

# **Water Supply Update**

Board of Directors Meeting

March 10, 2020

# Water Supply Briefing

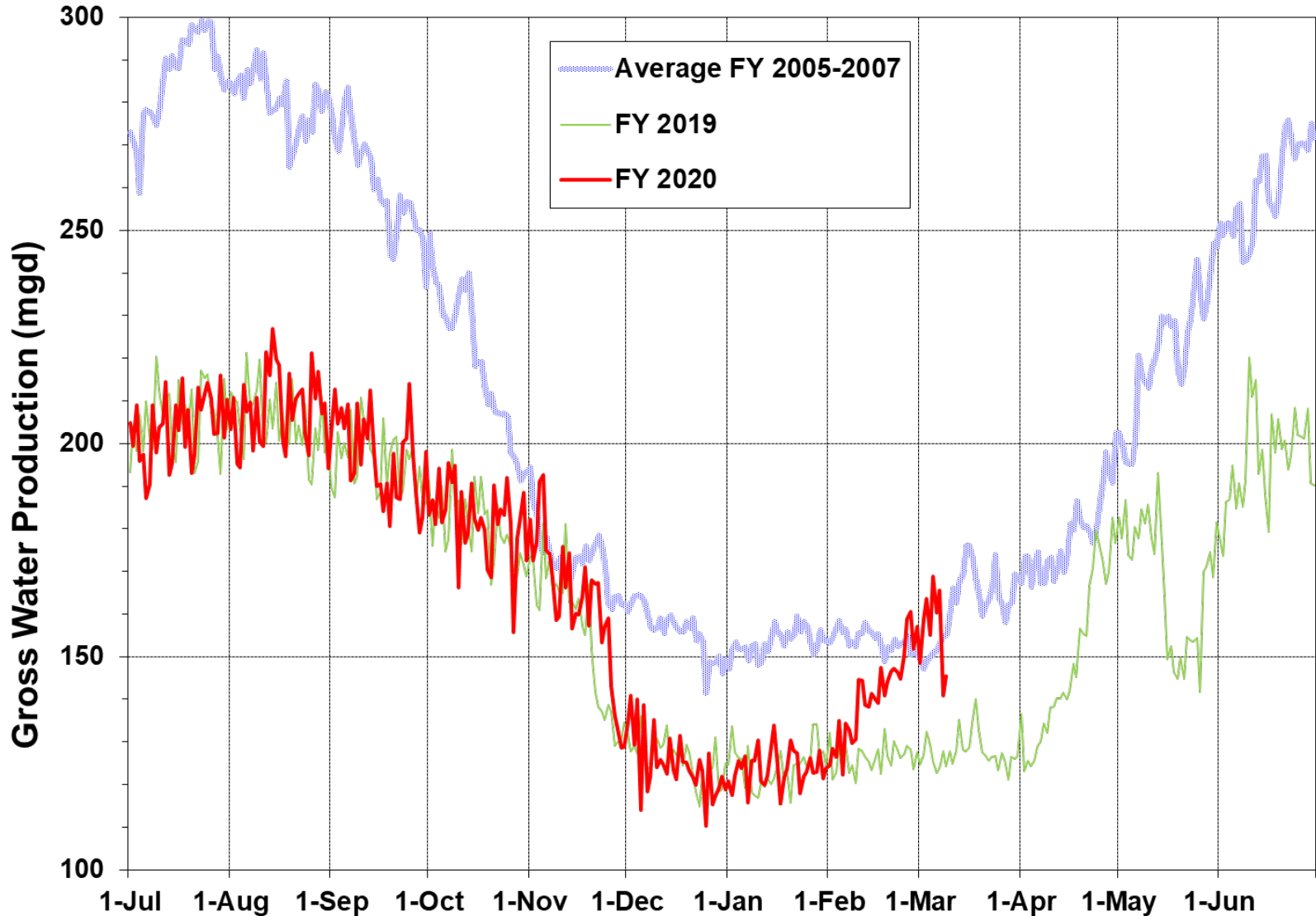


- Current Water Supply
- California Water Supply
- Water Supply Projections



