



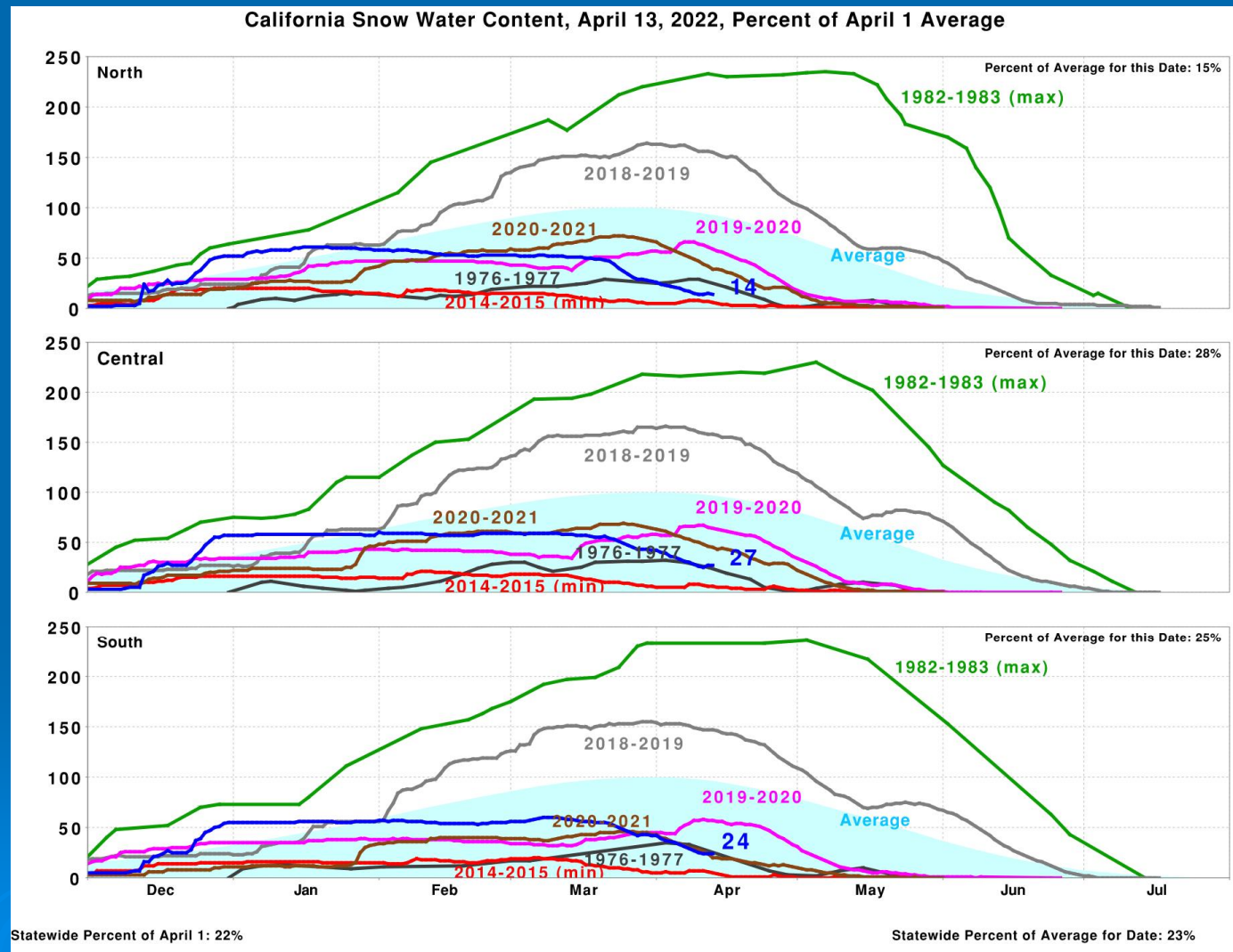
# Beaumont-Cherry Valley Water District

Serving the Beaumont, Cherry Valley