



# Drought Update

March 16, 2021

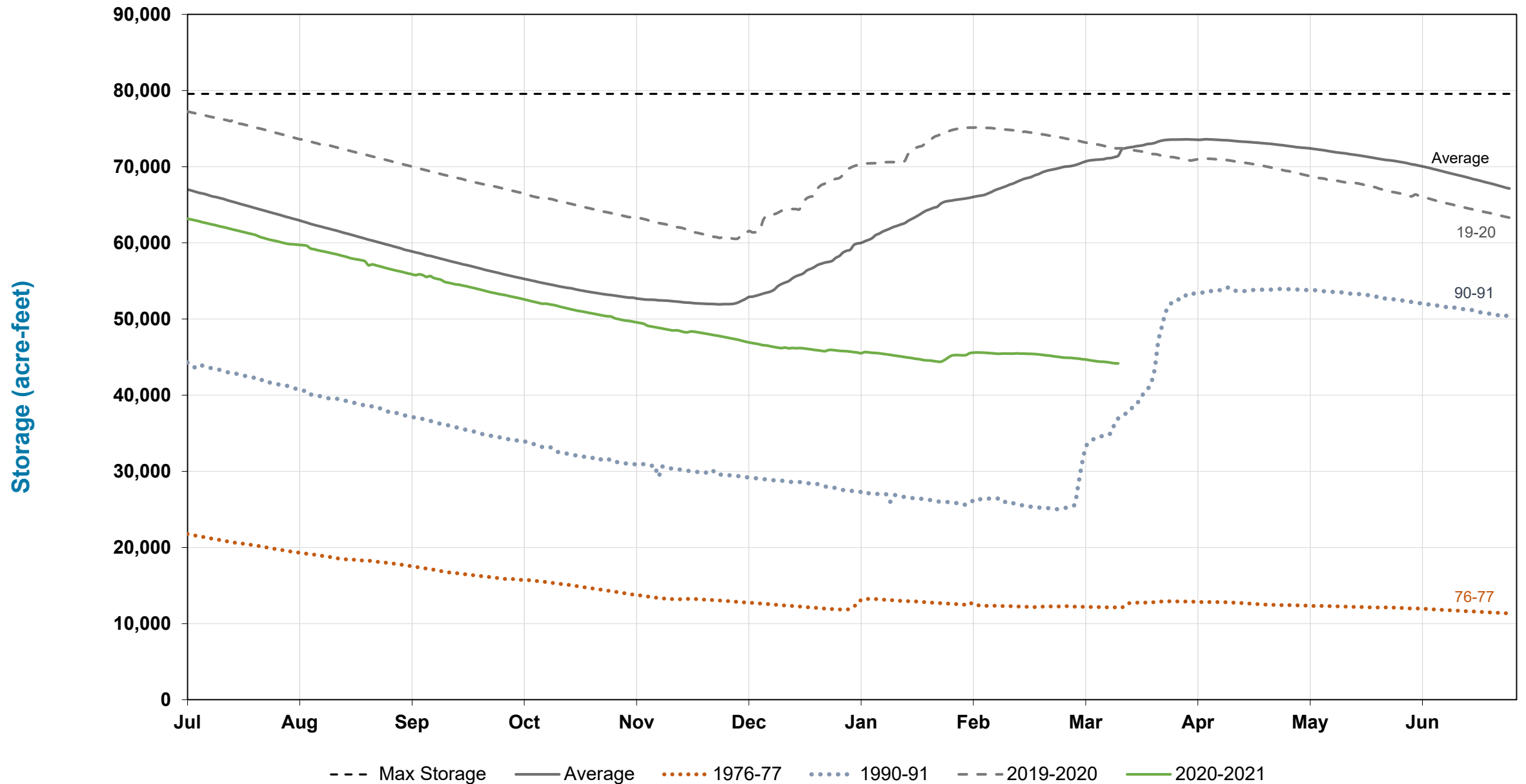


# Overview

- Review of Drought Conditions
- Update of Drought Response
  - Operational Initiatives & Water Supply Projects
  - Public Outreach & Communications
- Consideration of Mandatory Restrictions
- Financial Impacts
- Next Steps

