CITY COUNCIL WORKSHOP WATER CONSERVATION PLAN UPDATE

September 7, 2023

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OVERVIEW OF WATER CONSERVATION PLAN (CODE OF ORDINANCES, ARTICLE 13.06)

Water Conservation Goals

 Establishes 5 and I 0-year water reduction goals (by GPCD*) to reach I 40 GPCD by 2070.

Landscape Design and Installation

• Establishes a permit process for irrigation installation and requires droughttolerant grass for new and renovation projects.

Landscape Watering Management

 Establishes the allowed watering days and times for residential and commercial customers

Prohibition of Water Waste

 Prohibits certain activities that are considered wasteful: allowing water runoff, failing to repair a controllable leak, non-recycling decorative fountains, non-recirculation systems for car washes or laundromats.

Current	GCPD
Historical Average (2010-2019)	188
5-year goal	180
10-year goal	175
2070 Target	140

*GCPD – gallons per capita per day

(CODE OF ORDINANCES, SECTION 13.06.006)

- Establishes landscape watering hours: Midnight to 10am and 8pm to Midnight.
- Establishes landscape watering days.
- Prohibits landscape weekend watering.
- Permits watering by handheld hose, drip irrigation, or a 5-gallon bucket at any time or day.
- Establishes the issuance of Landscape Watering Permits.
 - Allows residents to water newly planted lawns by irrigation system without adhering to their watering days for 30 days.

WATER CONSERVATION CHALLENGES CODE COMPLIANCE

- Educating the public on the City's Water Conservation Plan is most important.
- Water Conservation handouts are provided when code compliance sees FORU customers watering on incorrect days/times.
- Starting August 2023 code compliance works flexible hours to cover occasional weekends.
- Current process is based on educational outreach.

Educational Notice

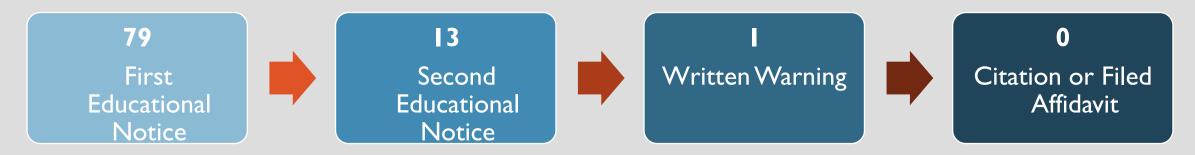
2 Educational Notice

Written Warning

File Affidavit with Municipal Court?

WATER CONSERVATION CHALLENGES CODE COMPLIANCE

- Educational Notices are provided in person or posted at the residence.
- Warning of Violations is provided in person or posted in addition to a mailing of the notice to the property owner.
- Notices given out from September 2022 to Present:

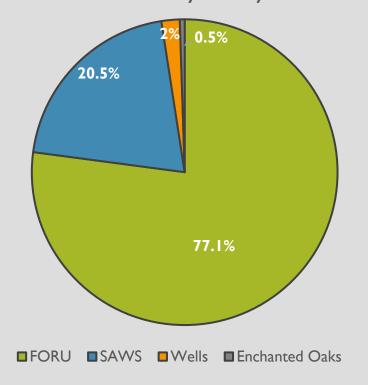


• No citations or affidavits have been filed with Municipal Court to date. Guidance is needed on whether this is supported if the need arises.