and some areas of Calimesa

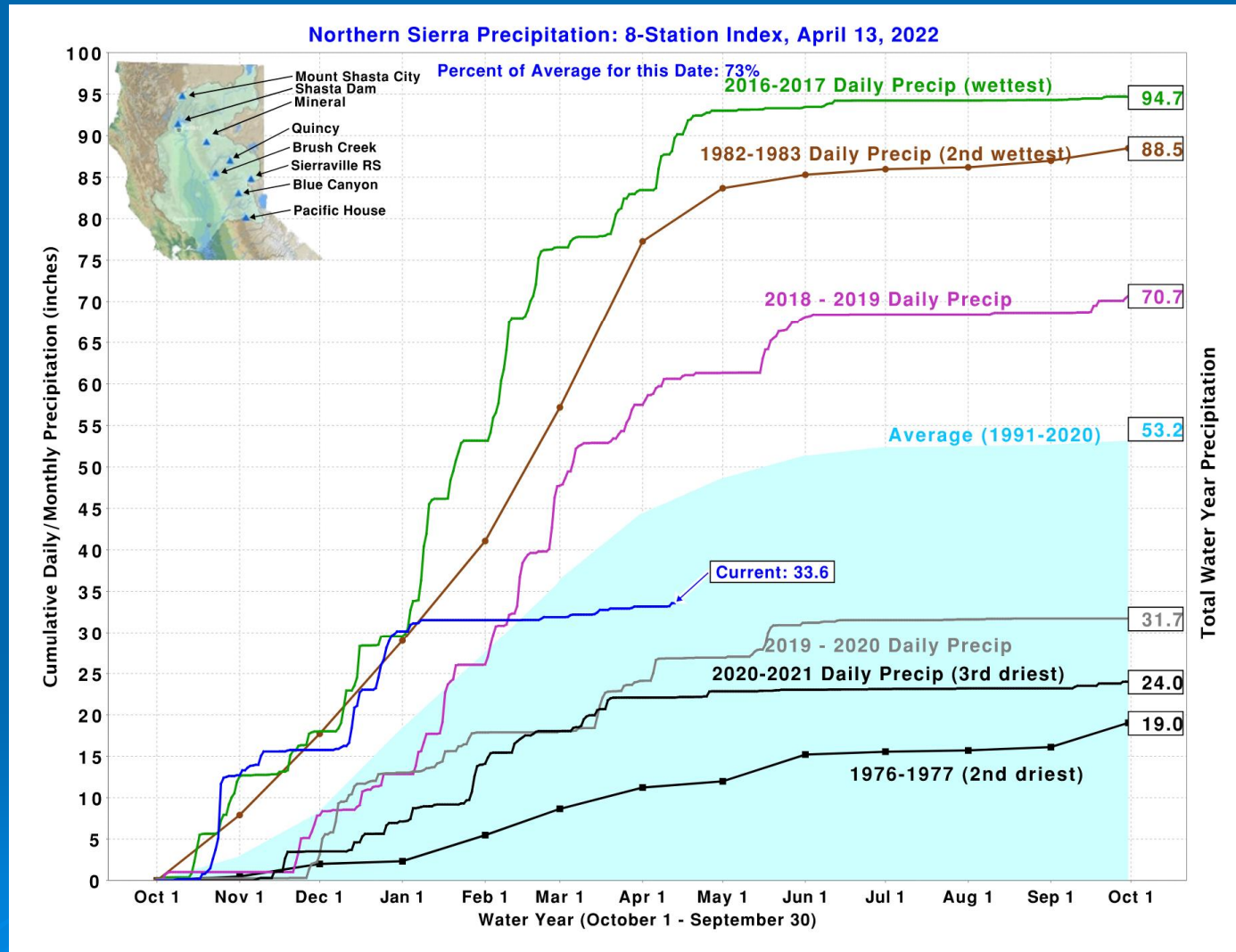
## Water Shortage, Use Restrictions, and Drought