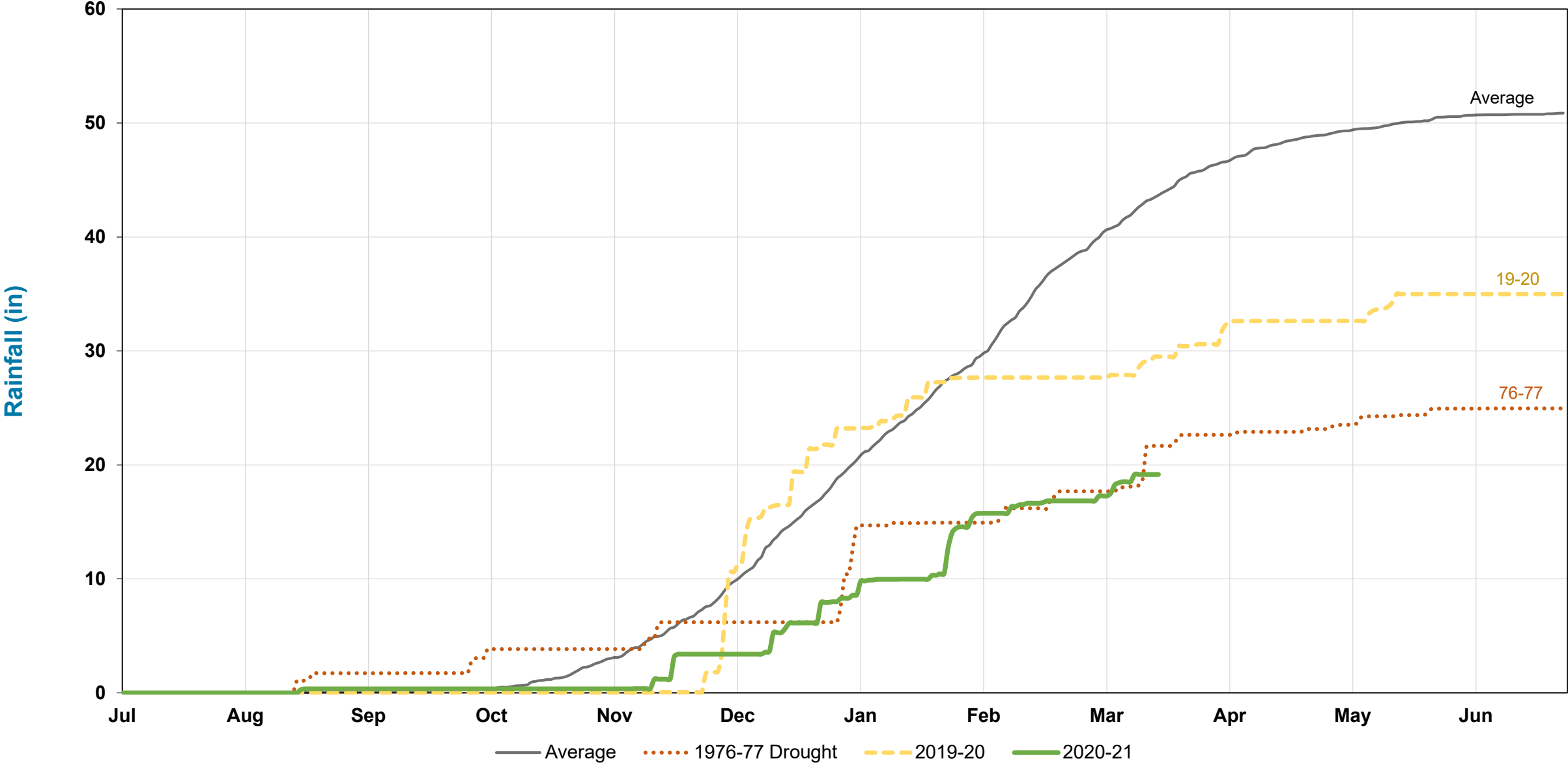
# Review of Drought Conditions

# Total Reservoir Storage

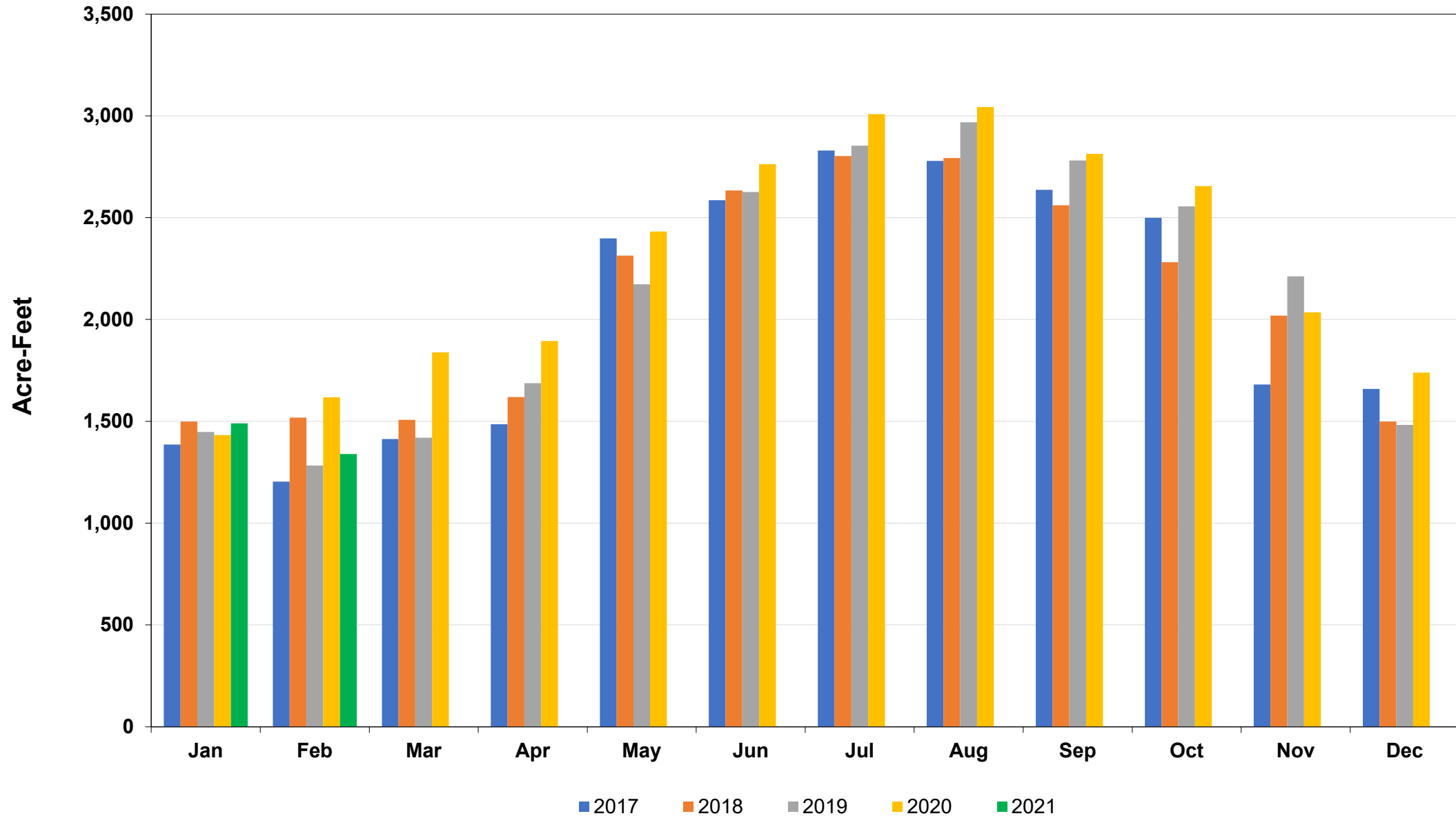


