



Drought Update

August 3, 2021

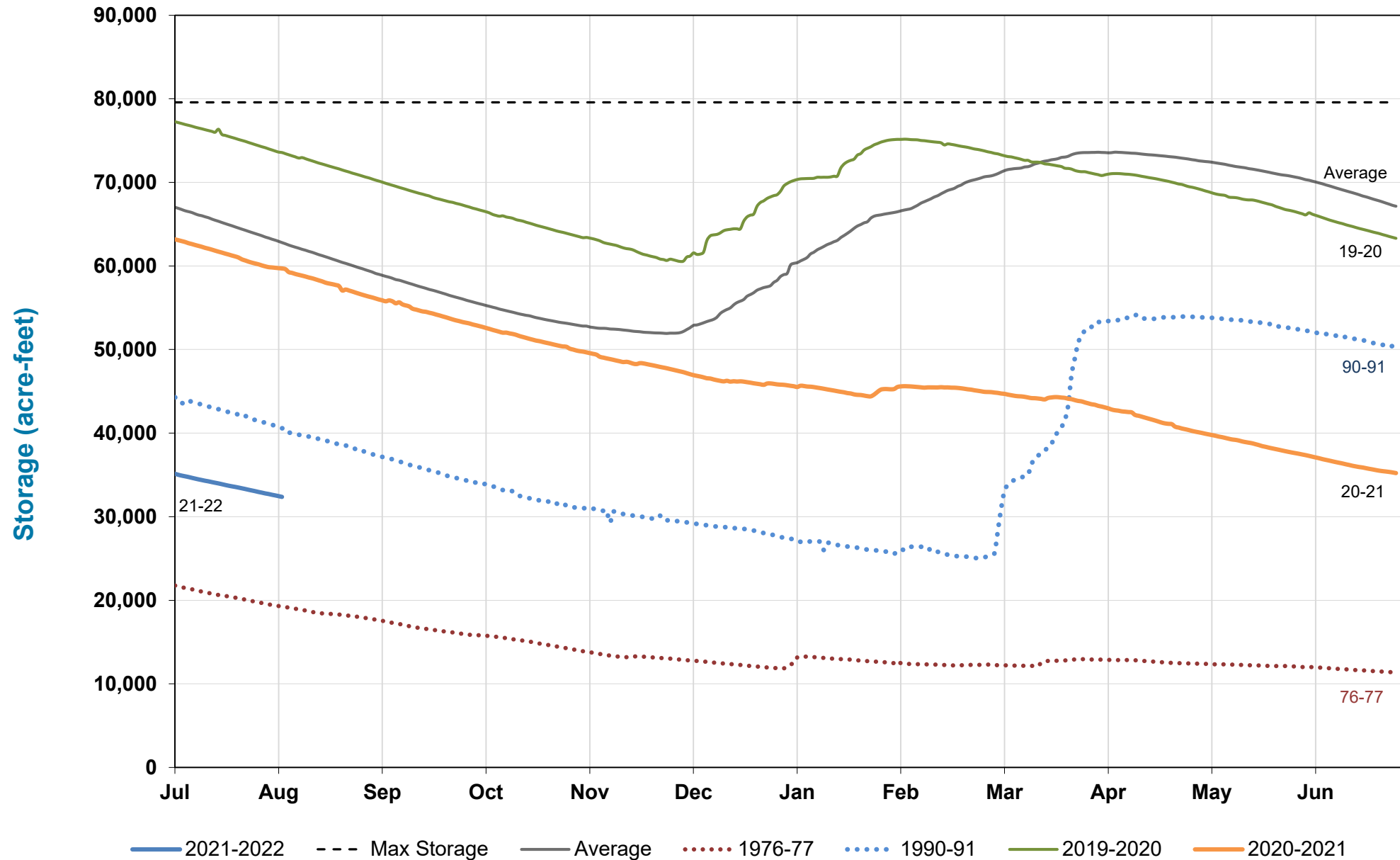


Overview

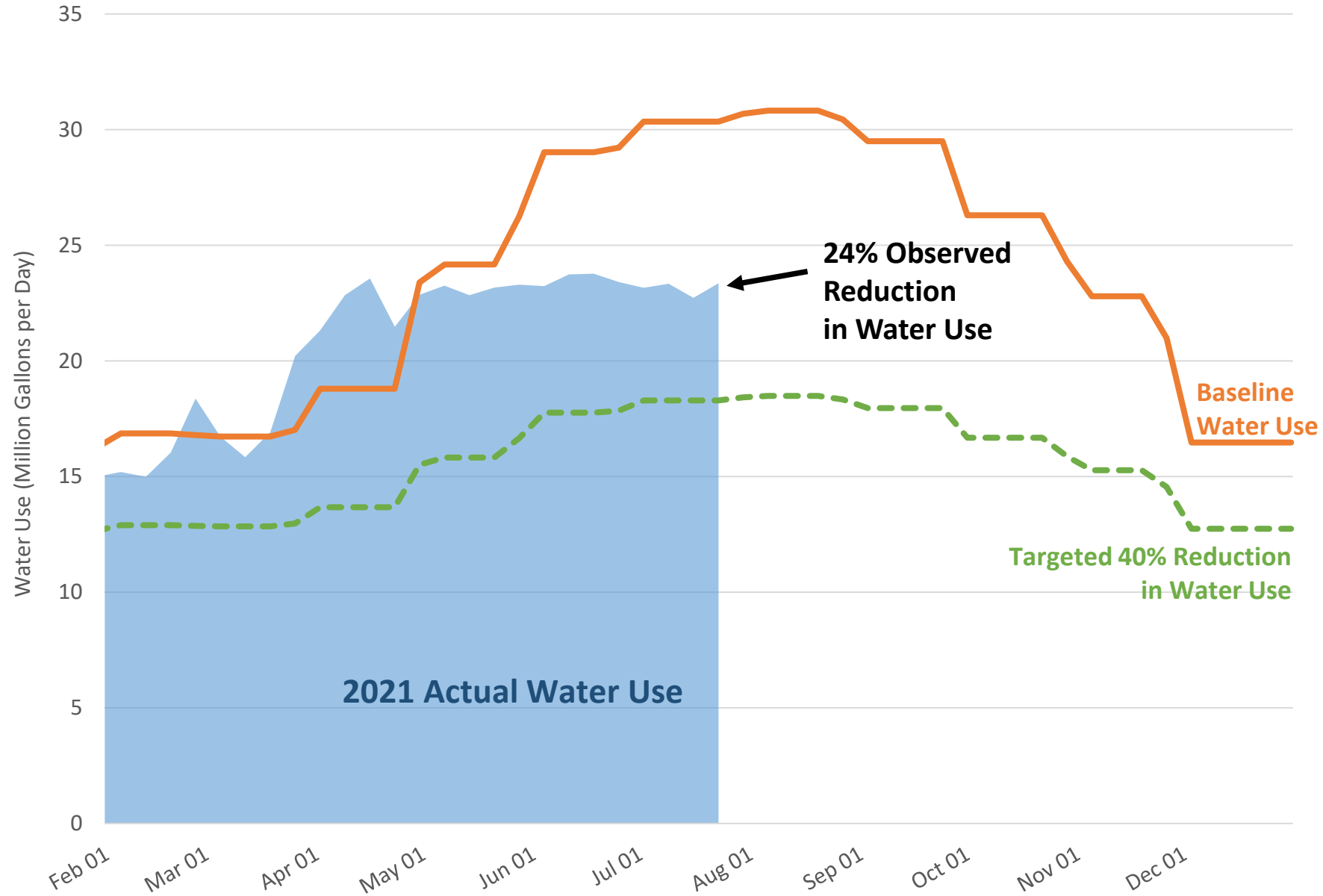
- Water Supply and Water Use
- Drought Activities and Conservation Outreach
- Water Transfers Update
- Next Steps