Presentation to  
Board of Directors  
April 13, 2022  
Board Meeting

# California Snow Water Content

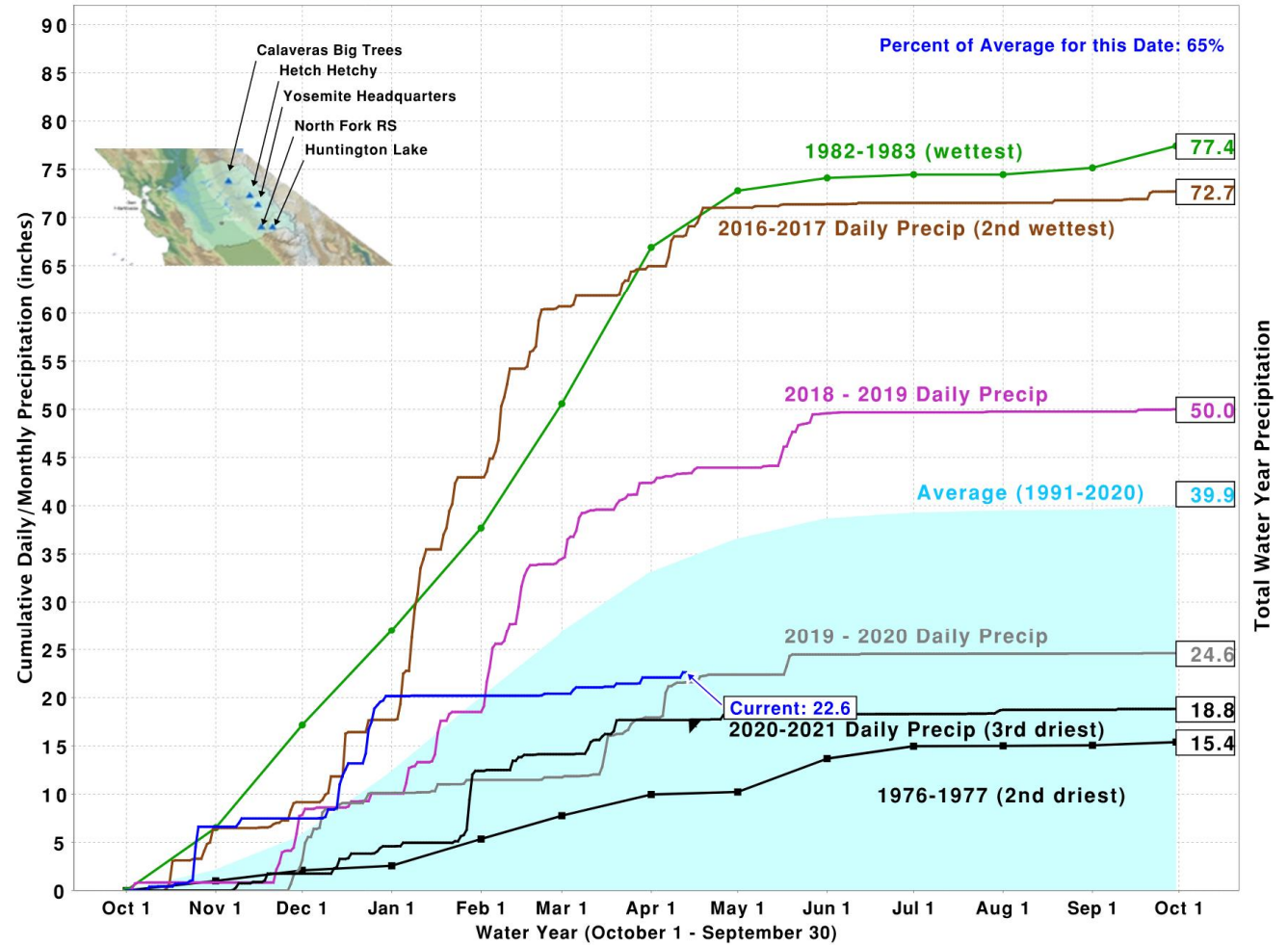


# Northern Sierra Precipitation