WATER CONSERVATION CHALLENGES OTHER UTILITY CUSTOMERS

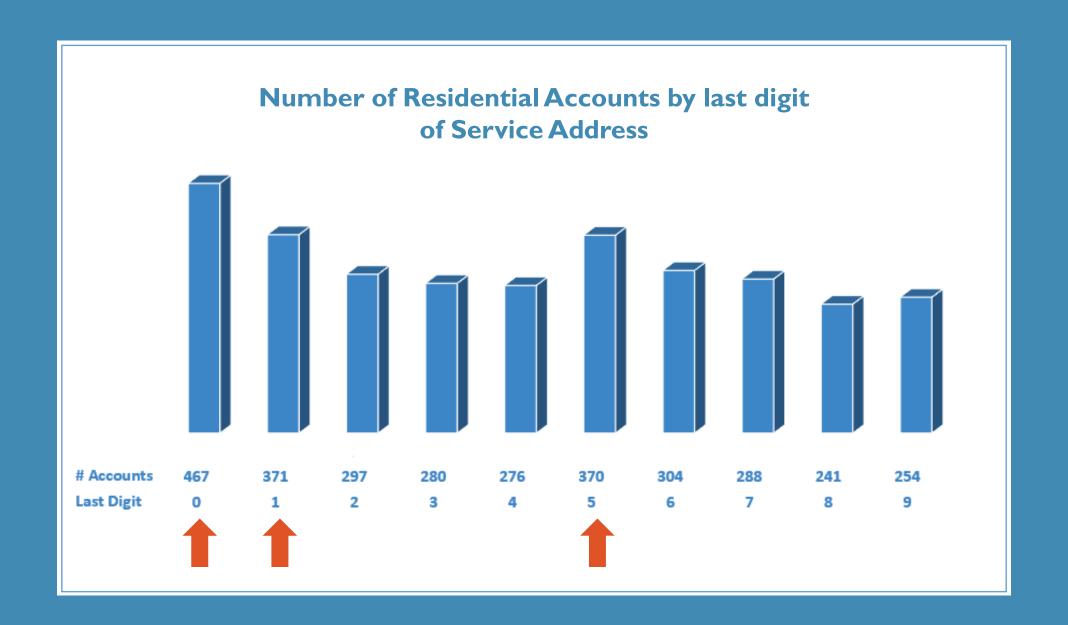
- Utility Providers within FOR City Limits:
 - Fair Oaks Ranch Utilities (FORU)
 - San Antonio Water System (SAWS)
 - Enchanted Oaks Water Utility
 - Private Well
- Currently, staff only enforces drought restrictions on Fair Oaks Ranch Utility customers.
- SAWS cannot enforce their restrictions within our city limits.

% Connections by Utility Provider



CURRENT WATERING DAYS SCHEDULE

Watering Day	Address Ending In:
Monday	0 – I
Tuesday	2 – 3
Wednesday	4 – 5
Thursday	6 – 7
Friday	8 – 9
Saturday	N/A
Sunday	N/A





The following are a few options up for discussion on changes that could be implemented.

Option #I – Status Quo

Option #2 – 7-Day Distribution by Service Address

Option #3 – 7-Day Distribution by Sequential Service Address

Option #4 – Designate a Commercial Watering Day

OPTION #I- STATUS QUO

Current watering day schedule remains unchanged.

