

# This presentation premiered at WaterSmart Innovations

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# Multi-Family Water Use Patterns in Tucson, AZ and Beyond

## October 7, 2021

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Photo by [Clay Banks](#) on [Unsplash](#)

## Water use guidelines in Tucson

- One Water / drought context for conservation
- Developing guidelines
- Multi Family analysis
- Next steps

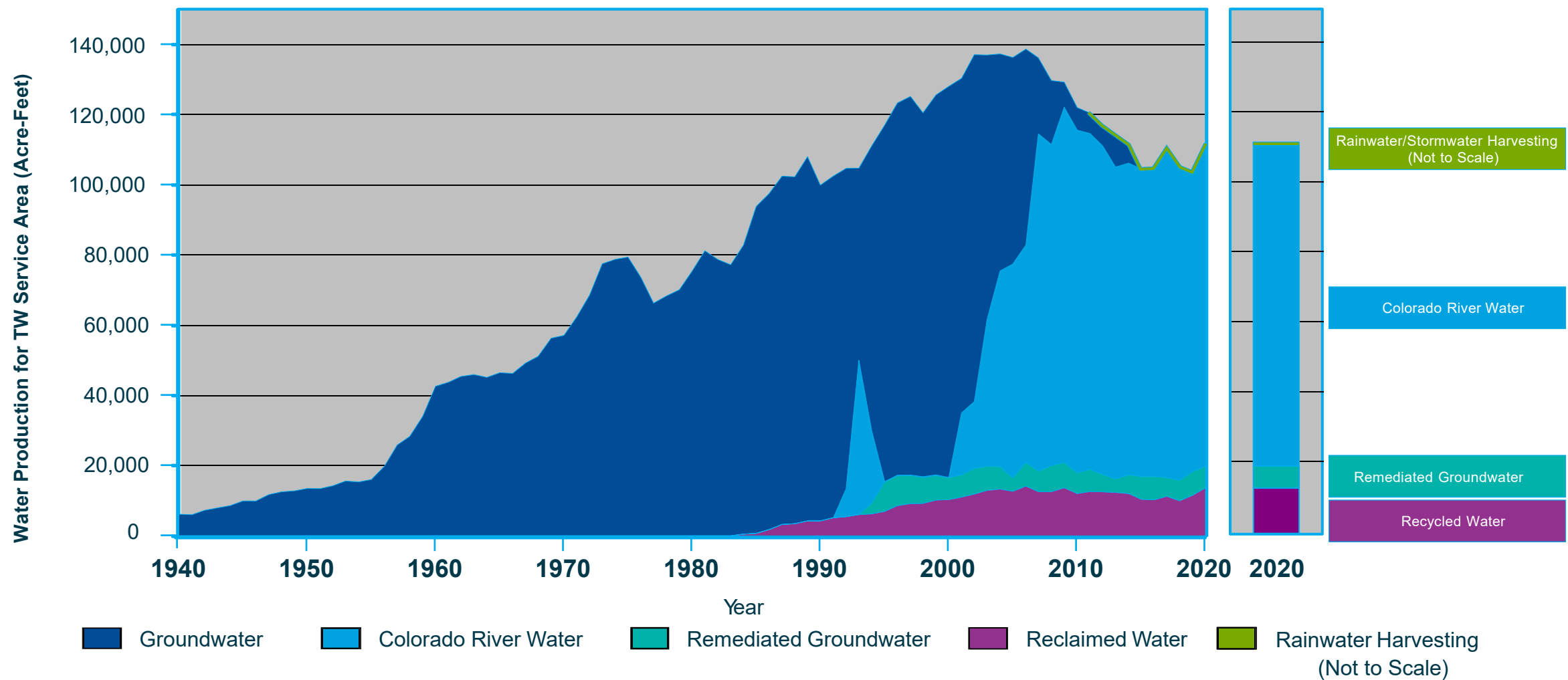


**Tucson takes an  
integrated water  
resource  
management  
approach;  
recognizing that all  
water has value**

*[onewatertucson.com](http://onewatertucson.com)*



# Water Production for Tucson Water Service Area (1940-2020)





# **DROUGHT PREPAREDNESS AND RESPONSE PLAN**

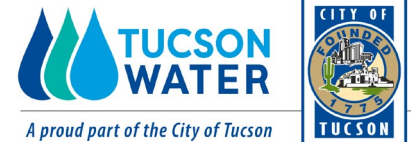
Original Plan Approved: November 28, 2006  
Ordinance Approved: March 20, 2007  
October 2020 Update

Required by A.R.S. §45-342, submitted to Arizona Department of Water Resources every five years

Originally approved in 2006, minor updates in 2012 and 2017

Key updates in 2020:

- Drought stages and thresholds are now aligned with the 2019 Drought Contingency Plan tiers
- Demonstrating how the Utility has diversified its water supply portfolio, increased water savings, and improved infrastructure redundancy
- Integrating climate change adaptation planning into the drought plan and One Water 2100
- Streamlining the drought responses and incorporating a strategic, data driven approach (water use guidelines)