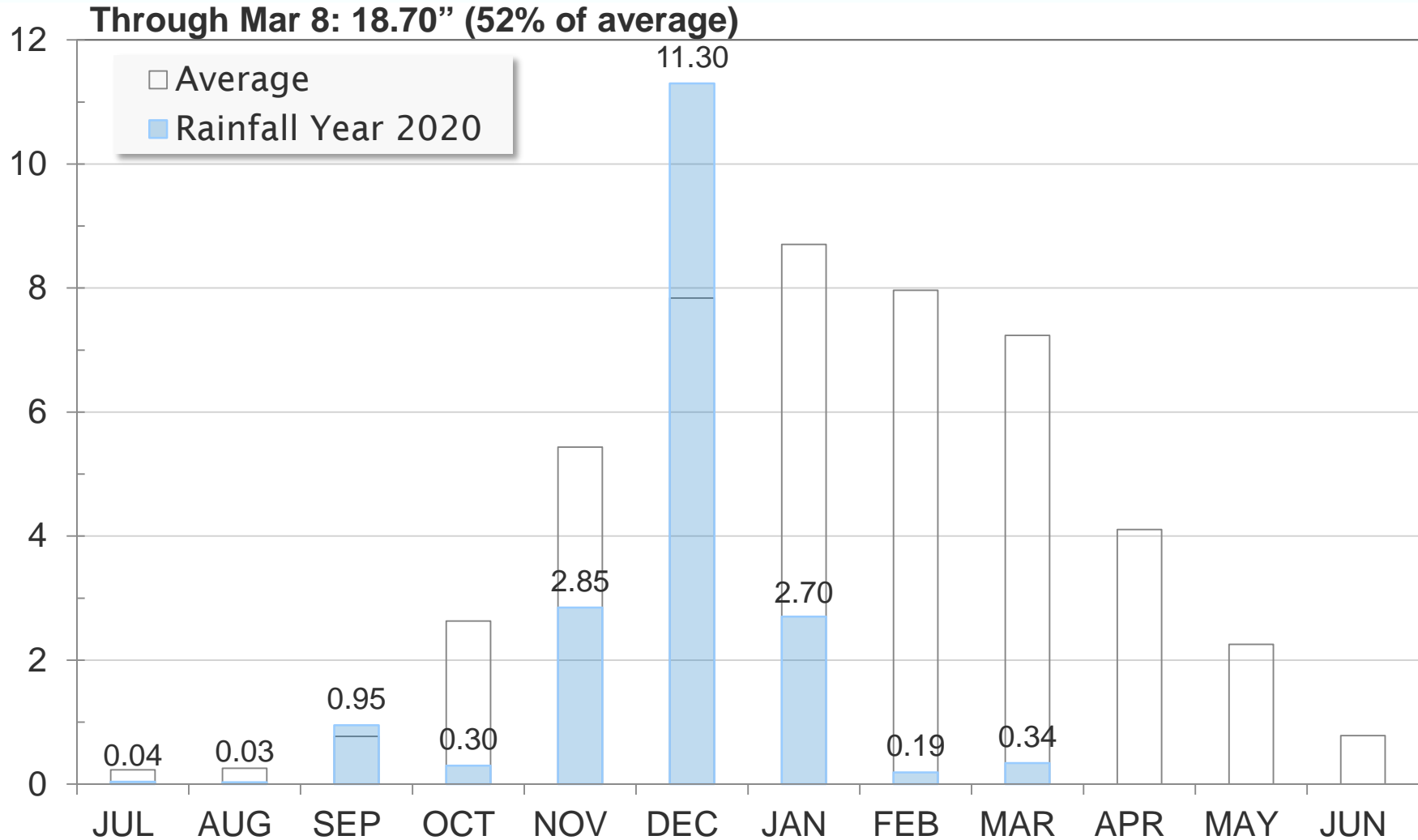
# Current Water Supply

## Gross Water Production



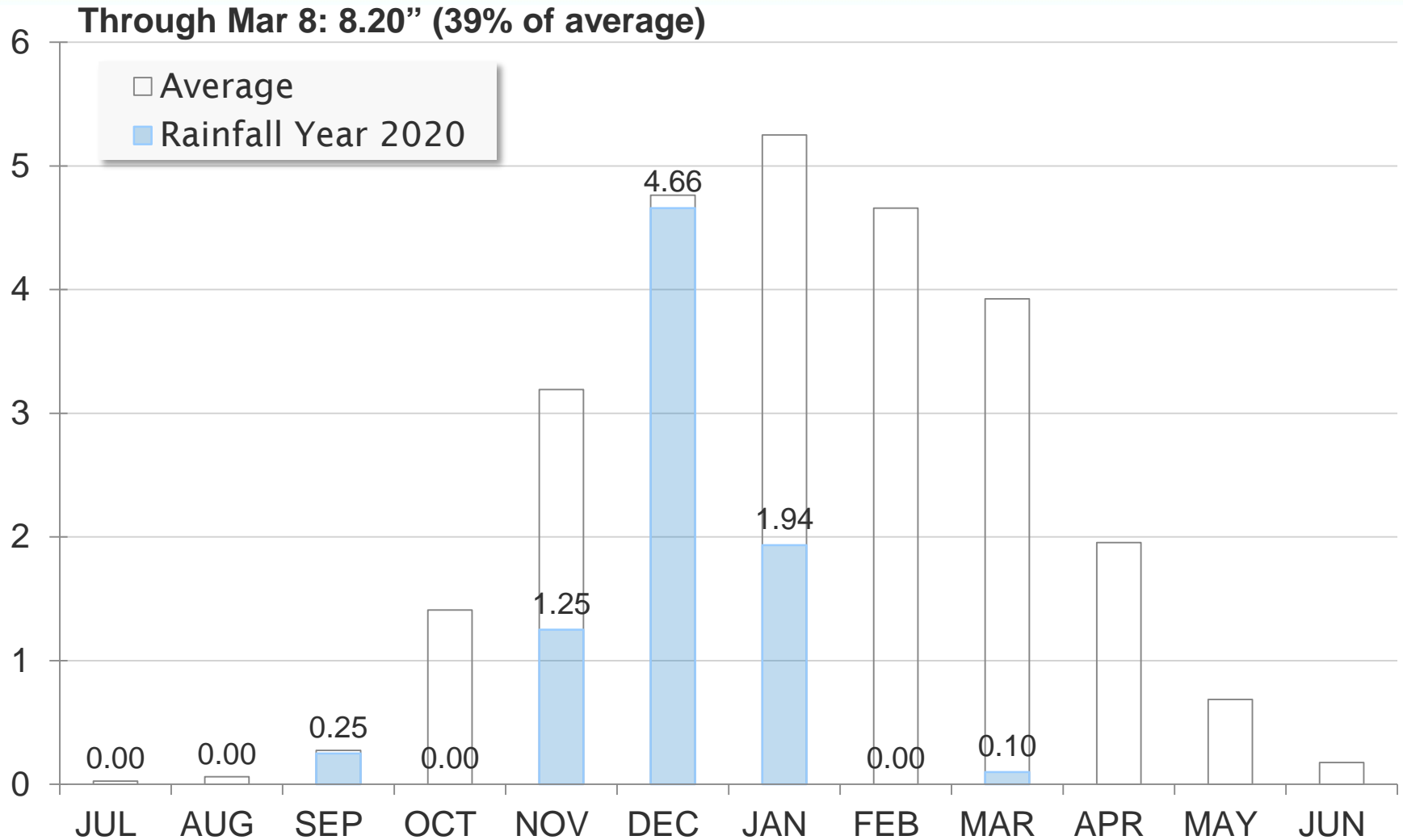
# Current Water Supply

## Mokelumne Precipitation



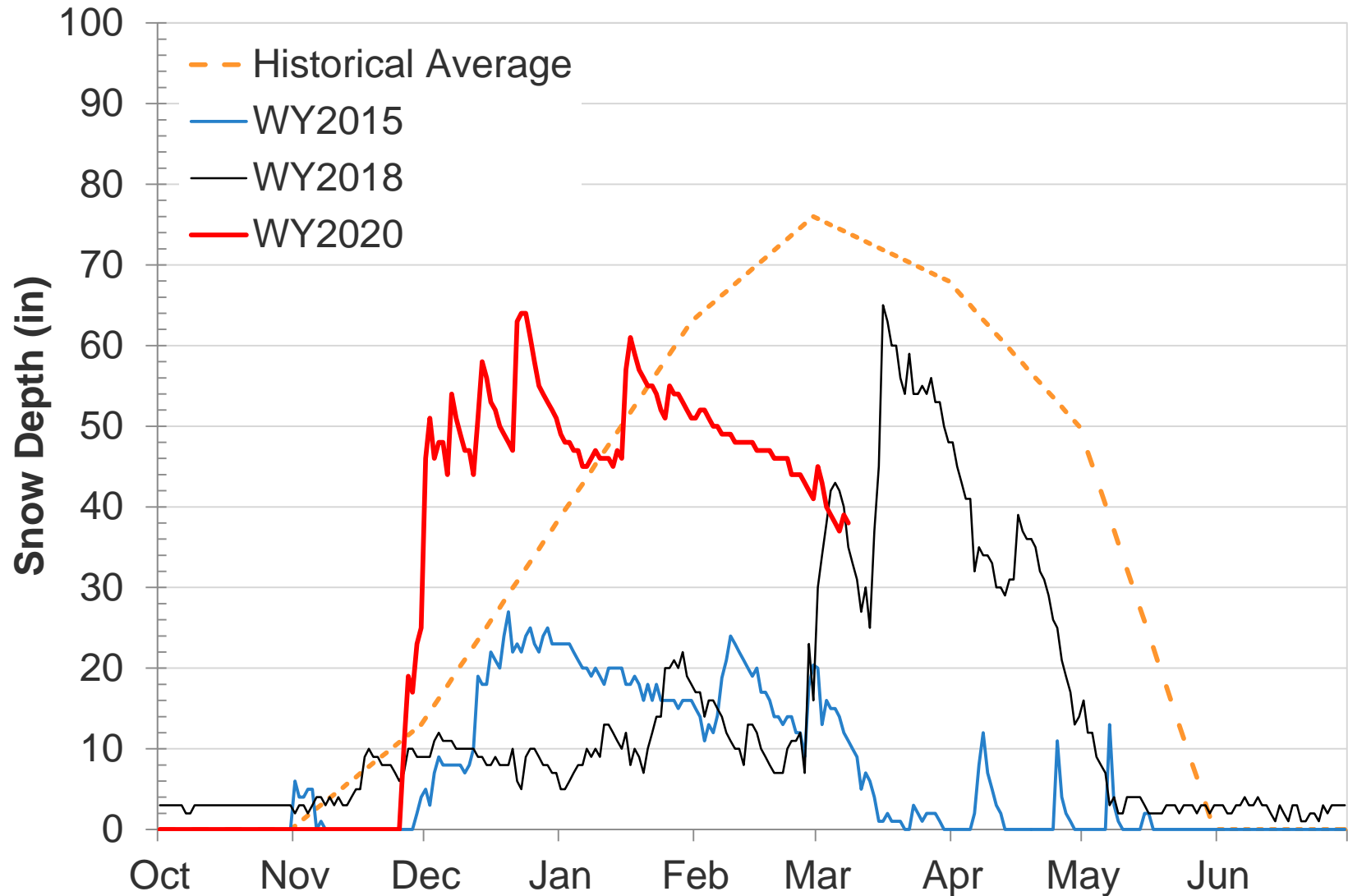