# Cumulative Rainfall

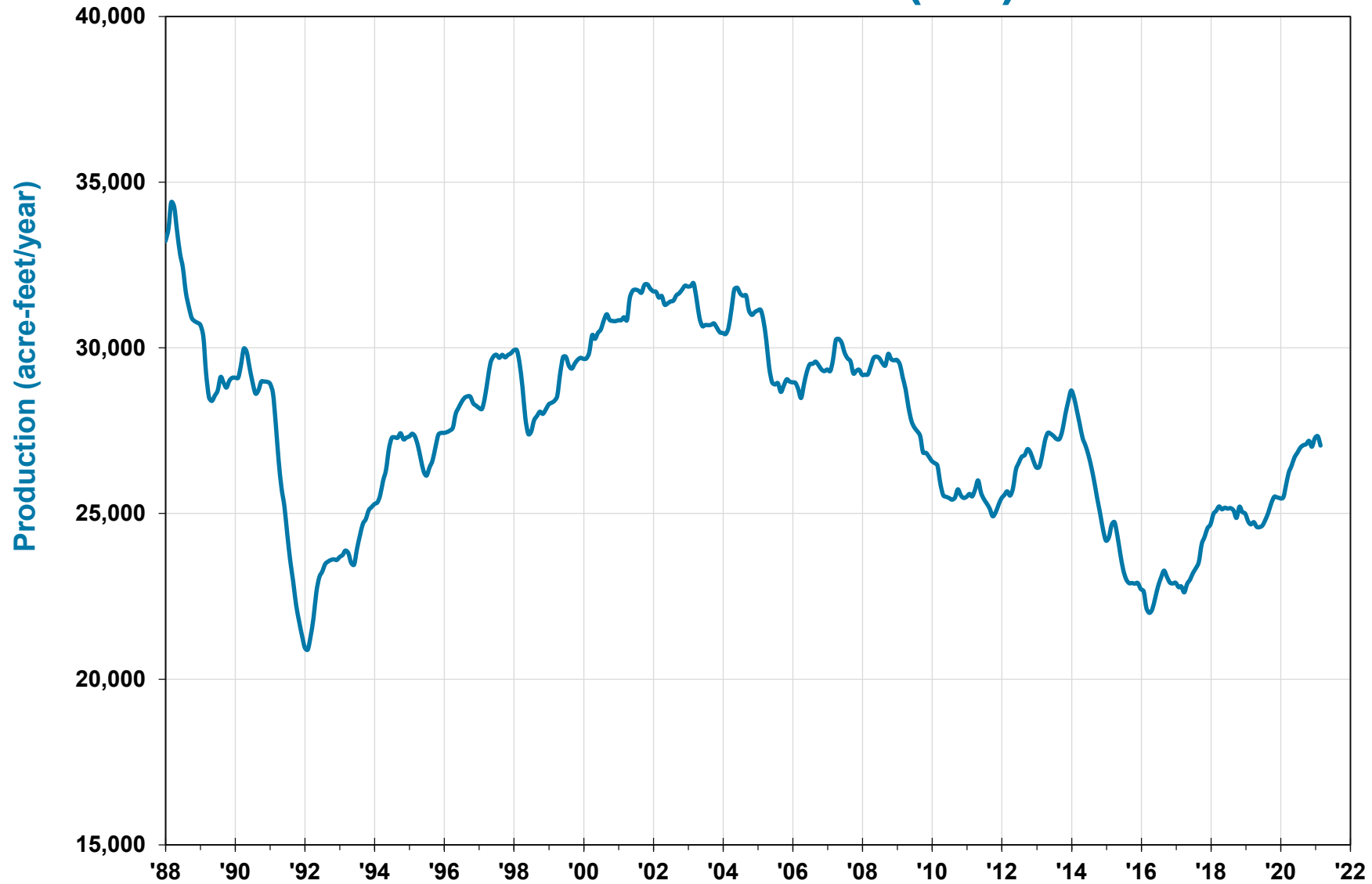
Lake Lagunitas Rain Gauge



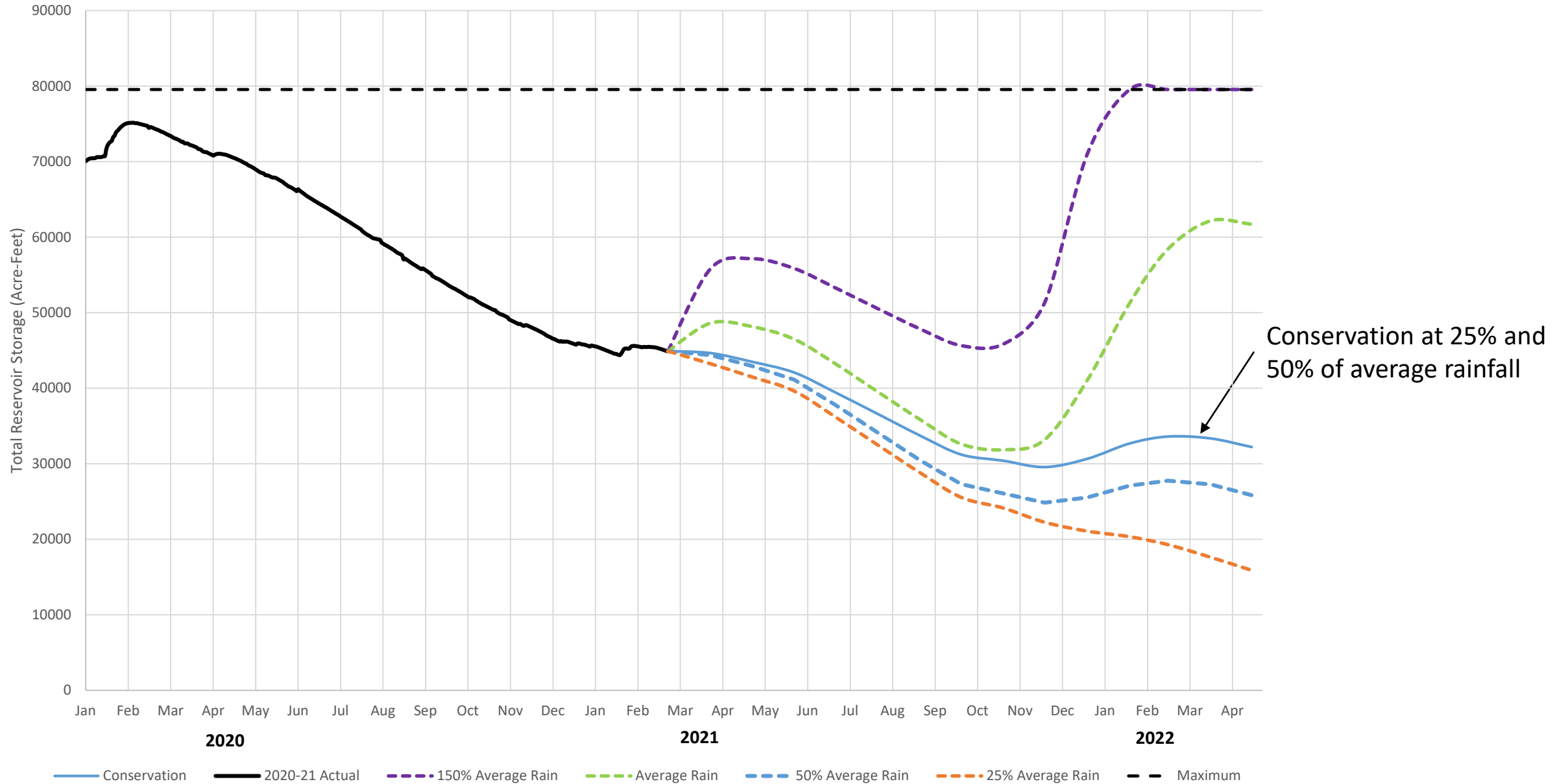
# Monthly Potable Water Production



# Running 12-month Potable Water Production (AF)



# Projected Reservoir Storage





# Drought Response: Operational Initiatives & Water Supply Projects

# Operational Initiatives

- Phoenix Lake
- Soulajule Reservoir
- Optimize Supplemental Water
- Recycled Water Treatment Plant
- Leak detection



