



**State Water Resources Control Board
 Temporary Urgency Change Order (12/14/2022)
 Russian River Hydrologic Report
 May 5, 2023 - May 11, 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).

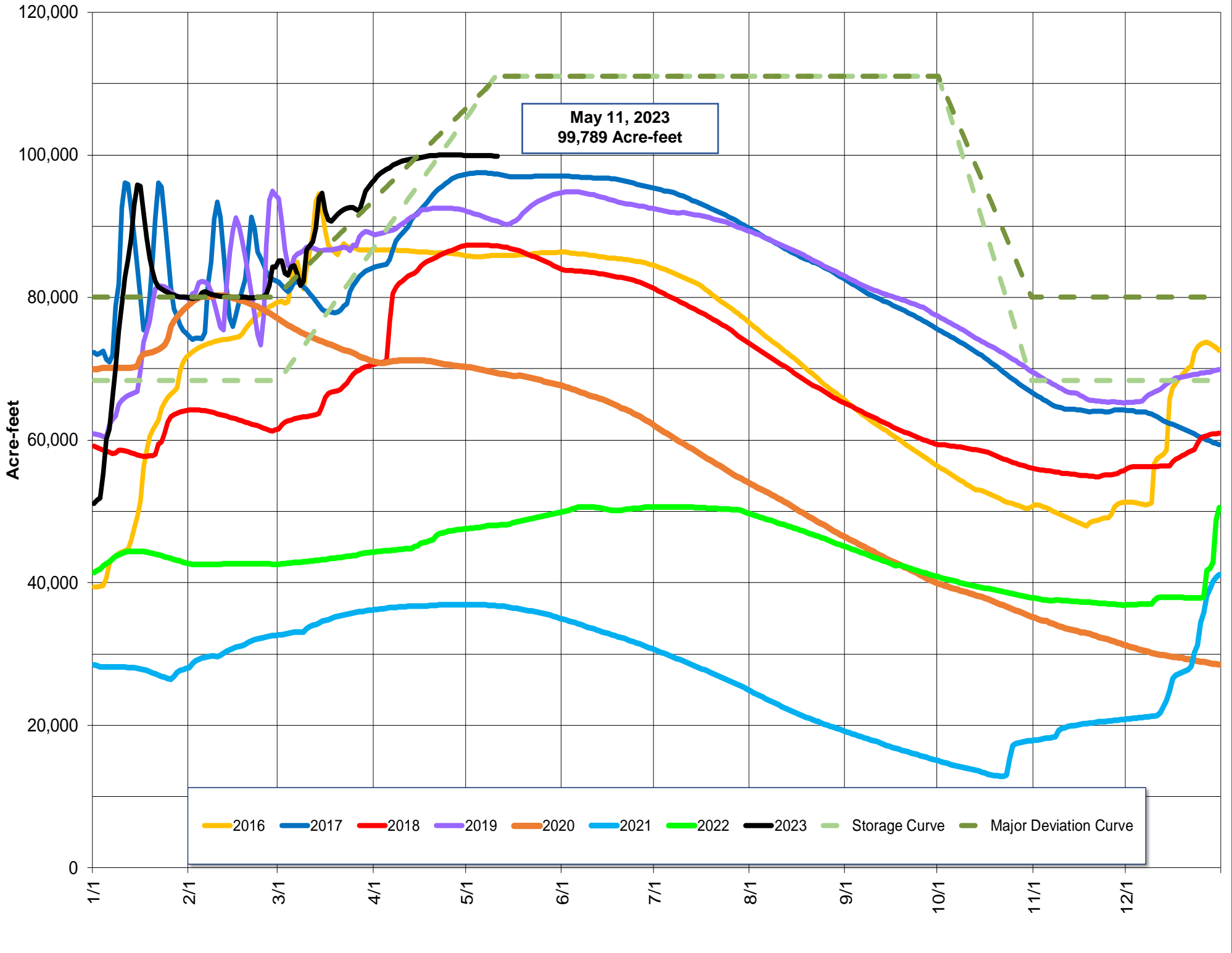
Instream Flow Requirements as of May 11, 2023

| Basis | Reach | Instantaneous (cfs) | 5-day Average (cfs) |
|--------------------------------------|---------------------|---------------------|---------------------|
| Modified Per Order: Normal Condition | Upper Russian River | 185 | - |
| D-1610: Normal Condition | Dry Creek | 80 | - |
| Modified Per Order: Normal Condition | Lower Russian River | 125 | - |

Upper and Lower Russian River based on criteria as established in the Order issued 12/14/2022.

