



**State Water Resources Control Board
 Temporary Urgency Change Order (5/19/2023)
 Russian River Hydrologic Report
 September 15, 2023 - September 21, 2023**

Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A, 12949, 12950, and 16596 (Applications 12919A, 15736, 15737, and 19351).

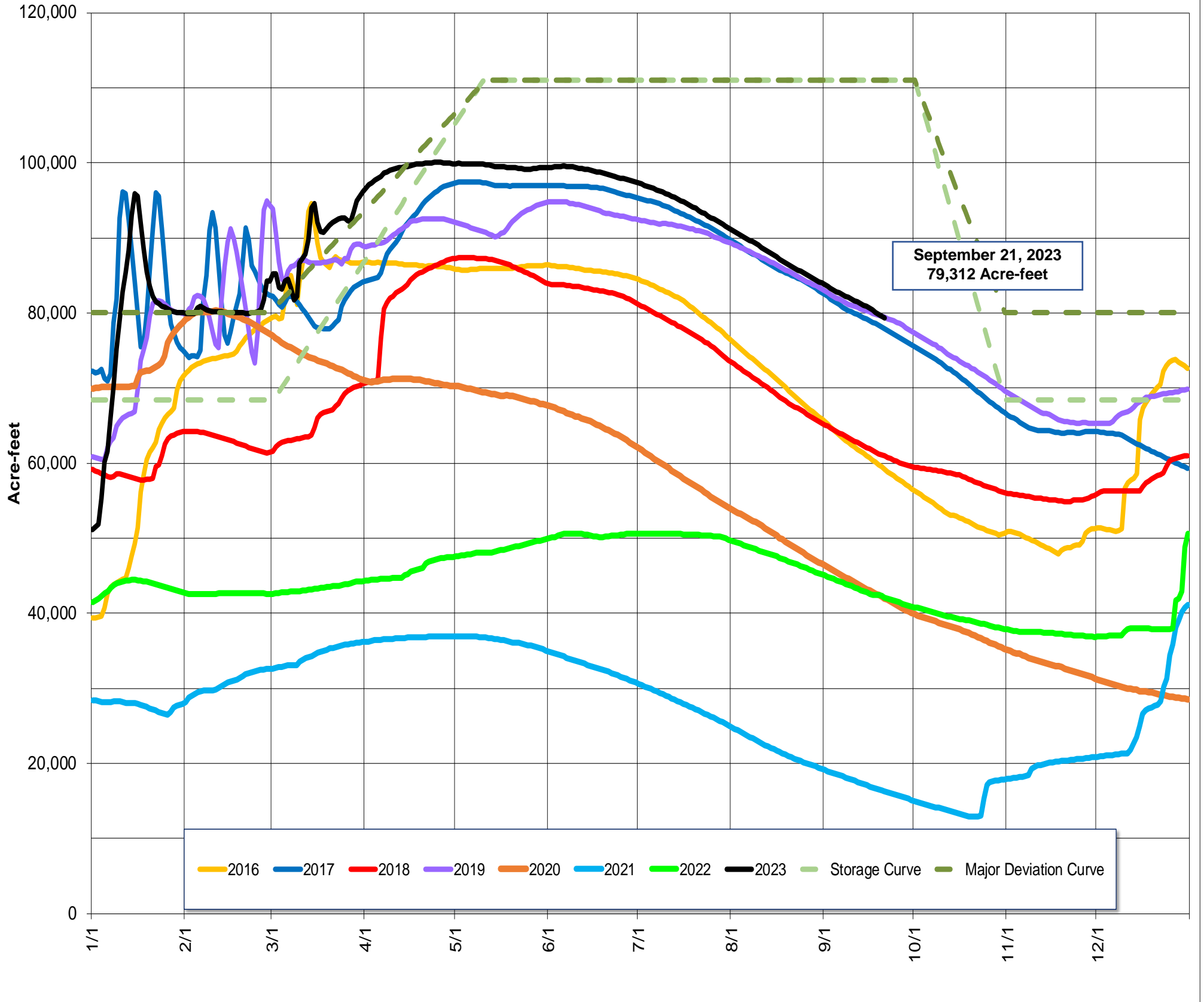
Instream Flow Requirements as of September 21, 2023

| Basis | Reach | Instantaneous (cfs) | 5-day Average (cfs) |
|--------------------------------------|---------------------|---------------------|---------------------|
| Modified Per Order: Normal Condition | Upper Russian River | 110 | 125 |
| D-1610: Normal Condition | Dry Creek | 80 | - |
| Modified Per Order: Normal Condition | Lower Russian River | 60 | 70 |

Upper and Lower Russian River based on criteria as established in the Order issued 5/19/2023.

