



State Water Resources Control Board
 Temporary Urgency Change Orders (10/31/2024)
 Russian River Hydrologic & Water Quality Report
 November 29, 2024 - December 5, 2024

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

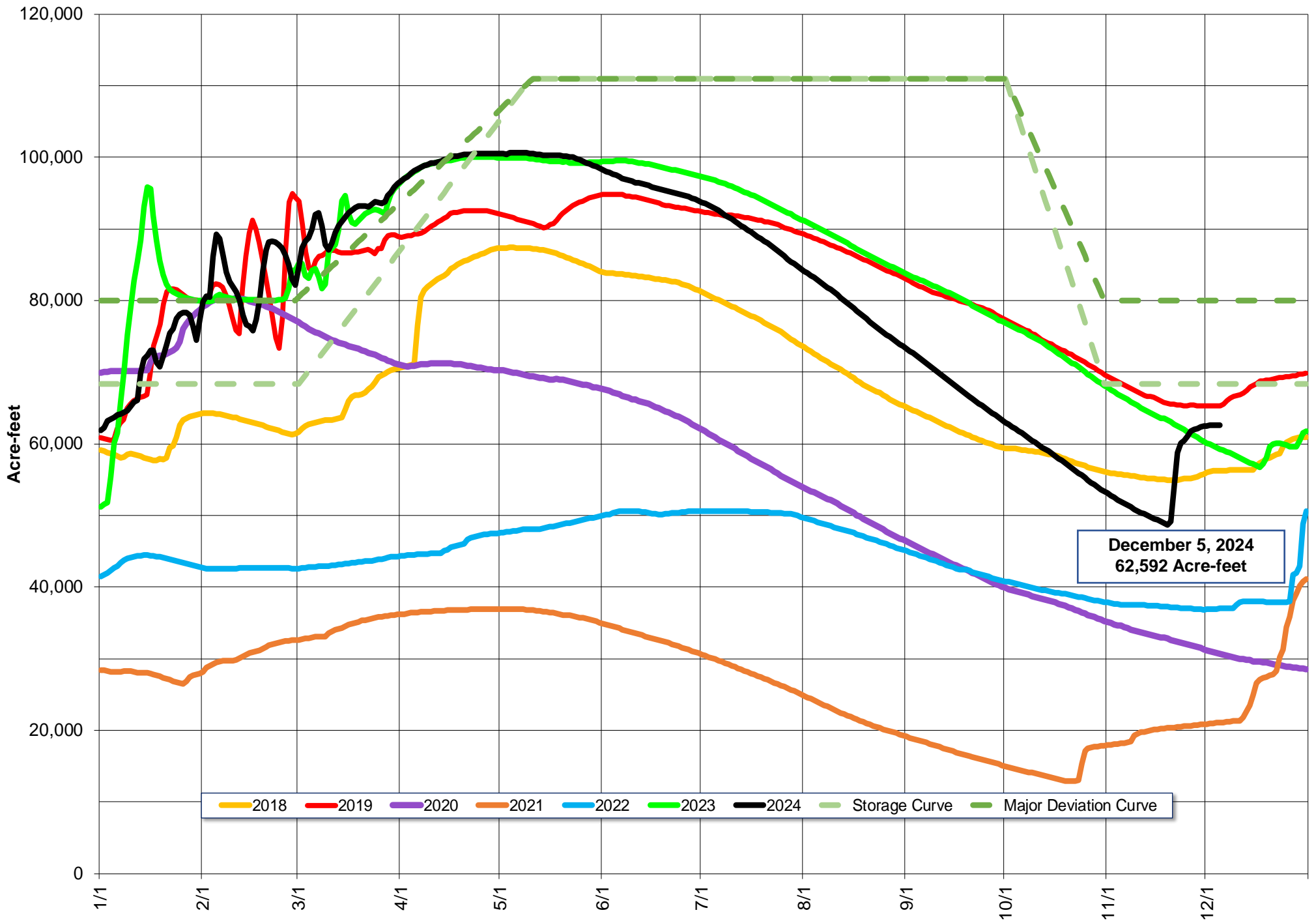
Instream Flow Requirements as of December 5, 2024

| Basis | Reach | Instantaneous (cfs) | 5-day Average (cfs) |
|--------------------------------------|---------------------|---------------------|---------------------|
| Modified Per Order: Normal Condition | Upper Russian River | 150 | - |
| Modified Per Order: Normal Condition | Dry Creek | 105 | - |
| Modified Per Order: Normal Condition | Lower Russian River | 125 | - |

Upper and Lower Russian River are based on criteria as established in the Order issued 10/31/2024.