**Tier 0**



City leads by example; develops guidelines

**Tier 1**



Customers receive targeted conservation information

**Tier 2**



Customers conduct water audits

**Tier 3**

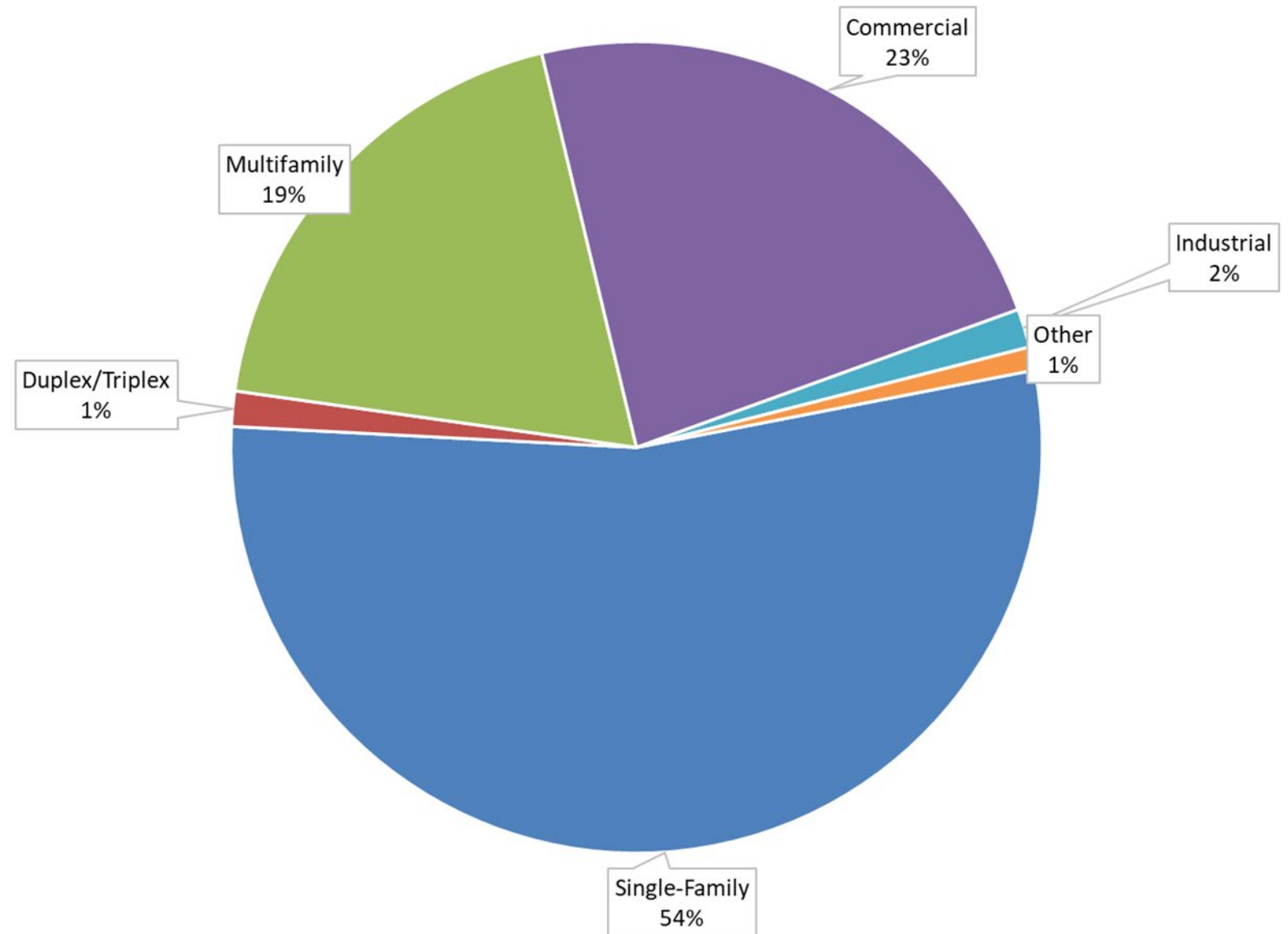


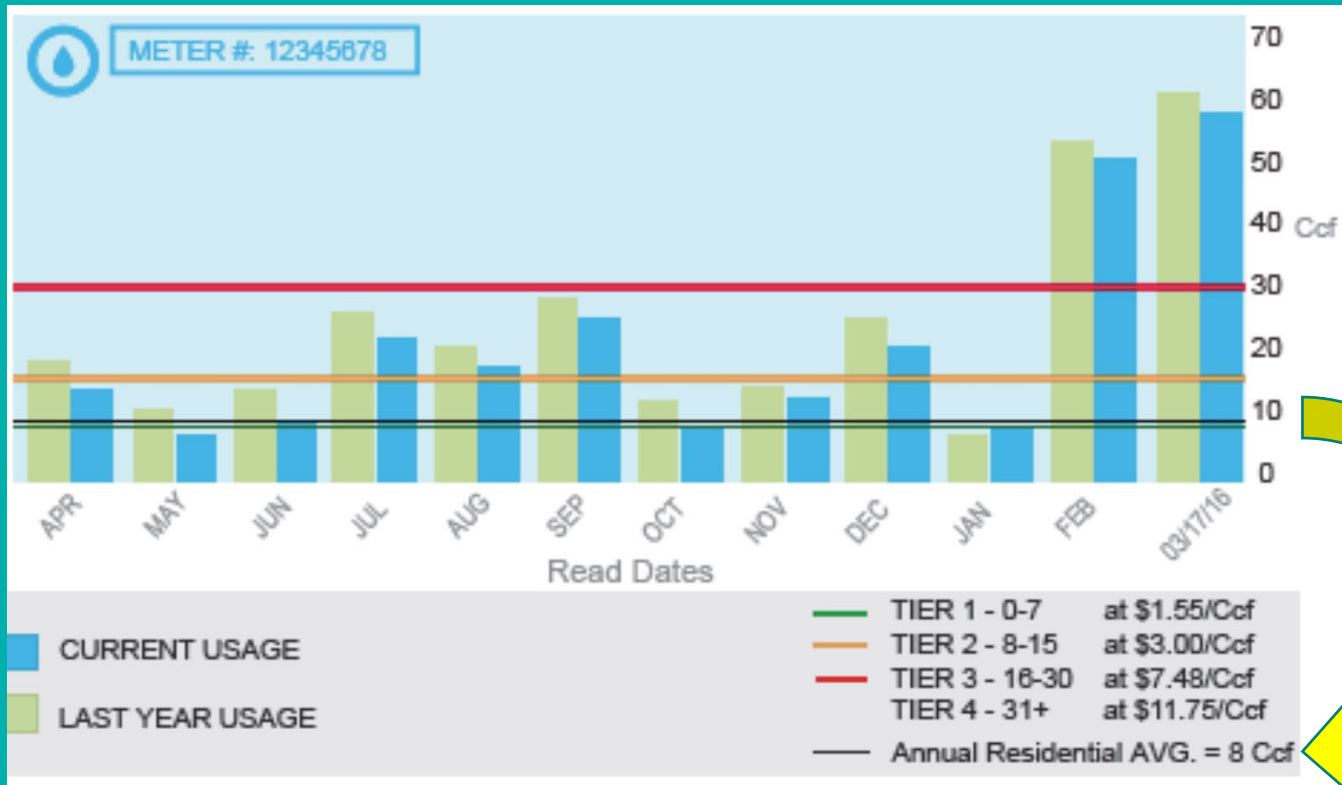
Customers implement audit recommendations