Lake Mendocino

Lake Mendocino Storage 2016 - 2023 and Storage Curve



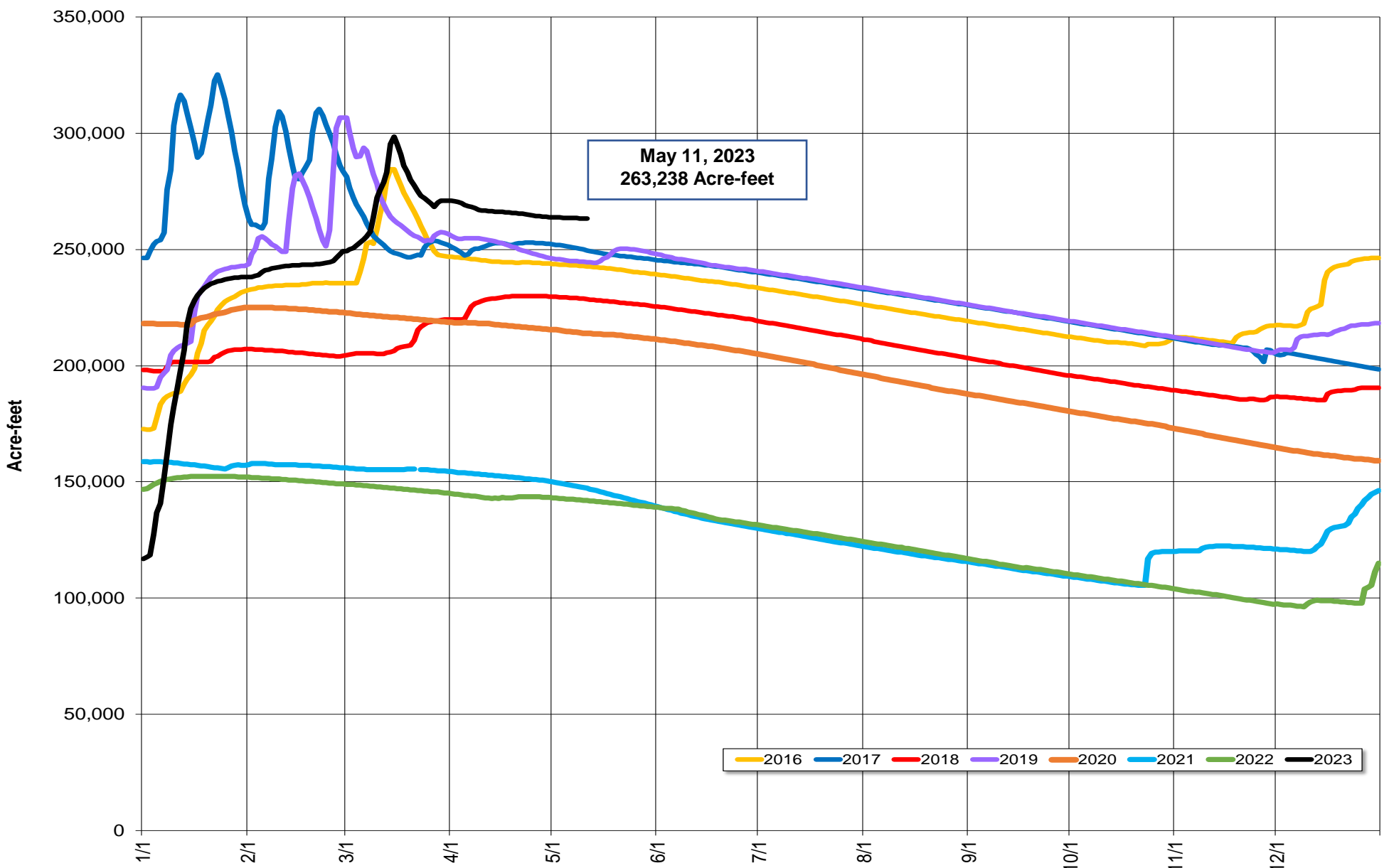
| | | | |
|-------------------------------|--------------|---------------|---------------------------------|
| Storage (acre-feet) | May 11, 2023 | 99,789 | |
| Change in Storage (acre-feet) | Last 30 days | 571 | Average Daily Rate 19 |
| | Last 7 days | -107 | -15 |
| Daily Inflow (cfs) | Last 7 days | Min | 134 |
| | | Max | 167 |
| | | Mean | 151 |
| Release (cfs) | Last 7 days | Min | 145 |
| | | Max | 156 |
| | | Mean | 150 |