Lake Mendocino

Lake Mendocino Storage 2018 - 2024 and Storage Curve



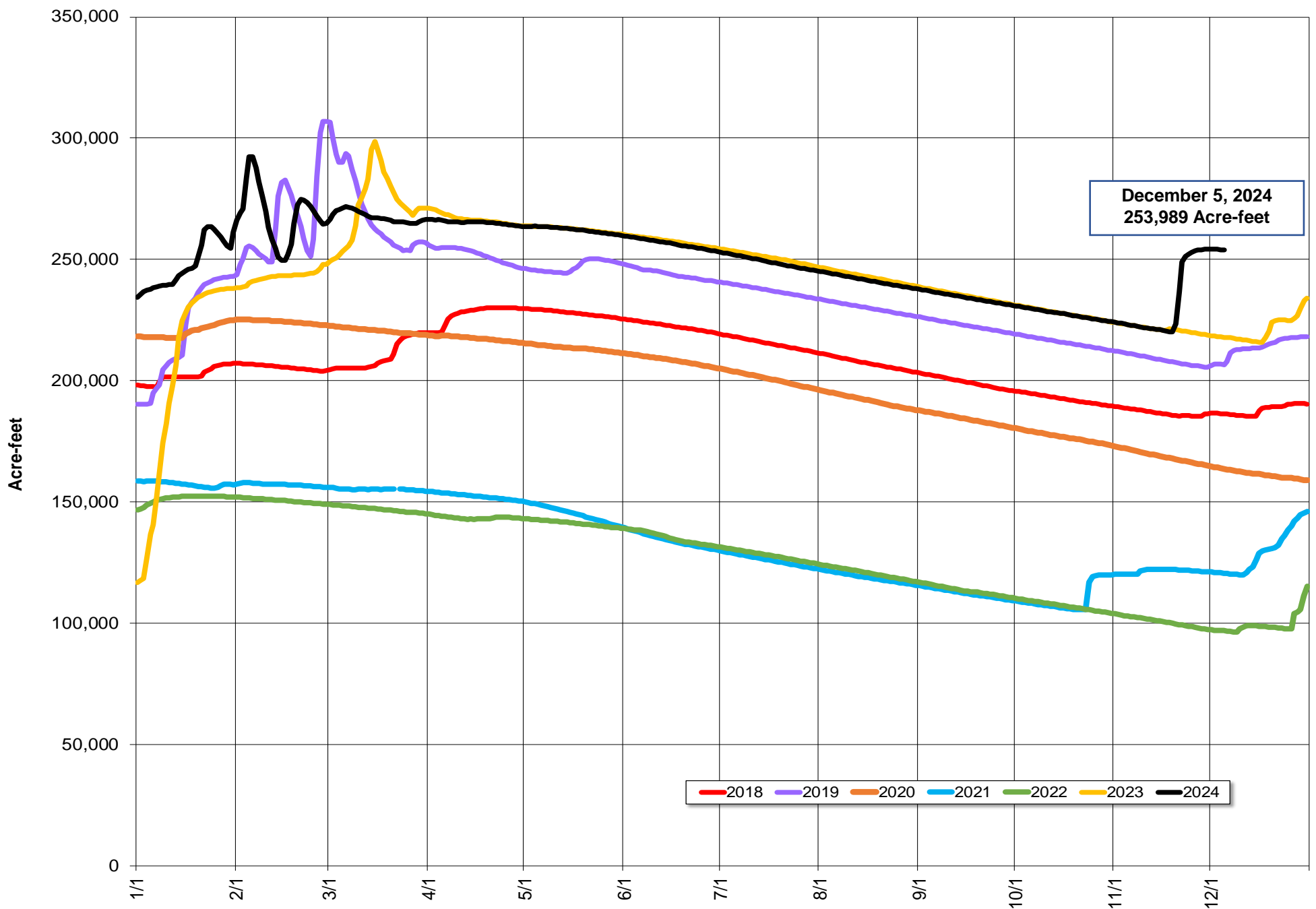
| Storage (acre-feet) | December 5, 2024 | 62,592 | |
|-------------------------------|------------------|---------------|------------|
| Change in Storage (acre-feet) | Last 30 days | 10,689 | 356 |
| | Last 7 days | 291 | 42 |
| Daily Inflow (cfs) | Last 7 days | Min | 78 |
| | | Max | 103 |
| | | Mean | 90 |
| Release (cfs) | Last 7 days | Min | 34 |
| | | Max | 83 |
| | | Mean | 56 |

Lake Sonoma



Todd Schram, February 10, 2024

Lake Sonoma Storage 2018-2024



| | | | |
|-------------------------------|------------------|----------------|--------------------|
| Storage (acre-feet) | December 5, 2024 | 253,989 | |
| Change in Storage (acre-feet) | Last 30 days | Total | Average Daily Rate |
| | | 30,839 | 1,028 |
| | Last 7 days | -162 | -23 |
| Daily Inflow (cfs) | Last 7 days | Min | 69 |
| | | Max | 137 |
| | | Mean | 102 |
| Release (cfs) | Last 7 days | Min | 105 |
| | | Max | 106 |
| | | Mean | 106 |

