



Cultivating a Sustainable Community

*Marin Water Board Retreat
October 15, 2021*



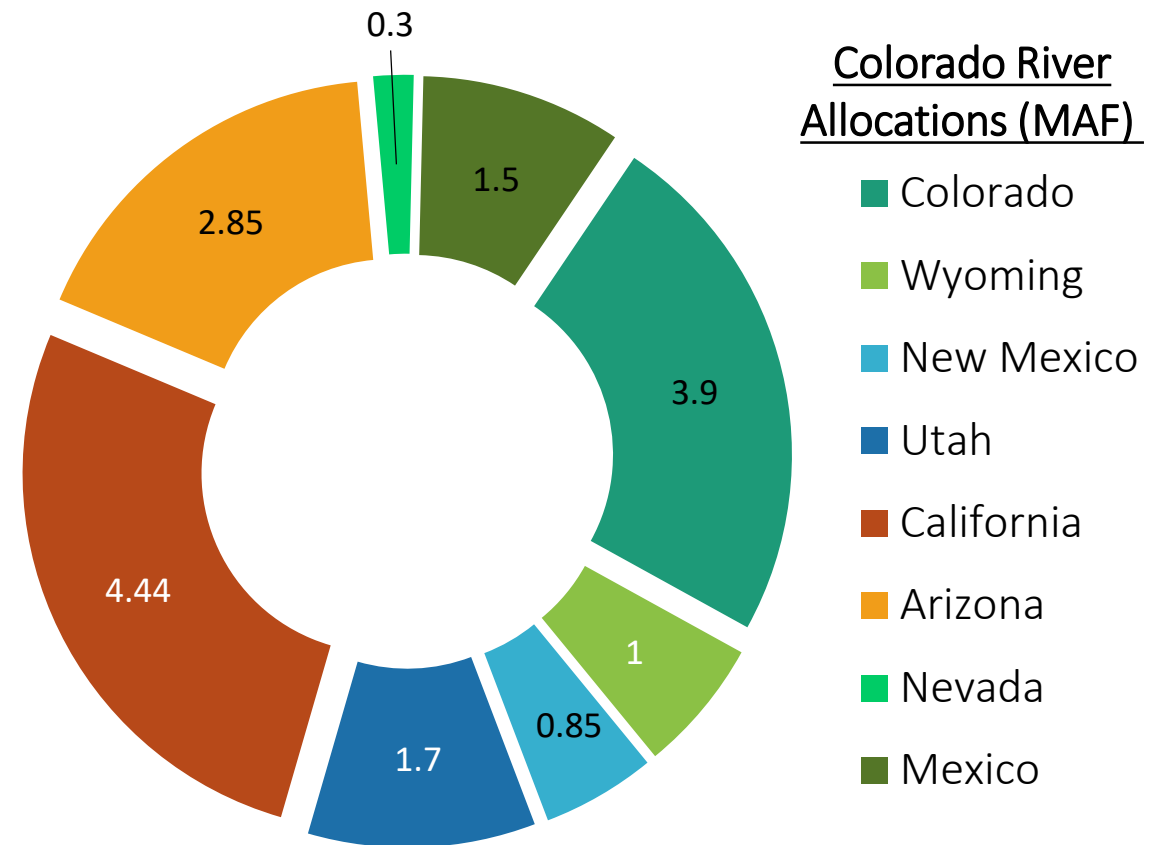
SOUTHERN NEVADA
WATER AUTHORITY™

We Have but a Small Share

Nevada is allocated 300,000 acre-feet of Colorado River water annually.

It's about 98 billion gallons.