Water Supply and Water Use

Total Reservoir Storage

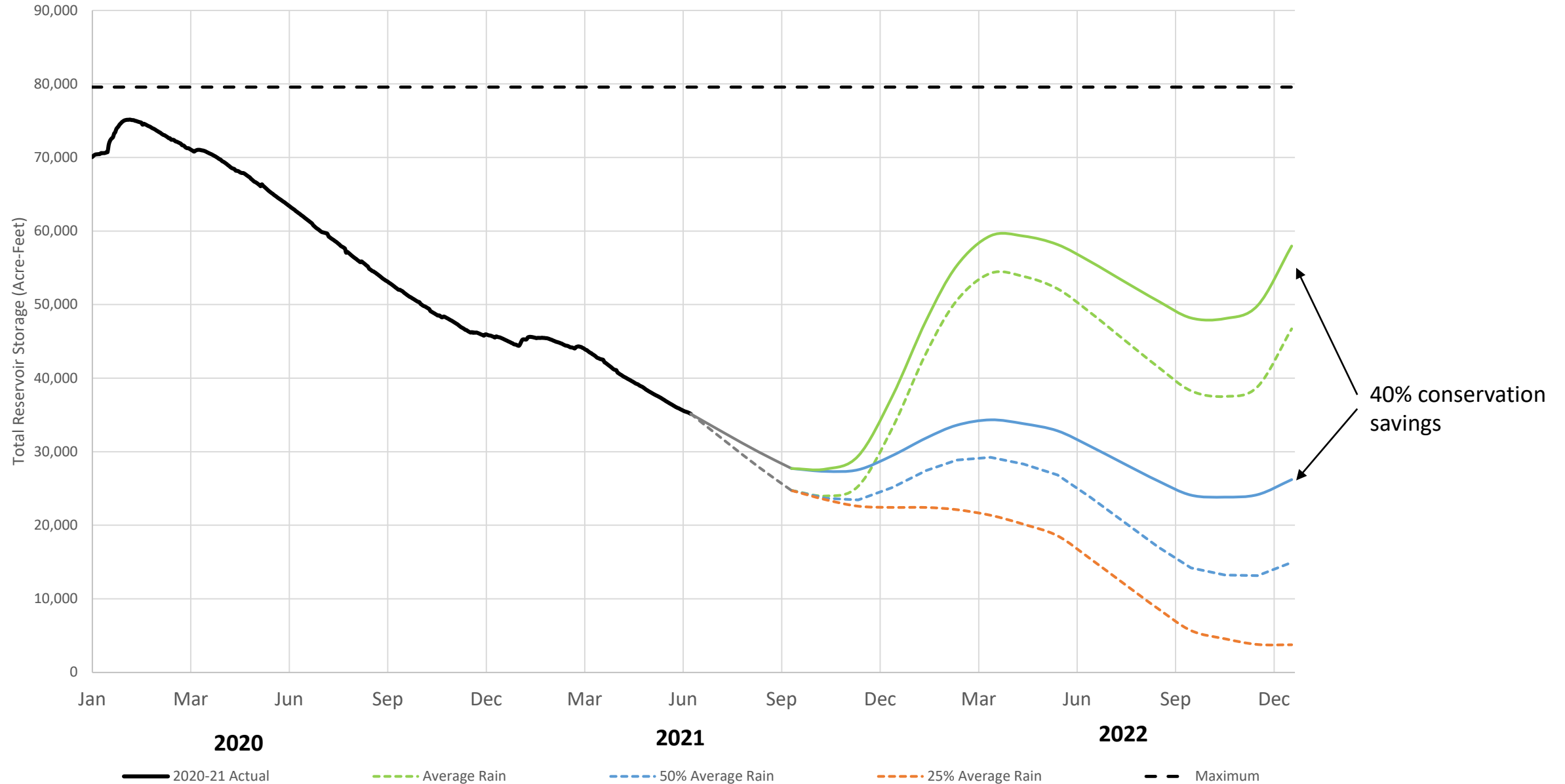


Actual vs. Targeted Water Use



*Baseline = 3-year average

Projected Reservoir Storage



Drought Activities and Outreach

Drought Activities: Water Supply Initiatives



Residential Recycled Water Pick-up Station

- Conservation
- Soulajule Reservoir
- Recycled Water
 - Residential Recycled Water Fill Station

Community Engagement & Outreach

- Stakeholder presentations
 - Nearly 50 presentations: city and town councils; homeowners' groups; chambers; rotaries; businesses, etc.
 - Will begin revisiting groups to provide updates
 - Ability to request presentations on our website



Upcoming Presentations

- 8/10: Smith Ranch Retirement Home
- 8/31: Sausalito City Council
- 9/1: Fairfax Town Council
- 9/7: Corte Madera Town Council
- 9/15: Mill Valley Outdoor Art Club

Recently Completed

- 7/29: Marin County City Managers Meeting
- 7/20: Belvedere-Tiburon Joint Disaster Advisory Council
- 7/13: Autodesk
- 7/12: Villa Marin Retirement Community
- 7/12: Green Change Zoom Meetup
- 7/8: Mill Valley City Council

Community Engagement & Outreach

➤ Rebate Program Outreach

■ Postcard Mailer

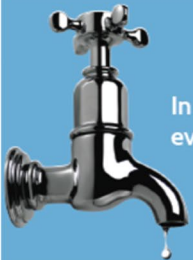
- Features lawn replacement incentive programs, graywater kits, and Flume
- Sent to entire service area

Save Water and Money with Rebates

Our reservoirs are at historic lows, and we are in a severe drought.



