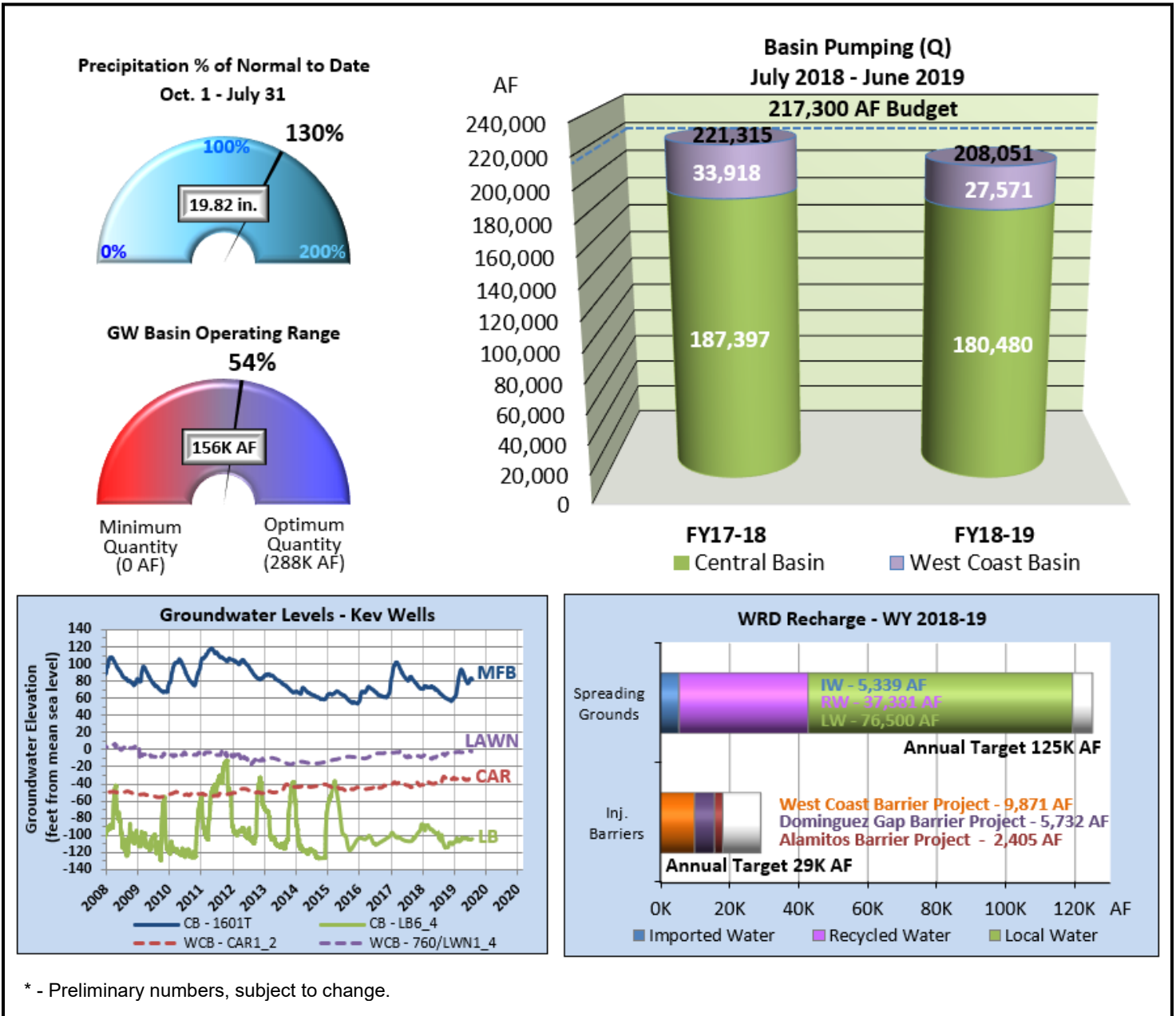




GROUNDWATER BASIN UPDATE FOR AUGUST 2019

GROUNDWATER BASINS AT A GLANCE*



SUMMARY

Staff monitors groundwater conditions in its service area throughout the year. A summary of the latest information is presented below.

