



# Drought Update

March 2, 2021

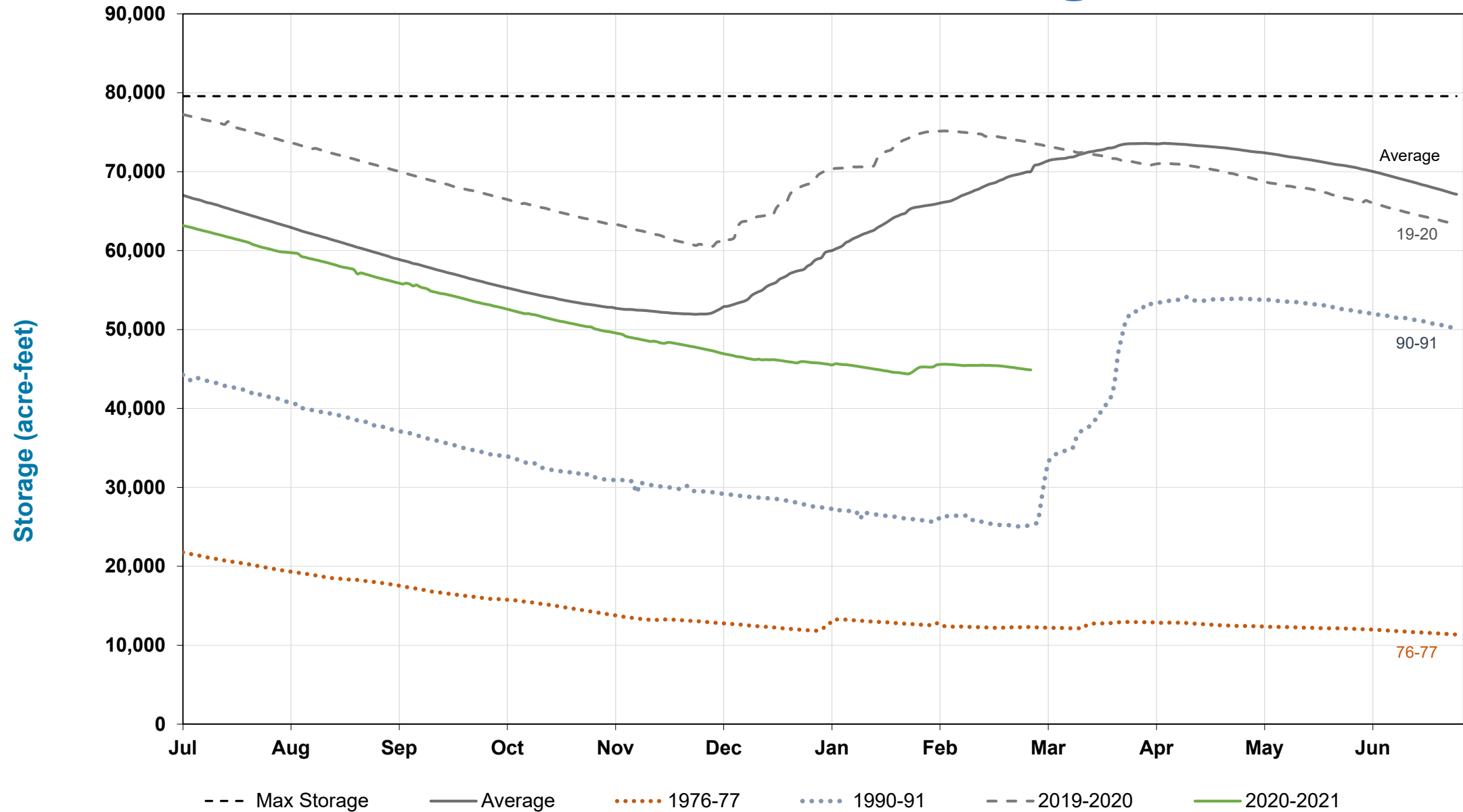


# Overview

- Review of Drought Conditions
- Update of Drought Response
  - Operational Initiatives
  - Water Supply Projects
  - Implementation of Voluntary Conservation Actions
  - Consideration of possible further conservation action
- Next Steps

