

# **Drought Update**

August 17, 2021

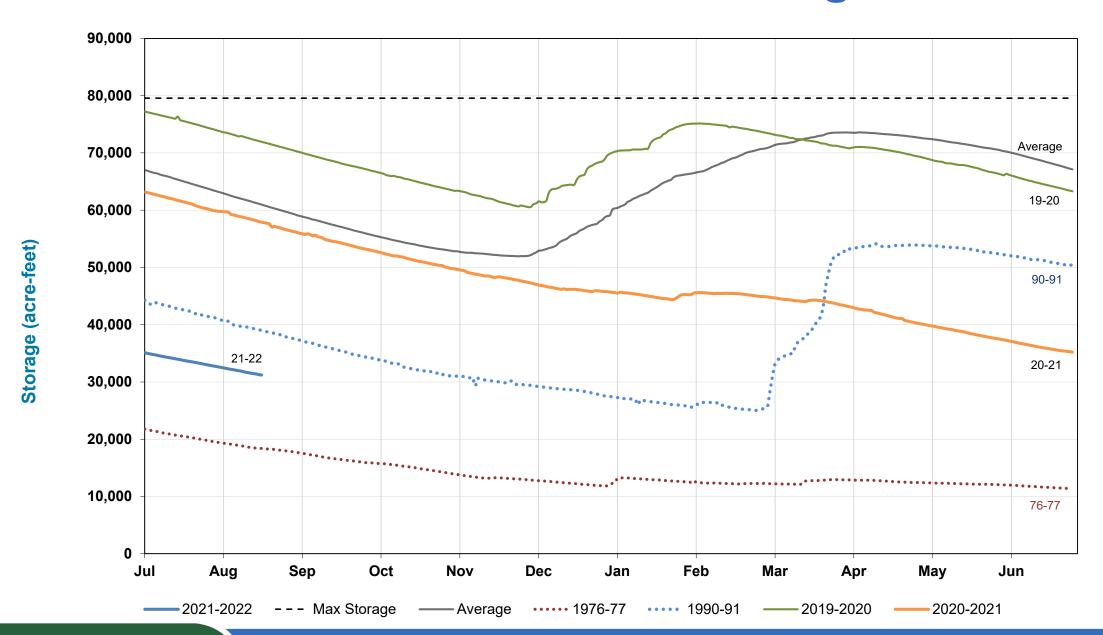


### **Overview**

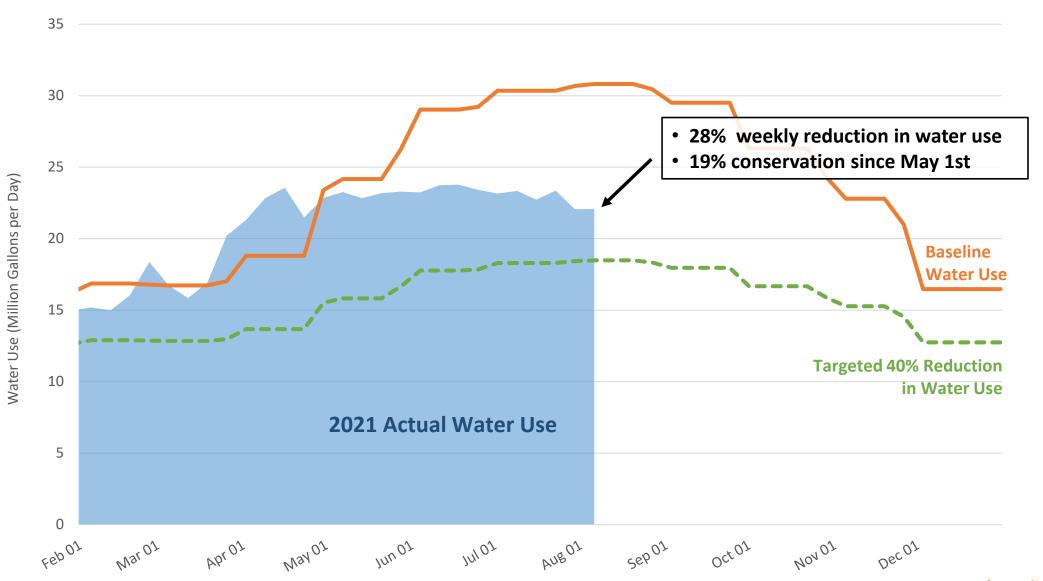
- Water Supply and Water Use
- Drought Activities and Outreach
- Conservation Update
- Emergency Intertie Project Update
- Next Steps