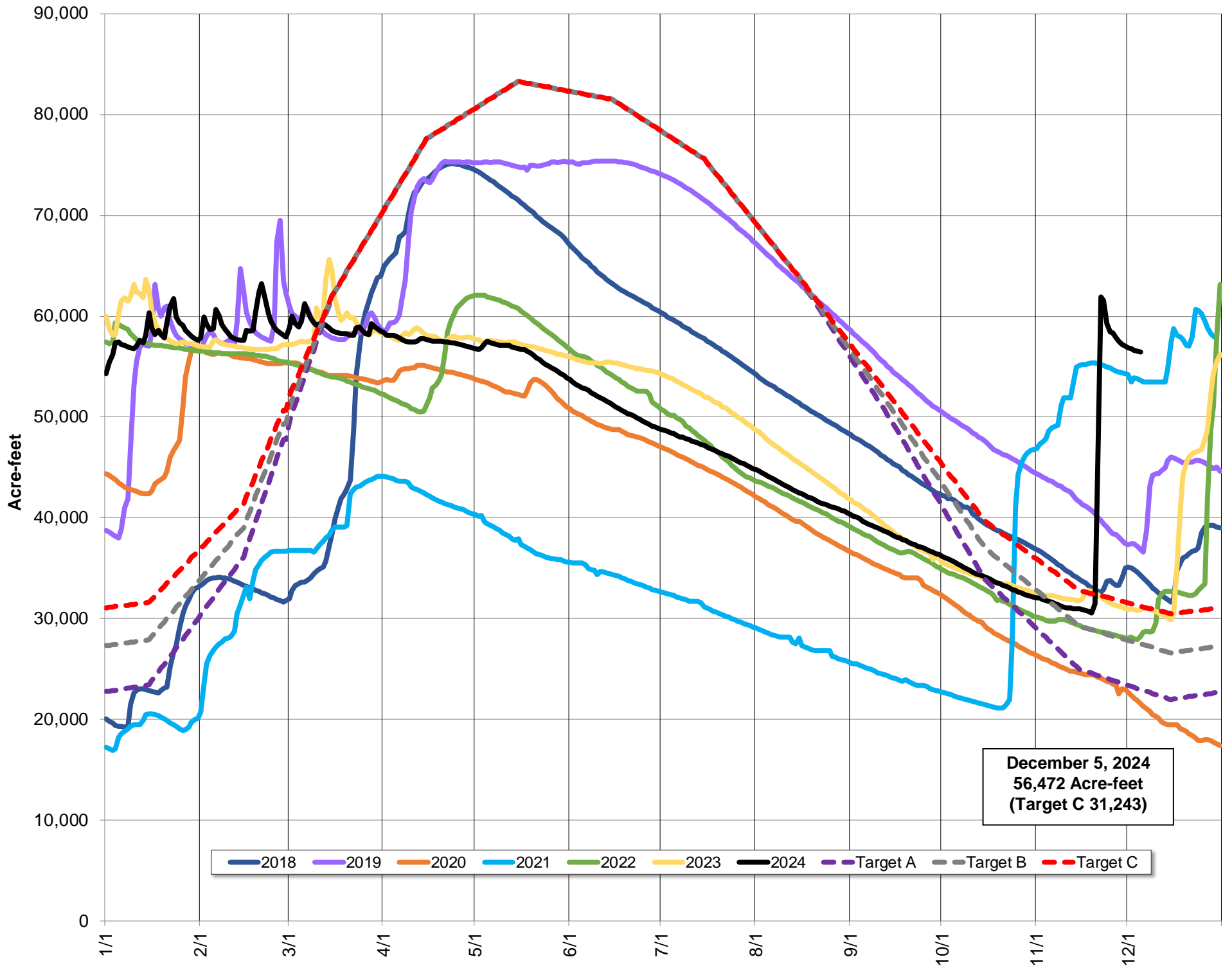
Potter Valley Project

| | | |
|---------------------|------------------|----|
| PVP Diversion (cfs) | December 5, 2024 | 46 |
|---------------------|------------------|----|

| Parameter | Date Range | Cumulative | Daily Average |
|---------------------|------------------------------------|------------|---------------|
| Inflow* (acre-feet) | October 1, 2024 - December 5, 2024 | 75,141 | 1,139 |
| | Last 7 days | 4,604 | 658 |

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2018 - 2024 and Target Storage Scenarios



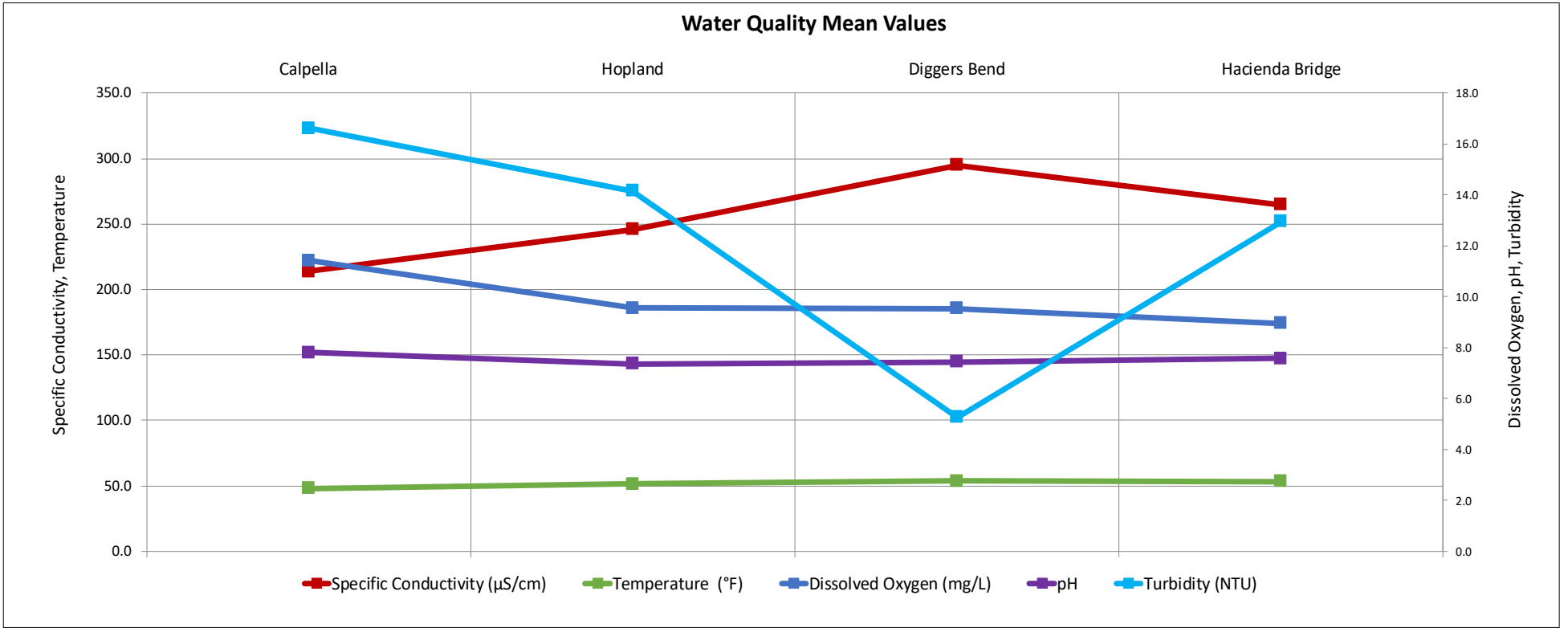
December 5, 2024
56,472 Acre-feet
(Target C 31,243)