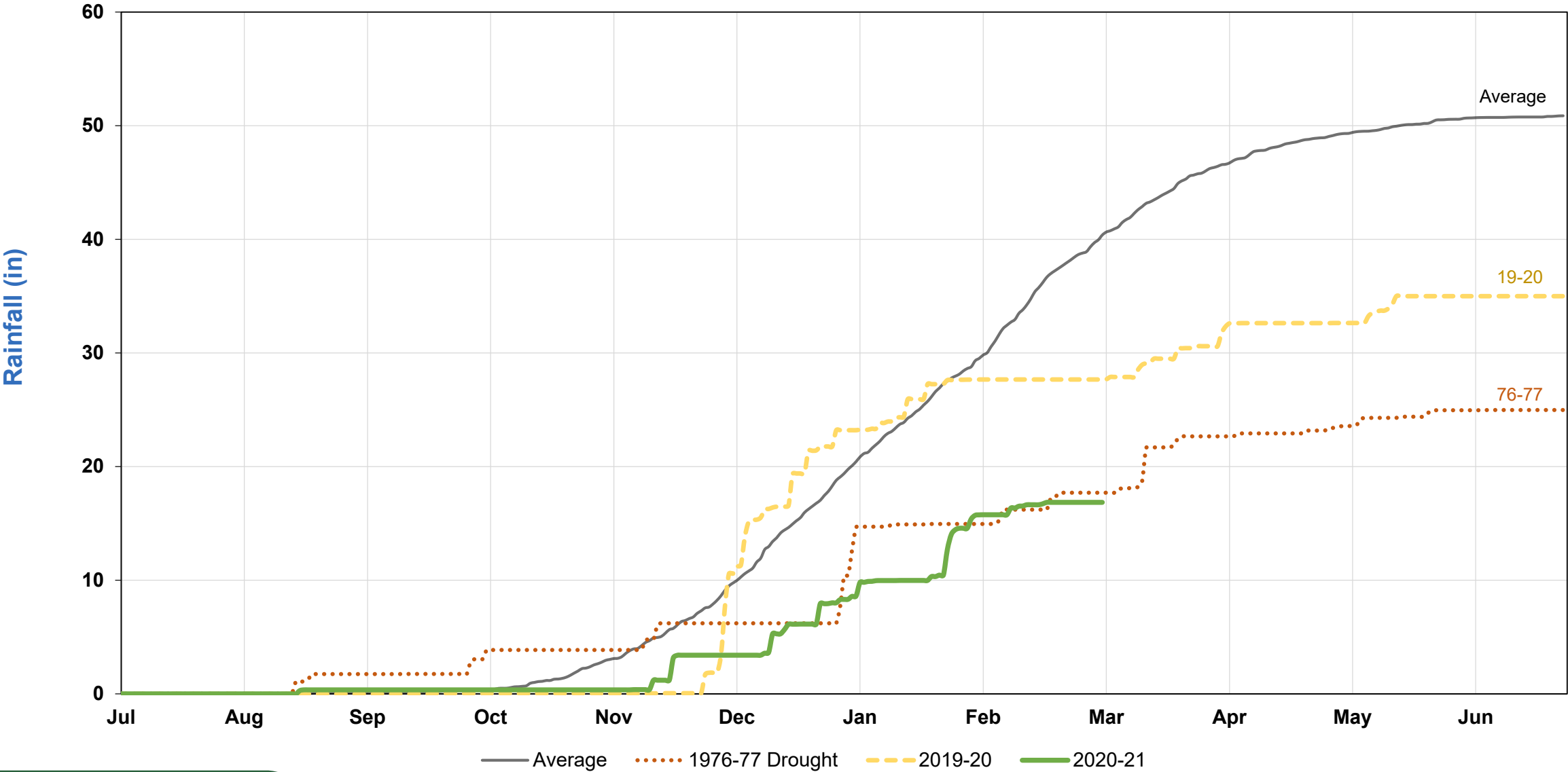
# Review of Drought Conditions

# Total Reservoir Storage



# Cumulative Rainfall

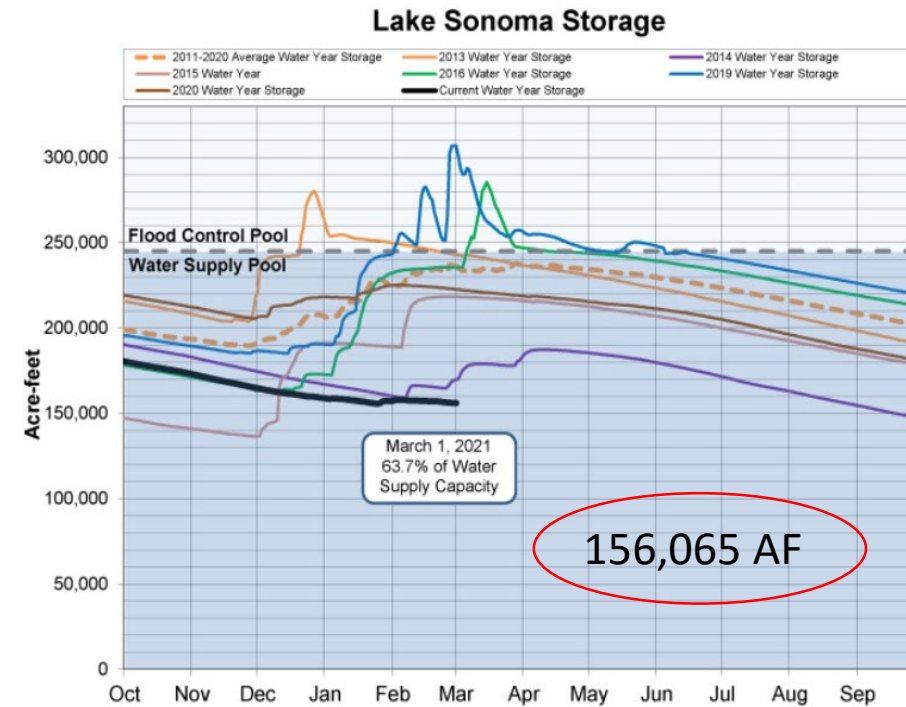
Lake Lagunitas Rain Gauge



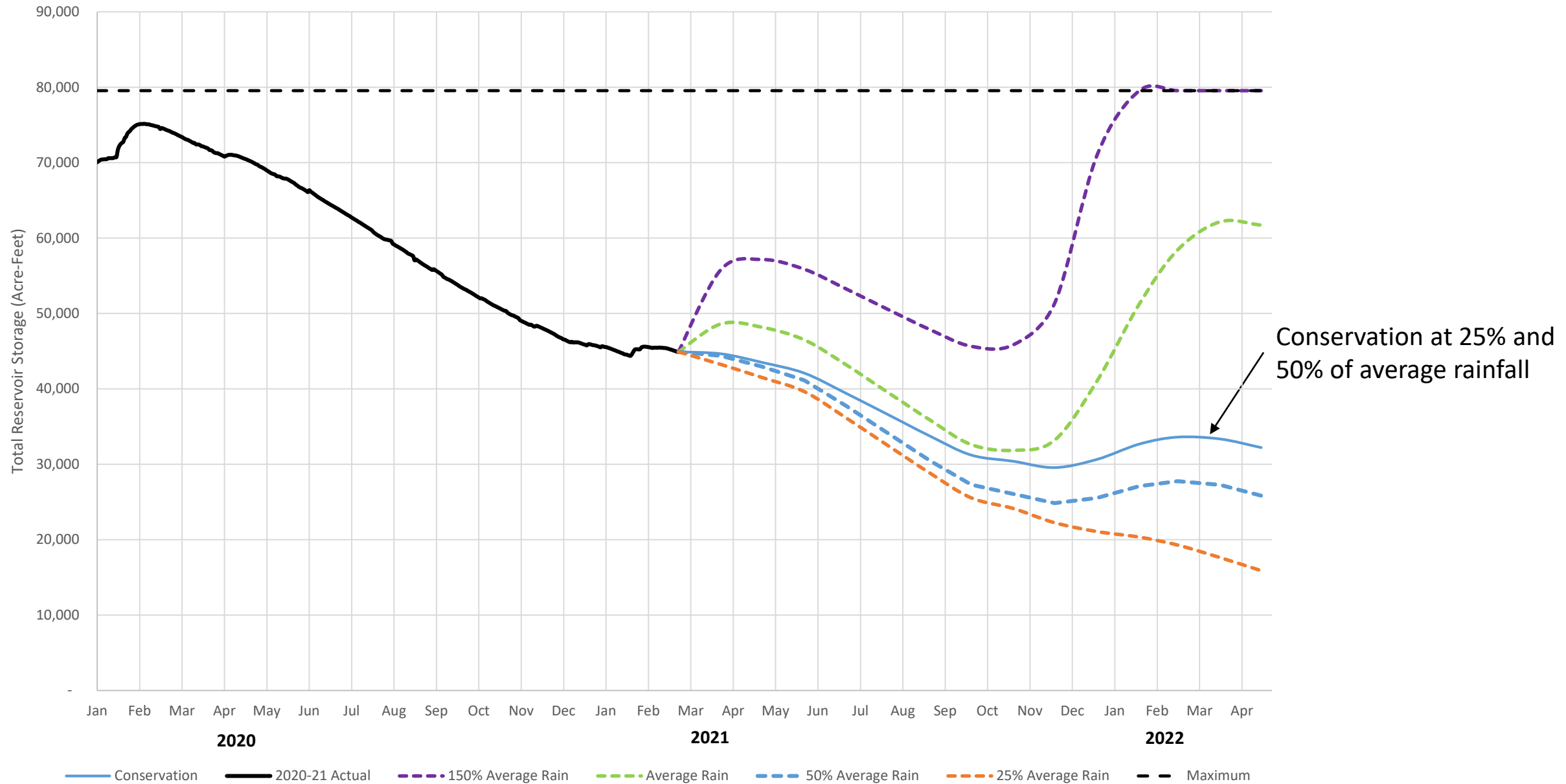
# Reservoir Storage

## Marin Water Storage 3-1-21

	Current Storage [AF]	Maximum Storage [AF]	Percent of Maximum Storage	Percent of Average Storage
Alpine	5,719	8,891	64.3%	--
Bon Tempe	3,900	4,017	97%	--
Kent	19,734	32,895	60%	--
Lagunitas	350	350	100%	--
Nicasio	9,972	22,430	44.5%	--
Phoenix	285	411	69.4%	--
Soulajule	4,938	10,572	46.7%	--
Total	44,898	79,566	56.4%	63.3%



# Projected Reservoir Storage



# Drought Response: Update on Operational Initiatives & Water Supply Projects



# Operational Initiatives

- Phoenix Lake
- Lake Lagunitas
- Soulajule Reservoir
  - Mobilization of generator scheduled for April 1st
- Optimize Supplemental Water