# Water Supply and Water Use

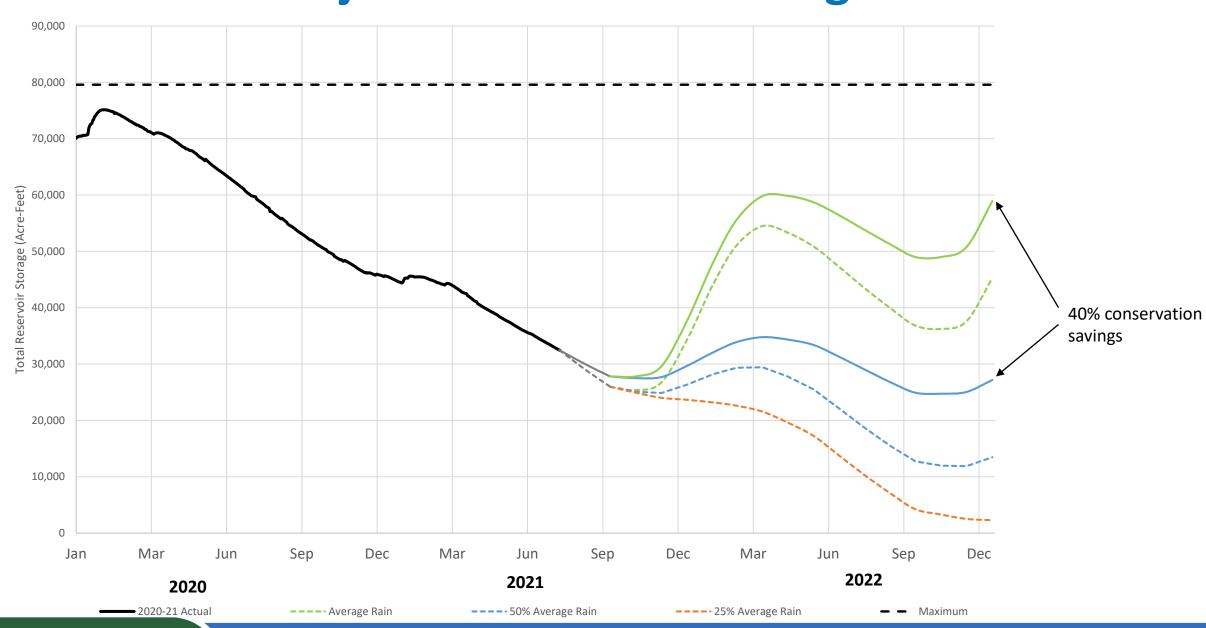
# **Total Reservoir Storage**



## **Actual vs. Targeted Water Use**



# **Projected Reservoir Storage**



# Drought Activities and Outreach

# **Drought Activities: Water Supply Initiatives**



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

Soft Opening of Residential Recycled Water Pick-up Station

### Stakeholder presentations

- More than 50 presentations: city and town councils; homeowners' groups; chambers; rotaries; businesses, etc.
- Looking for outdoor events to table: farmers markets, festivals, etc.