Russian River Flows (November 29, 2024 - December 5, 2024)

| 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 | 45.7 | 49.1 | | 51.3 | 51.3 | | 51.8 | |
| | Max | 50.2 | 53.8 | | 56.3 | 55.8 | | 55.0 | |
| | Mean | 47.9 | 51.3 | | 53.8 | 53.5 | | 53.2 | |
| Specific Conductivity (µS/cm) | Min | 208.0 | 219.0 | | | 258.0 | | 231.0 | |
| | Max | 217.0 | 254.0 | | | 313.0 | | 286.0 | |
| | Mean | 214.0 | 245.7 | | | 295.0 | | 265.0 | |
| Dissolved Oxygen (mg/L) | Min | 11.1 | 9.4 | | | 9.4 | | 8.5 | |
| | Max | 11.8 | 9.8 | | | 9.7 | | 9.3 | |
| | Mean | 11.4 | 9.6 | | | 9.5 | | 8.9 | |
| Dissolved Oxygen (% Saturation) | Min | 97.3 | 84.6 | | | 85.2 | | 77.8 | |
| | Max | 100.1 | 88.3 | | | 91.1 | | 87.2 | |
| | Mean | 98.3 | 86.2 | | | 88.9 | | 82.6 | |
| pH | Min | 7.8 | 7.3 | | | 7.3 | | 7.5 | |
| | Max | 7.9 | 7.4 | | | 7.5 | | 7.7 | |
| | Mean | 7.8 | 7.4 | | | 7.4 | | 7.6 | |
| Turbidity (NTU) | Min | 12.8 | 11.3 | | | 3.9 | | 7.4 | |
| | Max | 22.4 | 18.1 | | | 7.2 | | 23.3 | |
| | Mean | 16.6 | 14.2 | | | 5.3 | | 13.0 | |