Marin Water has a number of rebates available to help you make water-smart changes inside and outside your home. For a full list of rebates and applications visit:

MarinWater.org/Rebates



In a severe drought, every drop counts.

Presort Standard
U.S. Postage
PAID
Permit No. 275
Rancho Cordova, CA



Water Saving Rebates

Save water. Save money.

MarinWater.org/Rebates

Take a look at some of our most popular rebate programs. Our water efficiency experts are here to help find the programs and incentives that work best for you. Email Rebates@MarinWater.org, or call **415.945.1527**. We're in this together, and we're here to help.

Cash For Grass:

Now is the time to replace your thirsty lawn. We're offering \$3 per-square-foot of lawn removed through October 2021. We also offer a free sheet mulching program.

Graywater: Laundry-to-Landscape:

Reuse water from your washing machine for your garden, with a laundry-to-landscape graywater kit. We partnered with The Urban Farmer Store to offer a \$100 discount.

Flume Flow Meter:

Install a Flume flow meter to access real-time water use data on your phone. It's easy to install and straps on to most existing water meters. It can help you find leaks and new ways to save water.

Rebates@MarinWater.org | 415.945.1527 | 220 Nellen Ave., Corte Madera, CA 94925

Community Engagement & Outreach

➤ Rebate Program Outreach

- Special Rebate E-News
 - Sent to more than 25k customer emails
 - Points directly to rebate applications



In a Severe Drought, Every Drop Counts

Here are some of our water-saving rebates and incentives designed to save you money while conserving our most precious resource. Click below to view a complete list of our rebate offerings.

[Rebates](#)



Breakup with Your Thirsty Lawn

Now is the time to replace your lawn. We're offering \$3 per-square-foot of lawn removed through October 2021. We also offer a [free sheet mulching program](#).

[Learn More](#)

Community Engagement & Outreach

➤ Up Next

- Water Conservation Video PSA
- Webinar Series for Professional Landscapers
- Webinar Series for Residential Customers
- Focus Group
- Drought Drive Up: Saturday, August 21

**Marin Water**

Free Webinar Series
One Day a Week Irrigation:
Strategies for Survival
Turf, Shrubs and Trees

Marin Water is partnering with the California Center for Urban Horticulture and Jim Borneman to offer five free webinar workshops to learn tips and tricks for maintaining trees, shrubs and lawns under current drought conditions while complying with the landscape irrigation restrictions.

Jim is the former Vice President of Education Services at Ewing Irrigation and Landscape Supply. Jim has been providing irrigation training to landscape professionals across the United States for over 40 years.

Register: MarinWater.org/Webinars

Dates and Topics:

Aug 9	6:30 a.m.	Irrigation System
Aug 10	6:30 a.m.	Trees and Shrubs
Aug 11	6:30 a.m.	Deep Dive on Surface and Drip Irrigation Scheduling
Aug 12	6:30 a.m.	Turf
Aug 13	6:30 a.m.	Alternative Strategies for Turf Survival and Q & A

**MARIN WATER****UC DAVIS**
California Center for Urban Horticulture**UC DAVIS**
COLLEGE of AGRICULTURAL and ENVIRONMENTAL SCIENCES

