



ZENCITY TEMPERATURE CHECK REPORT

# Drought and Water Use

Prepared for Newport Beach, CA

# Introduction

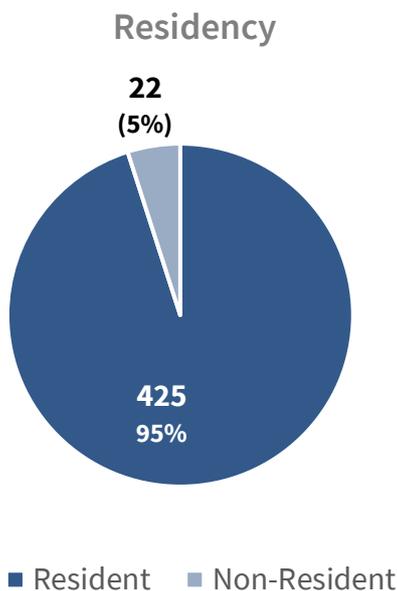
The following report reviews residents' feedback and input regarding water conservation and ongoing drought by analyzing resident responses to a survey designed by Zencity and deployed by Newport Beach. The survey was conducted between October 27 and December 3, 2021, and received 447 responses.

The survey included 1 open-ended and 17 closed-ended questions. The following analysis includes: Results of each closed-ended question; Results of the open-ended question; Related social media discourse analysis; Main takeaways and recommendations.

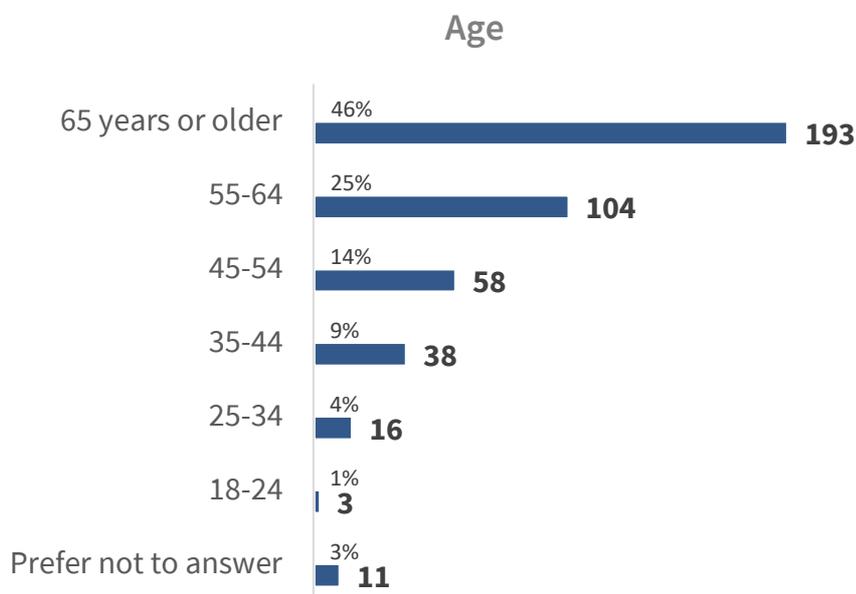
## Executive Summary

- Most respondents were concerned about the drought and water shortage and have reduced their water usage in the last few years.
- Respondents expressed support for most water conservation practices, but less so for capturing shower water and stopping to water their landscapes entirely.
- Many favored developing a mechanism that would allow households to track their water usage in order to limit their consumption.
- A desire to see the City play a more active role in the water crisis — through education and outreach, enforcement, and leading by example — also appeared recurrently among survey responses.

# Demographics

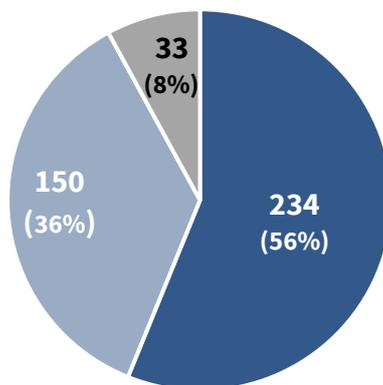


**95% of all respondents were residents of Newport Beach.** *The remainder of this report only analyzes the responses of self-identified residents.*



**Nearly half (46%) of resident respondents were 65 years or older.** Overall, only 14% of respondents were less than 45 years old.