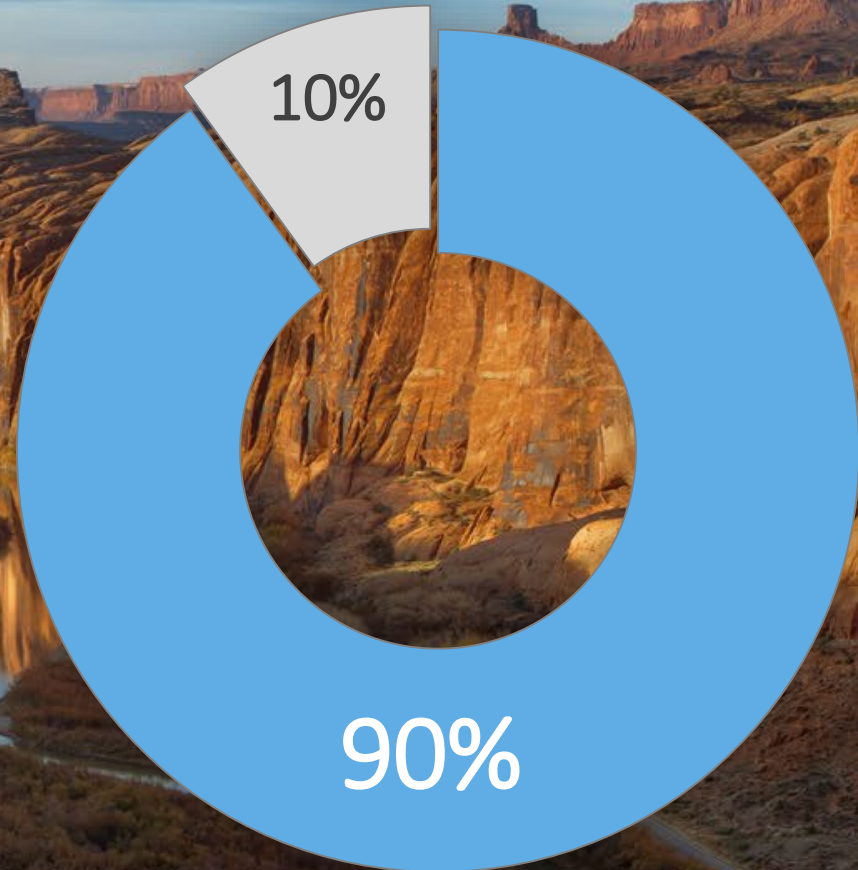
That's 1.8 percent of the 16.5 million acre-feet allocated.



The Colorado River is Our Lifeline

Southern Nevada is heavily reliant on the Colorado River to meet our community's water demands. The river provides 90 percent of our supply.

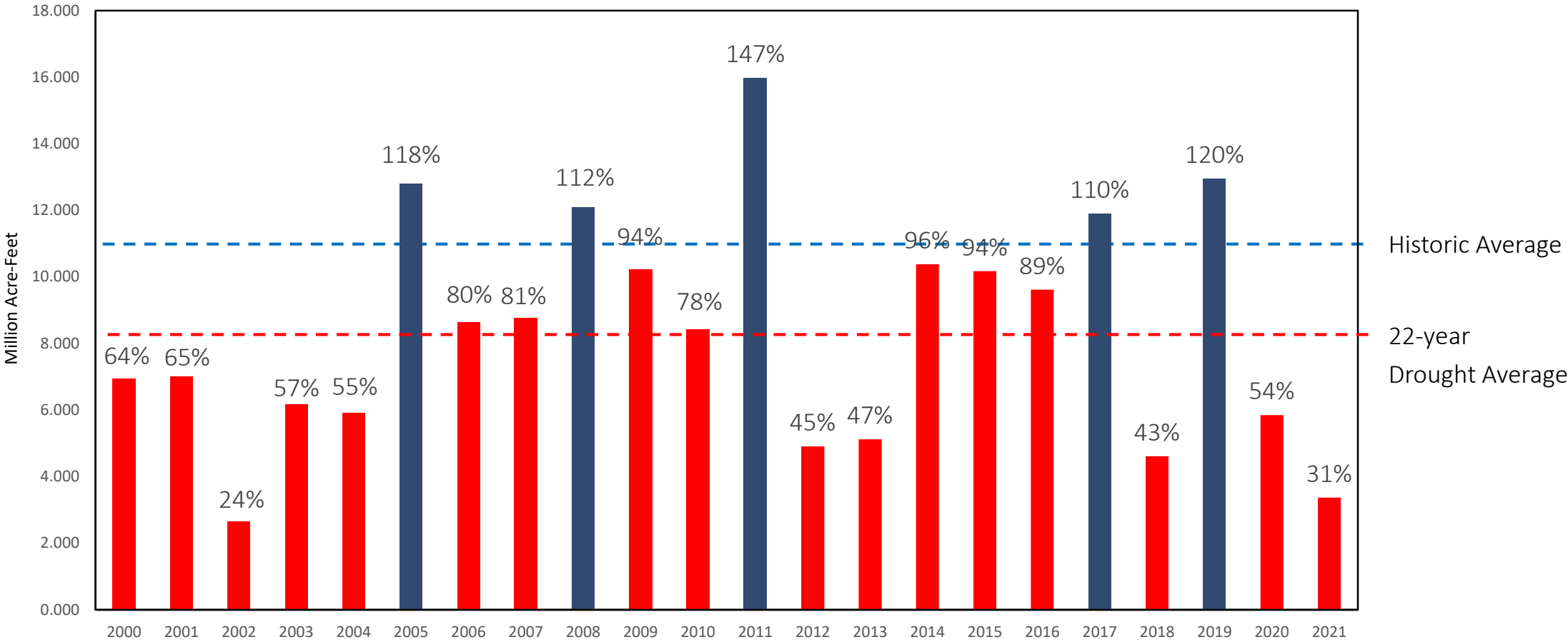
SNWA serves 2.4M people and more than 600,000 accounts.