Lake Sonoma



Nathan Baskett, March 3, 2011

Lake Sonoma Storage 2016-2023



| | | | |
|-------------------------------|--------------|----------------|--------------------|
| Storage (acre-feet) | May 11, 2023 | 263,238 | |
| Change in Storage (acre-feet) | Last 30 days | Total | Average Daily Rate |
| | | -3,477 | -116 |
| Daily Inflow (cfs) | Last 7 days | Min | 57 |
| | | Max | 148 |
| Release (cfs) | Last 7 days | Mean | 89 |
| | | Min | 109 |
| | | Max | 111 |
| | | Mean | 110 |

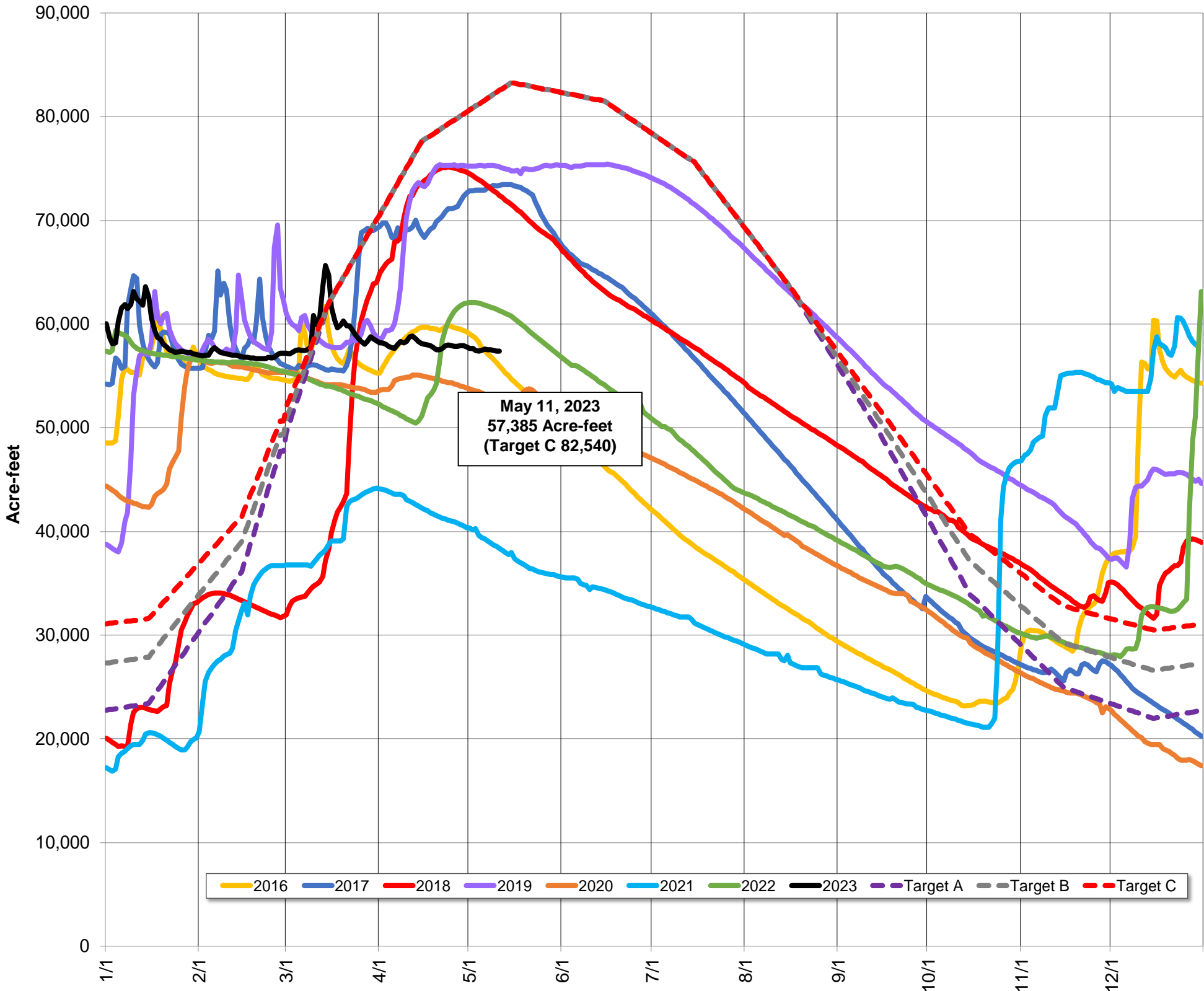
Potter Valley Project