Lake Mendocino

Lake Mendocino Storage 2016 - 2023 and Storage Curve



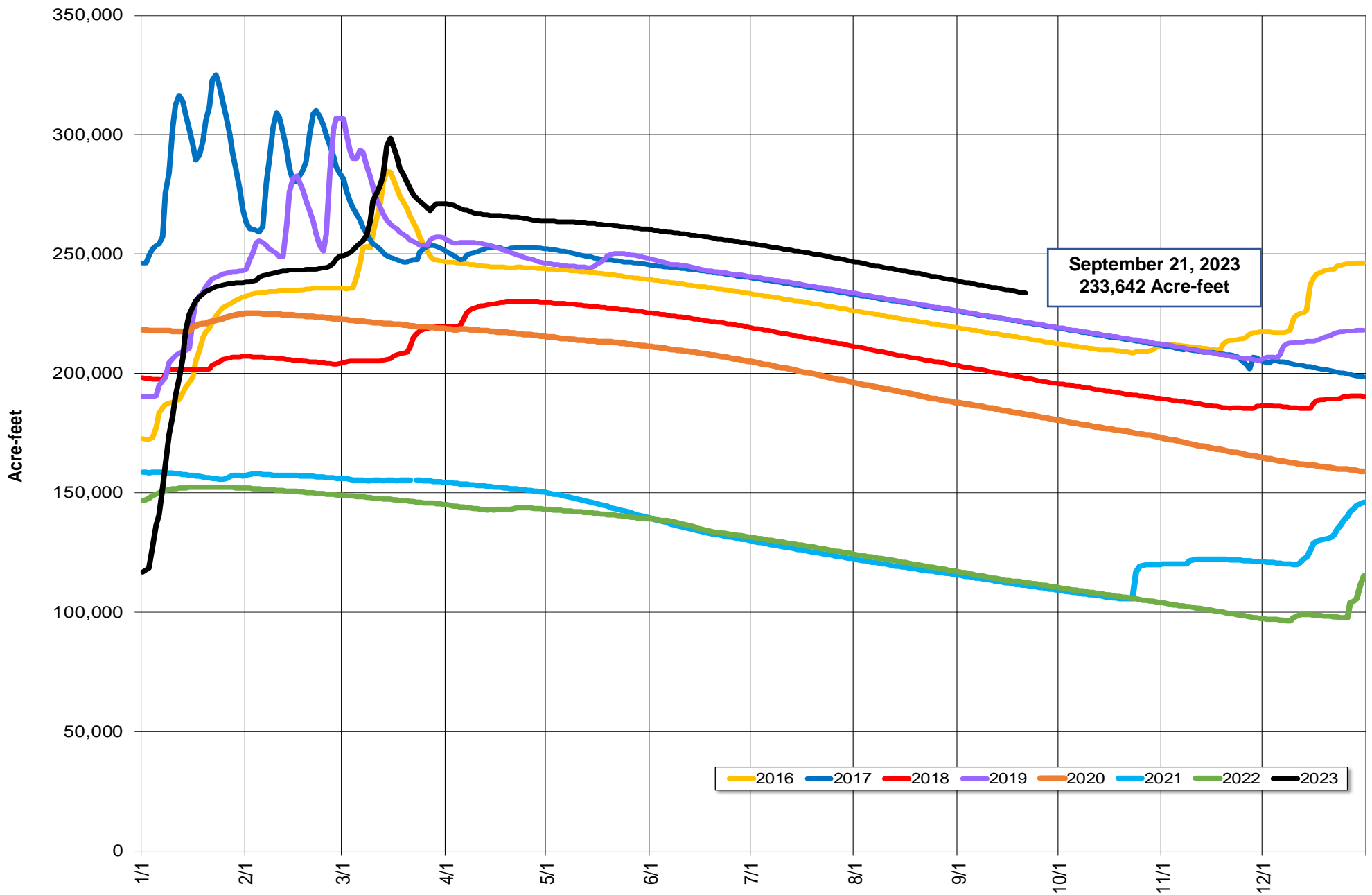
| Storage (acre-feet) | September 21, 2023 | 79,312 | |
|-------------------------------|--------------------|---------------|--------------------|
| | | Total | Average Daily Rate |
| Change in Storage (acre-feet) | Last 30 days | -6,657 | -222 |
| | Last 7 days | -1,535 | -219 |
| Daily Inflow (cfs) | Last 7 days | Min | 28 |
| | | Max | 98 |
| | | Mean | 76 |
| Release (cfs) | Last 7 days | Min | 189 |
| | | Max | 189 |
| | | Mean | 189 |