Drought Is Here: Save Water

August 16, 2021



### **Upcoming Presentations**

- 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**

- 8/10: Smith Ranch Retirement Home
- 7/29: Marin County City Managers Meeting
- 7/20: Belvedere-Tiburon Joint Disaster Advisory Council
- 7/13: Autodesk

### Customer Newsletter

- Prominently features drought information and water use restrictions.
- Provides resources for rebates, water supply updates and how to report water waste.

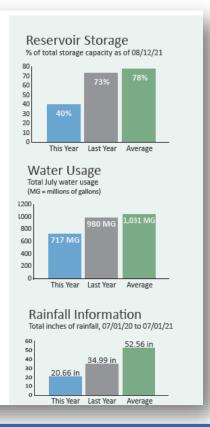
### FREE WATER-EFFICIENT FIXTURES

Stop by our customer service lobby at 220 Nellen Avenue, Corte Madera CA 94925 to pick up your free water-efficient fixtures. We have kitchen and bathroom sink aerators, low-flow shower heads, leak detection dve tablets, and shower timers. Small changes to your daily routine can amount to big water savings.



#### **Every Drop Counts - Report Water Waste**

If you see water waste, please let us know. You can report it using our online form at MarinWater.org/forms/water-waste-report, email Conservation@MarinWater.org, or call 415.945.1523.





#### SEVERE DROUGHT: SAVE WATER WITH US

We are facing a historic drought. The last two years have been some of the driest in decades, and the last 18 months have had the lowest rainfall levels recorded in more than 140 years. Our storage levels in mid-August are below 40 percent, when we typically see levels of more than 75 percent for this time of

We need everyone to save as much water as possible. Over the past six months, the water district has sent several mailers to everyone in the district highlighting water-use restrictions and the need for all of us to save as much water as possible. Alongside our conservation efforts, the district has been pursuing additional options to increase our overall supply. You can learn more about the drought and how you can save water by visiting our website at, MarinWater.org/Conserve.

We're here to help. Marin Water offers rebates and programs to help you save water, and money. Included in your bill this month is a brochure highlighting those rebates. You can also visit our website at MarinWater. org/Rebates or contact our water efficiency team at Rebates@MarinWater.org or at 415.945.1527.

To help preserve our limited supply, Marin Water's board adopted mandatory water use restrictions for all customers. Some important restrictions include:

- Spray irrigation is limited to one day a week. Each community has a designated watering day (see the chart below for your watering day).
- Drip irrigation is limited to any two days a week.
- · We recommend turning off your irrigation system and spot watering by hand, only when necessary. Spot watering can be done on any day of the week.
- Outdoor watering is prohibited between 9 a.m. and 7 p.m. to reduce evaporation.
- . Do not wash vehicles at home. Use a carwash that recycles water instead.
- · Do not power wash homes or businesses.
- Do not wash driveways or sidewalks.
- Do not water grass on public medians.
- Garden hoses must have a shutoff nozzle. You can contact us for free water-efficient fixtures.

For the full list of restrictions please visit MarinWater. org/WaterRules or contact us at CustomerService@ MarinWater.org. You can also call us at 415.945.1455.

#### **NEW WEEKLY WATERING SCHEDULE** Find your weekly watering day below: **Friday** Weekends Monday Tuesday Wednesday Thursday Mill Valley Woodacre Ross San Rafael San Quentin No spray Tiburon All other San Anselmo Larkspur unincorporated Belvedere Sausalito Fairfax areas in Marin Greenbrae Corte Madera San Geronimo County Kentfield Forest Knolls Lagunitas

### Special Rebate Insert



#### **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

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.

### Pool and Spa Covers

An uncovered pool will lose water due to evaporation. Marin Water offers a rebate of up to \$100 for customers who purchase and install pool or spa covers.

### Flume Flow Meter



Install a Flume flow meter to access real-time water use data on your phone or computer. 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.

### Hot Water Recirculator

To reduce water waste while you wait for the water to warm up, we recommend installing a hot water recirculating system. The district offers a \$50 rebate to help offset the cost of the system.