| | | |
|---------------------|--------------|----|
| PVP Diversion (cfs) | May 11, 2023 | 90 |
|---------------------|--------------|----|

| Parameter | Date Range | Cumulative | Daily Average |
|---------------------|--------------------------------|------------|---------------|
| Inflow* (acre-feet) | October 1, 2022 - May 11, 2023 | 583,719 | 2,618 |
| | Last 7 days | 7,912 | 1,130 |

*Inflow calculation based on criteria established in D1610

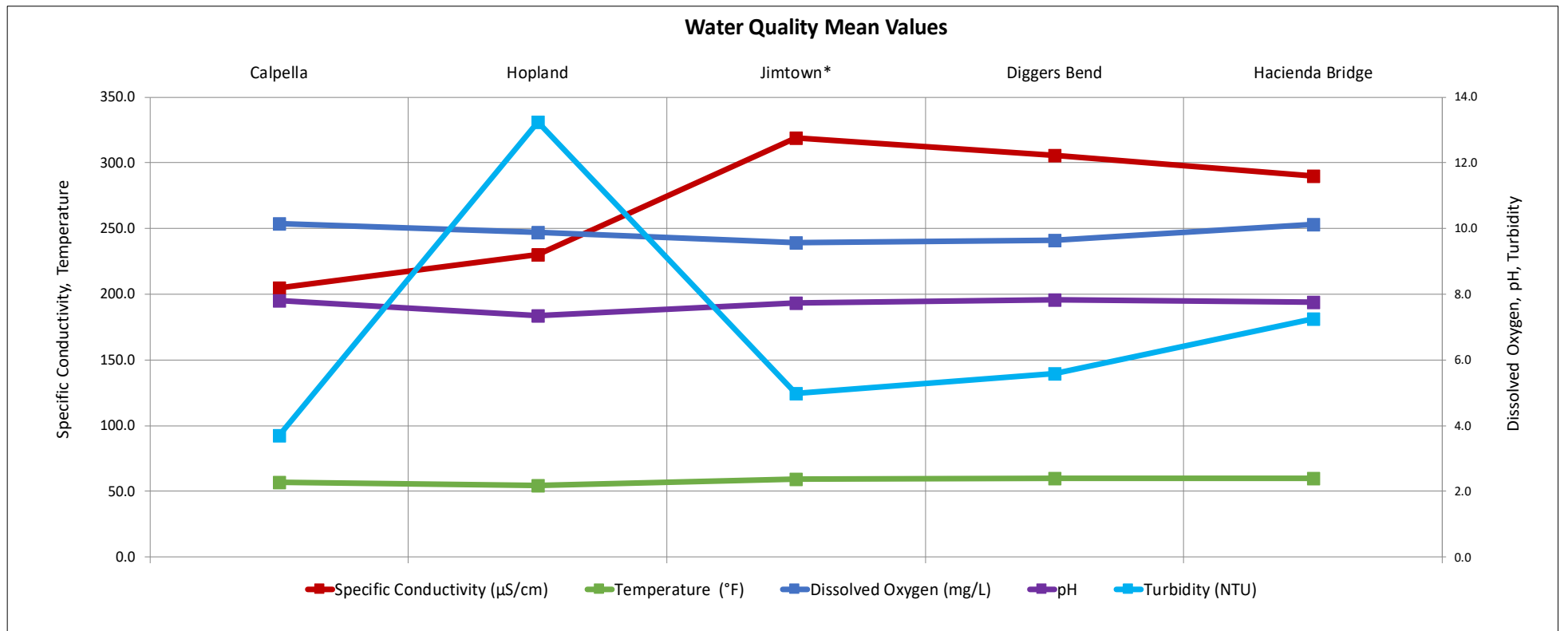
Lake Pillsbury Storage 2016 - 2023 and Target Storage Scenarios