**It's every-drop-counts time.**
Save water.
MarinWater.org/Conserve

Conservation Update

Contacts with Customers

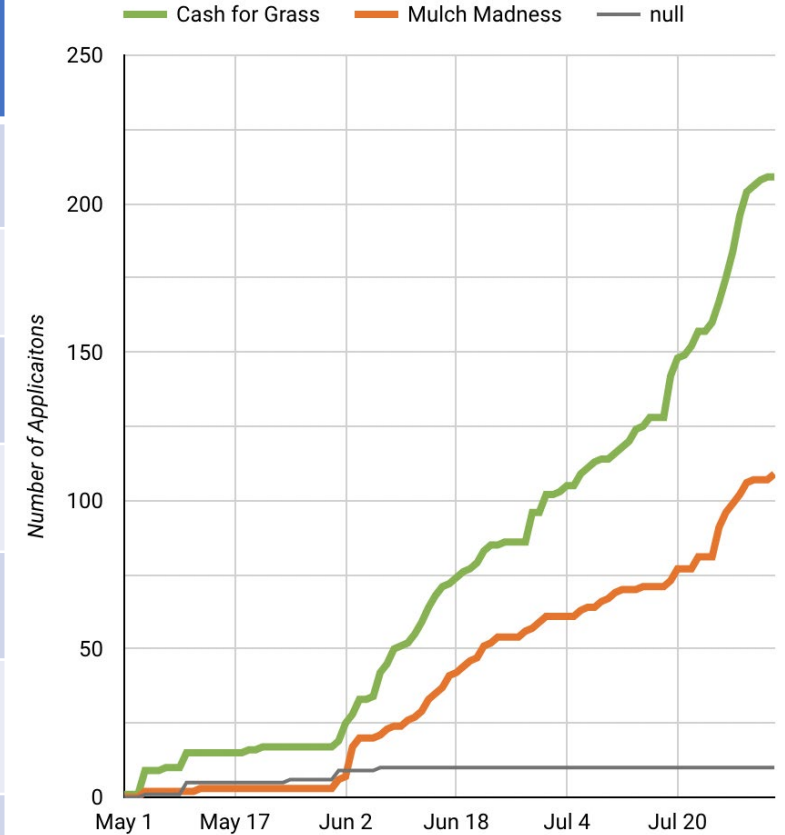
- Water Waste Reports
- Conservation calls/emails tracking

	Feb	Mar	Apr	May	June	July
Calls/ Emails	128	373	907	1,220	1,911	1,186
Water Waste Reports	5	13	104	203	253	1,055



Drought Program Participation

	June Participation	July Participation		Monthly Target
Turf Programs (sqft)	36,668	86,000		400,000
Flume Devices	618	473		450
Clothes Washers	66	22		20
Rain Barrel/ Cisterns	8	0		10
Pool Covers	25	53		10
Hot Water Recirculation Systems	3	2		5
Graywater Incentives	4	10		10



Landscape Area Measurements Statistics

- Residential Turf Grass in Service Area: 38.4M sqft
 - Prior reported figure was pre-QA/QC
- 79% of sites have turf (District-wide)
- Top 2,000 parcels
 - 95 HOA Common Area (3,251 sqft – 75,411 sqft)
 - 87 Multi Family Residential (3,193 sqft – 76,849 sqft)
 - 1818 Single Family Residential (3,193 sqft – 79,859 sqft)



Water Transfers Update

Emergency Drought Projects Summary

- ✓ **Conservation** – Continue as top priority, improve, refine and enhance
- ✓ **Sonoma Water** - collaborate on any and all opportunities to address the drought
- ✓ **Recycled Water** –
 - ✓ Residential Fill station – opening soon
 - ✓ Sanitary Districts – using secondary water for flushing
 - ✓ Commercial truck hauling – dust control, construction, wash downs etc
- ✓ **Ground Water Storage and Recovery** – longer term opportunity, no near term solution for drought
- ✓ **Desalination** – timing dictates temporary, capacity limited
- ✓ **Water Transfers** – pursuing feasibility of project

Emergency Drought Projects

Desalination – 3.6 TAF (3.6MGD)

Project Component	Cost Range
Operational Cost	\$5M - \$7M
Capital Improvements	\$25M - \$30M
Total	\$30M - \$37M

- Project delivery 12 months
- Capacity limited
- Regulatory process not well defined
- No desalination facilities have been constructed in SF Bay

Water Transfers – 15 TAF (13.5 MGD)