#### Clothes Washer Rebate

Replacing your older clothes washer with a new high-efficiency model is an easy way to save money and conserve water. You may qualify for a rebate of up to \$100.

For water-saving tips, water-efficient fixtures, and additional resources visit: MarinWater.org/Conserve





### Rain Barrels and Cisterns



Rainwater harvesting is the practice of collecting rainwater from rooftops and storing it for later use. We are offering up to 50 cents per gallon of storage. Up to \$1,000 per site.

### We're Here to Help

Not sure which program will work for you? We provide free phone consultations to help you find the conservation programs and rebates that best suit your needs. We also offer free waterefficient fixtures including hose shutoff nozzles, faucet aerators, showerheads, shower timers, and leak detection dye tablets.

Call us at 415.945.1527 or send us an email at Rebates@MarinWater.org to request fixtures or schedule a consultation.

# Questions? Email us: Rebates@MarinWater.org Call: 415.945.1527 Visit: MarinWater.org/Rebates

- ➤ Up Next
- Recycled Water Fill Station
- Drought Drive Up: Saturday, August 21
- Phase two ad campaign



# Drought Drive Up August 21st

Get your FREE water-saving kit at the Drought Drive Up. Walk up or drive to our Corte Madera office on Saturday August 21st.

From:

8 a.m. to 12:00 p.m.

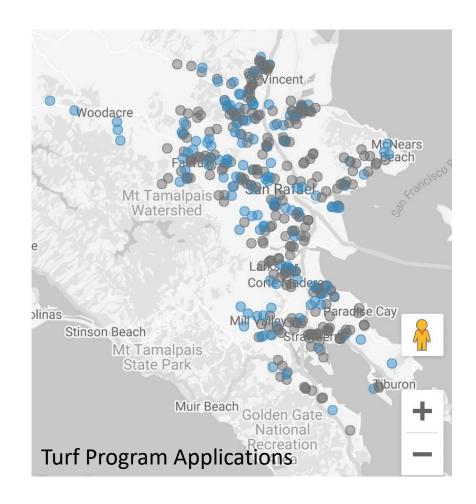
Location:

220 Nellen Ave., Corte Madera

# Conservation Update

# **Drought Program Participation – August Update**

	June	July	August*	Monthly Target
Turf Programs (sqft)	33,600	86,000	15,947	400,000
Flume Devices	618	473	201	450
Clothes Washers	62	24	7	20
Rain Barrel/ Cisterns	7	4	4	10
Pool Covers	25	89	35	10
Hot Water Recirculation Systems	3	22	9	5
Graywater Incentives	4	12	0	10

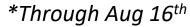


\*Through Aug 16<sup>th</sup>

### **Contacts with Customers**

- Water Waste Reports
  - Online form
  - Water Waste Hotline
  - Door tags
- Conservation calls/emails continue to increase

	Feb	Mar	Apr	May	June	July	Aug*
Calls/ Emails	128	373	907	1,220	1,911	1,186	659
Water Waste Reports	5	13	104	203	253	1,055	889





### **Boots on the Ground**

### Gym Outreach: 100% complete

- 42 gyms visited, materials delivered
- 10 either closed or not interested

### Hotels Outreach: 100% complete

- 28 received materials
- 7 not interested in our materials

### Restaurant Outreach: 40% complete

- 97 visited, materials delivered
- 9 not interested in our materials or have their own



# **Customer Support**

### Landscape Professional 5-part Webinar Series

- Strategies for Survival: Trees, Shrubs and Turf
- 20—40 attendees at each session
- Follow-up session Monday, August 23rd

### AMI Eye on Water Accounts

- 4% increase in sign-ups
- Resending sign up instructions to all AMI customers

### High Water Users

- Focus Groups
- Survey



**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 irrisation 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









It's every-drop-counts time.
Save water.