Precipitation (Oct 1st – July 31st)

The WRD precipitation index reports that for the 2018-19 Water Year, there has been 19.82 inches of rainfall. The normal rainfall for this time period is 15.29 inches, so the District is 130% of normal. As of July 30, 2019, the U.S. Drought Monitor is reporting 4% of the State is abnormally dry, 0% is under drought conditions.

Snowpack (Snow Water Content [SWE] as of July 17, 2019)

Due to the late storms in the Northern and Southern Sierra's this year, the California Cooperative Snow Surveys were extended into July with the last survey conducted on July 17th.

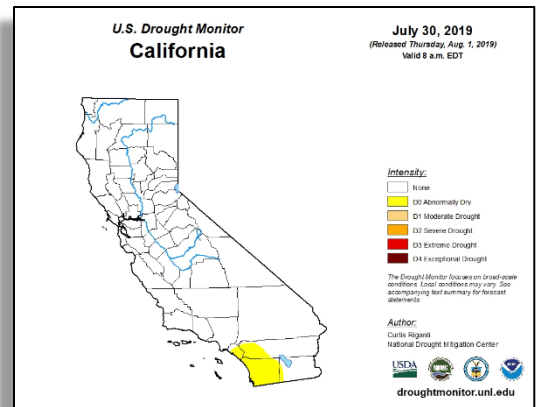
Snow Water Equivalent (SWE):

Northern Sierra Nevada – 0.3 inches, 0% of normal to date and 1% of April 1st average
Central Sierra Nevada – 0.0 inches, 0% of normal to date and 0% of April 1st average
Southern Sierra Nevada – 0.0 inches, 0% of normal to date and 0% of April 1st average
Statewide – 0.1 inches, 0% of normal to date and 0% of April 1st average

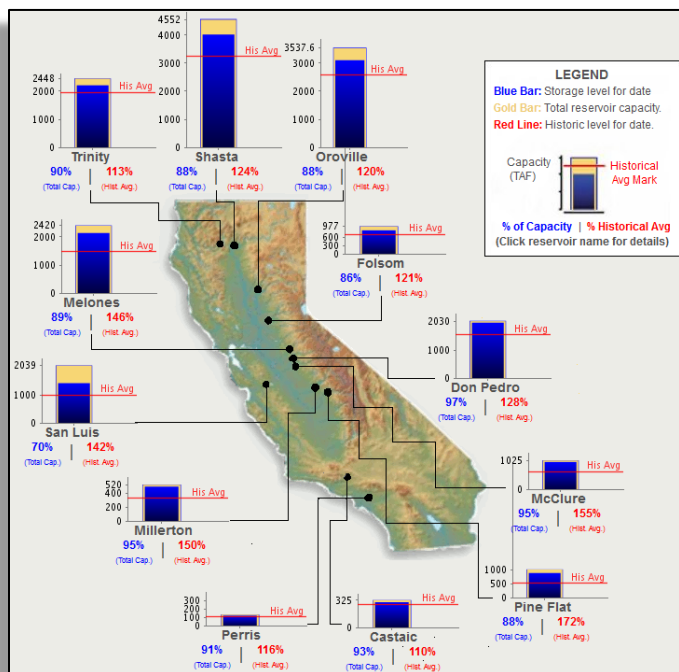
Reservoirs (as of August 1, 2019)

For all 16 reservoirs reported monthly to the committee, water levels have increased in 2 reservoirs compared to levels recorded in the previous month. Water levels rose the most at Lake Powell (1.3 million acre feet). The largest decrease (-0.37 million acre feet) occurred at Lake Shasta and Lake Oroville. The smallest decrease (<0.00 million acre feet) occurred at Lake Silverwood.

These 16 reservoirs are at 60% capacity (43.49 million acre feet) which is up relatively from the prior month (-1.22 million acre feet State Water Project [SWP] and +1.13 million acre feet Colorado River Aqueduct [CRA]). The largest contributing factor to the change in reservoir storage is Lake Powell (CRA) due to continued snowmelt runoff and conservation.