# Developing water use guidelines



Tucson Water 2019 Potable Metered Use





## Water bill guidelines

- Pricing tiers
- Single family residential consumption 8 ccf per month



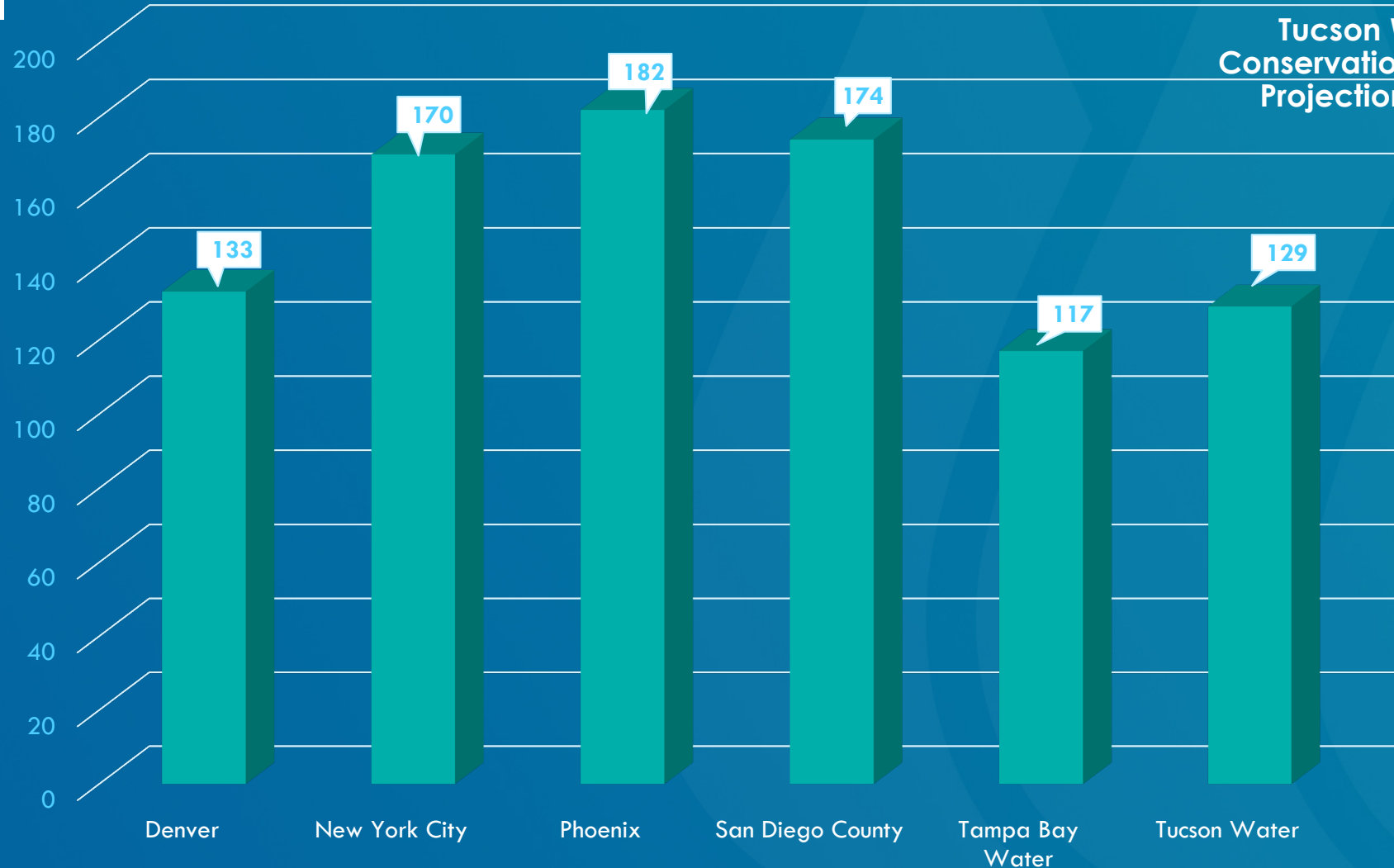
THE  
**Water  
Research**  
FOUNDATION


Water Use in the Multi  
Family Sector, 2018