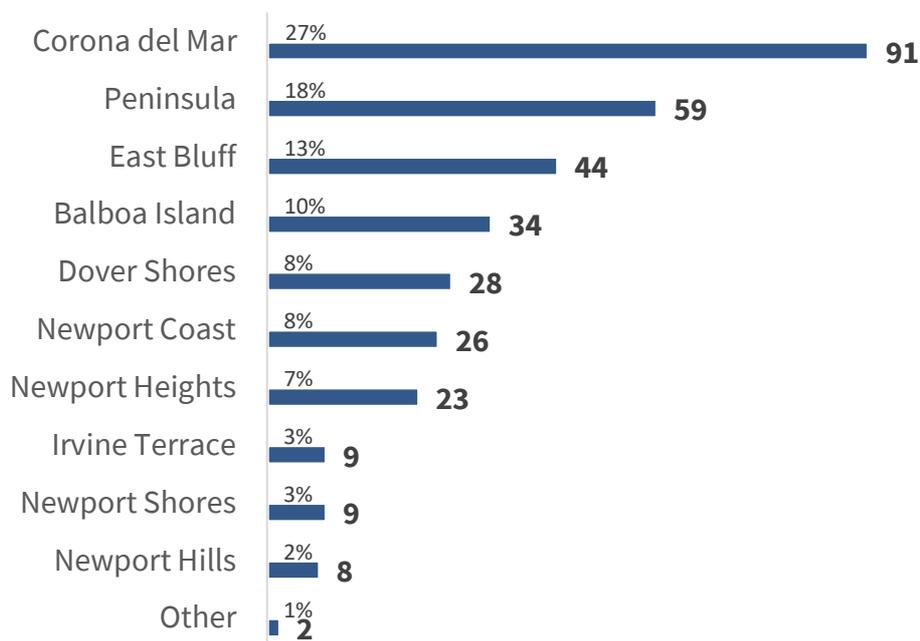
### Sex



■ Female ■ Male ■ Other/prefer not to say

**More than half (56%) of respondents were female**, while another 36% were male. The remaining 8% identified otherwise or preferred not to say.

### Neighborhood

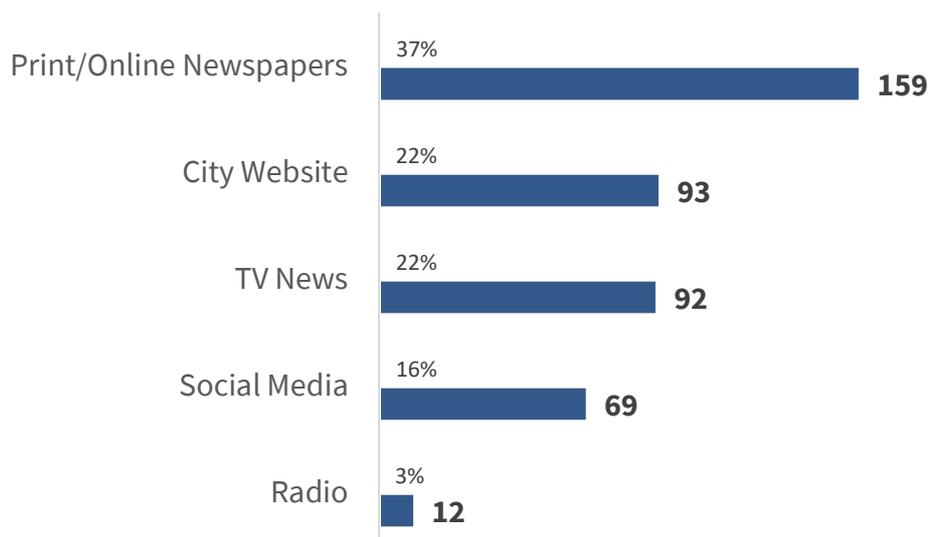


**The top-five neighborhoods accounted for more than three-quarters of all respondents:** Corona del Mar (27%), Peninsula (18%), East Bluff (13%), Balboa Island (10%), and Dover Shores (8%).

