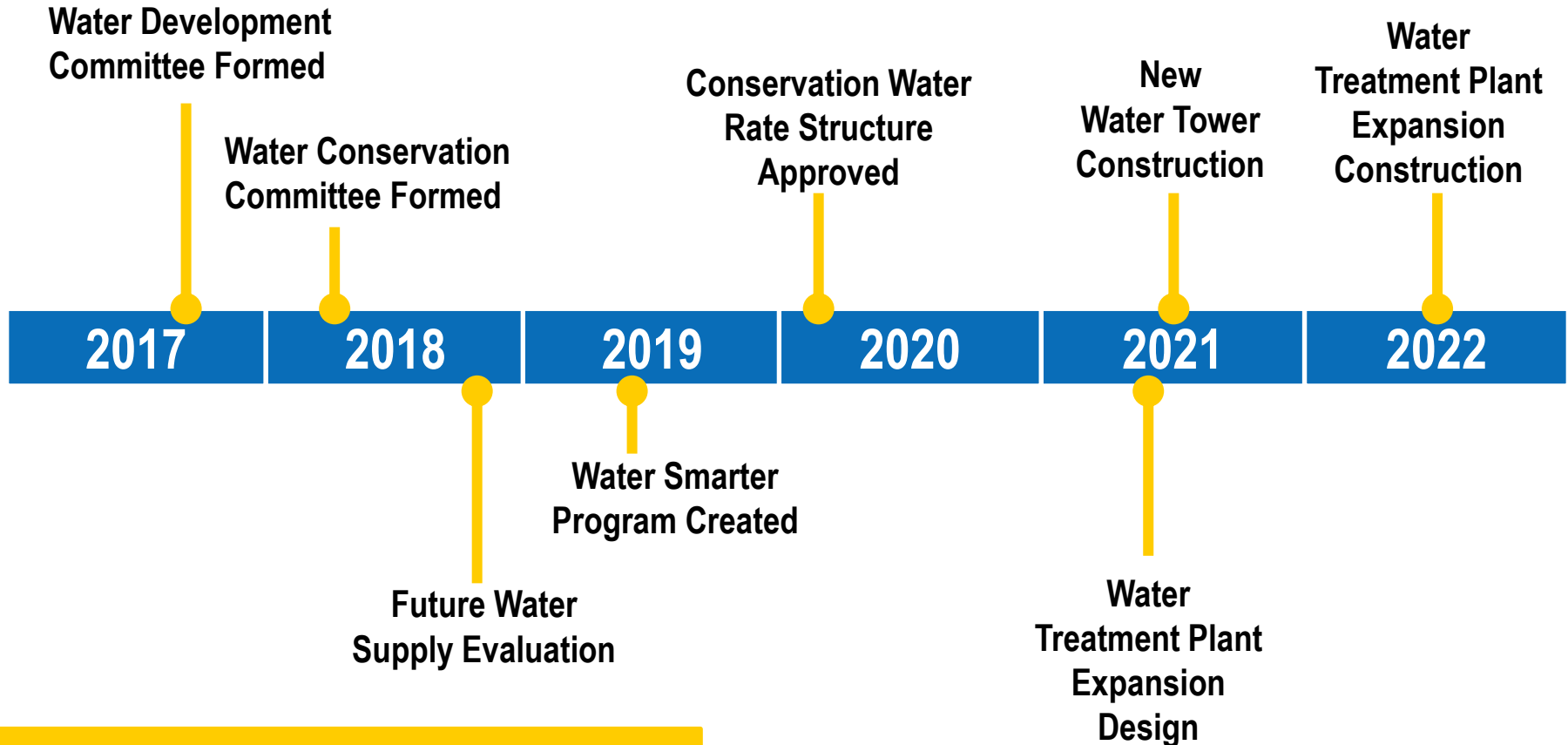


And Free Stuff Too:

- ✓ Showerheads
- ✓ Lawn Watering Gauges
- ✓ Toilet Leak Dye Tablets

TIMELINE OF RECENT IMPROVEMENTS AND PLANNED NEXT STEPS:

The timeline below illustrates the City’s continued investment in water system infrastructure upgrades, along with management policy changes to promote the wise use of water throughout the community.



Ongoing upgrades to Brandon’s water system: Well 8 construction and Well 6 rehabilitation to improve redundancy and storage.

KEYS TO PUBLIC EDUCATION AND UNDERSTANDING:

- The City has already taken several steps to address future water supply, treatment, distribution, and storage needs.
- Managing peak day usage through the Conservation Program is integral to the City's ability to continue to meet the essential needs of the community.
- Adherence to Lawn Watering Schedule, including applying only one inch of water per week on your lawn will keep individual water bills low and reduce peak day water use.
- Customers who create peak day demands should be charged accordingly for their impact on the water system; i.e., the "Cost of Service." Conservation rates are based on this concept.