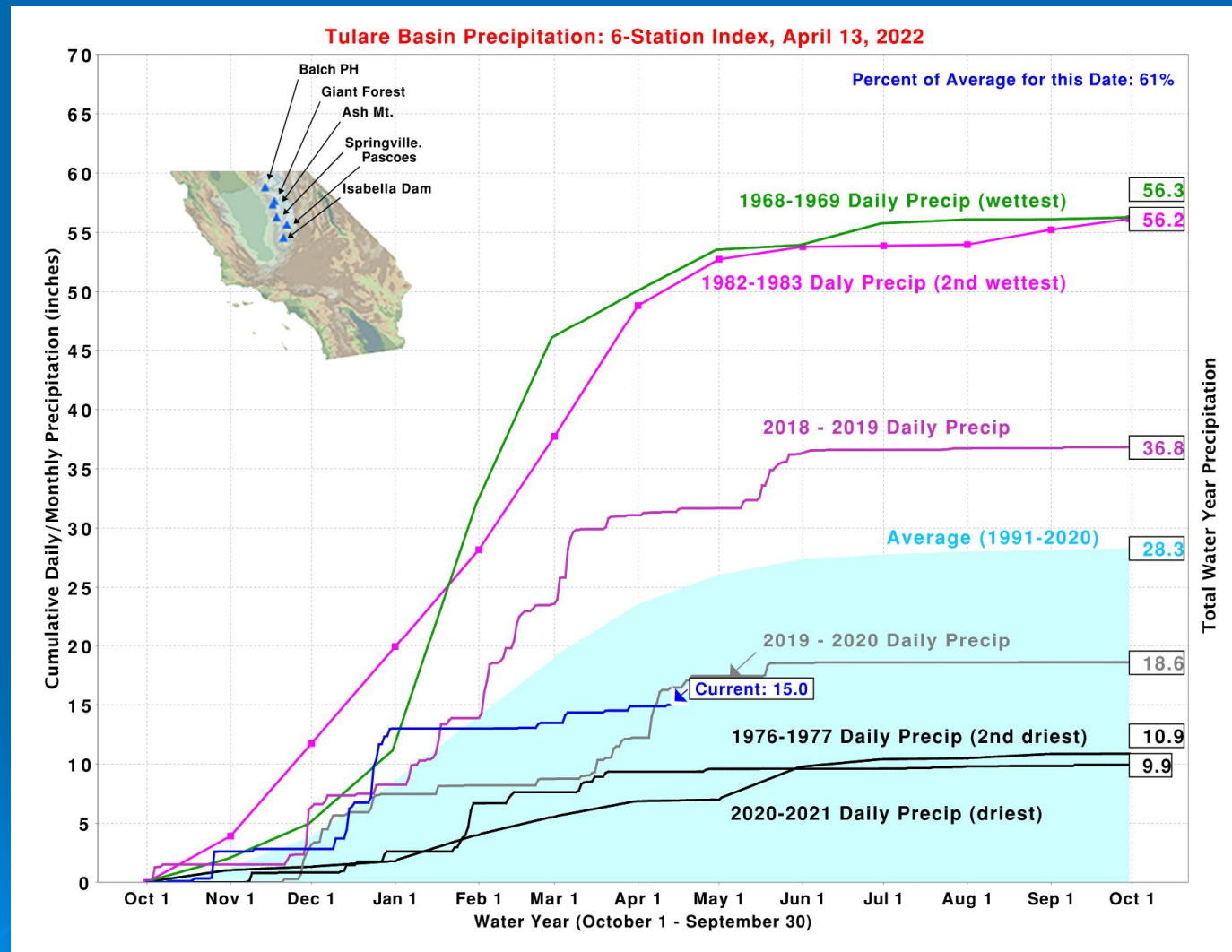


# Central Sierra Precipitation

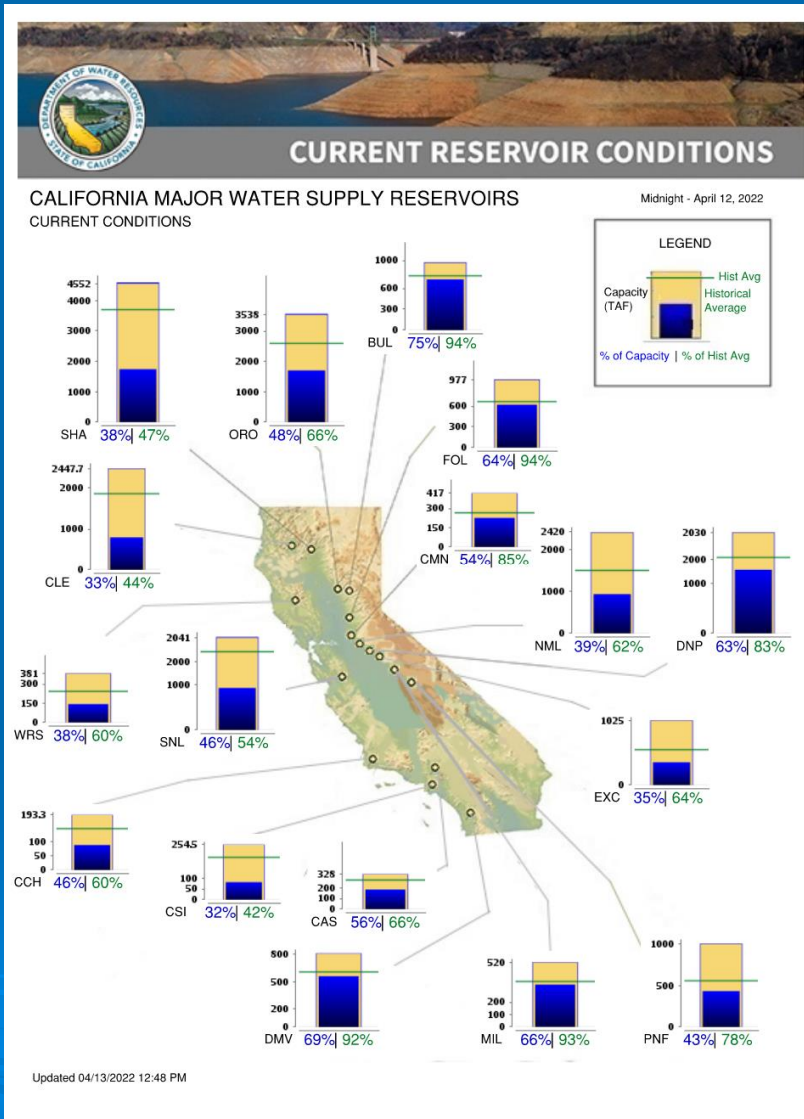
San Joaquin Precipitation: 5-Station Index, April 13, 2022