RESULTS ANALYSIS

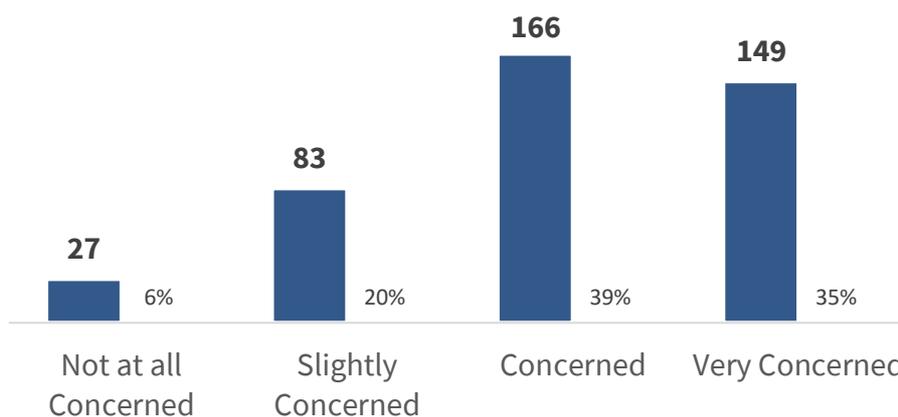
# Closed-Ended Questions Analysis

**1** What is your primary source of information about the drought/water use in the city?



**More than a third (37%) mainly receive information about the drought and water use in the city from newspapers.** Nearly half primarily turn to the city website (22%) and TV news broadcasts (22%).

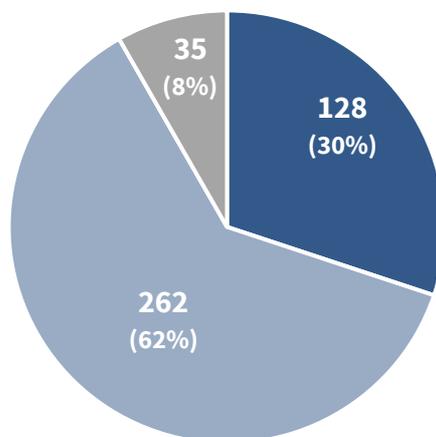
**2** To what extent are you concerned about a drought and water shortage?



**Nearly all respondents (94%) expressed some degree of concern about the drought and water shortage.** Almost three-quarters (74%) said they were either “concerned” or “very concerned” about the water crisis.

3

How much have you cut your water usage in the last few years?



■ To a large degree ■ A little bit ■ Not at all

**At 92%, most respondents had cut their water shortage to some degree in the past few years.** However, most had done so “a little bit” (62%) rather than “to a large degree” (30%).