  - 98% of normal allotment to date for FY21
- Recycled Water Treatment Plant
  - LGVSD scheduled startup beginning of April
- Leak detection
- Other
  - Water main flushing, sewer and/or construction flushing

# 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: Implementation of Voluntary Conservation Actions

# Status of Voluntary Conservation Outreach

## UNDERWAY & ONGOING

### Public Outreach

- ✓ Social Media Awareness Campaign
- ✓ Customer Bill Inserts
- ✓ Customer Newsletter – On the Waterfront
- ✓ News Release on Voluntary Conservation Actions
- ✓ Drought Website Resources
- ✓ Talking Points
- ✓ Lawn signs

## UPCOMING

- ☐ Marin Water E-newsletter
- ☐ Ad designs and campaign
- ☐ Op-Ed on drought and conservation
- ☐ Public awareness and education conservation ads
- ☐ FAQs
- ☐ Distribute additional drought materials: lawn signs, door hangers

### Targeted Outreach

- ✓ Mailed Call to Action Letters to specific sectors and customers
- ✓ Scheduling Community Presentations
  - ✓ Homeowner/Neighborhood Associations
  - ✓ City/Town Councils
  - ✓ Rotary/Chamber of Commerce
- ✓ Water Waste Notification System – Website and Phone

- ☐ Continue scheduling city/town presentations
- ☐ Present to Community Groups
- ☐ Train field crew staff on drought talking points and water waste prohibitions

# Voluntary Conservation Outreach

- Website Landing Page and Updates
- Social Media Engagement
  - Facebook
  - Twitter
  - Instagram
  - Nextdoor
- News Releases and Op-eds
- Public Awareness and Conservation ad campaign in development



# Voluntary Conservation Outreach

- Customer Newsletter
- Bill Inserts on Conservation
- Brochures and Conservation Informational Cards
- Short educational videos with conservation tips for website and social media

## WE ARE IN THE EARLY STAGES OF DROUGHT

It is time to conserve water.