# South Sierra Precipitation



# DWR – State Water Project Reservoir Levels



# Governor's Executive Order N-7-22 (3/28/2022)

1. The orders and provisions contained in my April 21, 2021, May 10, 2021, July 8, 2021, and October 19, 2021 Proclamations remain in full force and effect, except as modified by those Proclamations and herein. State agencies shall continue to implement all directions from those Proclamations and accelerate implementation where feasible.

Governor's Executive Order N-7-22 is Provided in the Staff Report – Attachment 2 (pages 243-248 of 377)

Prior Proclamations are Provided in the Staff Report – Attachment 9 (pages 296-310 of 377)

# Governor's Executive Order N-7-22

## Around the House

2. To help the State achieve its conservation goals and ensure sufficient water for essential indoor and outdoor use, I call on all Californians to strive to limit summertime water use and to use water more efficiently indoors and out. The statewide Save Our Water conservation campaign at [SaveOurWater.com](http://SaveOurWater.com) provides simple ways for Californians to reduce water use in their everyday lives. Furthermore, I encourage Californians to understand and track the amount of water they use and measure their progress toward their conservation goals.



### Fill Bathtub Halfway or Less

Filling up your bathtub halfway or less can save 17-25 gallons of water per person every bath.



### Fix Leaks

Fixing leaks inside and outside the home can save 27 to 90 gallons of water each day.



### Install Aerators

Installing aerators can save .7 gallons per minute.



### Install High-Efficiency Toilets

Installing high-efficiency toilets can save 6-35 gallons per day.



### Recycle Indoor Water and Irrigate Your Garden

Recycling indoor water to use outdoors can cut water use by 30%.



### Take 5-minute Showers

Keeping showers under 5 minutes can save 12.5 gallons per shower when using a water-efficient showerhead.



### Turn Off Water When Brushing Teeth, Shaving

By turning off the water when brushing teeth or shaving you can save 8 gallons of water per person per day.



### Wash Full Loads of Clothes and Dishes

Washer: saves 15-45 gallons per load. Dishwasher: saves 5-15 gallons per load.



# Governor's Executive Order N-7-22

2. To help the State achieve its conservation goals and ensure sufficient water for essential indoor and outdoor use, I call on all Californians to strive to limit summertime water use and to use water more efficiently indoors and out. The statewide Save Our Water conservation campaign at [SaveOurWater.com](http://SaveOurWater.com) provides simple ways for Californians to reduce water use in their everyday lives. Furthermore, I encourage Californians to understand and track the amount of water they use and measure their progress toward their conservation goals.

## Around the Yard



### Use Water-wise Plants

Check with your local water agency on the best plants for your area. It is best to use water-wise, California-native plants when possible.



### Install Drip Irrigation & Add a Smart Controller

Installing a drip irrigation system and a smart controller can save 15 gallons each time you water.



### Reimagine Your Yard

Feed your vegetables and fruits water first because they feed you! Water-wise plants and shade trees use little or no water once established. Thirsty plants such as lawn and container plants are the lowest priority.



### Use a Broom to Clean Outdoor Areas

Using a broom to clean outdoor areas can save 6 gallons every minute.



### Use Drought-resistant Trees, Plants

Using drought-resistant plants and trees can save 30-60 gallons per 1000 sq. ft. each time.