*Station operated seasonally

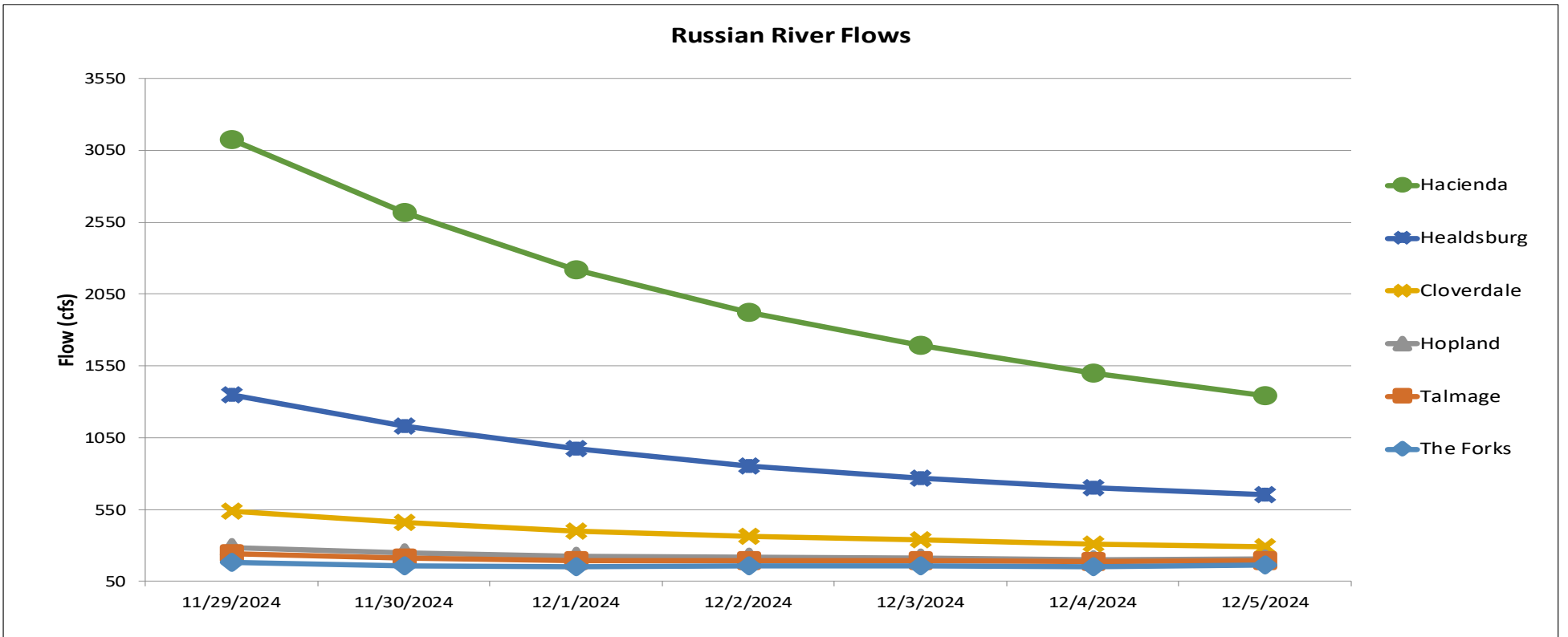
Water Quality Mean Values



| Gage | 24-hr Average Flow (cfs) | | | | | | |
|-----------------------------|--------------------------|--------------|-------------|-------------|-------------|-------------|-------------|
| | Nov 29, 2024 | Nov 30, 2024 | Dec 1, 2024 | Dec 2, 2024 | Dec 3, 2024 | Dec 4, 2024 | Dec 5, 2024 |
| The Forks* | 183 | 159 | 154 | 158 | 157 | 153 | 161 |
| Talmage USGS 11462080 | 240 | 210 | 197 | 197 | 194 | 186 | 197 |
| Hopland USGS 11462500 | 286 | 251 | 226 | 219 | 214 | 203 | 205 |
| Cloverdale USGS 11463000 | 539 | 457 | 399 | 363 | 338 | 309 | 289 |
| Healdsburg USGS 11464000 | 1347 | 1130 | 973 | 855 | 769 | 702 | 651 |
| Hacienda USGS 11467000 | 3124 | 2620 | 2218 | 1921 | 1691 | 1498 | 1342 |