Storage in Million Acre Feet

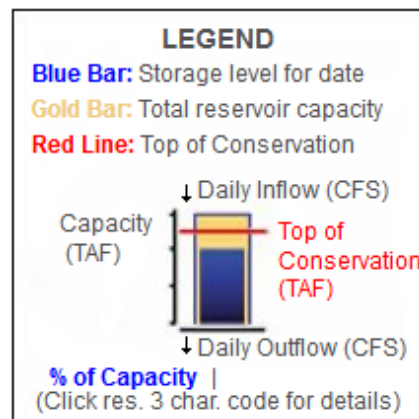
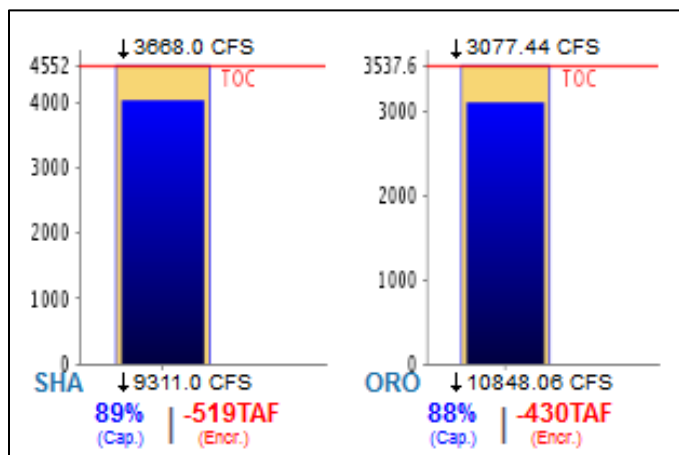


| Reservoir | Capacity | Storage | % Full | Change |
|------------------|-------------|-------------|------------|-------------|
| Trinity Lake | 2.45 | 2.21 | 90% | -0.12 |
| Lake Shasta | 4.55 | 4.02 | 88% | -0.37 |
| Lake Oroville | 3.54 | 3.11 | 88% | -0.37 |
| Folsom Lake | 0.98 | 0.84 | 86% | -0.09 |
| New Melones | 2.40 | 2.14 | 89% | -0.08 |
| Don Pedro | 2.03 | 1.98 | 97% | 0.02 |
| Lake McClure | 1.02 | 0.97 | 95% | -0.02 |
| San Luis | 2.04 | 1.42 | 70% | -0.10 |
| Millerton Lake | 0.52 | 0.49 | 95% | -0.01 |
| Pine Flat | 1.00 | 0.88 | 88% | -0.05 |
| Castaic Lake | 0.33 | 0.30 | 93% | 0.00 |
| Lake Perris | 0.13 | 0.12 | 91% | -0.01 |
| Silverwood | 0.08 | 0.07 | 87% | 0.00 |

MWD Reservoirs (CRA)
Storage in Million Acre Feet

| Reservoir | Capacity | Storage | % Full | Change |
|---------------|--------------|--------------|------------|-------------|
| Powell | 24.30 | 13.93 | 57% | 1.30 |
| Mead | 26.12 | 10.25 | 39% | -0.16 |
| DVL | 0.81 | 0.76 | 94% | -0.01 |