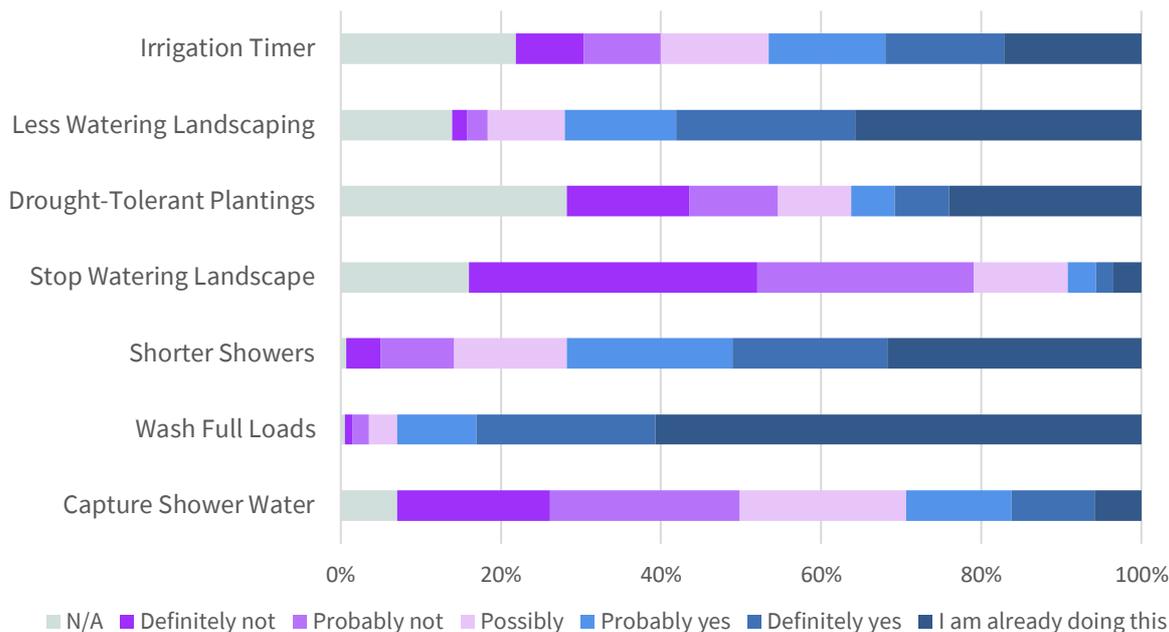
4

Would you be willing to cut your current water usage in the following ways due to drought?

Residents were asked to evaluate **seven proposed ways to reduce their current water usage:**

- 1.1 Install a weather-based **irrigation timer**
- 1.2 **Water landscaping** three days or less per week
- 1.3 Remove your grass and replace with **drought-tolerant plantings**
- 1.4 **Stop watering** my landscape
- 1.5 **Shorter showers**
- 1.6 **Wash full loads** of laundry and dishes
- 1.7 **Capture shower water** and reuse while waiting for it to heat up

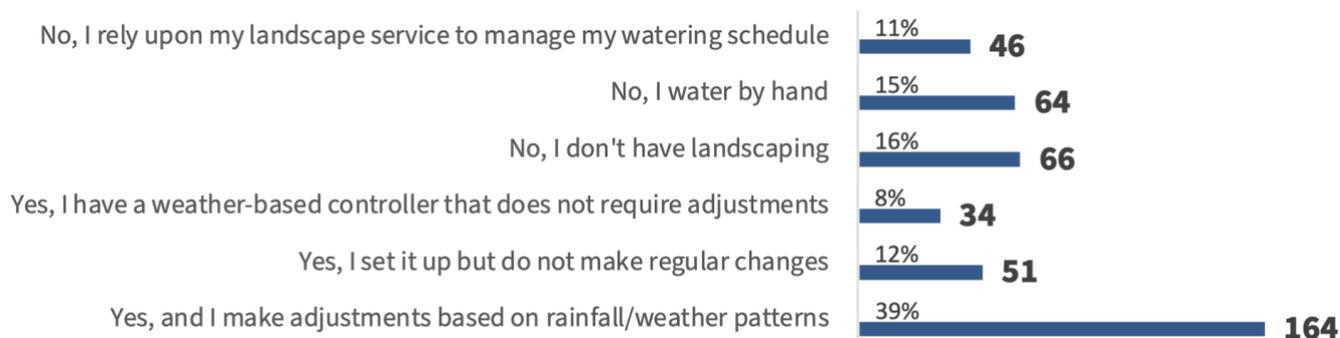
As shown in the graph below, **respondents expressed the most support for washing full loads of laundry and dishes and the least support for stopping to water their landscape altogether.**



**More respondents were inclined to adhere to five of the seven proposed ways to reduce water usage<sup>1</sup>.** Respondents were less inclined to stop watering their landscape completely (75%) and capture their shower water (64%)<sup>2</sup>.

**At 61%, most respondents shared that they already wash full loads of laundry and dishes.** A sizable share also said the same for reducing their water landscaping to three days or less per week (36%) and taking shorter showers (32%).