Lake Sonoma



Nathan Baskett, March 3, 2011

Lake Sonoma Storage 2016-2023



| | | | |
|-------------------------------|--------------------|---------|--------------------|
| Storage (acre-feet) | September 21, 2023 | 233,642 | |
| | | Total | Average Daily Rate |
| Change in Storage (acre-feet) | Last 30 days | -7,698 | -257 |
| | Last 7 days | -1,511 | -216 |
| Daily Inflow (cfs) | Last 7 days | Min | 0 |
| | | Max | 5 |
| | | Mean | 2 |
| Release (cfs) | Last 7 days | Min | 108 |
| | | Max | 110 |
| | | Mean | 109 |

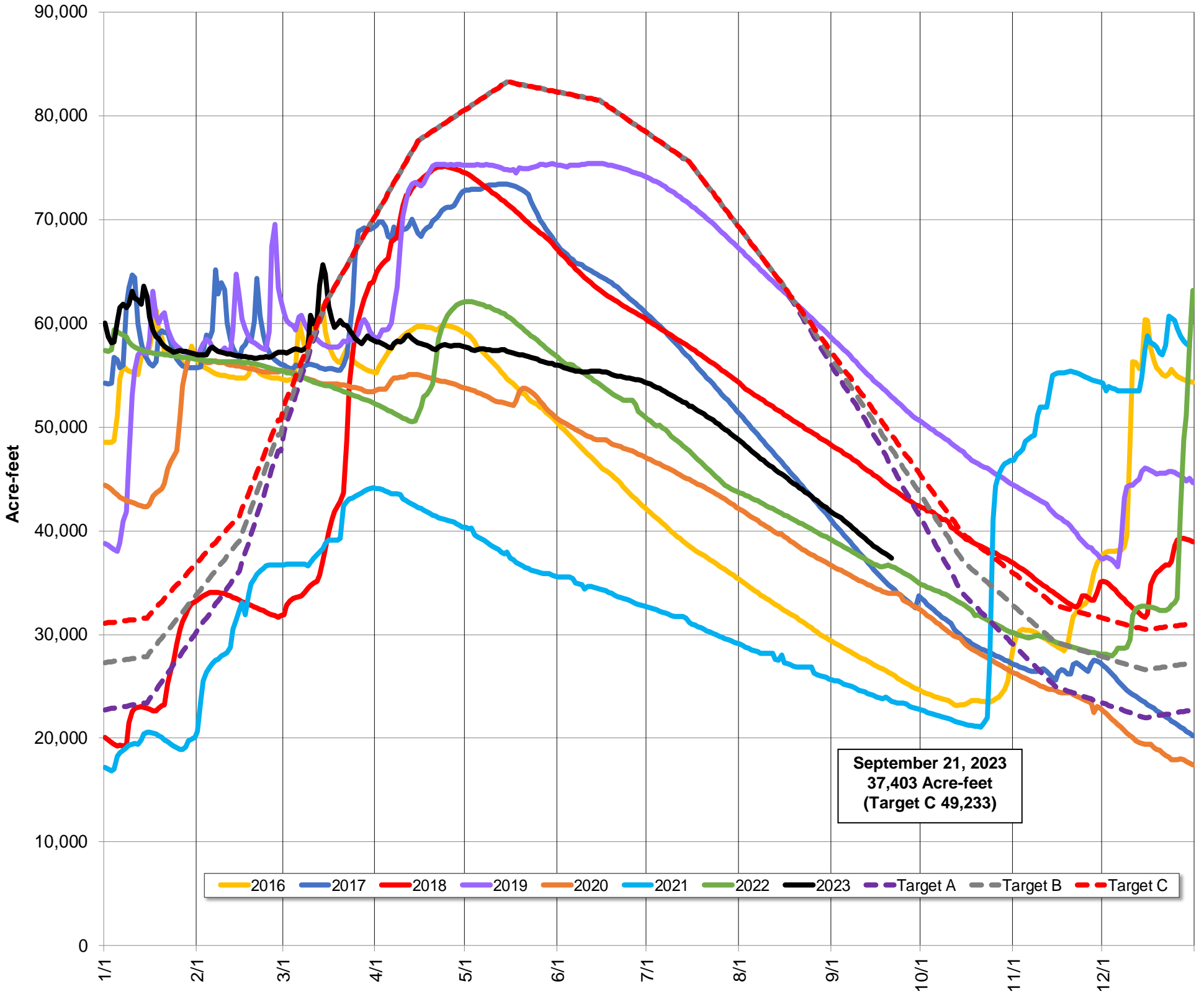
Potter Valley Project

| | | |
|---------------------|--------------------|----|
| PVP Diversion (cfs) | September 21, 2023 | 73 |
|---------------------|--------------------|----|

| Parameter | Date Range | Cumulative | Daily Average |
|---------------------|--------------------------------------|------------|---------------|
| Inflow* (acre-feet) | October 1, 2022 - September 21, 2023 | 622,520 | 1,749 |
| | Last 7 days | 220 | 31 |

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2016 - 2023 and Target Storage Scenarios