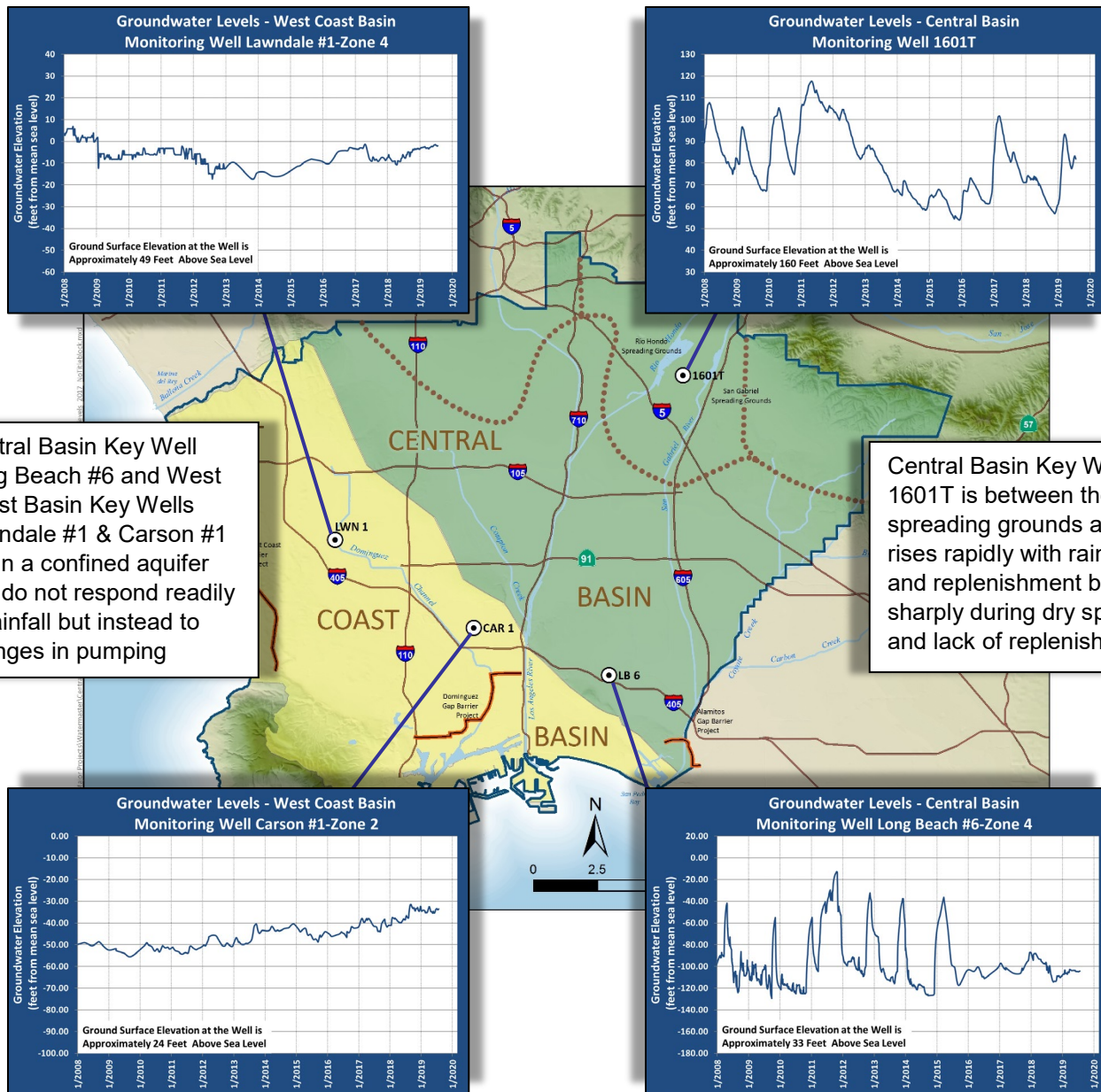
Black Text - Decrease or no change in storage since the last report.
Green Text - Increase in storage since the last report.



Charts illustrating Lake Shasta (SHA) and Lake Oroville (ORO) draining at rates greater than water is being captured (-5,643 cfs and -7,771 cfs, respectively).

Groundwater Levels (through July 26, 2019)

Groundwater levels in key monitoring wells are shown in the hydrographs below.



Groundwater Level Changes in Key Wells

| Well Name | Since Last Report | Since Same Time the Previous Year |
|---|--------------------|-----------------------------------|
| Central Basin Key Well 1601T | Increased 3.5 feet | Increased 16.7 feet |
| Central Basin Key Well Long Beach #6 4 | Increased 0.5 foot | Increased 1.7 feet |
| West Coast Basin Key Well Lawndale #1 4 | Decreased 0.4 foot | Increased 5.6 feet |
| West Coast Basin Key Well Carson #1 2 | Increased 0.4 foot | Increased 4.0 feet |