# Current Water Supply

## East Bay Precipitation



# Current Water Supply

## Caples Lake Snow Depth



# Current Water Supply

## Snow



| <b>As of Mar. 8, 2020</b>      | <b>Cumulative<br/>Precipitation</b> | <b>% of<br/>Average</b> |
|--------------------------------|-------------------------------------|-------------------------|
| Caples Lake Snow Depth         | 38"                                 | 51%                     |
| Caples Lake Snow Water Content | 14.25"                              | 52%                     |

# Current Water Supply

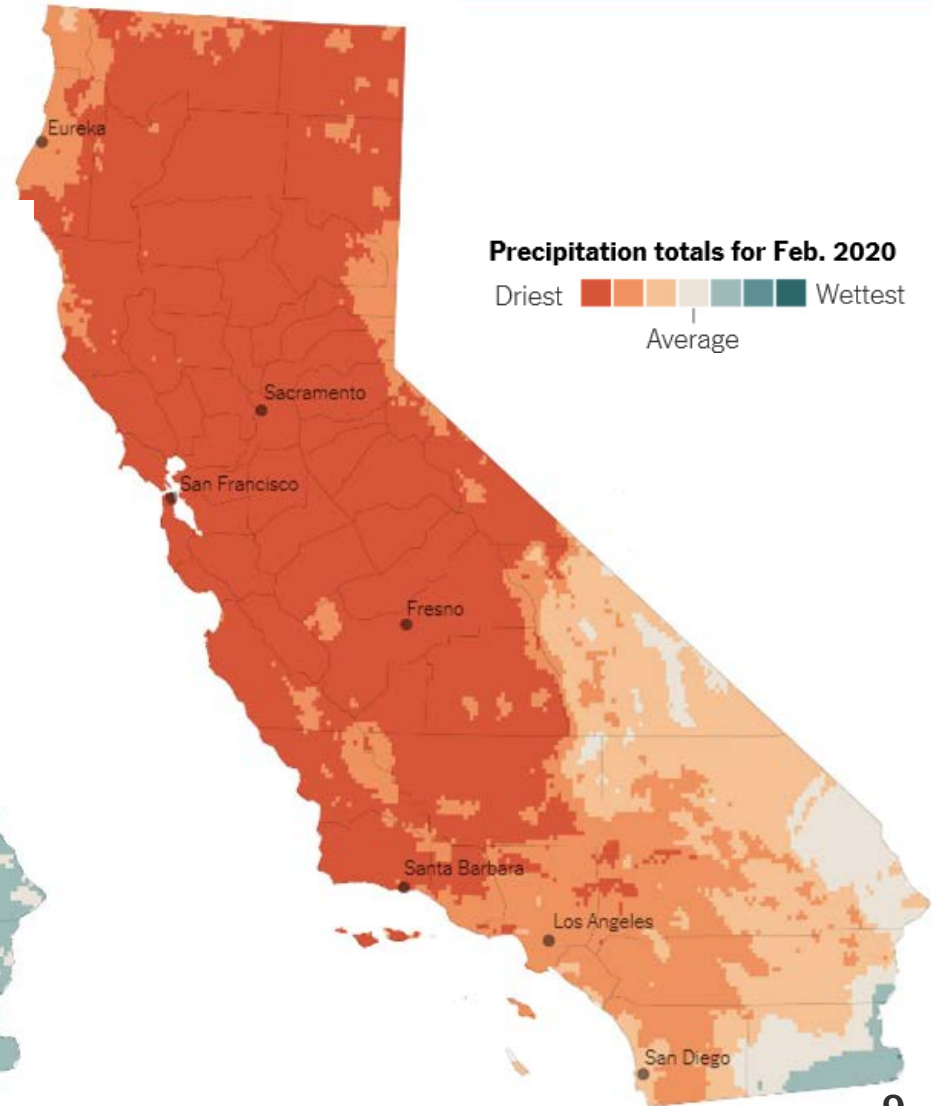
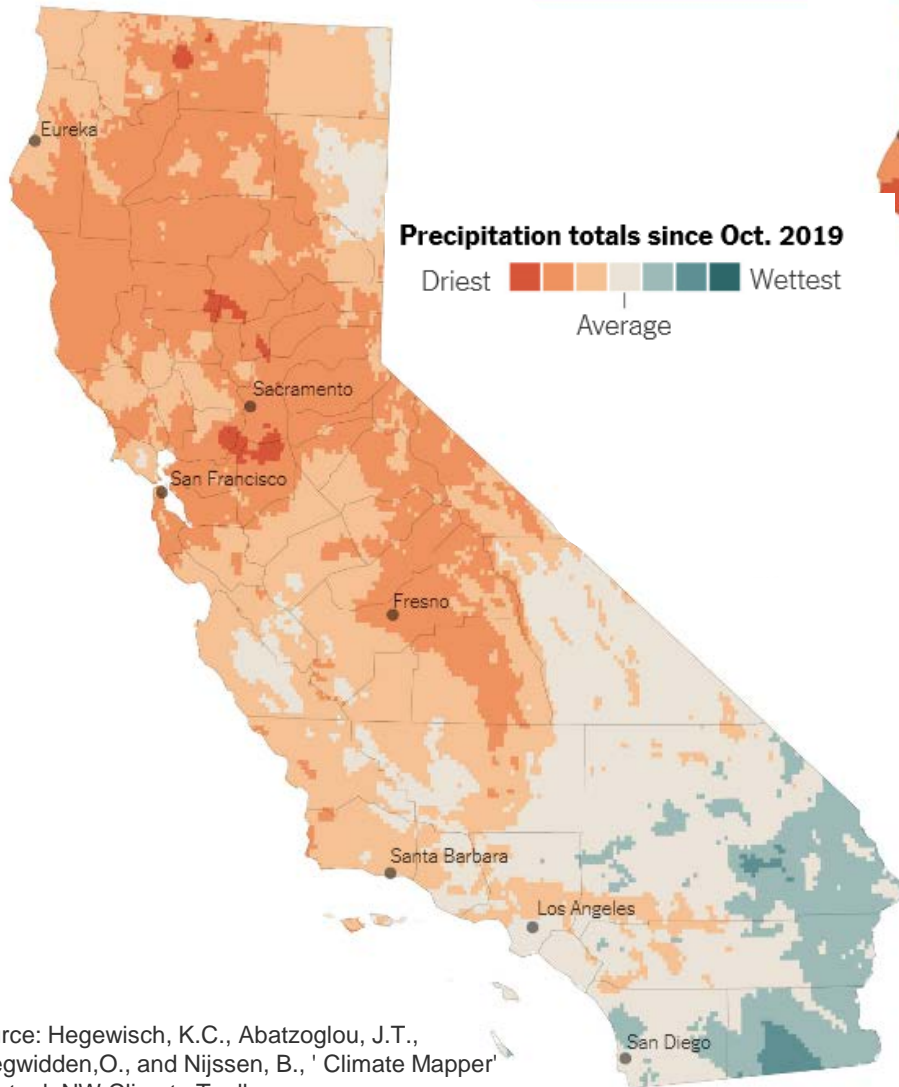
## Reservoir Storage