Last year was the second-driest year in 90 years, and our reservoirs are well below where they typically are for this time of year. We are asking all customers to conserve water with us.

We're here to help with tips, resources and rebates. We also offer phone consultations with our water efficiency experts to identify water-saving opportunities tailored to your needs.

Making some simple changes to your daily routine will help us save water, and will also save you money.

Visit [MarinWater.org/Conserve](https://MarinWater.org/Conserve) for the latest information on Marin Water's drought response, conservation tips, and resources. To track our rainfall and water supply, visit: [MarinWater.org/Water-Watch](https://MarinWater.org/Water-Watch)

## JOIN OUR WATER WATCH TEAM

Be on the lookout for water wasters!  
If you see water waste:

Give us a call:  
**415.945.1523**

Email us:  
[Conservation@MarinWater.org](mailto:Conservation@MarinWater.org)

Use our online form:  
[MarinWater.org/Forms/Water-Waste-Report](https://MarinWater.org/Forms/Water-Waste-Report)

## CONSERVATION COUNTS

Here Are Smart and Simple Ways to  
Save Water

### Outdoors

- Turn off your irrigation system and water your plants by hand, only when needed.
- Install a shutoff nozzle on your garden hose. If you need one, let us know and we will mail you a free one.
- Water early in the morning (before 9 a.m.) or in the evening (after 7 p.m.) to avoid evaporation.
- Replace your lawn with water-efficient landscaping, and take advantage of our rebates.
- Install a Laundry-to-Landscape graywater system that reuses water from your washing machine for irrigation.
- Hold off on refilling decorative fountains, swimming pools and hot tubs until drought conditions end.
- Don't wash your car at home. If you need to wash it, use a carwash that recycles water.

### 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](mailto:Conservation@MarinWater.org)

# Voluntary Conservation Outreach

- Mailed call to action letters to specific sectors offering assistance and conservation materials
- Scheduling presentations:
  - City/town councils
  - Homeowner associations
  - Community groups
- Water Waste Prohibitions
  - Updated notifications & door hangers
  - Training field crew staff

## Sectors:

- Dedicated Irrigation Customers
- Golf Courses
- Highest water users
- San Quentin Prison
- AMI customers
- Homeowner Associations
- Property Managers
- Hospitality Industry (hotel and restaurants)
- Building Contractors
- Landscape Contractors
- Irrigation Supply Stores
- Carwash
- Laundromats and Linen Services

# Consideration of Possible Further Conservation Actions



# Mandatory Restrictions in District Code

	District Code: 25% Reduction
Water Savings % (May-Oct)	<b>25%</b> 3,900 AF
Restrictions	Water use allocation
Implementation	Parcel by parcel enforcement and water allocation; nearly impossible
Advantages	Currently in District code
Drawbacks	Calculation of allotment requires unavailable information (# of residents/service)

# Options for Mandatory Restrictions

	30% Reduction	Irrigate Two days/week	Irrigation Restricted Trees Only
<b>Water Savings % (May-Oct)</b>	<b>20-30%</b> 4,500 AF	<b>40%</b> 6,000 AF	<b>55%</b> 8,200 AF
<b>Restrictions</b>	Indoor/Outdoor 30% reduction	2 days 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
<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	<ul style="list-style-type: none"> <li>– Max 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	Significant impact on landscapes

## Next Steps

- Continue drought outreach initiatives
- Continue pumping Phoenix Lake
- Mobilize SoulaJule rental generator
- Update on Kastania Pump Station Rehab Design – April 6<sup>th</sup>
- Evaluate need for mandatory restrictions

**Drought is Here  
Conserve Water**

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