Russian River Flows (May 5, 2023 - May 11, 2023)

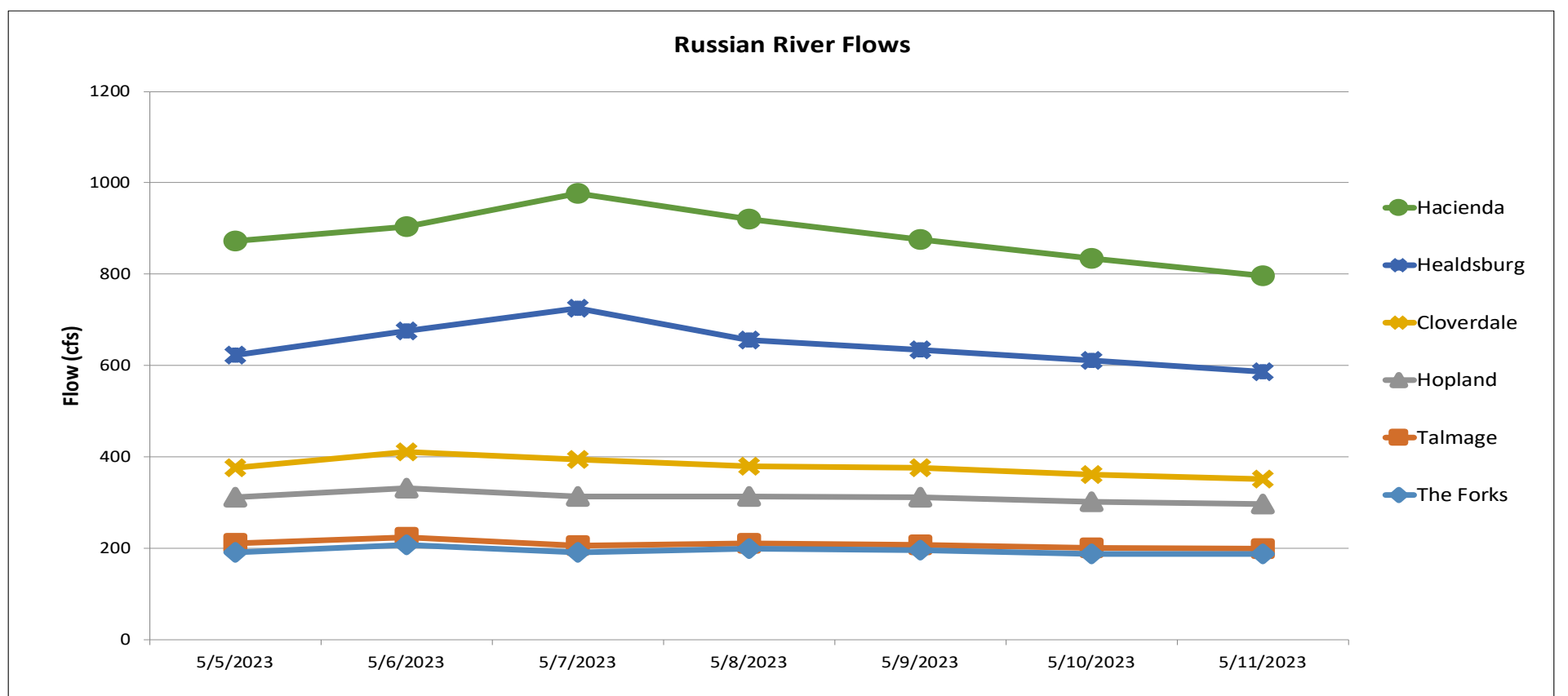
| Parameter | | Calpella | Hopland | Cloverdale* | Jimtown* | Diggers Bend | River Diversion System at Mirabel* | Hacienda Bridge | Johnsons Beach* |
|---------------------------------|------|---------------|---------------|---------------|---------------|---------------|------------------------------------|-----------------|-----------------|
| | | USGS 11461500 | USGS 11462500 | USGS 11463000 | USGS 11463682 | USGS 11463980 | SCWA | USGS 11467000 | SCWA |
| Temperature (°F) | Min | 54.1 | 52.2 | | 56.1 | 57.2 | | 57.0 | |
| | Max | 62.1 | 58.3 | | 64.2 | 64.9 | | 63.9 | |
| | Mean | 56.8 | 54.6 | | 59.3 | 59.9 | | 59.9 | |
| Specific Conductivity (µS/cm) | Min | 197.0 | 227.0 | | 305.0 | 295.0 | | 281.0 | |
| | Max | 220.0 | 234.0 | | 332.0 | 311.0 | | 298.0 | |
| | Mean | 205.0 | 230.4 | | 319.1 | 305.4 | | 289.8 | |
| Dissolved Oxygen (mg/L) | Min | 9.4 | 9.2 | | 8.7 | 8.6 | | 8.9 | |
| | Max | 10.8 | 10.6 | | 10.5 | 10.6 | | 11.2 | |
| | Mean | 10.1 | 9.9 | | 9.6 | 9.6 | | 10.1 | |
| Dissolved Oxygen (% Saturation) | Min | 94.2 | 86.7 | | 86.3 | 85.9 | | 89.6 | |