Phoenix Lake and Barge Pump

# Water Supply Projects

- Kastania Pump Station Rehabilitation
  - Assessing alternatives: Timing, Cost, CEQA, additional supply capacity
  - Preliminary recommendations April 6<sup>th</sup> Board Meeting
- Environmental Releases
- Consideration of Multi-year Drought Projects

# Drought Response: Public Outreach & Communications

# Status of Voluntary Conservation Outreach

## UNDERWAY & ONGOING

## UPCOMING

### Public Outreach

- ✓ Social Media Awareness Campaign
- ✓ Customer Bill Inserts
- ✓ Customer Newsletter – On the Waterfront
- ✓ News Release on Voluntary Conservation Actions
- ✓ Drought Website Resources
- ✓ Yard Sign Distribution (more than 130)
- ✓ Marin Water E-newsletter Launched
- ✓ Continued Media Coverage: Op-Ed and Editorial

- ☐ Public awareness and education conservation ads
- ☐ Watershed drought-related signage
- ☐ Ongoing update to presentations and materials
- ☐ Distribute additional drought materials: yard signs, door hangers

### Targeted Outreach

- ✓ Sector-specific call-to-action letters
- ✓ Scheduling Community Presentations
  - ✓ Homeowner/Neighborhood Associations
  - ✓ City/Town Councils
  - ✓ Rotary/Chamber of Commerce
- ✓ Water Waste Notification System – Website and Phone
- ✓ Staff Training on drought messaging and water waste prohibitions
- ✓ Stakeholder presentations begin
- ✓ Gardening articles
- ✓ FireSafe Marin Newsletter

- ☐ Continue scheduling presentations for city/town councils, community groups and organizations
- ☐ School program materials

# Voluntary Conservation Outreach

- Social Media Advertising Awareness Campaign
  - Facebook; Instagram
  - Reach: 21,194
- Marin Water E-News
  - Recipients: 22,600
  - Open rate: 37% | Industry Open Rate: 30%
- Public awareness and conservation ad campaign in development
- Media: 20 print, broadcast and digital reports on drought/conservation



## Drought is Here: It's Time to Conserve

Warmer, drier weather has moved us into the early stages of drought. In fact, 2020 was the second-driest year in 90 years. We entered March with reservoir storage levels at 56 percent capacity. We typically see an average of about 90 percent for this time of year.

We are asking all of our customers to partner with us and voluntarily conserve water. Marin Water offers several rebate programs, including incentives for lawn replacements and free mulching materials and irrigation conversion kits delivered to your home or business. We also provide free water-efficient hose nozzles, showerheads and faucet aerators. Visit [MarinWater.org/Conserve](https://MarinWater.org/Conserve) for more conservation tips and information on all of our rebates or connect with us at [Conservation@MarinWater.org](mailto:Conservation@MarinWater.org).

[Learn More](#)



# Voluntary Conservation Outreach

- Staff training on drought messaging, water waste prohibitions, and resources
- Stakeholder outreach: city/town councils; schools; community groups; homeowners associations
  - City of San Rafael: March 15
  - Mission San Rafael Rotary: April 1
  - Town of Corte Madera: April 6
  - Marin County Schools/Facilities: April 15
  - Town of Fairfax: Scheduling in process
  - Rotary of San Rafael: April 19
  - San Rafael Harbor & Marin Sunrise Rotary: April 27



# Voluntary Conservation Outreach

- Calls and emails have increased over last month:
  - 215 calls/emails
  - 9 Water Waste calls
- Rebates & Water-Efficiency Programs
  - 6 Smart irrigation controller rebates
  - 20 Landscape Your Lawn Turf Replacement inquiries





# Consideration of Mandatory Reduction Programs

# Consideration of Mandatory Reduction Programs

- Target Landscaping
  - Peak summer demand nearly double winter demand
- Continue voluntary indoor water usage savings
- Water waste prohibitions remain in place, with expansion to include:
  - Refilling or make-up water for decorative water features and recreational water features
  - Using potable water for washing of cars, boats, airplanes, etc
  - Power washing of buildings and homes
  - Use of hydrant meters for construction and dust control

## Indoors

- Install water-efficient faucet aerators and showerheads. We provide them for free.
- Fix leaks as soon as you discover them.
- Take shorter showers.
- Only run your washing machine and dishwasher when you have a full load.
- Replace washing machines and dishwashers with water-saving, high-efficiency models.