MarinWater.org/Conserve

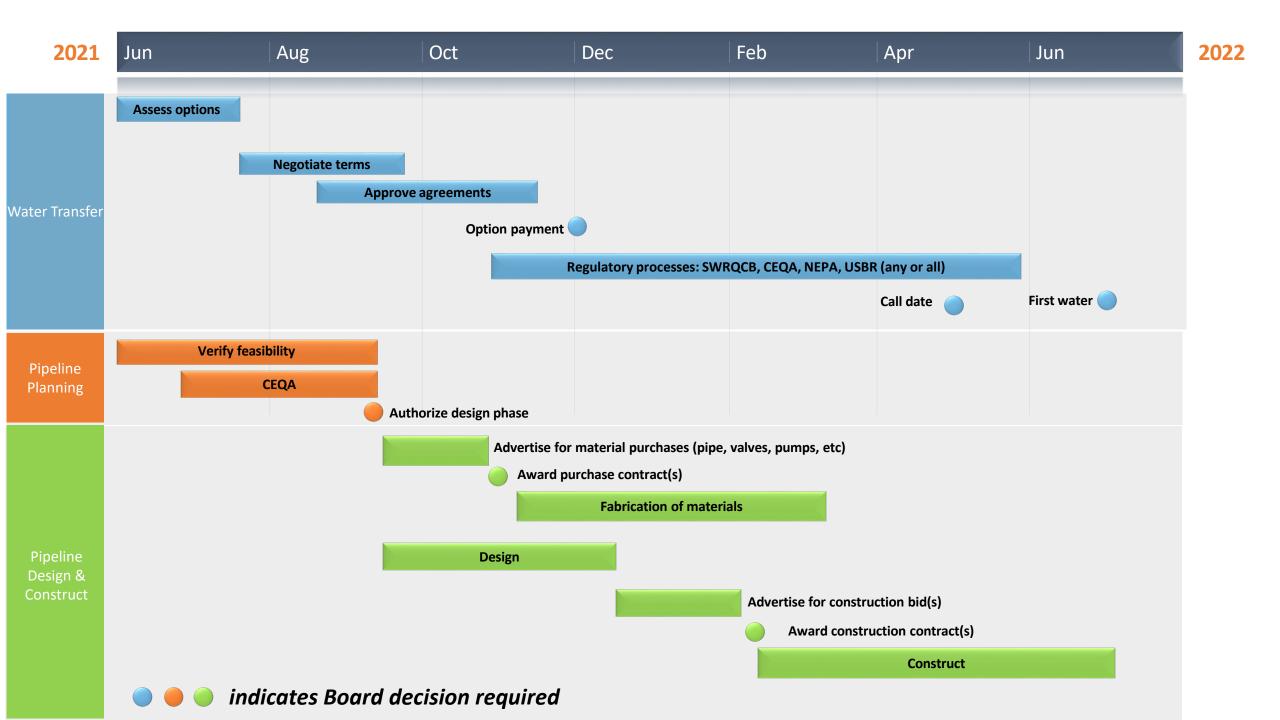
# **Emergency Intertie Project Update**

# **Emergency Drought Projects Summary**

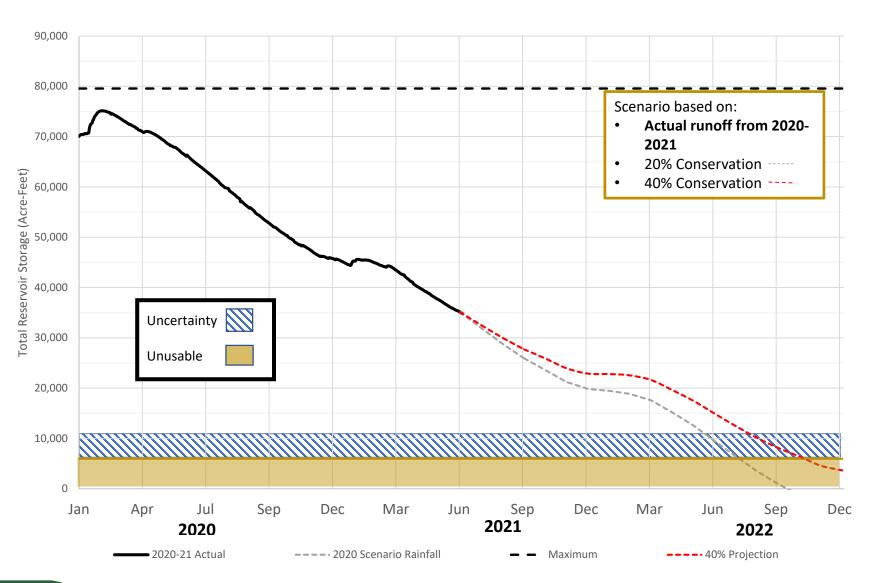
- ✓ **Conservation** Continue as top priority, improve, refine and enhance
- ✓ **Sonoma Water** Collaborate on any and all opportunities to address the drought
- ✓ Recycled Water Residential Fill station, commercial hauling
- ✓ Water by rail Logistics of off-loading and treatment, cost \$163,000/AF
- ✓ Excavating reservoirs 10,000 AF = 16.1 M cubic yards (hoover dam = 4.3M cy)