| | Max | 105.0 | 101.7 | | 106.6 | 108.9 | | 113.7 | |
| | Mean | 97.9 | 92.7 | | 95.2 | 96.6 | | 101.6 | |
| pH | Min | 7.6 | 7.3 | | 7.6 | 7.7 | | 7.6 | |
| | Max | 8.1 | 7.4 | | 7.9 | 8.0 | | 7.9 | |
| | Mean | 7.8 | 7.4 | | 7.7 | 7.8 | | 7.8 | |
| Turbidity (NTU) | Min | 2.7 | 11.1 | | 3.9 | 3.2 | | 3.4 | |
| | Max | 8.0 | 17.5 | | 8.1 | 25.3 | | 14.3 | |
| | Mean | 3.7 | 13.2 | | 5.0 | 5.6 | | 7.3 | |

*Station operated seasonally



| Gage | 24-hr Average Flow (cfs) | | | | | | |
|-----------------------------|--------------------------|-------------|-------------|-------------|-------------|--------------|--------------|
| | May 5, 2023 | May 6, 2023 | May 7, 2023 | May 8, 2023 | May 9, 2023 | May 10, 2023 | May 11, 2023 |
| The Forks* | 190 | 206 | 190 | 198 | 196 | 188 | 188 |
| Talmage USGS 11462080 | 211 | 223 | 205 | 211 | 207 | 200 | 199 |
| Hopland USGS 11462500 | 312 | 332 | 313 | 313 | 311 | 302 | 297 |
| Cloverdale USGS 11463000 | 376 | 410 | 395 | 380 | 376 | 361 | 351 |
| Healdsburg USGS 11464000 | 623 | 676 | 725 | 655 | 635 | 611 | 586 |
| Hacienda USGS 11467000 | 872 | 905 | 976 | 921 | 876 | 835 | 796 |