Average Annual Gallons per Unit per Day

Tucson Water  
Conservation 10 Year  
Projection, 2021



**TUCSON  
WATER**  
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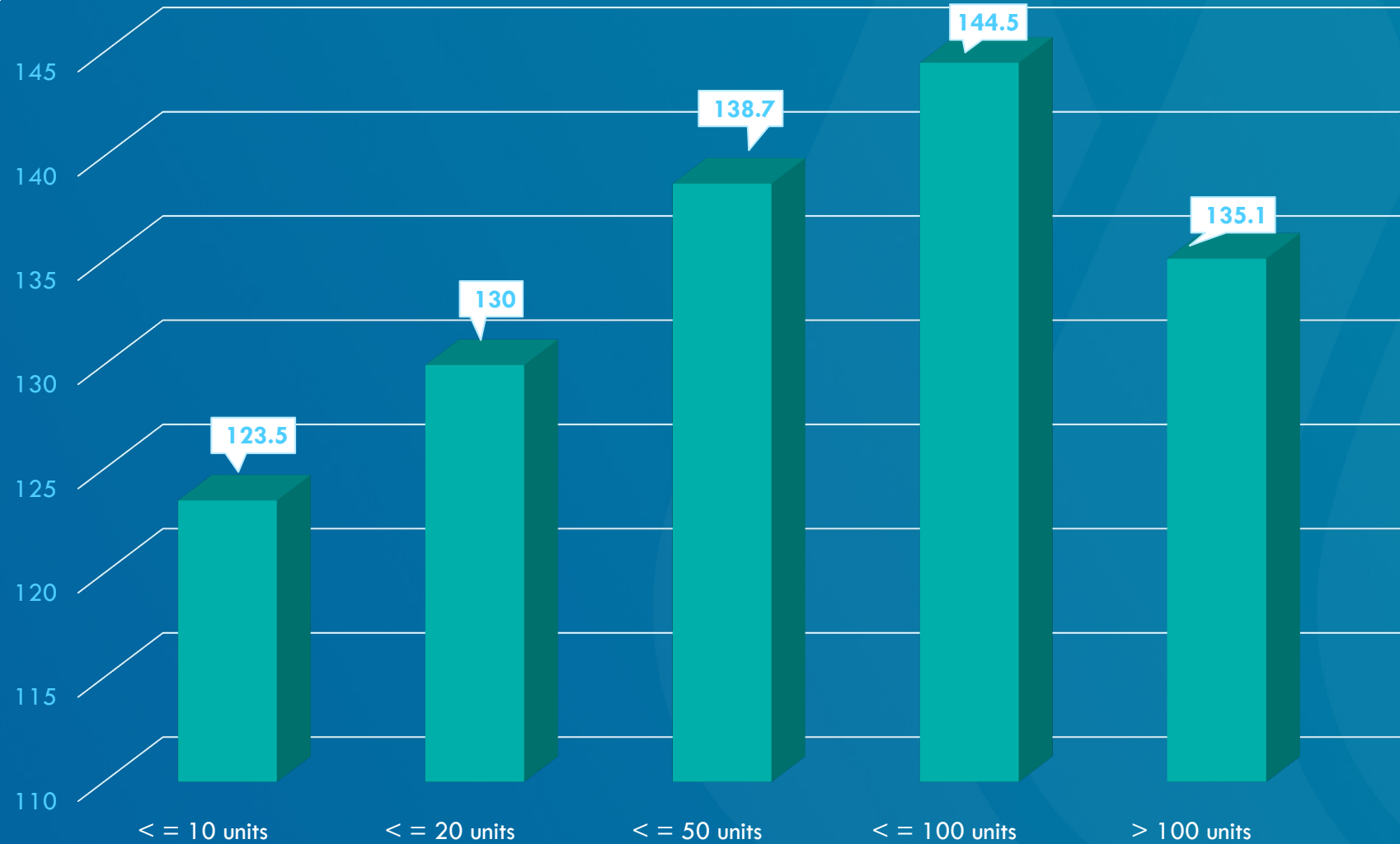




Tucson Water  
Conservation 10 Year  
Projection, 2021