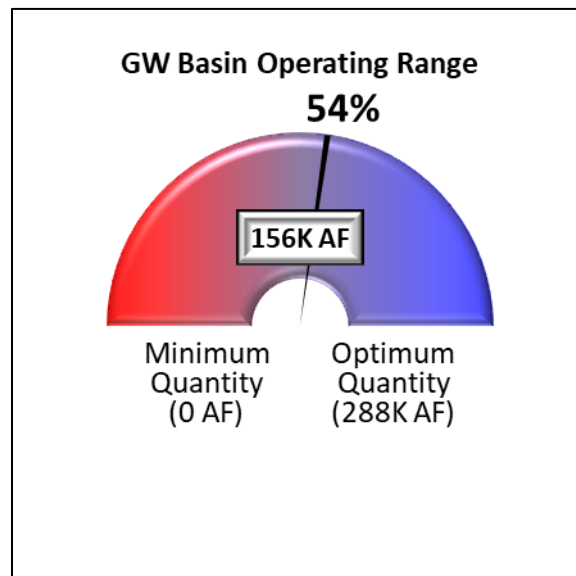
Bold indicates a change in direction (decreasing or increasing) since the last report.

Optimum and Minimum Groundwater Quantity

In response to a 2002 State audit of the District's activities, the Board of Directors adopted an Optimum and Minimum Quantity for groundwater in the District to define an appropriate operating range that would sustain adjudicated pumping rights, leave room for future storage projects, and identify a lower limit. The amounts are based on the accumulated overdraft concept, which the District tracks year by year based on changes in groundwater storage.

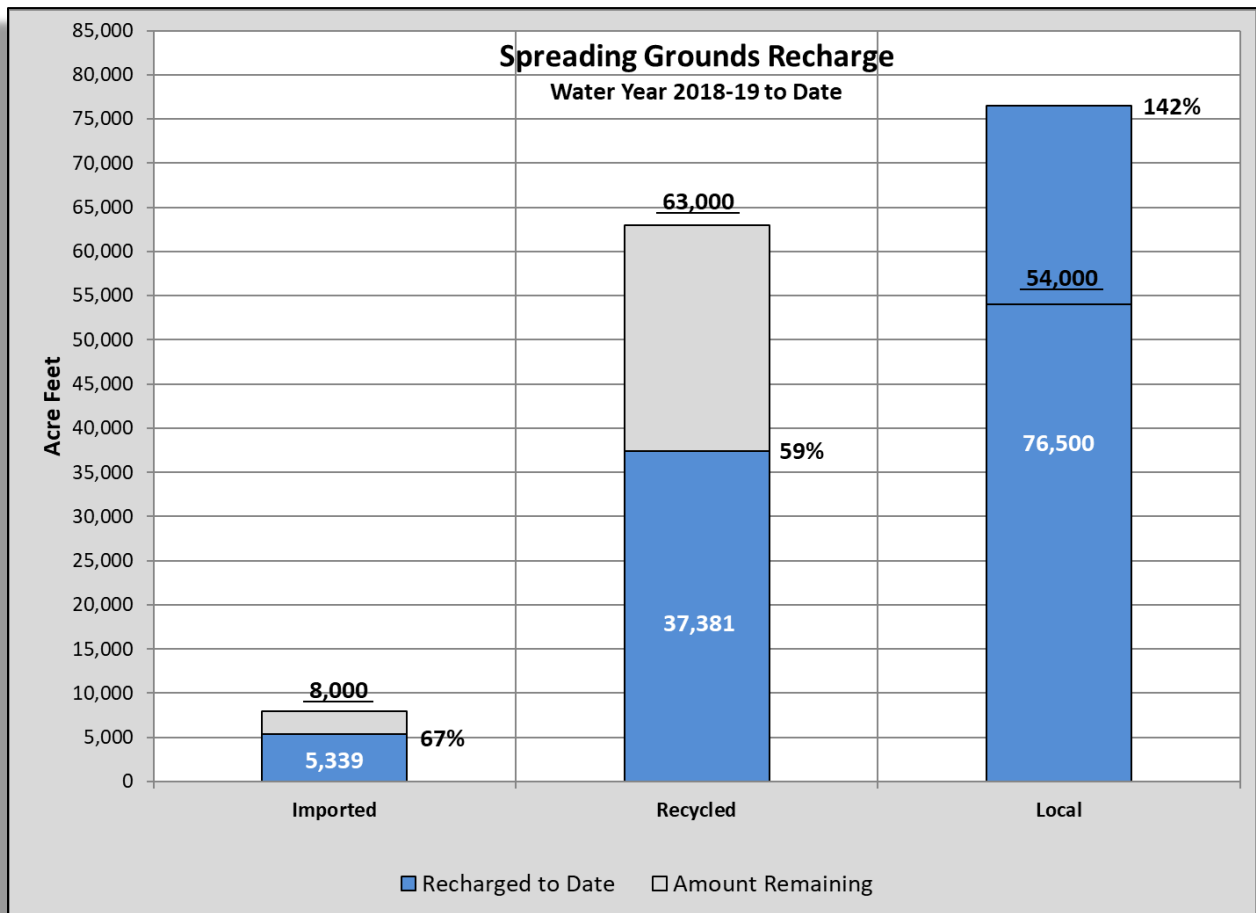
After an extensive review of over 70 years of water level fluctuations and discussions with the Board and pumping community, Water Year 1999/2000 was recognized as a representative year for the Optimum Quantity, which equated to an accumulated overdraft of approximately 612,000 acre-feet. The Minimum Quantity was defined as an accumulated overdraft of 900,000 acre-feet, which allowed an operating range from 0 acre-feet (minimum) to 288,000 acre-feet (optimum). The Board also adopted a policy to make-up the groundwater deficit should the accumulated overdraft fall too far below the Optimum Quantity.