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

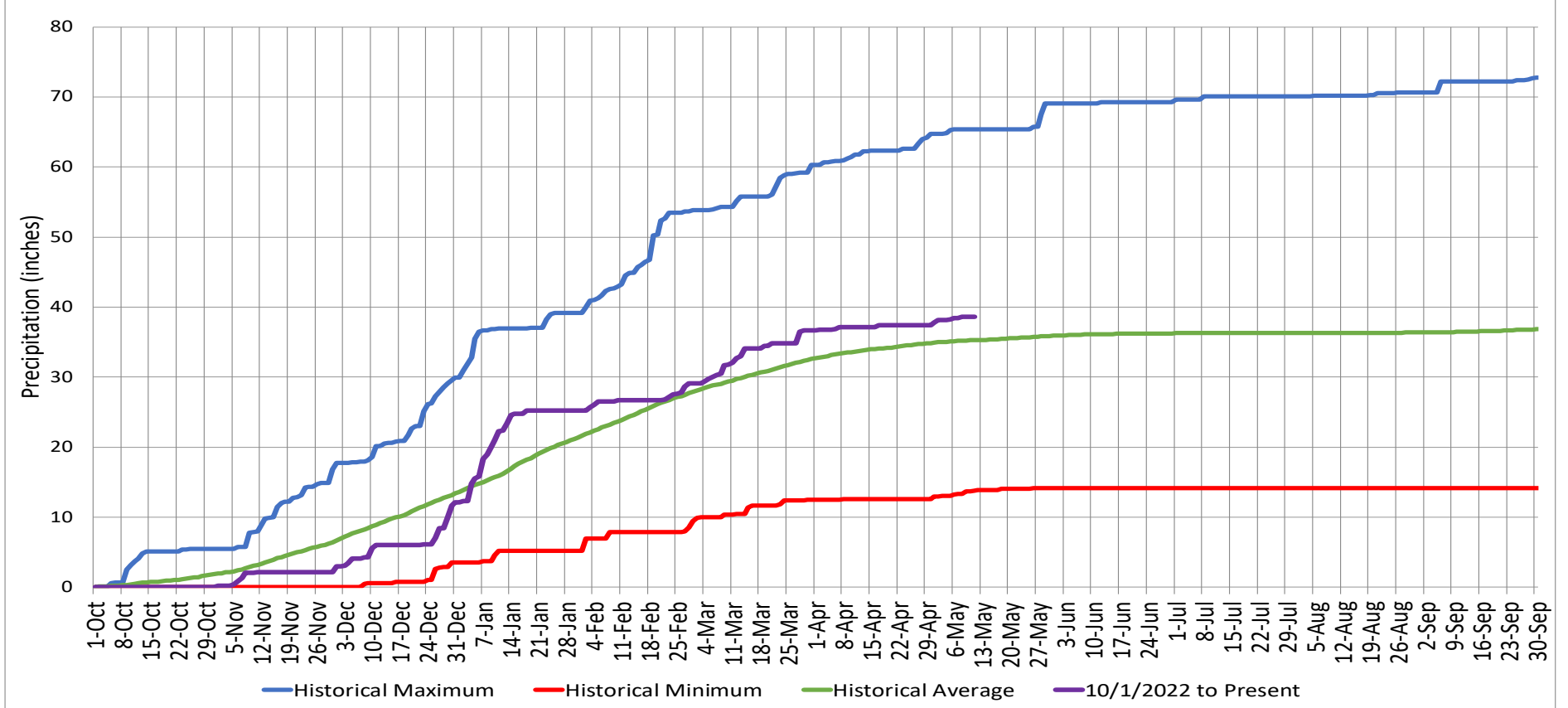


Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))