## 5 Do you have a sprinkler controller?

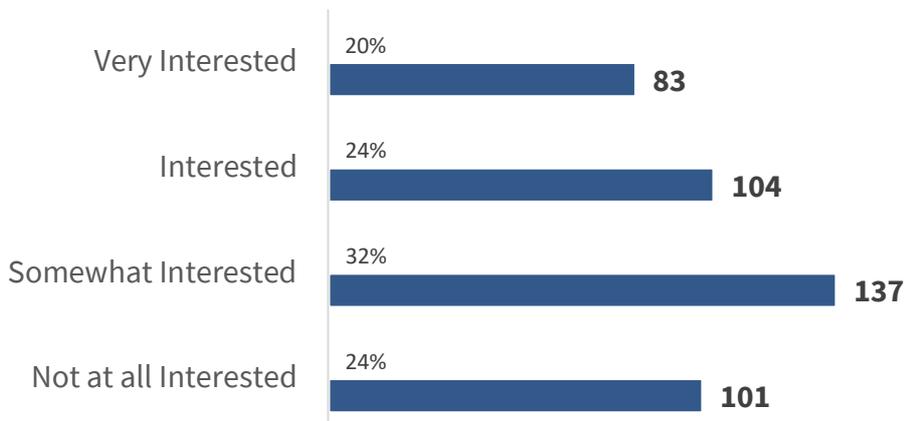


At 58%, **a majority of respondents reported having a sprinkler controller.** Further, most of those who have a sprinkler controller adjust the sprinkler's schedule — either automatically or manually — based on rainfall and weather patterns. Only 12% of respondents had a sprinkler controller and do not adjust its schedule as needed.

<sup>1</sup> An inclination to adhere is defined as responses of "probably yes," "definitely yes," and "I am already doing this."  
<sup>2</sup> Indicated by responses of "definitely not," "probably not," and "possibly."

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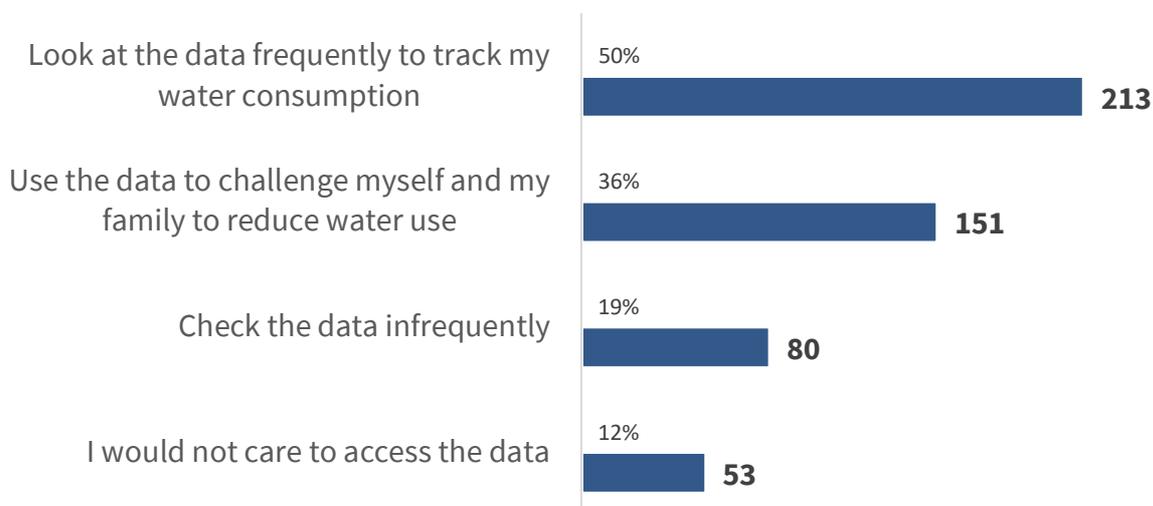
Are you interested in using a website or a mobile application that monitors your water usage and sends you alerts of possible leaks and high usage?



**More than three-quarters (76%) expressed some degree of interest** in using a website or mobile app that monitors their water usage and sends relevant alerts.

7

If you had easy access to more detailed information about your daily, weekly and monthly water use, how likely would you be to take the following actions? (select all that apply)<sup>3</sup>



**Most respondents expressed some interest in using data about their water usage to track or reduce their water consumption.** Only 12% said they would not care to access the data at all.