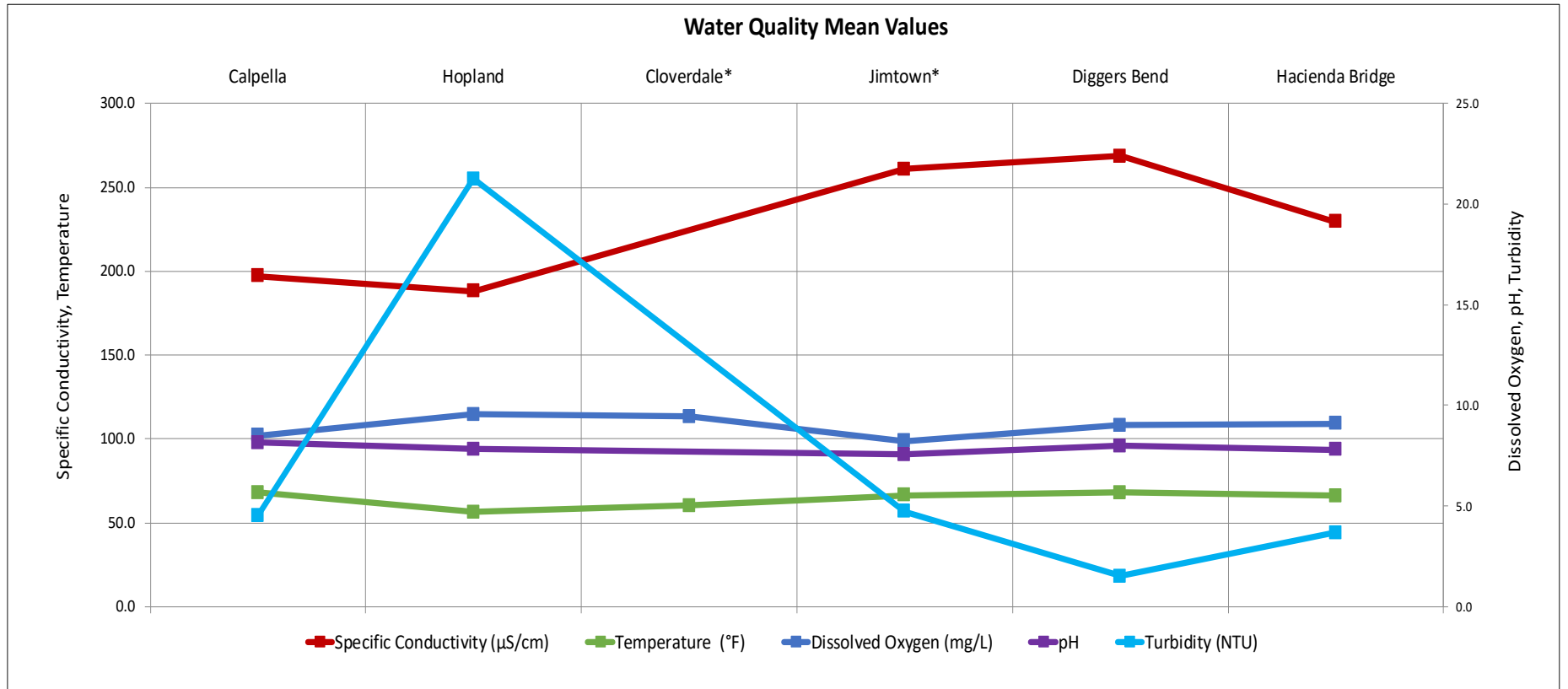


September 21, 2023
37,403 Acre-feet
(Target C 49,233)

Russian River Flows (September 15, 2023 - September 21, 2023)

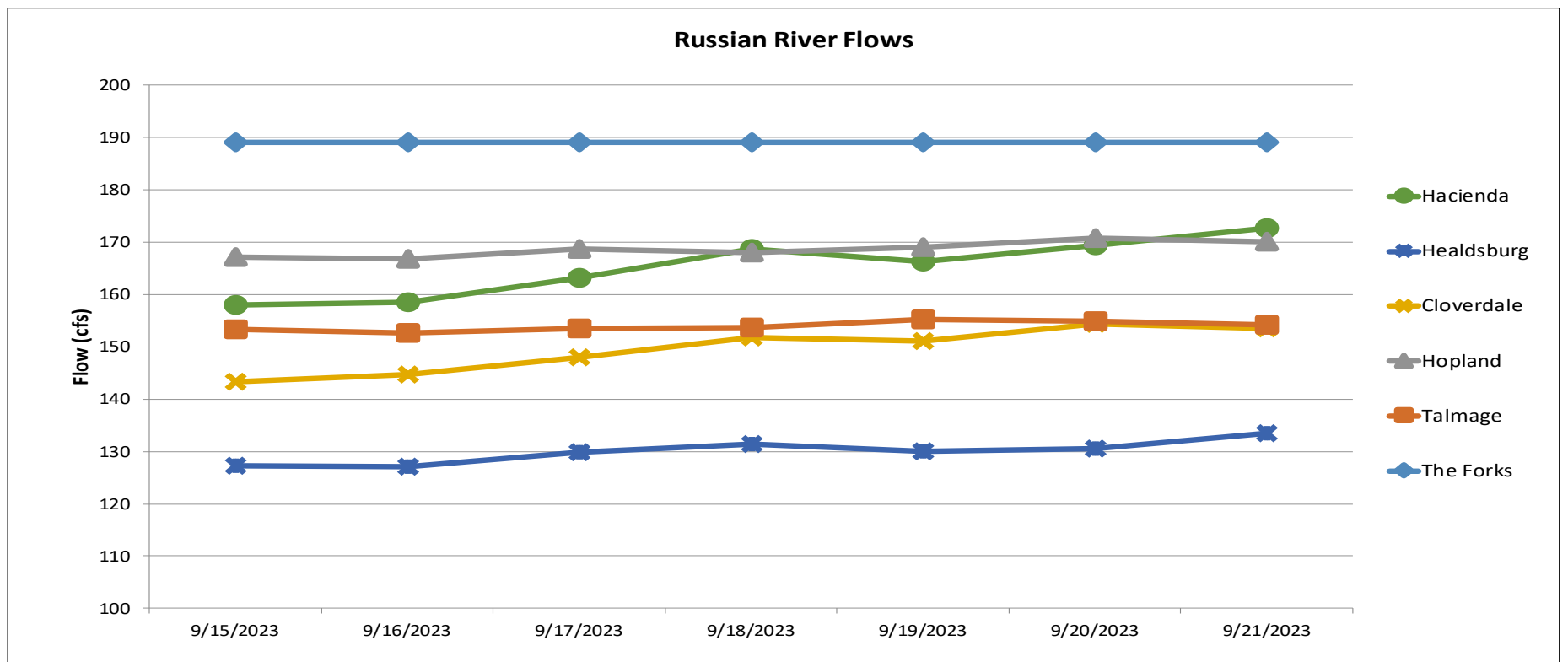
| Parameter | | Calpella | Hopland | Cloverdale* | Jimtown* | Diggers Bend | River Diversion System at Mirabel* | Hacienda Bridge | Johnsons Beach* |
|---------------------------------|------|---------------|---------------|---------------|---------------|---------------|------------------------------------|-----------------|-----------------|