■ Colorado River □ Other

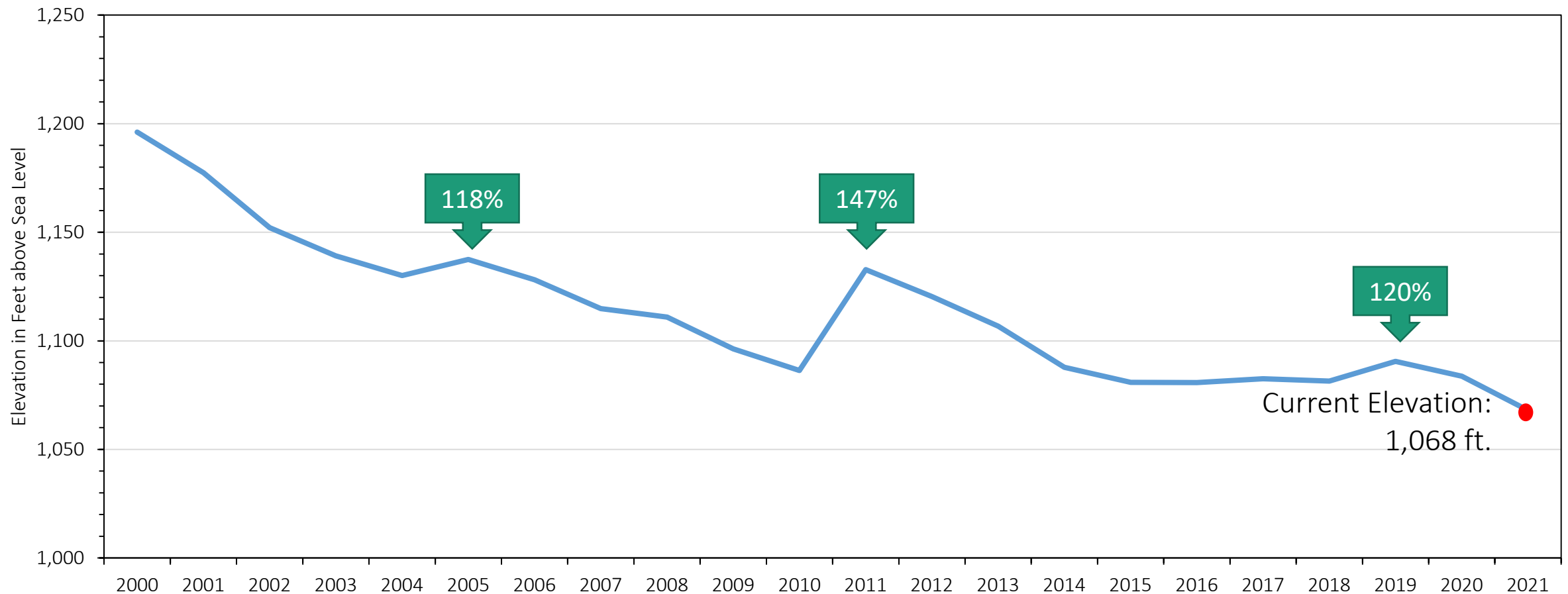
Drought is Taking a Toll

In the early 2000s, Colorado River inflows began to decrease and have not rebounded.