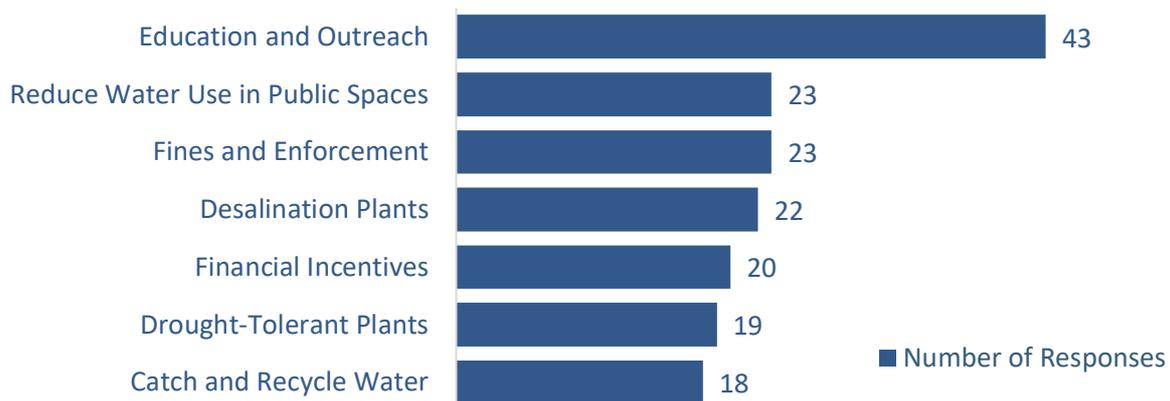
<sup>3</sup> Since respondents could choose more than one option, the percentages displayed add up to more than 100%.

RESULTS ANALYSIS

# Open-Ended Question Analysis

8

What would you like to see the City do to help reduce the impact of the current drought?



When asked what they would like to see the City do to help reduce the impact of the drought, **286 respondents provided their input through free-text responses**. Some of the main themes identified among the responses include:

- **Education and Outreach (43 responses):** The most common viewpoint expressed in the free-text responses was that the City should provide more educational materials for residents and communicate more about water conservations tips and initiatives.

*“More public education similar to what was done at the high point of the drought. If it’s top of mind for people they will be more mindful with their water usage. Do more education with the kids and how they can cut water usage.”*

- **Reduce Water Use in Public Spaces (23 responses):** At the same time, some thought that the City should focus on minimizing water usage in public spaces, such as sprinklers in road medians, parks, and public landscapes.

*“The City is wasteful in watering public landscaped areas. I see sprinklers on before, during and right after rain.”*

- **Fines and Enforcement (23 responses):** Many also thought that the City should more strictly enforce water conservation mandates and fine both individuals and businesses who are wasteful with their water usage.

*“Promote water reductions regularly and also tell water wasters how to correct overuse and/or fine them. Code enforcement needed.”*

- **Desalination Plants (22 responses):** Some supported using desalination to ensure a sufficient water supply year-round.

*“Since climate change is not going away any time soon, invest in desalinization. We have an infinite supply of water here.”*

- **Financial Incentives (20 responses):** Others pushed for financial incentives for those who reduce their water usage or install more water-friendly landscapes.

*“Provide a financial incentive to those who demonstrate minimal water usage.”*

- **Drought-Tolerant Plants (19 responses):** Another bloc called for a concerted effort to plant more drought-tolerant or drought-friendly plants.

*“Replace grassy medians with drought-friendly plants, encourage residents and local businesses to do so as well.”*

- **Catch and Recycle Water (18 responses):** Finally, some supported efforts to capture and recycle more unused water and rainfall, as well as increase water storage capabilities, including through a reservoir.

*“Create the ability to use more recycled water for irrigation, for the city and individuals.”*

In addition to the themes outlined above, other free-text response came from those who called for **more local restrictions on water usage (15 responses)**, a **reduction in property and commercial developments (13 responses)**, increased access to **water usage data (8 responses)**, and **higher utility charges for households that use more water (5 responses)**. In addition, **four respondents** explicitly expressed their agreement with implementing some or all of the proposals outlined in Q4 in this survey.