- ✓ **Ground Water Storage and Recovery** longer term opportunity, no near term solution for drought
- ✓ Desalination timing dictates temporary, capacity limited
- ✓ Water Transfers / Emergency Intertie pursuing feasibility of project

# **Overall Project Update**

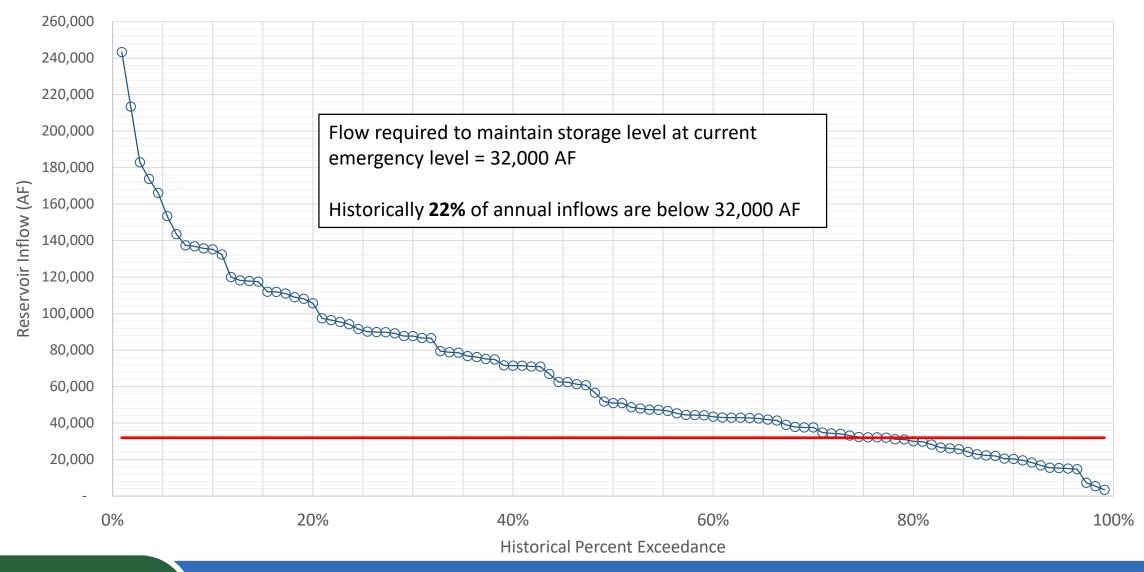
- Water Transfers developing key terms for option and supply agreements
- Drafting wheeling terms/agreements with key Bay Area agencies
- Weekly meetings with CalTrans PM, Engineering, CEQA etc.
- Hydraulic analysis, pipe routing, geometric and structural analysis for various bridge segments
- Operations Planning