| As of<br>3/8/2020 | Current<br>Storage | Percent of<br>Average | Percent of<br>Capacity |
|-------------------|--------------------|-----------------------|------------------------|
| Pardee            | 181,330 AF         | 99%                   | 89%                    |
| Camanche          | 280,380 AF         | 100%                  | 67%                    |
| East Bay          | 129,900 AF         | 96%                   | 86%                    |
| Total System      | 591,610 AF         | 99%                   | 77%                    |

# California Water Supply

## Driest February on Record



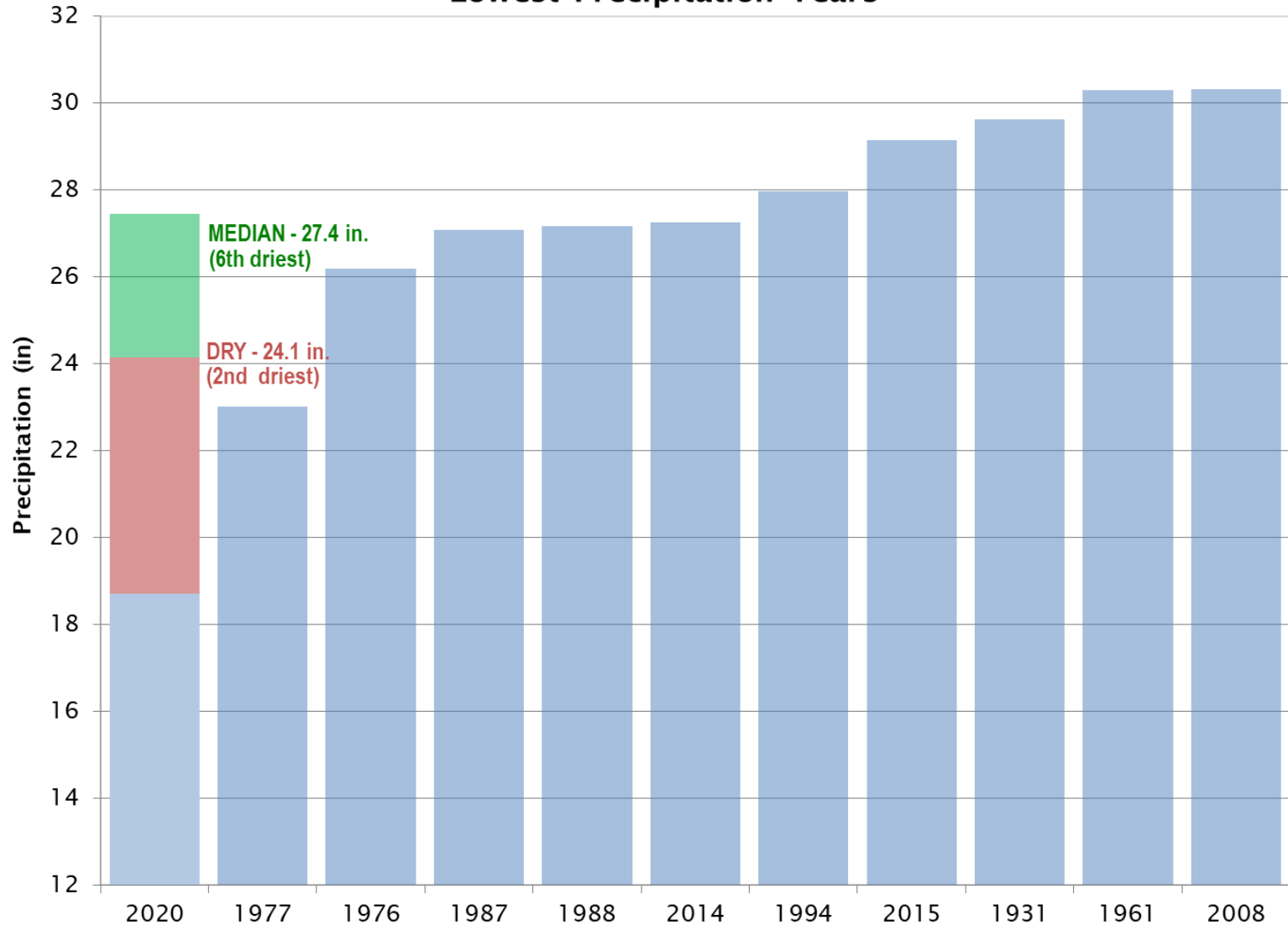
Source: Hegewisch, K.C., Abatzoglou, J.T., Chegwidde, O., and Nijssen, B., 'Climate Mapper' web tool. NW Climate Toolbox (<https://climatetoolbox.org/>) accessed on 3/1/2020.