The Accumulated Overdraft as of July 26, 2019, has been estimated at 744,240 acre-feet (subject to change), which is 155,760 acre-feet above the Minimum Groundwater Quantity and 132,240 acre-feet below the Optimum Quantity.



Montebello Forebay Spreading Grounds (June 2019)

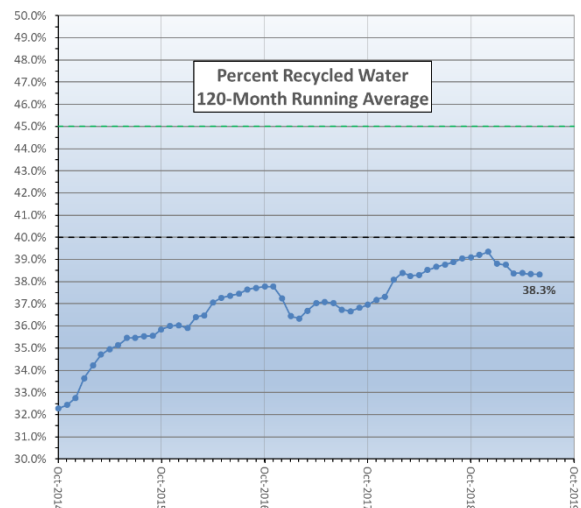
The following Chart shows the preliminary spreading grounds replenishment water:



The District recharged the basins with 5,340 acre-feet of imported water in the 2018-19 year. No additional imported water purchases are anticipated at this time.

Preliminary numbers for the first nine months of the 2018-19 Water Year show that 37,381 acre-feet of recycled water has been recharged. The 120-month running average of recycled water contribution in the Montebello Forebay is 38.3% and the regulatory maximum is 45%, with additional studies and monitoring being required once 40% is reached.