### Set Mower Blades to 3"

Setting mower blades to three inches encourages deeper roots and saves 16-50 gallons per day.



### Adjust Sprinkler Heads & Fix Leaks

Saves 12-15 gallons each time you water and a leak about as small as the tip of a ballpoint pen can waste about 6,300 gallons of water per month!



### Use Mulch

Using mulch can save 20-30 gallons of water per 1000 sq. ft. each time you water.

# Governor's Executive Order N-7-22

To further conserve water and improve drought resiliency if the drought lasts beyond this year, I encourage urban water suppliers to conserve more than required by the emergency regulations described in this paragraph and to voluntarily activate more stringent local requirements based on a shortage level of up to thirty percent (Level 3).

3. By May 25, 2022, the State Water Resources Control Board (Water Board) shall consider adopting emergency regulations that include all of the following:
  - a. A requirement that each urban water supplier, as defined in section 10617 of the Water Code, shall submit to the Department of Water Resources a preliminary annual water supply and demand assessment consistent with section 10632.1 of the Water Code no later than June 1, 2022, and submit a final annual water supply and demand assessment to the Department of Water Resources no later than the deadline set by section 10632.1 of the Water Code;
  - b. A requirement that each urban water supplier that has submitted a water shortage contingency plan to the Department of Water Resources implement, at a minimum, the shortage response actions adopted under section 10632 of the Water Code for a shortage level of up to twenty percent (Level 2), by a date to be set by the Water Board; and
  - c. A requirement that each urban water supplier that has not submitted a water shortage contingency plan to the Department of Water Resources implement, at a minimum, shortage response actions established by the Water Board, which shall take into consideration model actions that the Department of Water Resources shall develop for urban water supplier water shortage contingency planning for Level 2, by a date to be set by the Water Board.



# 2021 District Supplies & Demands

**Table 1 – BCVWD Supplies and Demand for 2021**

<b>BCVWD Firm Supplies (as of end of 2021)</b>	
<b>Source</b>	<b>Supply, AF</b>
SWP Table A Allocation (5%)	822
Edgar Canyon Groundwater	1,000
Misc. Water Purchases/Transfers	508
Storage Account Balance	31,633
Unused Overlier Rights	2,000
<b>Total Supply</b>	<b>35,963</b>
<b>BCVWD Demands</b>	
2021 Production from Beaumont Basin (includes all potable water demand, potable water make-up to the non-potable system, non-potable water from Well 26, and misc. losses)	13,058
2021 Production from Edgar Canyon Wells	1,090
Total 2021 Production (Total Demand [potable and non-potable] plus losses, misc. transfers to City of Banning)	14,148
5-Year Demand (based on 2021 production)	70,740

# Historical Deliveries of SWP to SGPWA & BCVWD

**Table 2 – Historical Deliveries of SPW to SGPWA and BCVWD**

Calendar Year	Total SGPWA Deliveries, acre-ft (1)	BCVWD Deliveries, acre-ft (2)	BCVWD % of SGPWA Deliveries	DWR Allocation %
2003	116			90
2004	814			65
2005	687			90
2006	4,420	3,501	79.2	100
2007	4,815	4,501	93.5	60
2008	4,905	2,399	48.9	35
2009	6,609	2,741	41.4	40
2010	8,403	5,727	68.1	50
2011	10,730	7,979	74.4	80
2012	10,974	7,783	70.9	65
2013	9,695	7,434	76.7	35
2014	5,131	4,405	85.9	5
2015	3,930	2,773	70.6	20
2016	11,461	9,319	81.3	60
2017	15,843	13,590	85.8	85
2018	13,174	12,121	92.0	35
2019	14,152	13,645	96.4	75
<b>2020</b>	<b>11,469</b>	<b>11,005</b>	<b>96.0</b>	<b>15</b>
<b>Total</b>	<b>133,479</b>	<b>108,892</b>		

Sources: (1) Report on Water Conditions, Reporting Period 2018, SGPWA, (2) 2019 Draft Beaumont Basin Watermaster Annual Report, (3) 2020 Draft Beaumont Basin Watermaster Annual Report