# Water Supply Projections

## Dry Year Precipitation Comparison



Lowest Precipitation Years

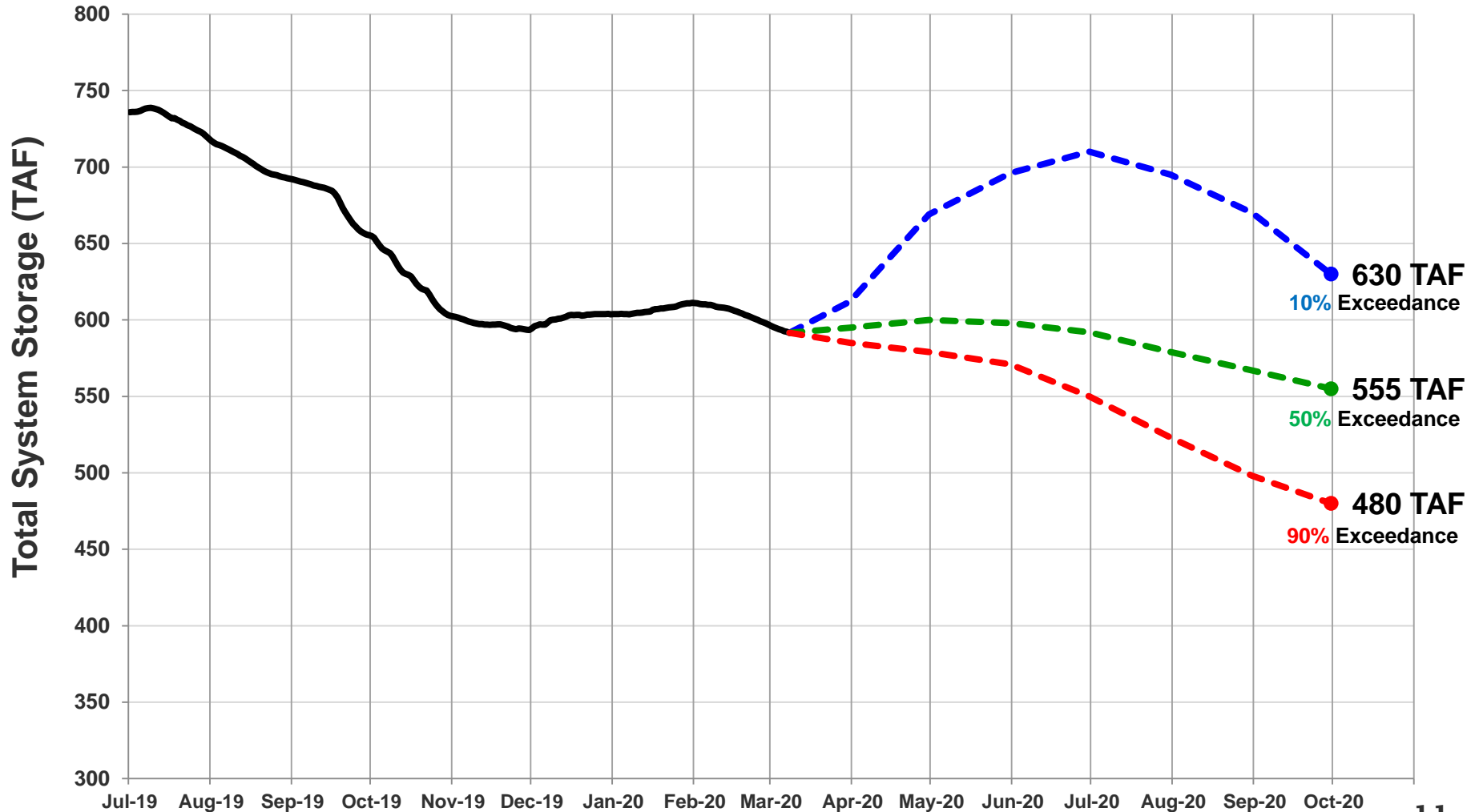


# Water Supply Projections

## Projected 2020 EBMUD Total System Storage



Total System Storage WY2020



# Questions ?



# WATER SUPPLY ENGINEERING DAILY REPORT

Monday, March 9, 2020

## RESERVOIR STORAGE AND ELEVATION

|                             | <u>WATER SURFACE</u>     |                       | <u>STORAGE</u>        |                       | <u>MAXIMUM CAPACITY</u>  |                         | Release<br><u>Cfs</u> | Spill<br><u>Cfs</u> |
|-----------------------------|--------------------------|-----------------------|-----------------------|-----------------------|--------------------------|-------------------------|-----------------------|---------------------|
|                             | Elevation<br><u>Feet</u> | +Gain<br><u>-Loss</u> | +Gain<br><u>Ac-Ft</u> | -Loss<br><u>-Loss</u> | Elevation<br><u>Feet</u> | Storage<br><u>Ac-Ft</u> |                       |                     |
| <u>MOKELUMNE</u>            |                          |                       |                       |                       |                          |                         |                       |                     |
| Pardee                      | 557.3                    | 0.1                   | 181540                | 210                   | 567.65                   | 203795                  | 14                    | 0                   |
| Camanche                    | 215.43                   | -0.1                  | 279760                | -620                  | 235.5                    | 417120                  | 330                   | 0                   |
| <u>EAST BAY</u>             |                          |                       |                       |                       |                          |                         |                       |                     |
| Briones                     | 570.66                   | 0                     | 55170                 | 0                     | 576.14                   | 58960                   | 0                     | 0                   |
| Chabot                      | 223.59                   | -0.01                 | 9140                  | -10                   | 227.25                   | 10350                   | 0                     | 0                   |
| Lafayette                   | 437.74                   | -0.01                 | 2910                  | 0                     | 449.16                   | 4250                    | 0                     | 0                   |
| San Pablo                   | 303.98                   | 0.02                  | 30270                 | 10                    | 313.68                   | 37915                   | 0                     | 0                   |
| Upper San Leandro           | 451.04                   | 0                     | 32410                 | 0                     | 459.98                   | 38905                   | 0                     | 0                   |
| Total East Bay Res.         |                          |                       | 129900                | 0                     |                          | 150380                  |                       |                     |
| <b>TOTAL SYSTEM STORAGE</b> |                          |                       | 591200                | -410                  |                          | 771295                  |                       |                     |