Contact Us:

**415.945.1520**

**Conservation@MarinWater.org**

# Options for Mandatory Restrictions

	30% Reduction	Irrigate Two days/week	Irrigate One day/week	Irrigation Restricted Trees Only
<b>Water Savings % (May-Oct)</b>	<b>20-30%</b> 4,500 AF	<b>~30%</b> Up to 6,000 AF	<b>~40%</b> Up to 7,300 AF	<b>55%</b> 8,200 AF
<b>Restrictions</b>	Indoor/Outdoor 30% reduction	2 days per week irrigation	1 day per week irrigation	Irrigation limited to trees only, hand watering only
<b>Implementation</b>	Staff water waste patrols	Staff water waste patrols	Staff water waste patrols	Staff water waste patrols
<b>Advantages</b>	<ul style="list-style-type: none"> <li>– Ease customers into mandatory restrictions</li> <li>– Provide flexibility</li> <li>– Use recommendations to educate on future restrictions</li> </ul>	Clearly defined restrictions	Clearly defined restrictions	<ul style="list-style-type: none"> <li>– Maximum savings</li> <li>– Easy to see who is complying</li> </ul>
<b>Drawbacks</b>	<ul style="list-style-type: none"> <li>- Potential for inadequate water savings</li> <li>- Uncertainty in water savings</li> </ul>	Customers may increase length of watering times to comply with 2 days/week restrictions	Customers may increase length of watering times to comply with 1 days/week restrictions	Significant impact on landscapes

# Example Approach to Implementing Mandatory Irrigation Restrictions

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
No irrigation	Mill Valley	San Rafael	Greenbrae	Fairfax	Ross	No irrigation
	Tiburon	San Quentin	Corte Madera	Woodacre	Kentfield	
	Belvedere		Larkspur	San Geronimo	San Anselmo	
				Forest Knolls		
	Sausalito			Lagunitas		

- Irrigation prohibited between 9 AM and 7 PM

# Approach to Enforcement

- Staff patrols, community reporting, hotline
- Water Waste Enforcement:
  - Water Waste Notification: Written notification/door hangers of water waste
  - Follow up Warning: Notification of second warning and site visit by staff regarding violation of same water waste to ensure corrective action
  - Notice of Violation: 3<sup>rd</sup> violation of water waste results in written notification and fine
- Current fine schedule for prohibitions: \$250 fine on customer bill

# Financial Impact of Drought

# Estimated Financial Impact of Drought

- Voluntary Conservation Actions (\$12.5M)
  - Reduction in Revenue (20% conservation over 8 months = \$8M)
  - Increased Supplemental Supply (2,000 AF = \$3.3M)
  - Soulajule Generator Rental (\$1.2M)
- Mandatory Restrictions 40% Reduction (\$20.5M)
  - Reduction in Revenue (additional 20% conservation to achieve 40% savings over 8 months)

# Approaches to Financial Impact of Drought

## Alternatives to Consider:

- Implement drought rates outlined in District Code 6.01.310

### Emergency Water Rates:

- 10% rate increase voluntary
  - 25% rate increase mandatory
- 
- Defer drought rates as we monitor revenue, water sales, evaluate need for drought rates in subsequent months



## Next Steps

- Continue close monitoring of water supply
- Continue drought outreach efforts
- Continue operational and water supply projects
- Consider need for mandatory restrictions

**Drought is Here  
Conserve Water**

Learn more at [MarinWater.org/Conserve](https://MarinWater.org/Conserve)