| | | USGS 11461500 | USGS 11462500 | USGS 11463000 | USGS 11463682 | USGS 11463980 | SCWA | USGS 11467000 | SCWA |
| Temperature (°F) | Min | 64.4 | 54.1 | 57.4 | 63.3 | 64.4 | | 63.5 | |
| | Max | 70.5 | 58.1 | 63.5 | 70.0 | 71.2 | | 68.7 | |
| | Mean | 68.0 | 56.4 | 60.2 | 66.4 | 67.9 | | 66.0 | |
| Specific Conductivity (µS/cm) | Min | 191.0 | 187.0 | | 257.0 | 262.0 | | 227.0 | |
| | Max | 201.0 | 190.0 | | 265.0 | 272.0 | | 236.0 | |
| | Mean | 197.1 | 188.2 | | 261.0 | 268.9 | | 229.4 | |
| Dissolved Oxygen (mg/L) | Min | 8.1 | 9.2 | 8.8 | 6.9 | 7.1 | | 7.9 | |
| | Max | 9.3 | 10.1 | 10.6 | 10.5 | 12.0 | | 10.5 | |
| | Mean | 8.5 | 9.6 | 9.4 | 8.2 | 9.0 | | 9.1 | |
| Dissolved Oxygen (% Saturation) | Min | 89.8 | 87.6 | 88.4 | 74.1 | 77.4 | | 84.8 | |
| | Max | 100.7 | 98.8 | 108.5 | 117.7 | 133.0 | | 114.6 | |
| | Mean | 93.4 | 91.8 | 95.0 | 89.1 | 99.1 | | 98.0 | |
| pH | Min | 8.0 | 7.8 | | 7.4 | 7.6 | | 7.5 | |
| | Max | 8.3 | 7.9 | | 7.9 | 8.6 | | 8.1 | |
| | Mean | 8.2 | 7.8 | | 7.5 | 8.0 | | 7.8 | |
| Turbidity (NTU) | Min | 3.4 | 17.8 | | 3.8 | 1.0 | | 3.0 | |
| | Max | 6.0 | 28.7 | | 7.6 | 2.4 | | 4.9 | |
| | Mean | 4.5 | 21.3 | | 4.7 | 1.5 | | 3.7 | |