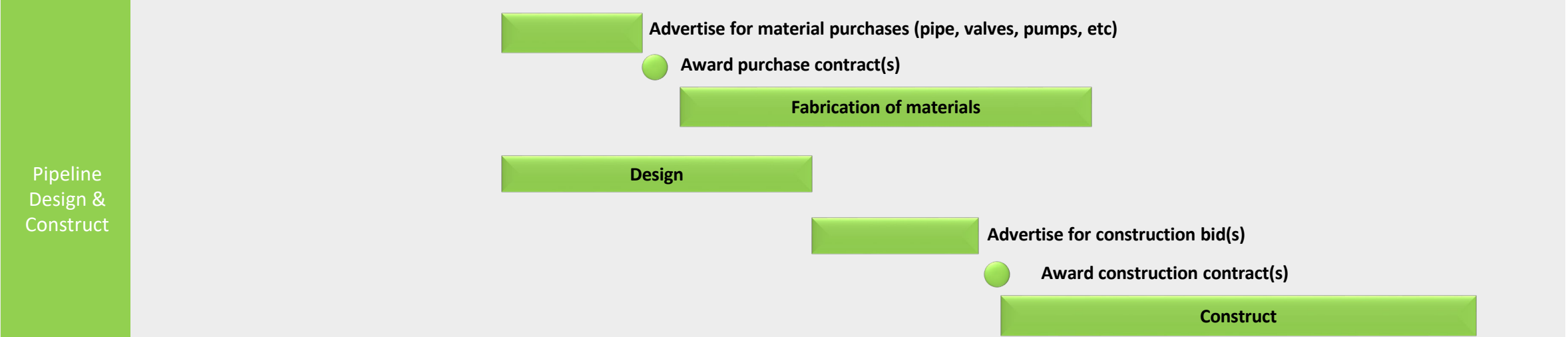
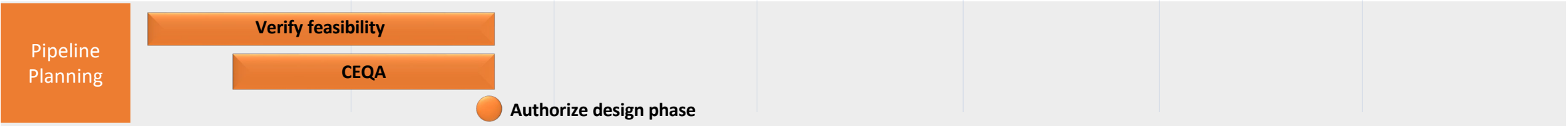
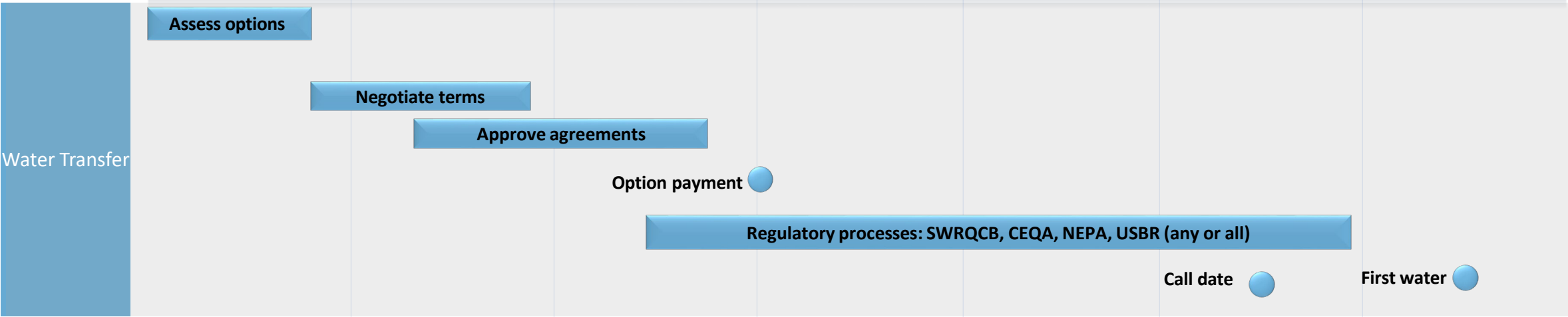
Project Component	Cost Range
Water Purchase and Wheeling	\$10M - \$18M
Capital Improvements	\$50M - \$70M
Total	\$60M - \$88M

- Project delivery 12 months
- Capacity adequate
- Regulatory process well defined
- Water Supply Options available
- Hundreds of transfers occur per year in CA