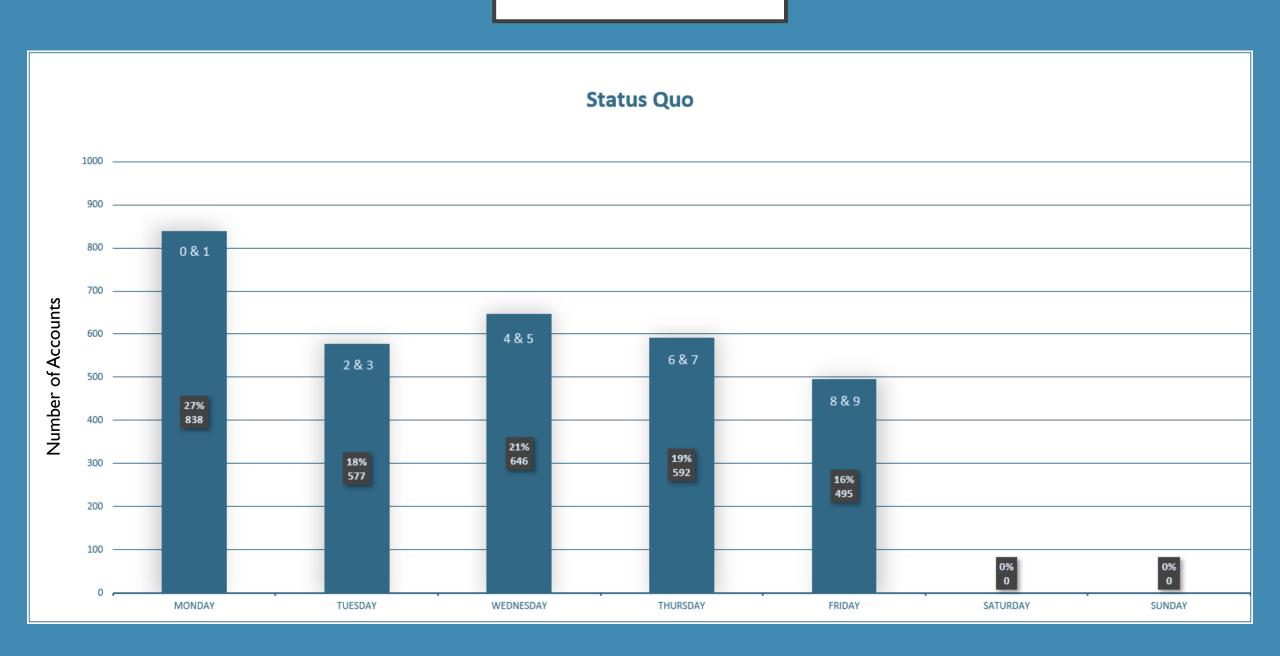
- Current watering schedule causes several peaking days throughout the week.
- The largest peak occurs on Monday due to the large number of residential and commercial user addresses ending in 0 and 1. Addresses ending in 5 are the next runner up for largest group.
- Due to the high peak of water usage on Mondays the water tank levels are not given enough time for the water tanks to refill before the other schedule watering days usage begins.
- This results in the water plants playing catch up throughout the week until Thursday when the usage starts to slow down.

Pros

 Current watering schedule and is similar to other utilities

Cons

 Creates peaks and stress on the plants and staff



OPTION #2 - 7-DAY DISTRIBUTION BY SERVICE ADDRESS

Switch watering days for a more even distribution of service addresses across 7 days

- This method would be the best-case scenario for distribution as it spreads the usage across the week evenly.
- FORU commercial accounts are not included in this graph. However, they
 would be assigned to Tuesday for watering days as it has the lowest number of
 addresses assigned.
- This method would affect all accounts except addresses ending in 9.

Pros

- Steady flow across the week
- No large peaks
- Demand is easier to manage

Cons

- No sequential order may confuse FORU customers
- Will require increased education for FORU customers





OPTION #3 - 7-DAY DISTRIBUTION BY SEQUENTIAL SERVICE ADDRESS

Split Monday's service addresses to Sundays and Mondays and assign commercial accounts to Saturdays.

- This method would be an improvement in terms of distribution as it spreads some of the high peak usage across the week.
- This method separates the most frequent service addresses of 0 and 1 into two days. Sundays would now be for addresses ending in 0 and Monday for addresses ending in 1.
- The FORU commercial accounts would be assigned to Saturday for watering days to assist in lowering demand during the week.
- This method would affect FORU commercial accounts and addresses ending in 0.