| <b>DISTRIBUTION SYSTEM</b>         |                           |                              |
|------------------------------------|---------------------------|------------------------------|
| <u>DISTRIBUTION RESERVOIRS</u>     |                           |                              |
|                                    | Storage<br><u>MG</u>      | Operating<br><u>Capacity</u> |
| Today                              | 342                       | 720                          |
| Total Previous Day                 | 358                       |                              |
| Total Change                       | -16                       |                              |
| <u>WATER PRODUCTION AND DEMAND</u> |                           |                              |
|                                    | Million<br><u>Gallons</u> | Capacity<br><u>MGD</u>       |
| Lafayette WTP                      | 0                         | 25                           |
| Orinda WTP                         | 106                       | 190                          |
| San Pablo WTP                      | 0                         | 30                           |
| Sobrante WTP                       | 0                         | 50                           |
| Upper San Leandro WTP              | 0                         | 45                           |
| Walnut Creek WTP                   | 29.3                      | 90                           |
| <b>TOTAL SURFACE PRODUCTION</b>    | 135.3                     | 430                          |
| Miscellaneous(Estimated)           | 0.4                       |                              |
| <b>TOTAL WATER PRODUCTION</b>      | 135.7                     |                              |
| Change in Distribution System      | -16                       |                              |
| Wash Water from Distribution Sys.  | 0.3                       |                              |
| <u>SYSTEM DEMAND</u>               |                           |                              |
|                                    | 151.3                     |                              |
| East-of-Hills Demand               | 36.9                      |                              |
| West-of-Hills Demand               | 114.4                     |                              |

| <b>MOKELUMNE SYSTEM</b>                               |                |                         |
|---|----------------|-------------------------|
| <u>AQUEDUCT DELIVERIES</u>                            |                |                         |
|   | <u>MG</u>      | <u>Flow Conditions</u>  |
| Line 1  | 37             | GRAVITY                 |
| Line 2  | 48.4           | GRAVITY                 |
| Line 3  | 52.3           | <u>THROTTLE</u>         |
| <b>TOTAL</b>  | 137.7          | 213 Cfs                 |
| <u>FSCC to MOK AQUEDUCTS (Measured at Brandt), MG</u> |                |                         |
| Mok 1   | 0              |                         |
| Mok 2   | 0              |                         |
|   | 0 MG           |                         |
| <u>RIVER FLOWS AND RELEASES</u>                       |                |                         |
|   |                | <u>Cfs</u>              |
| Mokelumne River Natural Flow                          |                | 441                     |
| Pardee Reservoir Inflow                               |                | 338                     |
| Pardee Release to Camanche Res.                       |                | 14                      |
| Pardee Release to JVID                                |                | 0                       |
| Camanche Release to Mokel. River                      |                | 330                     |
| <u>PG&amp;E CO. STORAGE (Acre-feet)</u>               |                |                         |
|   | <u>Storage</u> | <u>Change</u>           |
|   |                | <u>Maximum Capacity</u> |
| Old Reservoirs  | 4969           | -33                     |
| Salt Springs Res.                                     | 18292          | 78                      |
| Lower Bear Res.                                       | 12060          | 159                     |
| <b>Total</b>  | 35321          | 204                     |

| <b>RAW WATER TRANSMISSION</b>       |              |              |
|-------------------------------------|--------------|--------------|
|                                     | <u>INPUT</u> | <u>DRAFT</u> |
| Briones Res.                        | 0            | 0            |
| San Pablo Res.                      | 7            | 0            |
| U. San Leandro Res.                 | 0            | 0            |
| <b>TOTAL</b>                        | 7            | 0            |
| <u>REMARKS</u>                      |              |              |
| WID Canal Diversion = 55 cfs        |              |              |
| Mokelumne River below WID = 219 cfs |              |              |

| <b>PRECIPITATION (Inches)</b> |                  |              |                       |                       |                     |
|-------------------------------|------------------|--------------|-----------------------|-----------------------|---------------------|
| <u>STATION</u>                | <u>THIS YEAR</u> |              |                       | <u>AVERAGE YEAR</u>   |                     |
|                               | <u>Today</u>     | <u>Month</u> | <u>Season to-Date</u> | <u>Season to-Date</u> | <u>Season Total</u> |
| USL WTP                       | 0                | 0.07         | 8.49                  | 19.86                 | 25.33               |
| Orinda WTP                    | 0                | 0.35         | 11.35                 | 25.07                 | 32.06               |
| Lafayette Reservoir           | 0                | 0.13         | 7.9                   | 22.28                 | 28.18               |
| Walnut Creek WTP              | 0                | 0            | 9.11                  | 18.44                 | 23.02               |
| Camp Pardee                   | 0                | 0.12         | 9.4                   | 15.99                 | 21.56               |
| Salt Springs P.H.             | 0                | 0.41         | 18.51                 | 33.63                 | 45.51               |

PG&E data as of 4:00 pm previous date.  
 All other data as of midnight.  
 WTP capacities are sustainable rates.

| <u>CAPLES LAKE (7,830 FT) DATA</u> |              |                |
|------------------------------------|--------------|----------------|
|                                    | <u>Today</u> | <u>Average</u> |
| Snow Depth                         | 37 Inches    | 74 Inches      |
| Water Content                      | 14.3 Inches  | 27.3 Inches    |