# **Drought Project Planning**



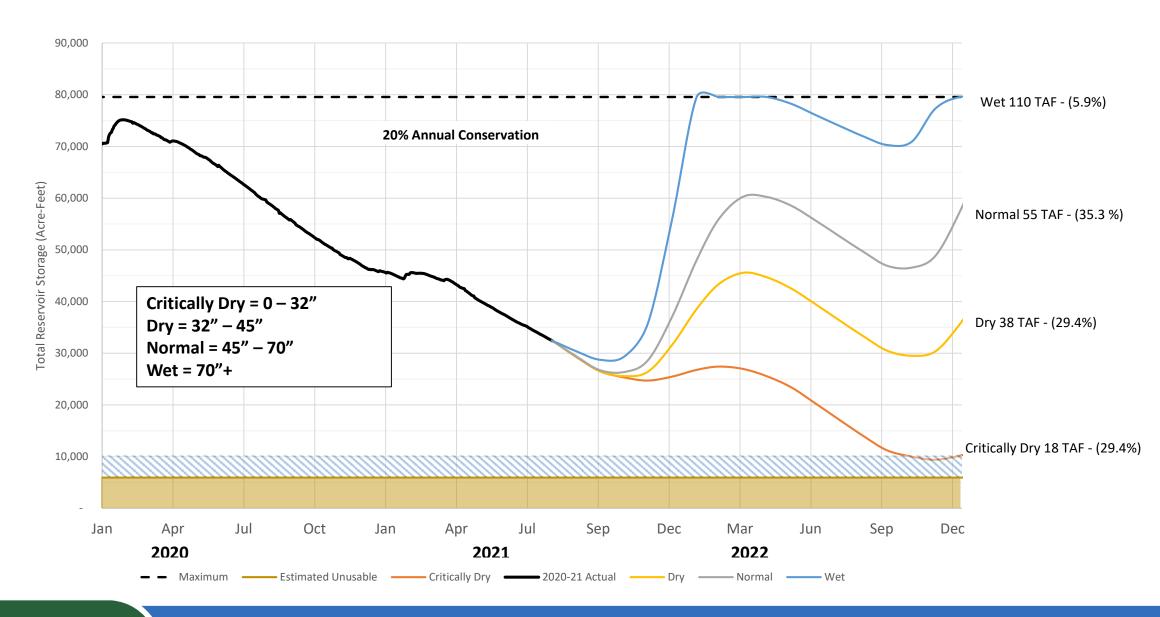
## **Historical Inflow**



# **Classification of Water Year**

Water Year Type	Range	Representative Runoff
Wet	> 70 inches	110 TAF
Normal	45 – 70 inches	55 TAF
Dry	32 – 45 inches	38 TAF
Critically Dry	< 32 inches	18 TAF

# **Projections based on Water Year Type**



### **Other Schedule Factors**

- Water supply
- Multiple agency coordination increases complexity and reduces control over schedule
- Technically challenging elements Chevron, legacy bridge etc
- Materials lead time -
- Construction unforeseen issues

# **Emergency Intertie - Key Milestones**

August 30 – Complete feasibility and design to support CEQA – (~\$3M)

September 21 – Authorize full Design – (~\$7M)

October 19 – Pre purchase of material – (~\$15M)

September – Various transfer and wheeling agreements

February 2022 – Award Construction – (~\$40M)

# **Emergency Intertie Project Conceptual Cost**

- Capital Cost \$60M \$90M Water Transfer Project
- Annual cost \$2M to \$5M debt service plus operational costs when in use
- Rate impact = 3% 4.5% (one time) rate increase
- Grants and low-interests loans

# **Next Steps**

- Continue to refine & 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 Emergency Intertie project planning

# Severe Drought Save Water

Learn more at:

MarinWater.org/Conserve