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

Russian River Flows

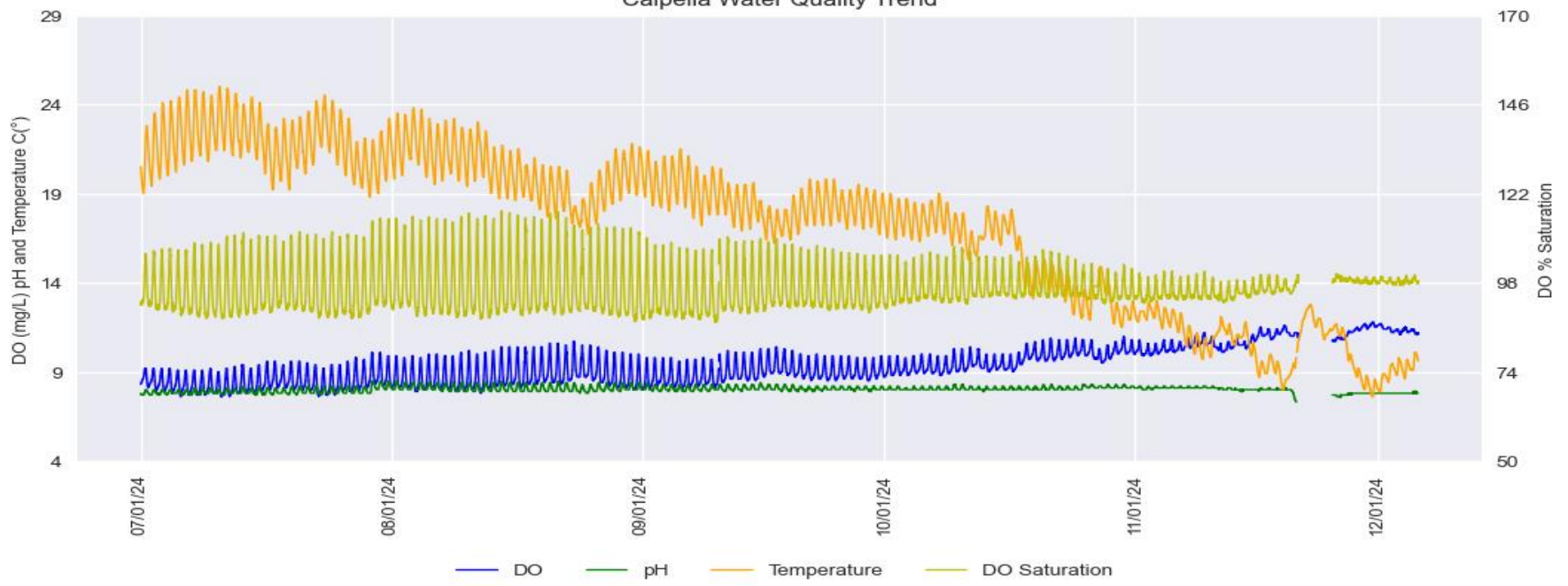


Russian River Water Quality July 1, 2024 – December 5, 2024

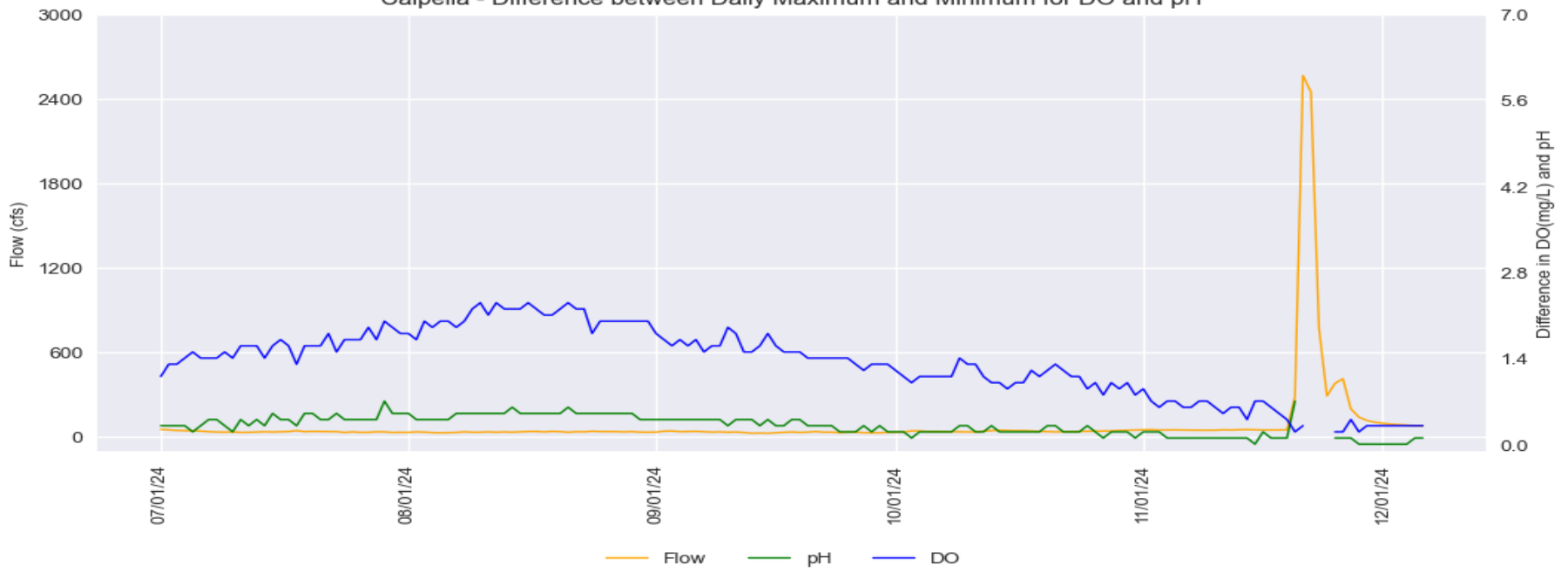
Provisional Data Subject to Revision

Calpella

Calpella Water Quality Trend