# CY 2021 Water Storage (Beaumont Basin)

Agency / Party to the Judgment	Calendar Year 2021 (ac-ft)		
	Beginning	Ending	Change
City of Banning	50,889.2	48,718.1	-2,171.1
BCVWD	39,749.8	31,633.2	-8,116.6
City of Beaumont	0.0	0.0	0.0
South Mesa Water Company	10,134.2	10,262.7	128.4
Yucaipa Valley Water District	16,287.7	15,957.1	-330.6
Morongo Band of Mission Indians	0.0	0.0	0.0
San Gorgonio Pass Water Agency	471.8	507.8	36.0
<b>TOTAL in Storage</b>	<b>117,532.8</b>	<b>107,078.9</b>	<b>-10,453.8</b>

Source: Beaumont Basin Watermaster 2021 Annual Report – DRAFT April 6, 2022

# WSCP - Annual Water Supply and Demand Assessment

Per Governor's EO, Now  
JUNE 1, 2022

**Table 5 – Annual Water Supply and Demand Assessment Decision Making Process**

	Activity
December - April	Annual water supply and demand review
April - May	Prepare Annual Water Supply and Demand Assessment based on findings of supply and demand review. Present Assessment to General Manager for review.
May	Public notification of the intent to adopt Annual Water Supply and Demand Assessment at the June Board of Directors meeting.
June	Presentation of findings in the Annual Water Supply and Demand Assessment and necessary shortage response actions to the Board of Directors for Approval by Resolution.
July 1st (or 14 days from Notification of Final Allocation, whichever is later)	Submittal of final adopted Annual Water Supply and Demand Assessment to the State of California Department of Water Resources.

From 2020 WSCP (page 10); Agenda page 271 of 377

# WSCP – Water Shortage Level & Response Actions

**Table 6 (DWR Submittal Table 8-1) – Water Shortage Contingency Plan Levels**

DWR Table 8-1 Water Shortage Contingency Plan Levels		
Shortage Level	Percent Shortage Range	Shortage Response Actions (Narrative description)
1	Up to 10%	Up to 10% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes voluntary public demand reduction of 10%, and community outreach encouraging conservation.
2	Up to 20%	Up to 20% reduction in normal, "long term" water supply (including conjunctive use water in storage); includes any actions from Shortage Level 1. Response actions include mandatory 10% reduction - Increased public outreach, restaurants serve water upon request, lodging must offer opt out of linen services
3	Up to 30%	Up to 30% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes any actions from Shortage Levels 1 and 2. Response actions include mandatory 20% reduction - limit landscape irrigation to certain number of days per week
4	Up to 40%	Up to 40% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes any actions from Shortage Levels 1, 2 and 3. Response actions include mandatory 25% reduction - limit irrigation of lawns to once a week except for lawns and turf irrigate with recycled water, restrict water use for decorative water features, limit filling of pools only to cases where appropriate cover is in place
5	Up to 50%	Up to 50% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes any actions from Shortage Levels 1 - 4. Response actions include mandatory 30% reduction - prohibit filling of swimming pools, washing of automobiles only limited to facilities using recycled water, prohibit potable water use for construction activities, industrial water users required to reduce water use (food processing, concrete mixing plant)
6	>50%	Greater than 50% reduction in normal, "long term" water supply (including conjunctive use water in storage); response actions includes any actions from Shortage Levels 1 - 5. Response actions include mandatory 30% reduction - prohibit landscape irrigation except for irrigation with use of recycled water, industrial water users required to further reduce water use (food processing, concrete mixing plant)

NOTES:

20% Reduction in Supplies  
10% Mandatory Reduction  
in Use

30% Reduction in Supplies  
20% Mandatory Reduction  
in Use



## WSCE – Shortage Level 3 (20% Mandatory Reduction in Demands)

### 4.3 Shortage Level 3 (Moderate Shortage – Mandatory Reduction)

Shortage Level 3 occurs when:

- Up to a 30% reduction in normal (average), “long-term” averaged supply occurs
- Imported water supplies (SWP allocation and other imported supplies) averages between a minimum of 28% up to a 38% over a three-year (or longer) period

Restrictions up to Shortage Level 3 will still be mandatory. At this point, the District will initiate water restrictions similar to Resolution 2015-05 and require a 20% reduction in demand from an established base year. In this stage, the District will impose restrictions similar to Resolution 2015-05: but limit lawn watering to two times per week (assigned days based on street address) and no filling of new swimming pools. Topping off swimming pools is permitted. No new construction meters will be approved. Use of recycled or non-potable water for construction activities will be encouraged. The District may adopt financial incentives to encourage efficient water use. Public awareness programs will expand to schools.