Lake Mead Level is Our Indicator of System Health

Below average inflows led to declines in Lake Mead water levels.
Multiple years of extraordinary runoff would be required to recover.



PROTECTING LAKE MEAD

Colorado River Basin States Agreements

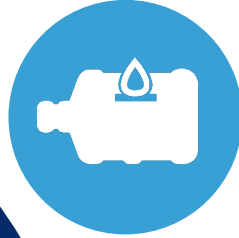
The Interim Surplus Guidelines (2007) and the Drought Contingency Plan (2019) help reduce the risk of Colorado River reservoirs reaching critical elevations.

LAKE MEAD WATER LEVEL (FT above Sea Level)	SHORTAGE AMOUNT (AFY)	DCP CONTRIBUTION (AFY)	TOTAL (AFY)
Above 1,090	0	0	0
At or below 1,090	0	8,000	8,000
At or below 1,075	13,000	8,000	21,000
Below 1,050	17,000	8,000	25,000
At or below 1,045	17,000	10,000	27,000
Below 1,025	20,000	10,000	30,000

DROUGHT RESPONSE



Southern Nevada has spent **decades** preparing for drought to ensure reliability of water supplies for Southern Nevada



WATER BANKING

2.1 MAF in storage (appx. 8 years' current demand)



RESOURCE PLANNING

Working with partners & developing comprehensive plans to manage supplies



CONSERVATION

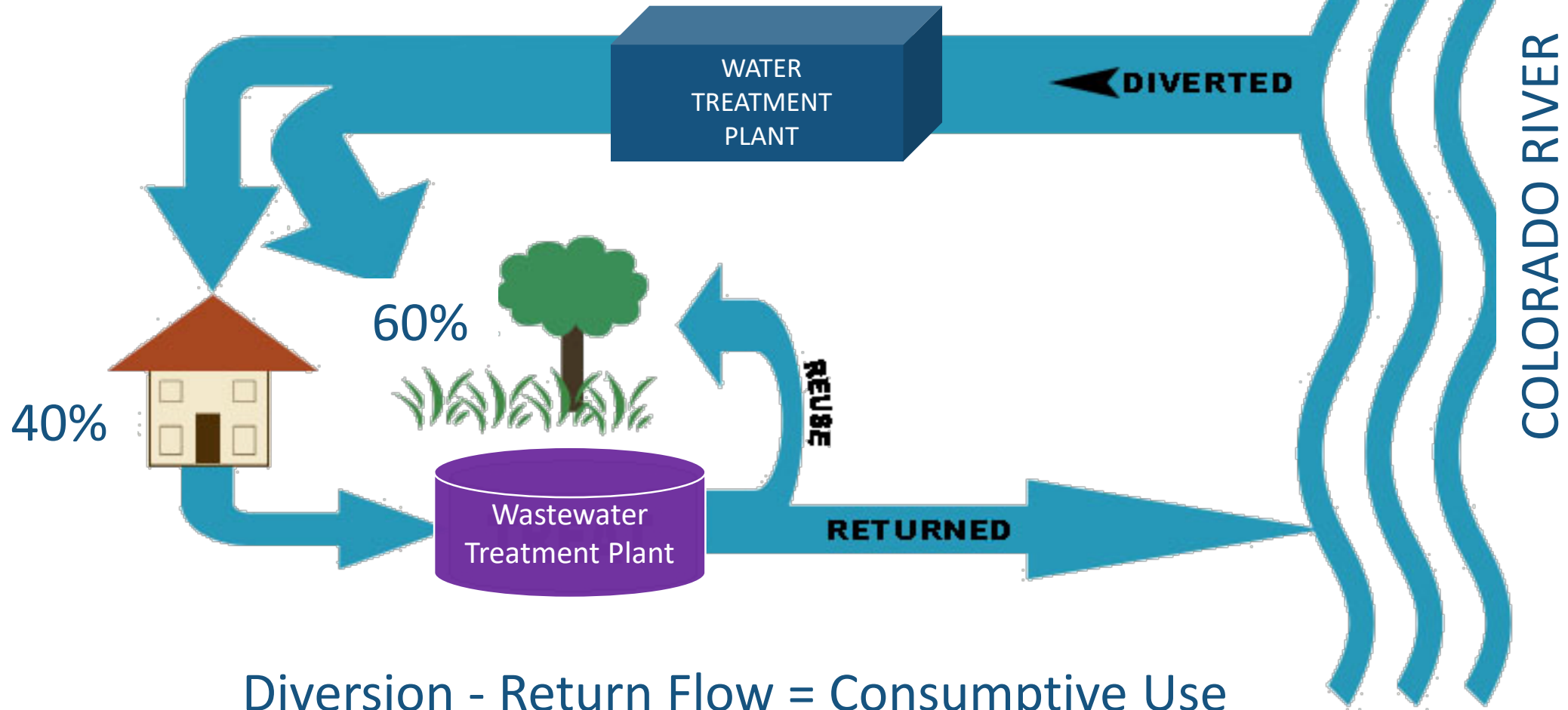
Incentives, programs, regulation & pricing