## Multi Family Complexes of Different Sizes

Average Annual Gallons per Unit per Day







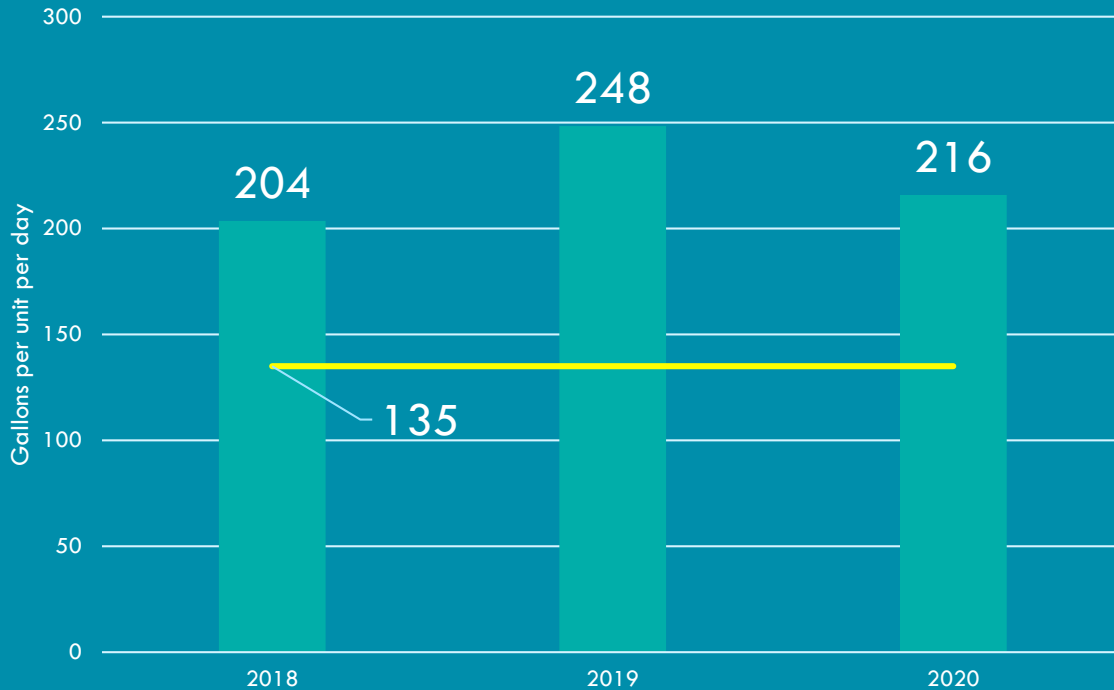
## Conclusions

- Multi family consumption is typically lower than single family consumption
- Less seasonal water use than single family
- Larger complexes with more amenities use more water per unit

