WAVERLY WATER UPDATE

OCTOBER 2024

It has been several months since the Water Conservation Measures were put in place and we want to provide an update to residents. Our area of Eastern Nebraska has not received the annual average amount of rainfall since 2020 which has led to an extended drought that is comparable to the drought of 1936. In June of 2023, immediate efforts to conserve water were necessary, leading the Mayor to call a Water Emergency, limiting lawn watering to 3 days per week. Water usage continued to be very high and the forecast for precipitation remained grim. The Mayor further enacted the Water Emergency in August 2023, allowing for lawn watering one day per week. A significant decline in water usage was noted, indicating the Water Conservation Measures were effective. Even though the effects of the drought were still present in February 2024, the Water Emergency was lifted because it was not peak watering season and water was not being used on lawns. The City reached out to experts to further educate City Officials, City Staff and Residents on practical and effective water use for lawns.

Simply put, the Water Conservation Measures were put in place to reduce excessive amounts of water used on lawns. The goal is to educate all water users so they may better understand how much water is needed to keep lawns healthy. *Please see the City website for more information and suggested tips about lawn watering: www.citywaverly.com*

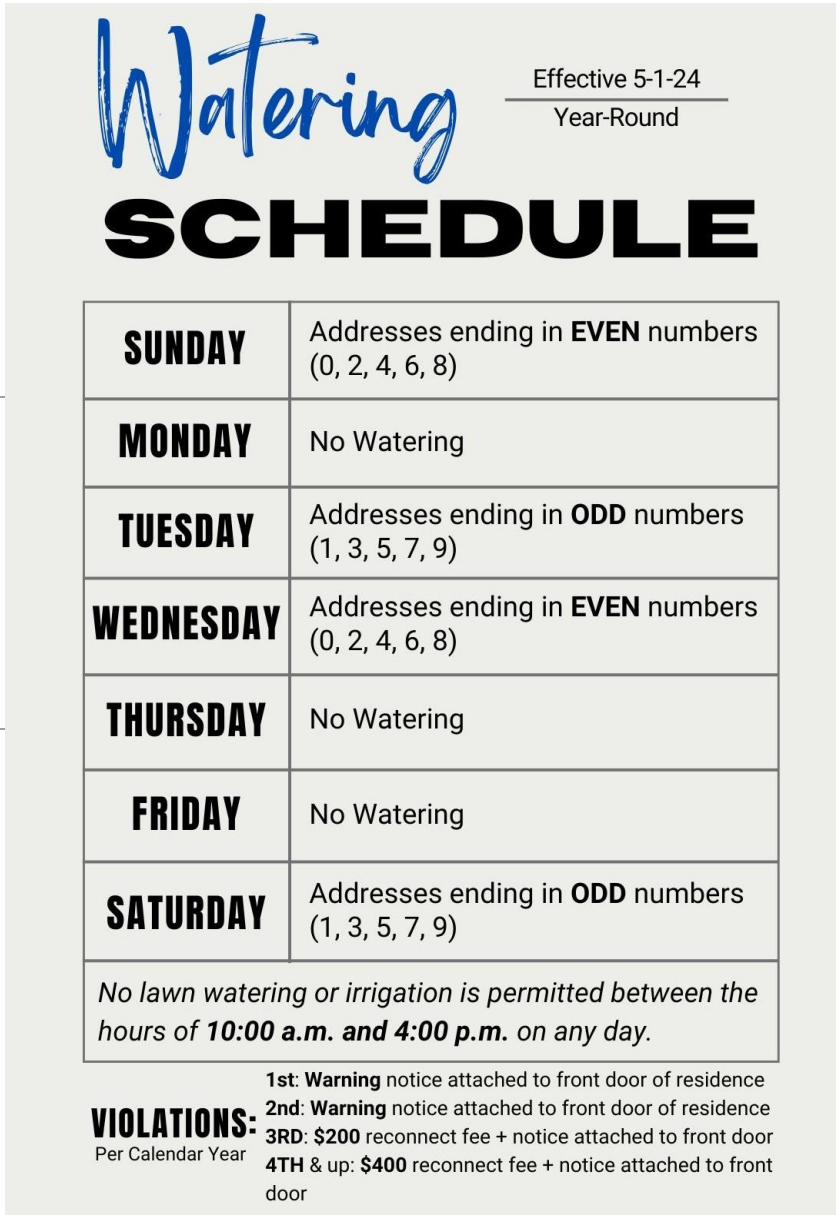
WATER CONSERVATION WATERING SCHEDULE

PLEASE UPDATE YOUR LAWN IRRIGATION SETTINGS TO ALIGN WITH YOUR ADDRESS ON THE WATER CONSERVATION WATERING SCHEDULE.

CITY PROJECTS COMPLETED

Well 7 Rebuild

Well 7 had been out of service due to a casing failure and a leaking pipe that destroyed the wellhouse. As of September 2024, the rebuild of Well 7 is officially completed! It is now back in service and has the capacity to produce 325 gallons per minute.



Well Maintenance Project
This project involved the cleaning and maintenance of Wells 4, 5, 6, 9, and 11 to ensure each well is working at its peak performance. Each well pump was taken apart and thoroughly cleaned and any necessary parts were repaired or replaced as needed. This project was completed in June 2024 and the overall results were favorable. The remaining two wells are scheduled for maintenance as follows: Well 8 by 2027 and Well 10 in October 2024.

Water Distribution Study
Population projections were studied to determine current and future water demands. The study found there are no water quality issues, and the City is proactively working with the Lower Platte South NRD and area producers to share best practices for fertilizer management in the Wellhead Protection Area and has eliminated the use of fertilizer on the farm ground where the primary well field is located. This study also looked at existing facilities that supply and store the water and recommended projects and improvements to increase the resiliency of our water system, including replacing old metal water mains. Residential and/or Commercial growth may warrant the need for a new well site to ensure adequate supply during peak usage months.

Well Field Hydrogeologic Analysis
With the recent declines in static and pumping water levels in the municipal wellfield, Waverly is looking to ensure that it can provide adequate water supply to meet the projected water demand as the population expands. Six of the 8 wells are in the semiconfined Dakota Aquifer system, meaning that recharge from precipitation occurs over many years as opposed to immediate responses to precipitation events. This implies that it will take several years of increased precipitation to alleviate the decline in water levels seen around Waverly. This study includes recommendations which will make Waverly's wellfield more resilient to both regional water level declines and an increase in water supply demand.

Well Siting Study
Locations have been identified for potential new wells in areas around Waverly. The City has budgeted funds in the coming year for up to 10 test well locations and depending upon results of the test wells, could potentially begin the process of adding an additional well in the next year.

* All study documents are posted online in our meeting software and on our website.

THE BOTTOM LINE

Through various water studies and daily well observations, we have determined that our infrastructure is capable of supplying water for current and projected growth demands. We have completed projects that help ensure our current infrastructure is properly maintained and operating at its peak ability.

What we can't control or improve is the amount of rain we receive. At the time of this writing, Waverly hasn't had precipitation since the beginning of August and that was only 1.5 inches. WATER CONSERVATION WILL ALWAYS BE OUR MOST EFFECTIVE TOOL TO MANAGE DAILY WATER USAGE AS THE DROUGHT PERSISTS IN OUR AREA.

We will continue to share the importance of water conservation efforts for all community members through our Facebook page "City of Waverly, Nebraska", our website www.citywaverly.com, and public notices.

Thank you all for doing your part.

Waverly
A Great Place to Grow