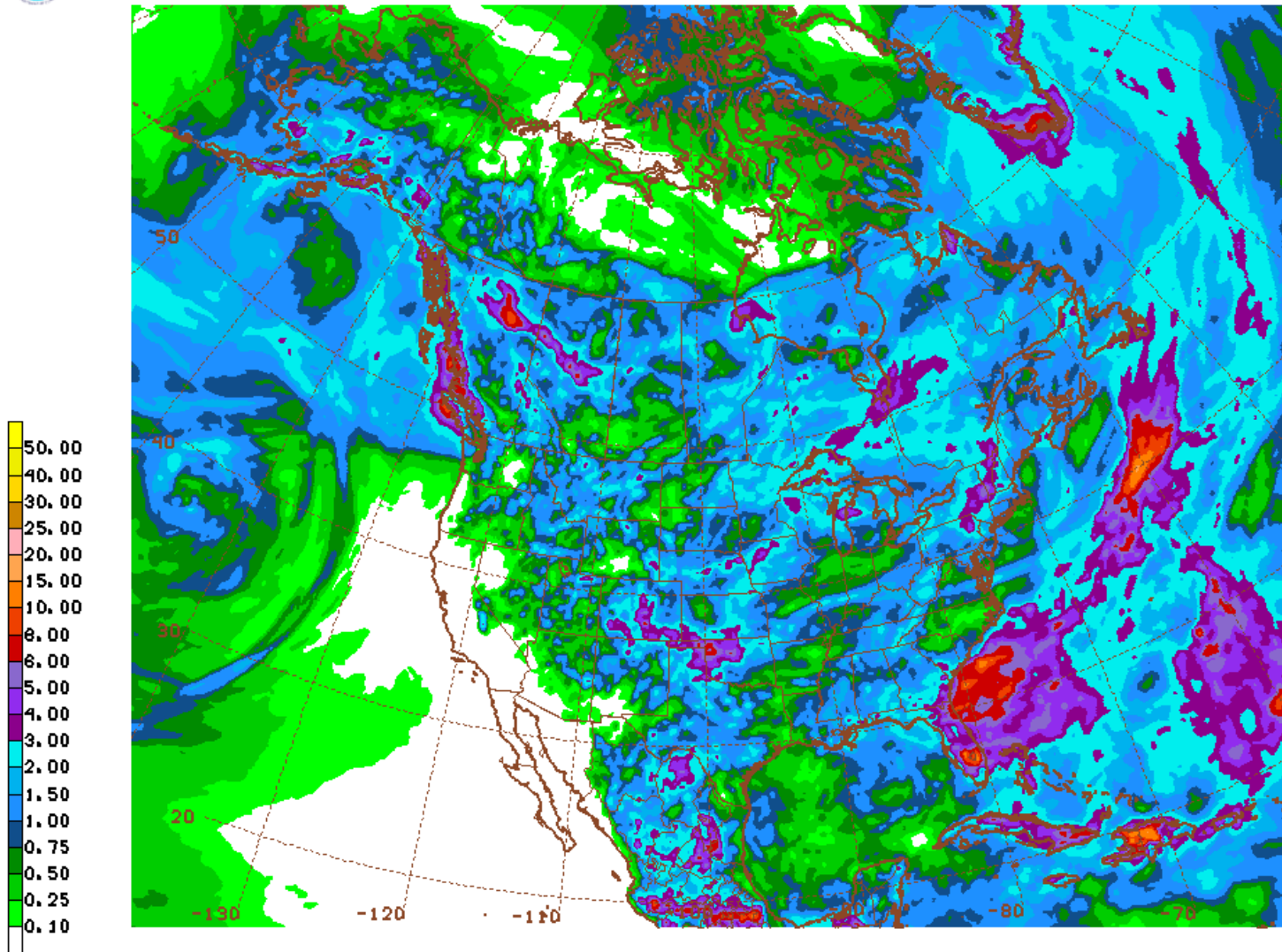
| Date Range | Cumulative (inches) |
|----------------------------|---------------------|
| Oct 1, 2022 - May 11, 2023 | 38.62 |
| Last 7 Days* | 0.46 |

Cumulative Precipitation Comparison of Current Year versus Historic Record



Global Forecast System Model 16-day Cumulative Precipitation Forecast

GFS 05/15/23 12UTC 384HR FCST VALID WED 05/31/23 12UTC NOAA/NWS/NCEP



GFS WED 230531/1200Y384 384HR ACCUMULATED PRECIP (IN)

| Date Range | Forecasted Cumulative (inches) |
|-----------------------|--------------------------------|
| May 15 - May 31, 2023 | 0.00 |