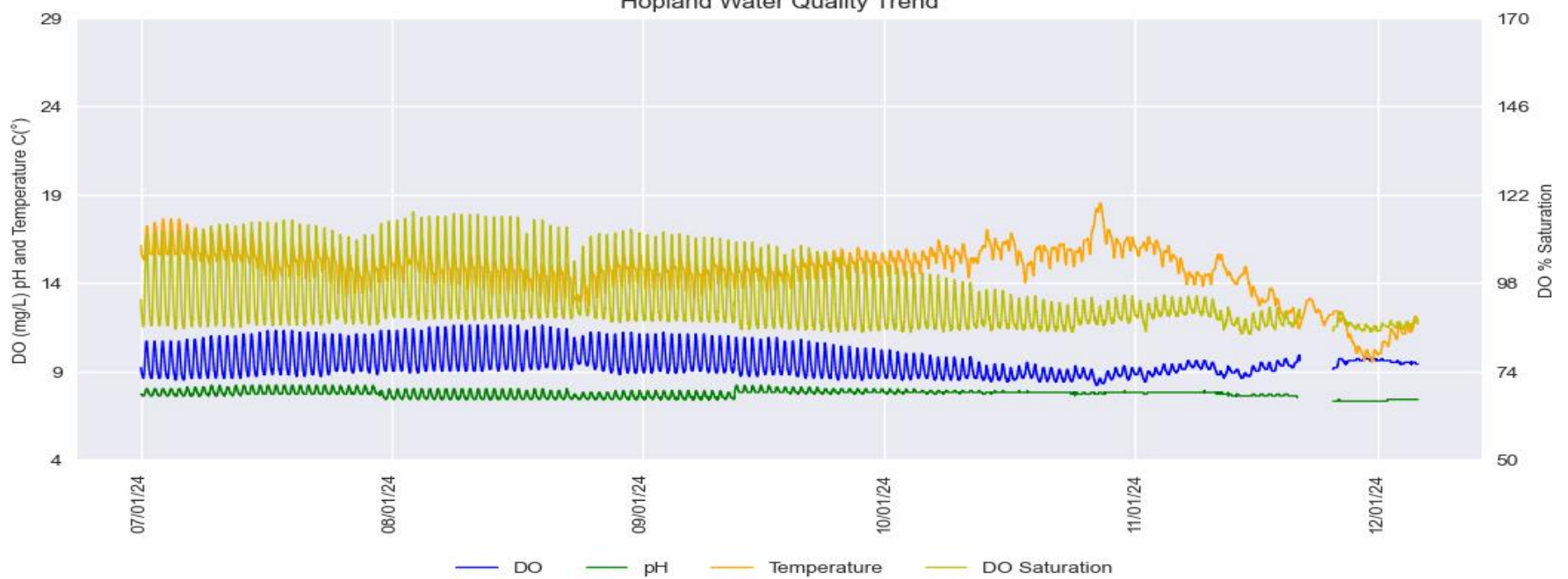


Calpella - Difference between Daily Maximum and Minimum for DO and pH

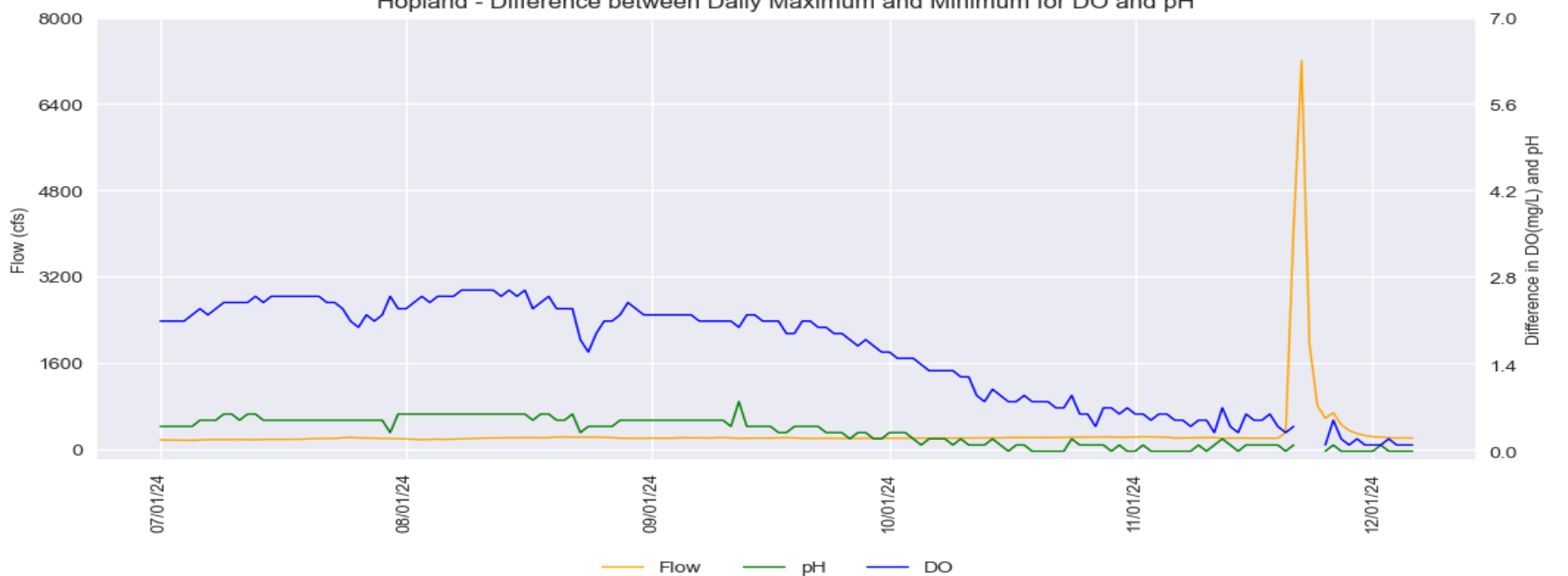


Hopland

Hopland Water Quality Trend



Hopland - Difference between Daily Maximum and Minimum for DO and pH

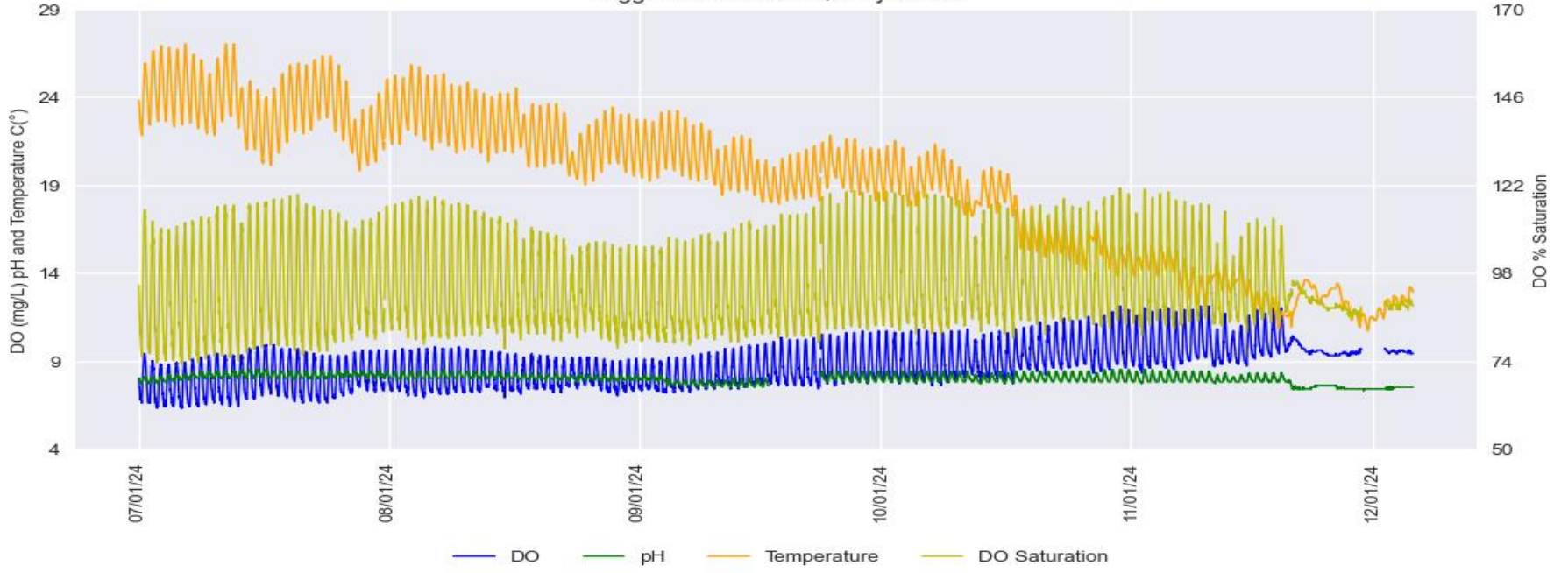