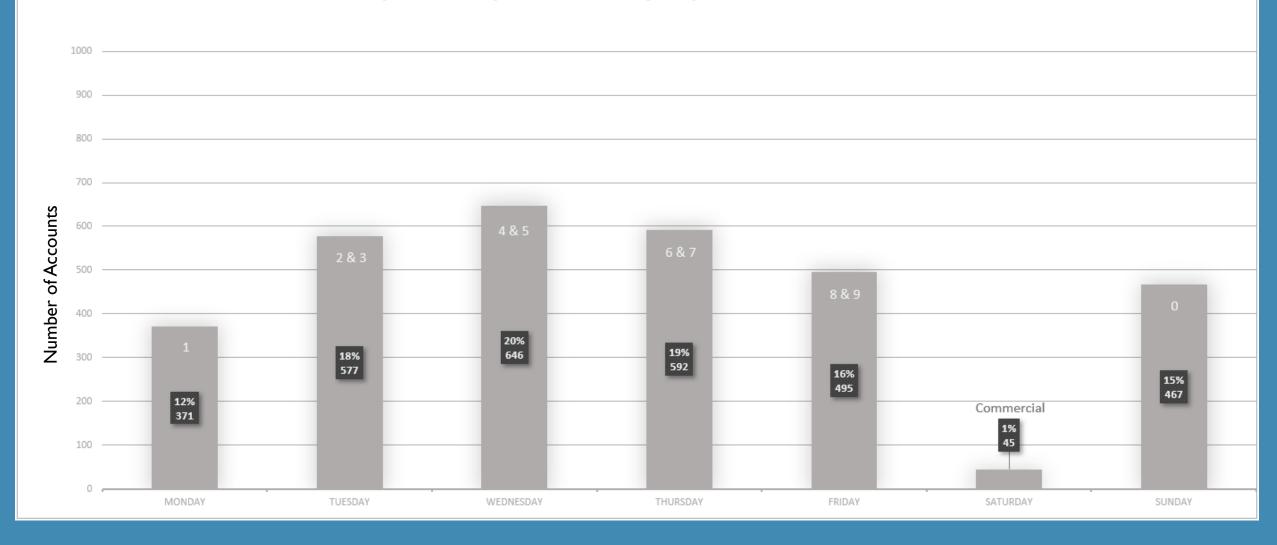
Pros

- It helps spread demand out on peaking days
- It does not affect a large number of FORU customers

Cons

 Will require increased education for FORU customers

Proposed 7 Day Distribution by Sequential Service Address



OPTION #4 - DESIGNATE A COMMERCIAL WATERING DAY

Current watering day schedule remains unchanged but move commercial watering days to Saturdays.

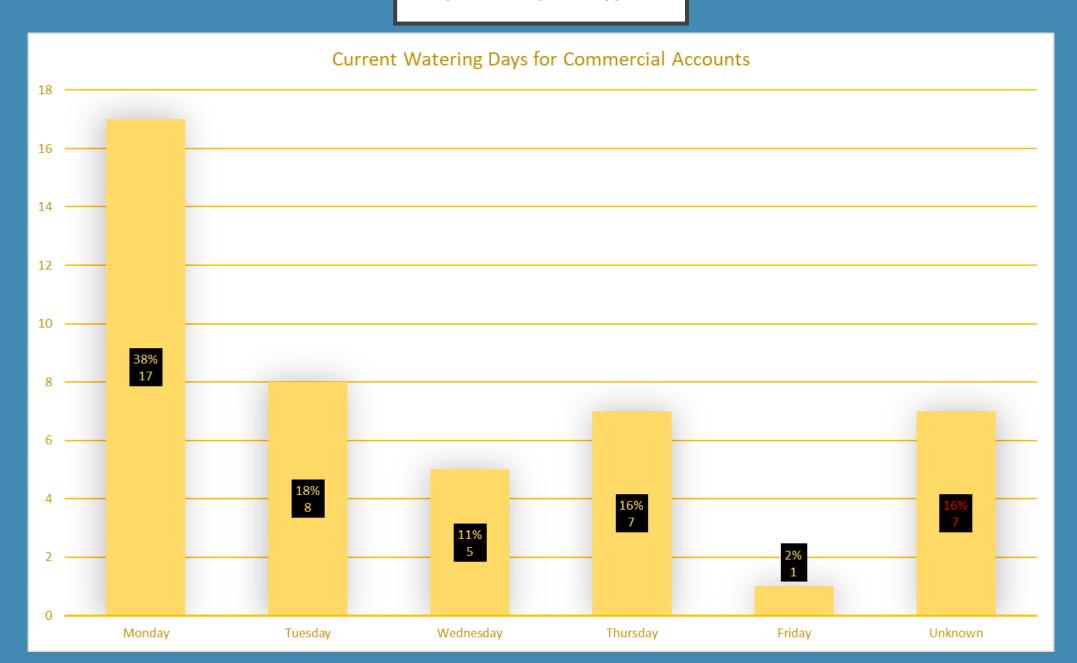
- This method would be an improvement in terms of consumption from Monday and Wednesday high peak usage but FORU residential accounts demand would remain unchanged.
- Currently, commercial accounts follow the current watering date. Many of their days fall on Mondays, Tuesdays and Wednesdays and are generally high usage customers.
- This method would only affect FORU commercial accounts.