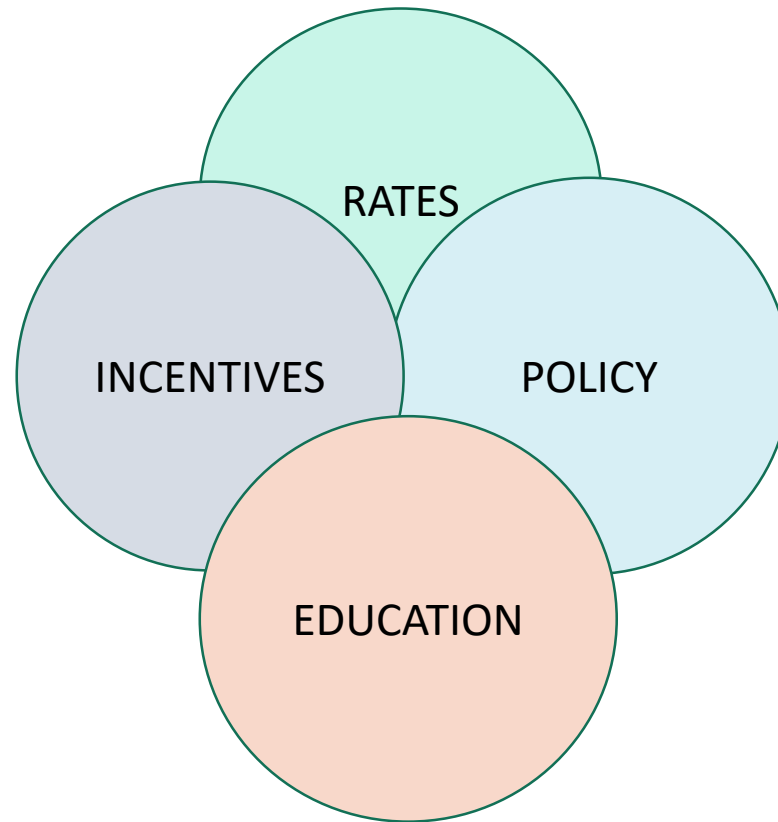
INFRASTRUCTURE

Constructing major facilities and asset management

Consumptive vs. Non-consumptive Water Use



Four Strategic Conservation Arenas



Current Programs

In relative order of value

- 4-Tier water rate
- Landscape development code (& service rules)
- Golf course water budgets
- Water Use Compliance Enforcement
- Water Smart Landscapes Incentive (\$3/SF)
- Water Efficient Technologies Incentive
- Smart Irrigation Control Rebate
- Smart Leak Detection Device Rebate
- Water Smart Car Wash
- Water Smart Contractor
- Water Upon Request



Emerging Programs

- Leak Intervention
- Mandatory non-functional turf retrofit (CII only)
- Regional Water Use Compliance enforcement
- Facility cooling
- Large Users Policy
- Development planning for higher efficiency