*Station operated seasonally



| Gage | 24-hr Average Flow (cfs) | | | | | | |
|-----------------------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Sep 15, 2023 | Sep 16, 2023 | Sep 17, 2023 | Sep 18, 2023 | Sep 19, 2023 | Sep 20, 2023 | Sep 21, 2023 |
| The Forks* | 189 | 189 | 189 | 189 | 189 | 189 | 189 |
| Talmage USGS 11462080 | 153 | 153 | 154 | 154 | 155 | 155 | 154 |
| Hopland USGS 11462500 | 167 | 167 | 169 | 168 | 169 | 171 | 170 |
| Cloverdale USGS 11463000 | 143 | 145 | 148 | 152 | 151 | 154 | 154 |
| Healdsburg USGS 11464000 | 127 | 127 | 130 | 131 | 130 | 131 | 134 |
| Hacienda USGS 11467000 | 158 | 159 | 163 | 169 | 166 | 169 | 173 |

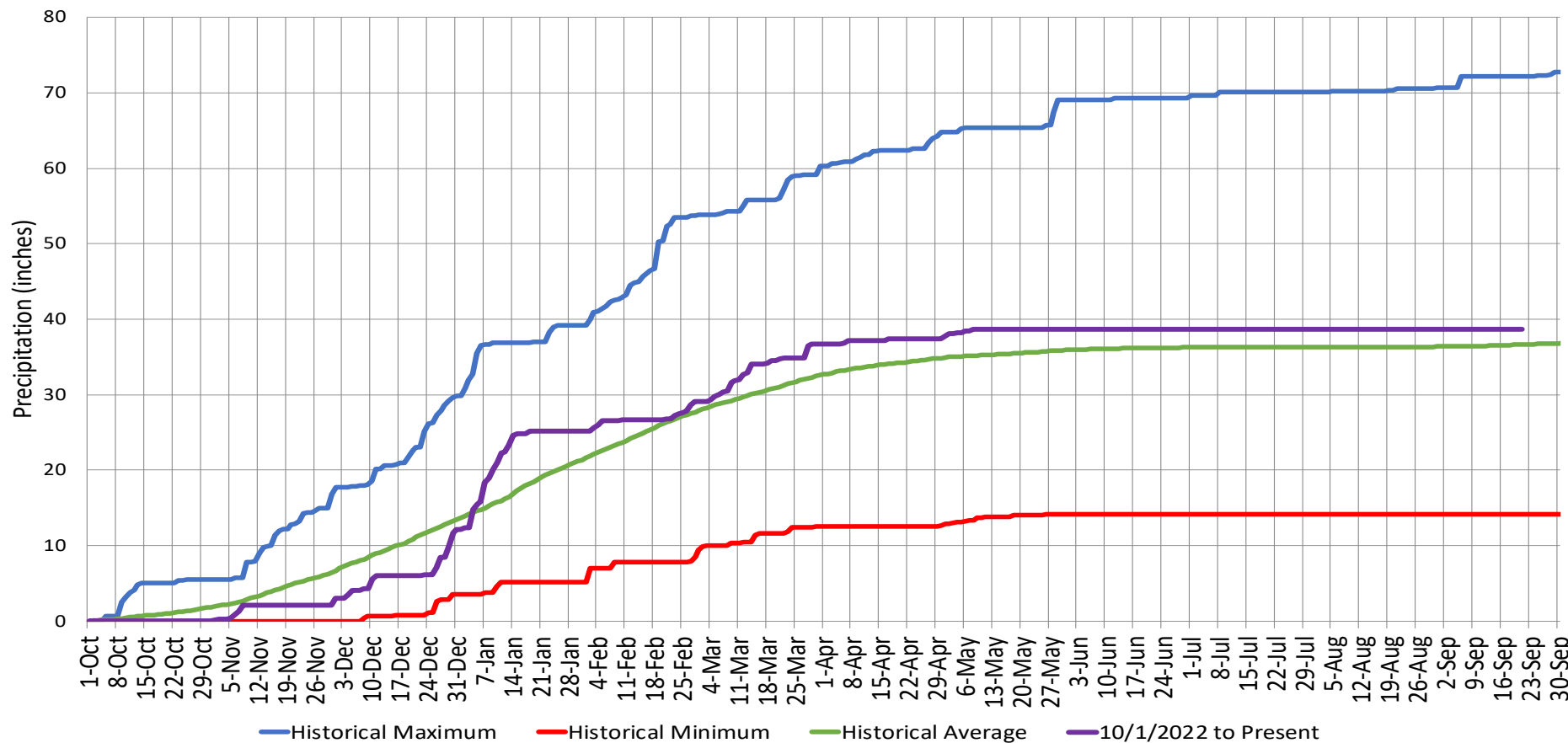
*West Fork(USGS 11461000) + East Fork (Coyote Valley Dam Release)