Pros

- Would not affect residential accounts
- FORU commercial accounts are generally high water users

Cons

Peak demand from FORU
 residential accounts will still exist







COMPARISON OF WATERING DAY SCHEDULE OPTIONS



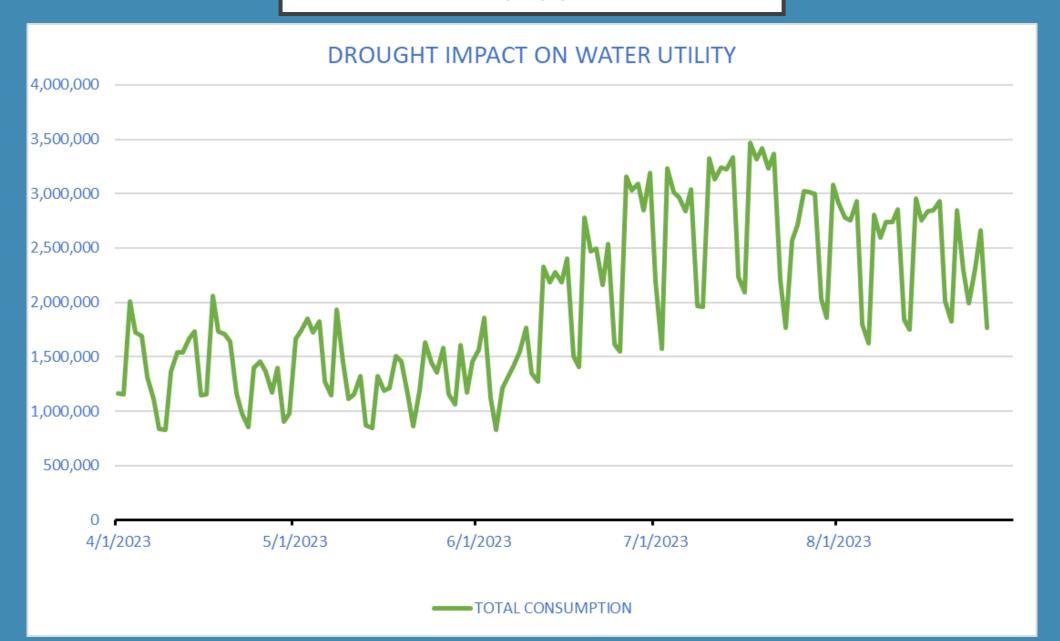
SUMMARY OF PROPOSED CHANGES

- Update Water Conservation Goals with the current data and update goals based on these numbers
- Update the Watering Day Schedule to Option #2

Additional Options

- Enforce SAWS drought restrictions within Fair
 Oaks Ranch by adopting their rules into our Water
 Conservation Ordinance.
- Shorten allowable watering hours (year-round or during summer months)
- Change drip irrigation to be used only during allowable watering hours.

CONSUMPTION DATA APRIL TO CURRENT



QUESTIONS?