Leak Intervention Programs

- Most member agencies operate a “leak forgiveness” program
- SNWA studying impact of customer-side smart leak detection devices
- Developing a Water Smart Plumber program
- Proposed free intervention voucher
- Creating utility captive insurance
- Proposed service line warranty coverage for 100 percent of residential customers



NON-FUNCTIONAL TURF

Unused turf is wasted water

73 gallons per square foot annually (9.8 feet rainfall equivalent)

- Medians
- Roundabouts
- Streetscapes
- Monument signs
- Parking lots
- Neighborhood entries
- Front yards
- Unused back yards

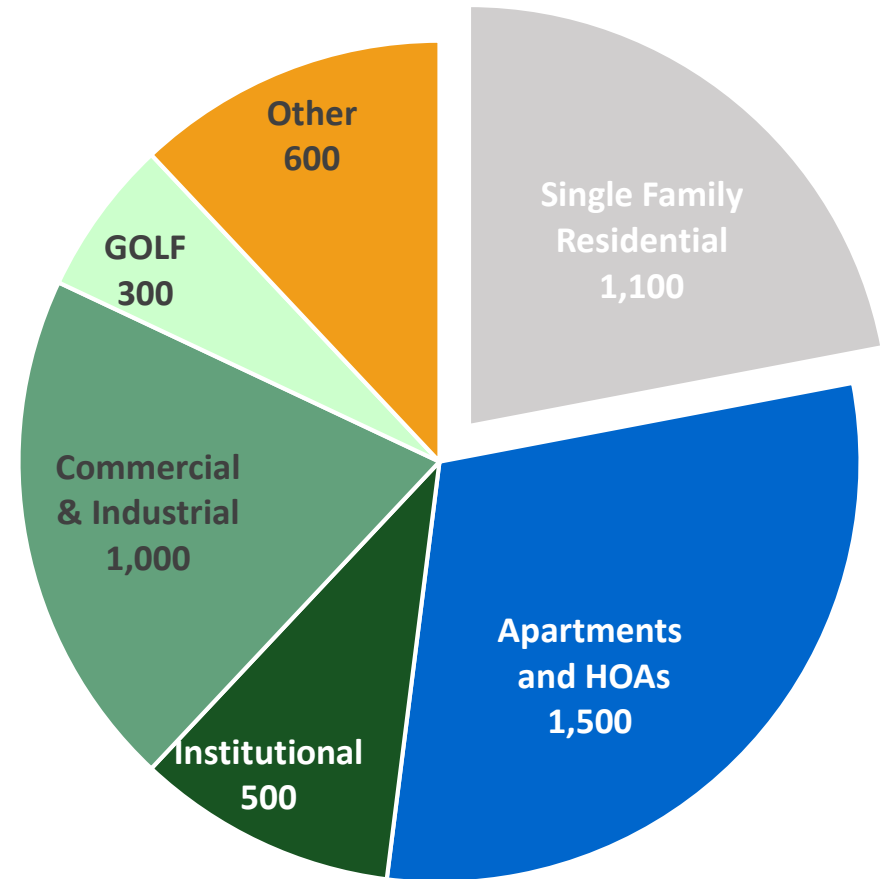
Recreational turf in parks and schools is valued, but non-functional turf has little or no recreational value.

NON-FUNCTIONAL TURF And AB356

AB356 initiates a five-year transition to replace non-functional turf (NFT) in commercial and governmental settings by prohibiting their irrigation with SNWA water.

- Single family homes excluded.
- Affects HOA's, businesses, government
- Golf and parks may have some NFT.
- Up to 170 million square feet.
- Savings of almost 10 billion gallons annually.
- Projects eligible for SNWA rebates.

Estimated Non-Functional Turf
Eligible for Replacement (Acres)