# WSCP – Demand Reduction Actions

DWR Table 8-2: Demand Reduction Actions

Shortage Level	Demand Reduction Actions <i>Drop down list</i> <i>These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.</i>	How much is this going to reduce the shortage gap? <i>Include units used (percentage)</i>	Additional Explanation or Reference <i>(optional)</i>	Penalty, Charge, or Other Enforcement? <i>For Retail Suppliers Only Drop Down List</i>
<i>Add additional rows as needed</i>				
All	Improve Customer Billing	1%	Continue to provide customers with detailed breakdowns of water use and encourage water use efficiency	No
All	Expand Public Information Campaign	1%		
All	Landscape - Restrict or prohibit runoff from landscape irrigation	2-5%	Part of BCVWD's Water Waste Provisions	No
All	Other - Prohibit use of potable water for washing hard surfaces	2-5%	Part of BCVWD's Water Waste Provisions - prohibits watering of concrete	No
All	Other - Require automatic shut of hoses	2-5%		No
2	CII - Lodging establishment must offer opt out of linen service	2-5%		No
2	CII - Restaurants may only serve water upon request	2-5%		No
2	Water Features - Restrict water use for decorative water features, such as fountains	1-3%		No
3	Landscape - Limit landscape irrigation to specific days	10-15%	2 days per week	Yes
3	Other	5%	Public awareness programs expanded to schools	No

# WSCP – Intangible Conservation Measures

- **Expand Public Information** – BCVWD should work with SGPWA and the other retailers in the San Geronio Pass to develop a consistent, region-wide message that could include regular articles in the local newspapers, displays at major events, low water using garden workshops, etc. Expand into the schools and service clubs. Work with the high-volume water users in the commercial/retail/industrial area to determine if there are water reduction opportunities.
- **Improved Customer Billing** – Continue providing customers with their historic usage for the past year in graphical format (bar charts) with target levels for water conservation. Provide data on other typical customers in the District's service area.
- **Rebates for Irrigation Efficiency Improvements** – BCVWD should work with SGPWA to provide rebates to improve irrigation efficiency including drip systems and smart controllers. Replacement of spray nozzles with rotating nozzles reduces water consumption significantly and prevents overspray.
- **Rebates for Turf Replacement** – BCVWD should work with SGPWA to provide rebates to convert turf areas to low water using drought tolerant plantings.

## Other Measures:

- Establish long-term turf conversion programs with the City, County, and HOA's.
- Implementation of Recycled Water from the City of Beaumont
- Restrict construction water to non-potable water
- Drought surcharges
- Implementation of additional tiers in the rate structure (Prop. 218 Required)

# WSCP – Implementation

Mandated Conservation:

20% Reduction of 2021 Total  
Production = 2,829.6 AF

\*2021 Landscape Irrigation  
Total Demand = 2,129 AF  
20% Reduction = 425.8 AF

## Theoretical Reduction Potential Through Conservation Measures

	Individual % Reduction	Amount (AF)	Conservation Quantity (AF)
2021 Total Production		14,148	
Expand Public Information	2%	-283.0	-283.0
Improve Cust. Billing	1%	-141.5	-424.4
Landscape Runoff Restrictions	3%	-424.4	-848.9
Hard Surface Washing Restrictions	2%	-283.0	-1,131.8
Hose Auto-Shutoff Nozzle Requirement	2%	-283.0	-1,414.8
CII (Hotel & Motel) - Linen Service (Education & Restrictions)	3%	-424.4	-1,839.2
CII (Restaurants) – Water Served Upon Request	3%	-424.4	-2,263.7
Restrictions on Water Features (i.e. Fountains & Decorative Ponds)	2%	-283.0	-2,546.6
Landscape Restrictions (Reduction from 5-day cycle to 4-day cycle, annual basis)*	20%	-425.8	-2,972.4

# WSCP – Implementation

## Drought Surcharges

### 5-1.4 DROUGHT SURCHARGES

In the event that the District activates water supply drought rates, customers will be notified in advance of the below surcharges. Drought rates are generally triggered by the declaration of a specific water shortage by the California Department of Water Resources, or alternatively, by the District's Board of Directors.

The Surcharge Rate below is additive to the current Commodity Rate, per unit of water, at the date of presentation. The Surcharge Rate in effect is dependent on the drought stage declared.

	Stage 1	Stage 2	Stage 3	Stage 4
Reduction in Use	10%	20%	30%	40%
Surcharge	\$0.17	\$0.36	\$0.60	\$0.92

# General Manager Comments





Discussion /  
Questions??