COMPLEMENTARY ANALYSIS

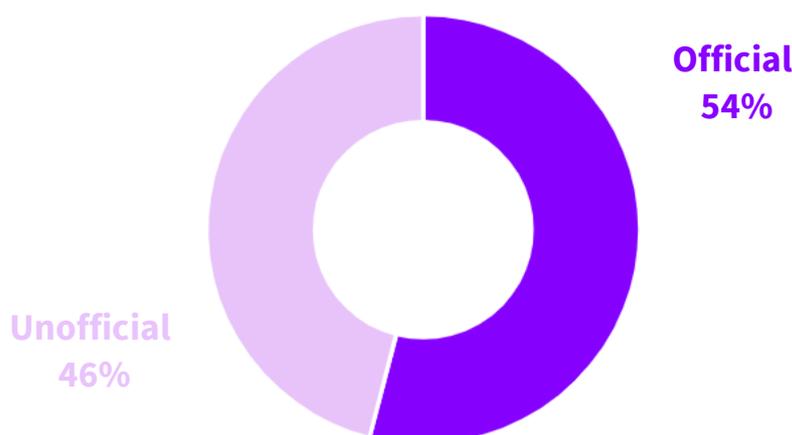
# Social Media Discourse Analysis

Since the beginning of the year, **795 online interactions** in Newport Beach’s online discourse concerned issues relating to regional [drought and water restrictions](#).

Overall, **slightly more than half (54%) of the discourse took place on official channels**, most of which came from the City’s Instagram account (325 interactions). The overwhelming majority of the discourse expressed neutral sentiment as residents responded with ‘likes’ and ‘shares’ to PSA’s about water conservation.

### Datasource Distribution: Drought and Water Restrictions

(January - November 2021)



Additionally, **more than a quarter (29%) of the discourse came from posts linking to the City’s [WaterSmartNewport website](#)**, most of which appeared in late May and June. Residents responded to these posts almost exclusively with tacit support, as expressed through ‘loves,’ ‘likes,’ and ‘shares.’

In addition, another [119 interactions](#) in the discourse came from posts about the Drought and Water Use survey itself, **nearly all of which (97%) stemmed from official channels**. Most responded to these posts with ‘likes’ and ‘shares,’ though a couple of commenters called for desalinization and for landlords to be held accountable for water leaks and waste.

## Conclusions

The survey results outlined above indicate that although **most are concerned about the drought and water shortage and have adjusted their water usage accordingly, there remains a number of focus areas** that, if addressed, could encourage more people to conserve water.

Almost all respondents indicated that they had reduced their water usage in the last few years, though a minority only did so substantially. In particular, **respondents showed the most willingness to wash only full loads of laundry and dishes, take shorter showers, water their landscape less, and utilize irrigation timers**. Additionally, some showed a willingness to transition to more drought-tolerant plants.

Accordingly, the City may want to focus its efforts on **promoting these practices rather than those met with more resistance**, such as capturing shower water and stopping to water their landscapes altogether.

Further, the fact that the largest block of free-text responses came from residents who supported more education and outreach efforts about water conservation indicates that **many support the City taking a larger role in engaging the community about this issue**.

**A desire to track household water usage to help reduce water usage** also appeared as a recurring theme in responses to both the closed-ended and open-ended questions.

As such, **the City should consider investing resources in such a platform that allows residents to track their household water usage**, which would also fulfill residents' desires to be educated about water conservation practices.

Finally, in the open-ended responses, **residents also voice a desire to see the City take a more active role in ensuring that water conservation practices are properly upheld**. In particular, they cited minimizing water usage in public spaces, enforcing ordinances, fining excessive water users, and even providing financial incentives for reducing water usage.

Accordingly, the City should be aware that **residents want the municipality to play a more active role in holding locals accountable, as well as the City itself, for their water usage**.

To conclude, we encourage the City to close the “feedback loop” around the issues and pain points raised by residents in this survey. Although there is considerable support for individual steps toward water conservation and reduction — which many already practice — **certain adjustments and improvements may allow residents to be more conscious of their water usage and better incorporate beneficial environmental practices into their daily lives**.