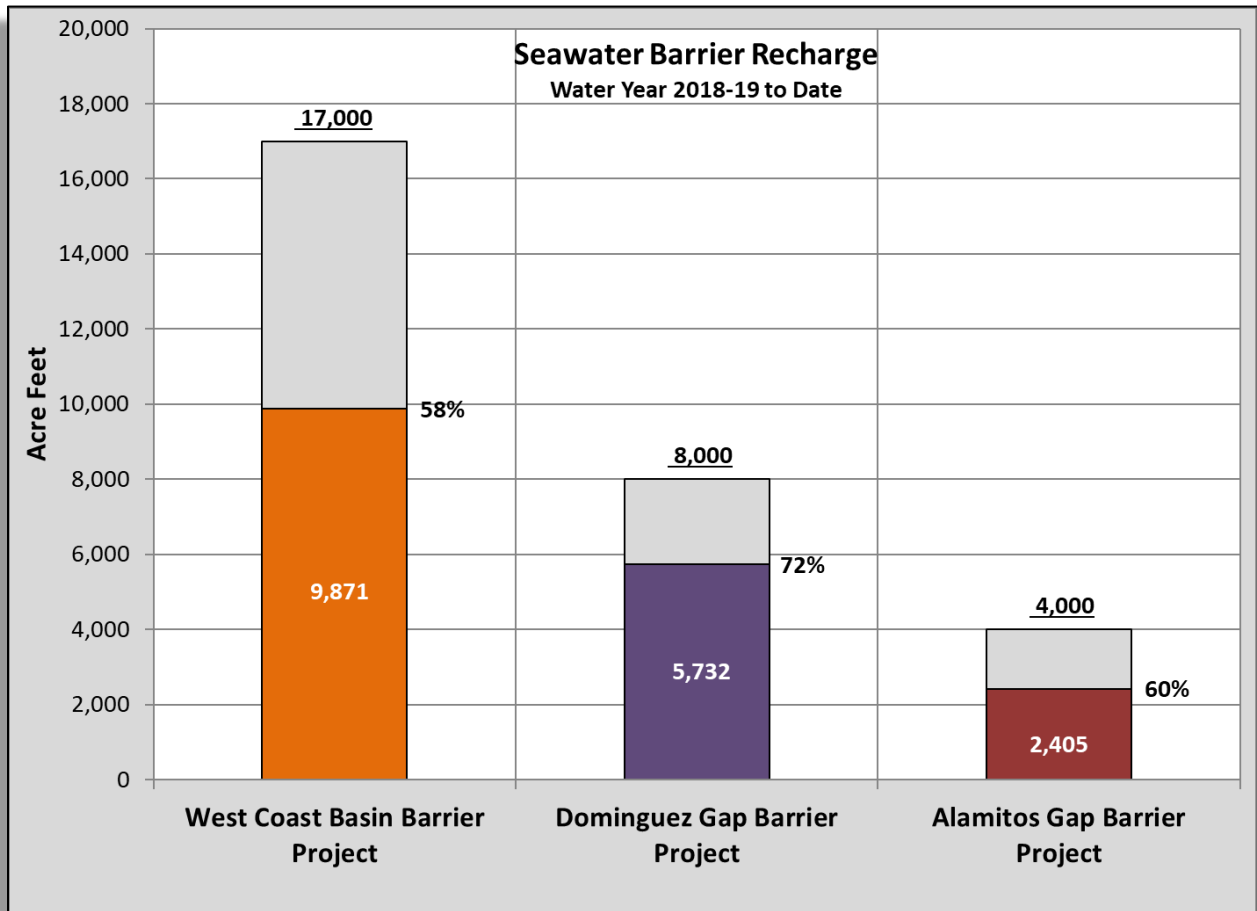
Local water (stormwater plus dry weather urban runoff) is captured by the Los Angeles County Department of Public Works (LACDPW) at the spreading grounds for recharge. Local water amounts are determined as the sum of the total



waters conserved at the spreading grounds less the imported and recycled water deliveries. For the first nine months of the 2018-19 Water Year, approximately 76,500 acre-feet of local water capture has been reported by the LACDPW.

Seawater Barrier Well Injection and Replenishment (June 2019)

The following Chart shows the barrier water injection:



Preliminary numbers for the first nine months of the 2018-19 Water Year show that the West Coast Barrier has used 9,871 acre-feet of the total 17,000 acre-feet planned for injection, 58% of total for the Water Year. The Dominguez Gap Barrier used 5,732 acre-feet for injection of the total 8,000 acre-feet planned for injection, 72% of the total for the Water Year. The Alamitos Barrier, on the WRD side, used 2,405 acre-feet for injection of the total 4,000 acre-feet planned for injection, 60% of the total for the Water Year.

Pumping (Fiscal Year July 2018 - June 2019)

Preliminary numbers for groundwater production in the District for the Fiscal Year 2018-19 (July 2018 – June 2019) indicate pumping in the Central Basin was down 6,917 acre-feet from the same time of the previous fiscal year (-3.7%) and the West

Coast Basin pumping was 6,347 acre-feet lower than the previous fiscal year (-18.7%). The total pumping is 208,051 acre-feet compared to 221,315 acre-feet during the same time the previous year for a decrease of 13,264 acre-feet, or -6.0%. The current pumping data do not include five Central Basin pumpers and one West Coast Basin pumper totaling an estimated 13 additional acre-feet.