2021

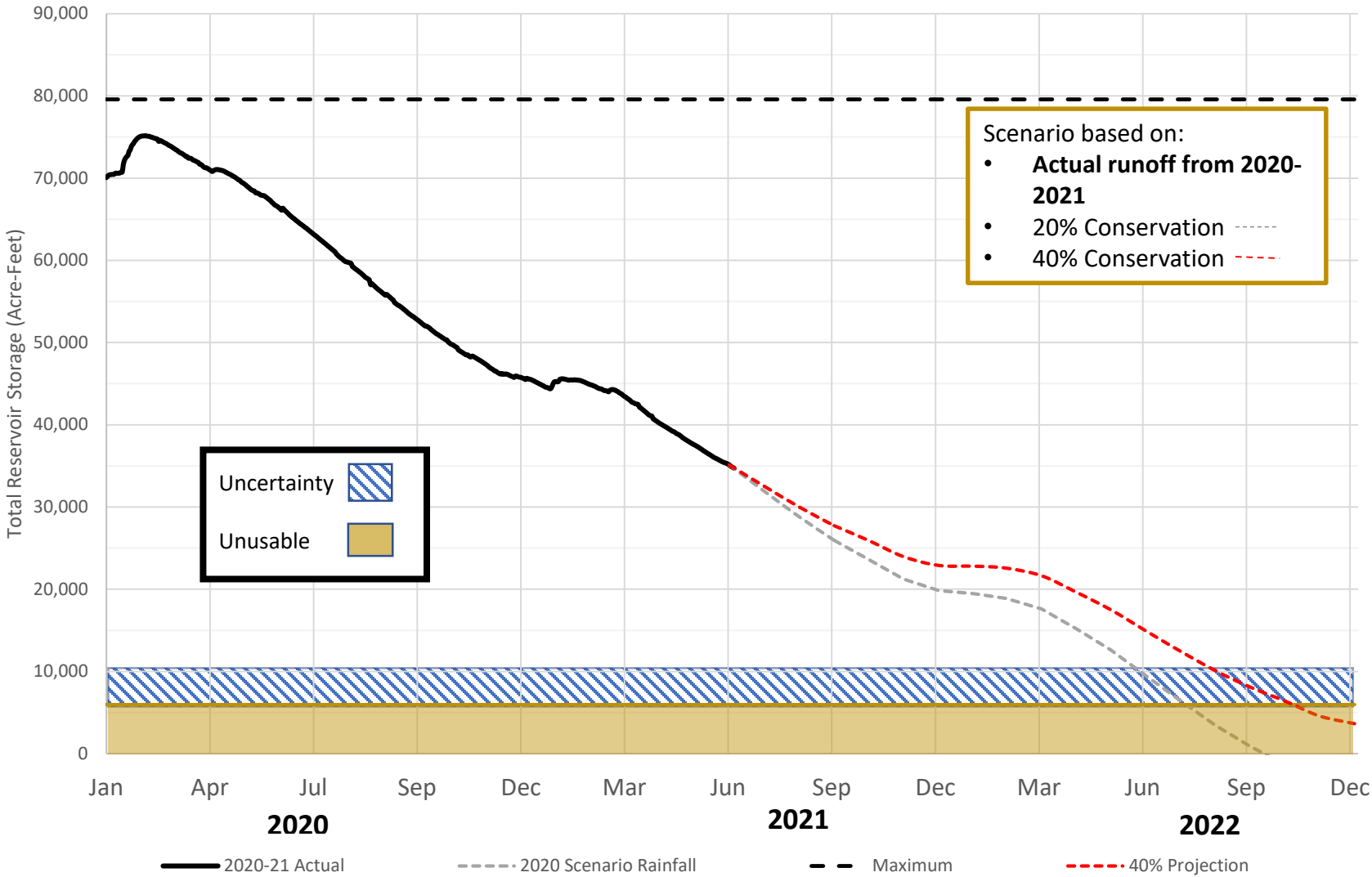
2022

Jun Aug Oct Dec Feb Apr Jun

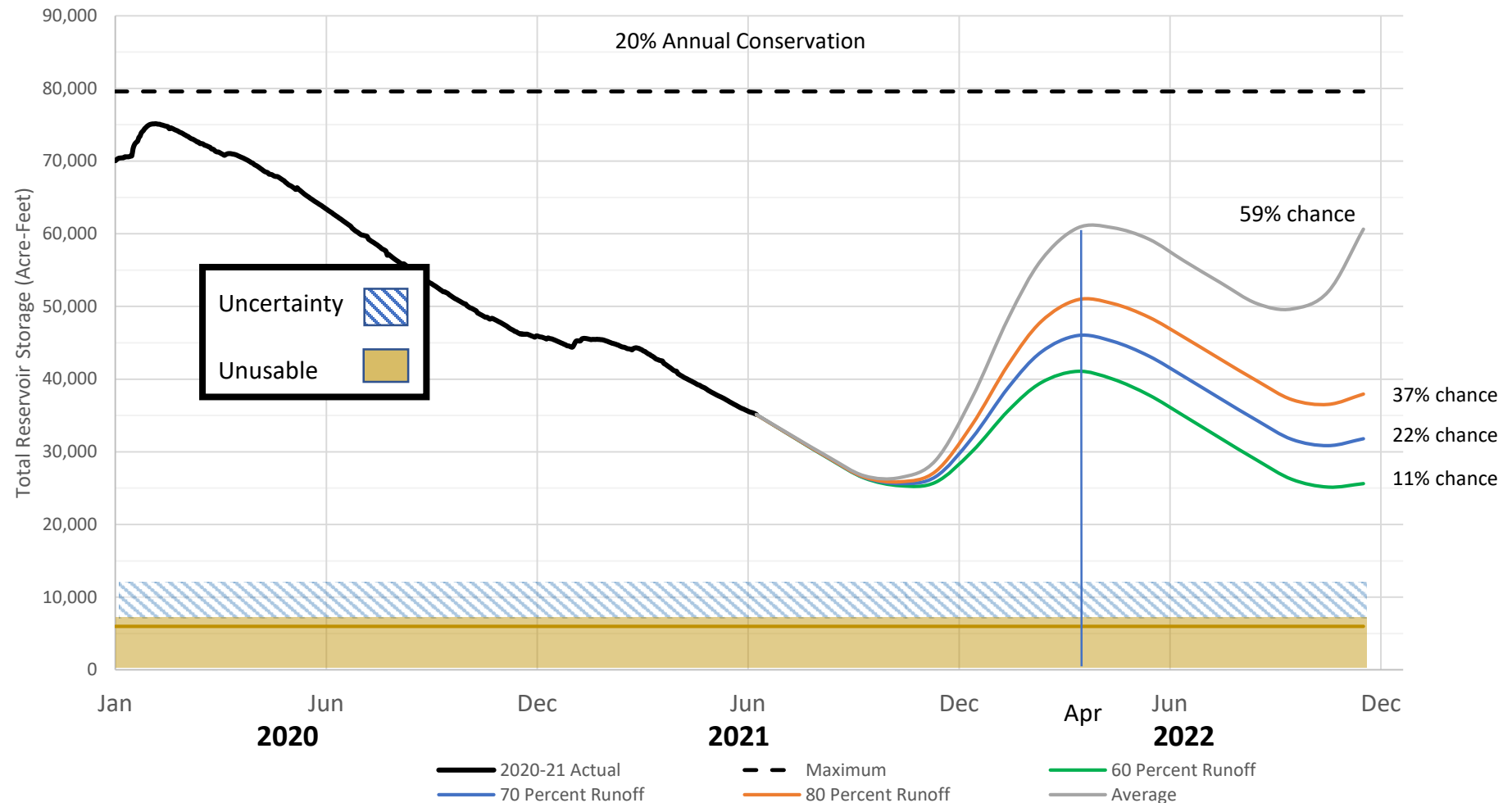


● ● ● *indicates Board decision required*

Drought Project Planning



Frequency of Rainfall Scenarios



Conservation Equivalent to 15,000 AF Water Transfer

- 3 yr Avg Demand = 25,880 AF
- Conservation Savings = 15,000 AF
 - Irrigation ~7,600 AF (100% reduction)
 - Indoor ~ 7,400 AF (42% reduction)
- Target demand = 10,880 AF
 - From 129 gpcd to 50 gpcd
- Level of confidence in achieving?
 - Compliance ~75% - Need more stringent level of conservation to 37.5 gpcd
- How long can approach be sustained?

Summary

- Conservation – essential to meet project schedule
- Conservation in lieu of Water Transfer
 - ~ 37.5 gpcd
- Runoff scenarios – frames level of risk and helps consider need for a project

Next Steps

- Continue to enhance drought outreach and Conservation efforts
- Continue operational and water supply projects
- Ongoing monitoring and reporting to the Board status as compared to established conservation goals
- Continue to pursue water transfer options and infrastructure planning