Precipitation

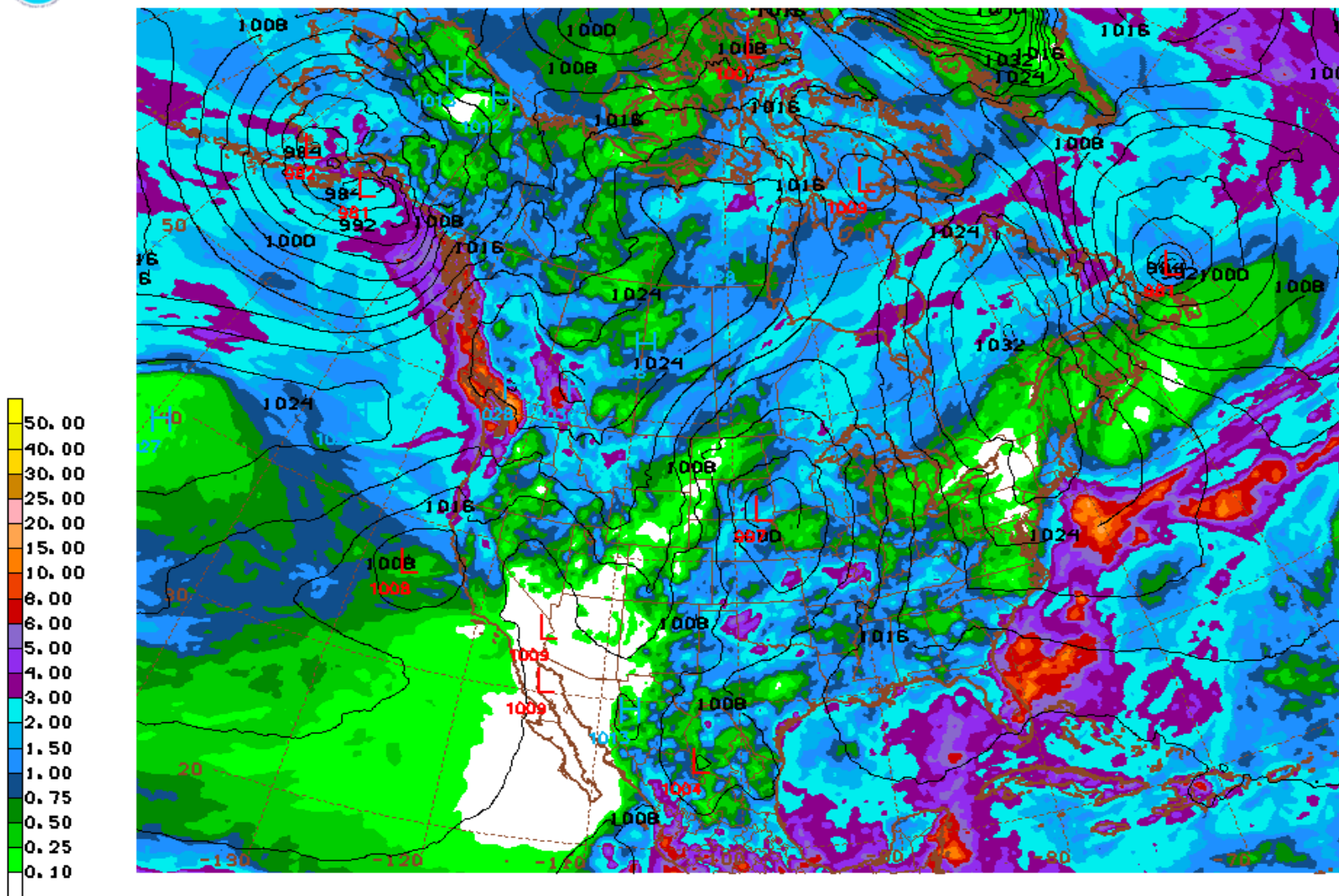
| | |
|--|---------------------|
| Ukiah Municipal Airport (WBAN: 72590523275 (KUKI)) | |
| Date Range | Cumulative (inches) |
| Oct 1, 2022 - Sep 21, 2023 | 38.64 |
| Last 7 Days* | 0.00 |

Cumulative Precipitation Comparison of Current Year versus Historic Record



Global Forecast System Model 16-day Cumulative Precipitation Forecast

6FS 09/25/23 12UTC 384HR FCST VALID WED 10/11/23 12UTC NOAA/NWS/NCEP



6FS WED 231011/1200V384 EMSL (4MB), 384HR ACCUMULATED PRECIP (IN)

Date Range
Sep 25 - Oct 11, 2023

Forecasted Cumulative (inches)
0.88

Russian River Fisheries Monitoring



Video has been reviewed through September 16, 2023 and no adult salmonids have been observed. Based on previous years data, few adult Chinook are observed in the month of September and the bulk of adult Chinook return to the Russian River from mid-October to mid-November.