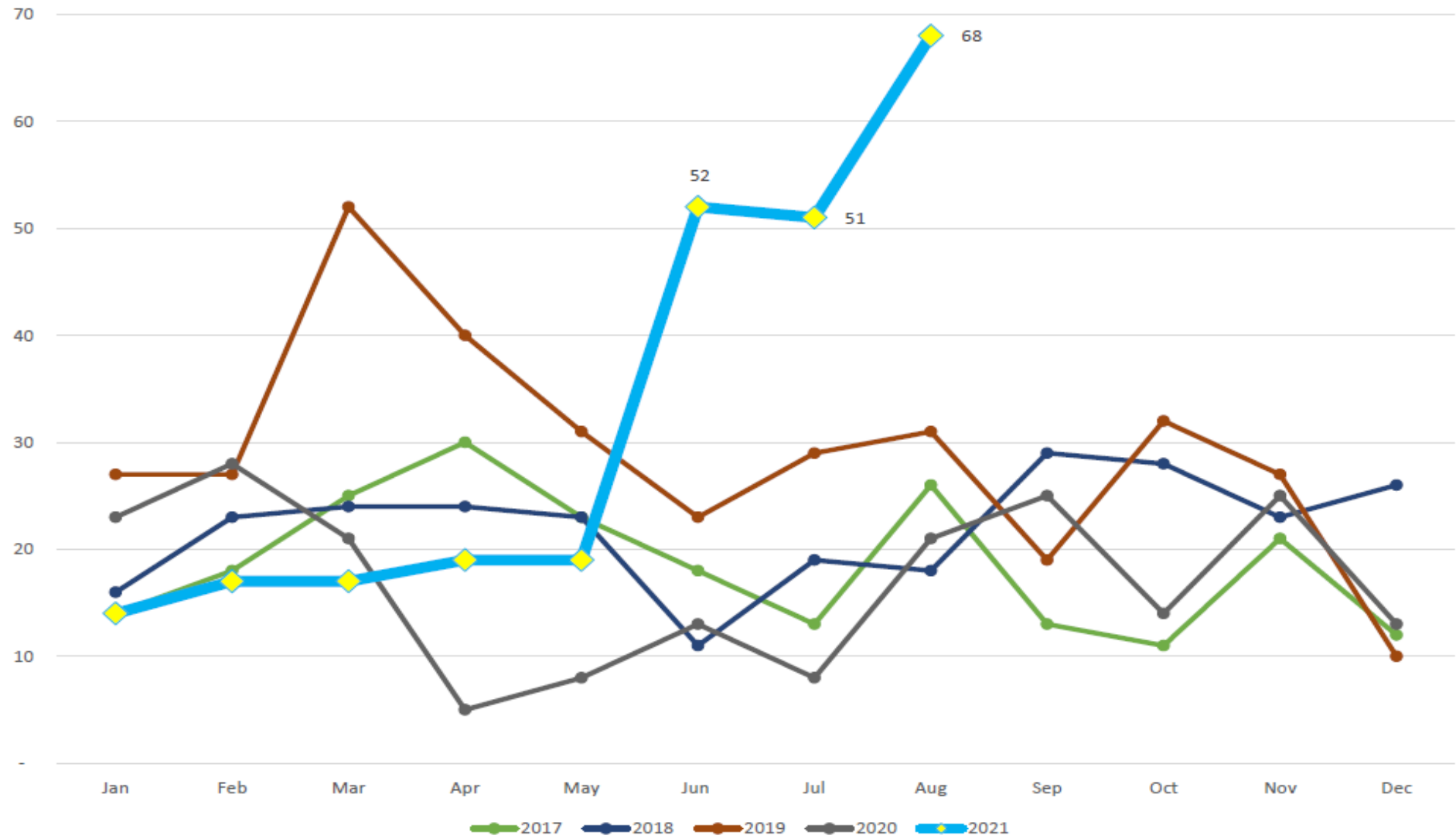


Implementation of AB356

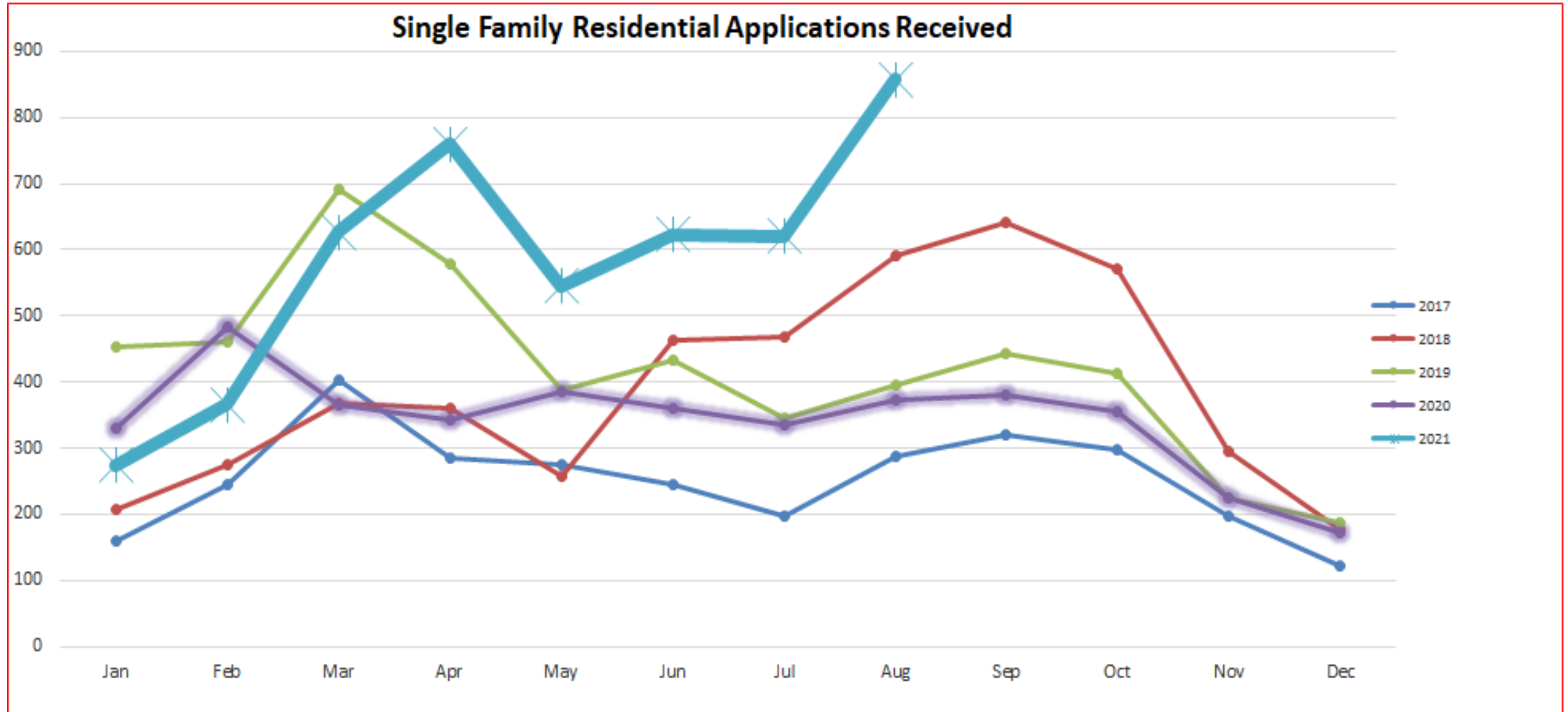
- Outreach to the landscape and nursery industry.
 - Strengthen supply chains.
 - Expand staff and equipment.
- 9-member advisory committee of affected landowners convening now to help formalize definitions.
- Aerial imagery and land use data will identify affected properties.
- SNWA is amplifying its workforce and streamlining rebate processes.



Enterprise WSL Pre-Measures Scheduled, 2017 - 2021



Single Family Residential Water Smart Landscapes Applicants



Water Use Compliance Programs

- Research shows significant savings from compliant properties compared to non-compliant properties.
- Currently 16 FTE conducting field investigations 24/7.
- Some agencies use AMI data to issue warnings and violations.
- SNWA augmenting member agency staff soon.
- RFP to utilize smart controls as a demand management and compliance tool.



Facility Cooling

- Facility cooling is second only to landscape irrigation in consumptive demand.
- Little is known about the efficacy and economic impacts of alternative cooling strategies.
- Currently working with AWE members on research to inform decision making.
- Will consider requiring best practices to be utilized in new development.



Large Users Policy

- The top 2% of CII accounts use more than half of all water in their sector.
- Developing policy to compel best practices for new development exceeding 10Mgal consumptive use annually.
- Many stakeholders in this arena:
 - Economic development agencies
 - Elected officials
 - Chambers of commerce
 - Landowners



Questions?



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