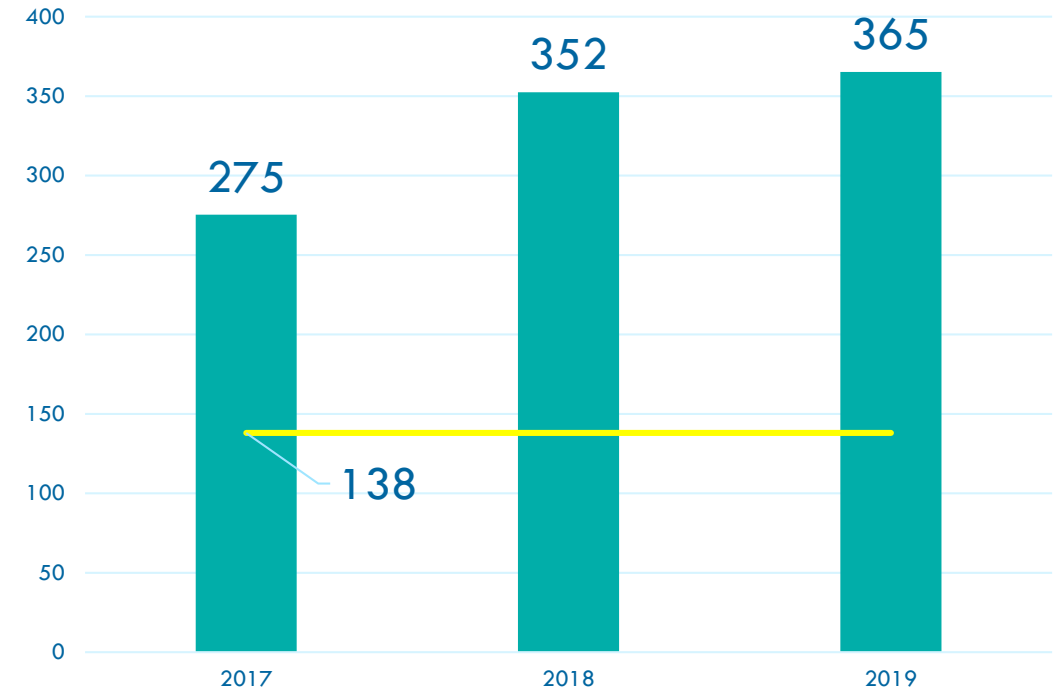


# Communicating the guidelines to Multi Family customers

## Large complex (301 units)



## Small complex (23 units)



## Next steps:

1. Drought communications
2. Residential guidelines
3. Large customer guidelines

1

- Tucson has enough water to thrive, but never enough to waste
- Conservation has made our community more resilient, allowing us to save decades of water in the ground
- Get involved with One Water 2100 to help us plan for the future

2

Alliance for Water Efficiency's Home Water Works Calculator

<https://www.home-water-works.org/calculator>

3

Landscape Water Budget App for Large Customers



[Home](#)

## Water Calculator

How much water do I use? How do I compare? How can I conserve?

Home water conservation is easy once you understand how and where you can use less. The quick and easy Water Calculator shows you which water uses in your home are efficient and which are not and offers simple conservation tips that save water and energy.

**How much  
water** do you use?



click **HERE**  
to start  
NOW!



Large customer water use guidelines incorporate GIS and consumption data to create a budget





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Thank you 😊 Any questions?