Russian River Water Quality July 1, 2024 – December 5, 2024

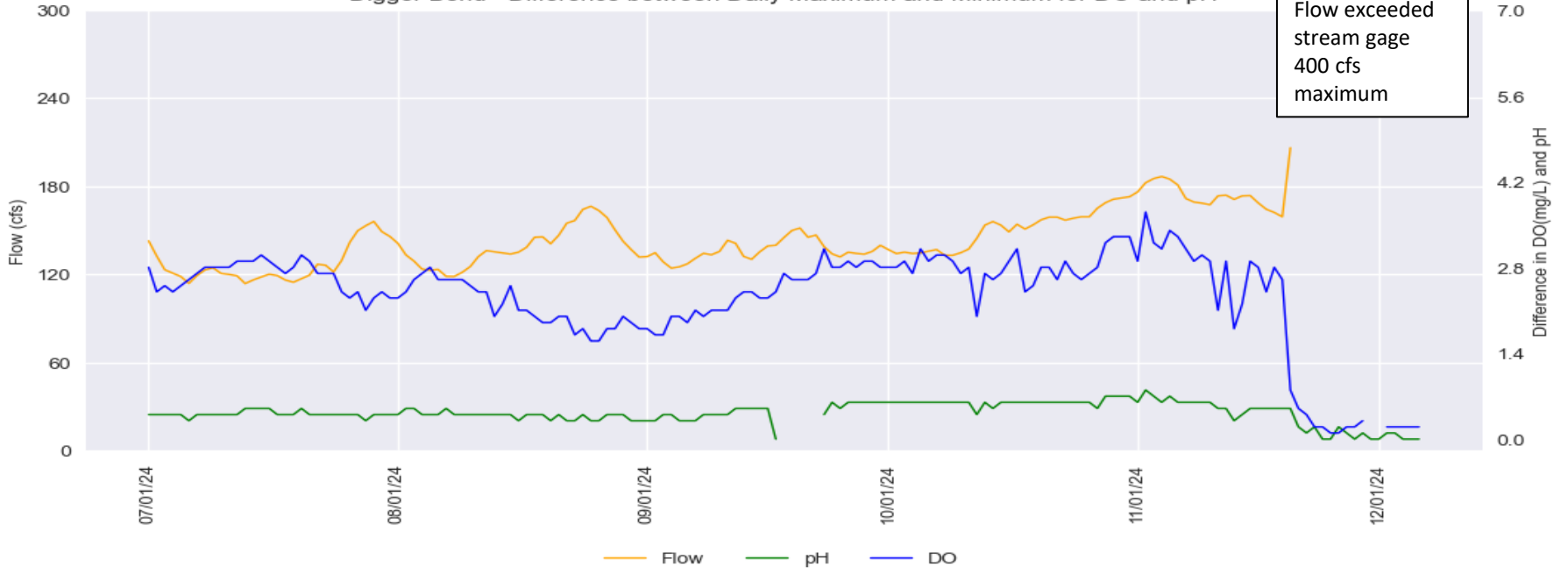
Provisional Data Subject to Revision

Digger Bend

Digger Bend Water Quality Trend

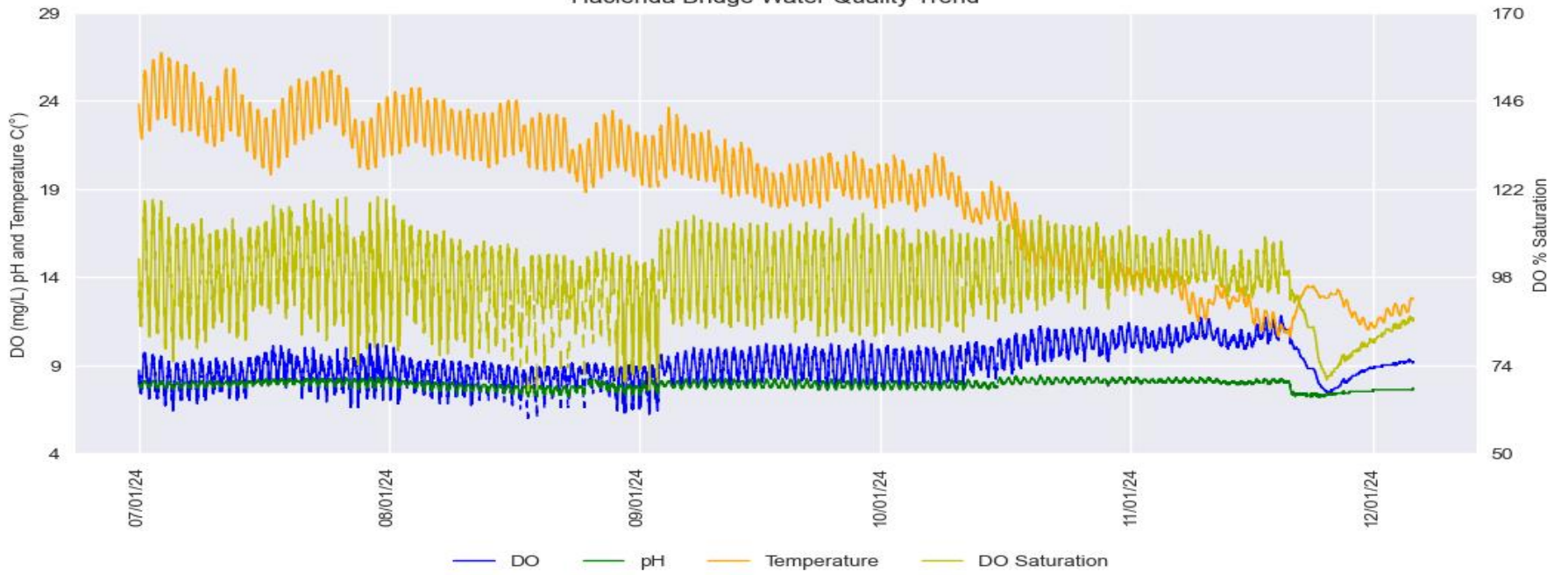


Digger Bend - Difference between Daily Maximum and Minimum for DO and pH

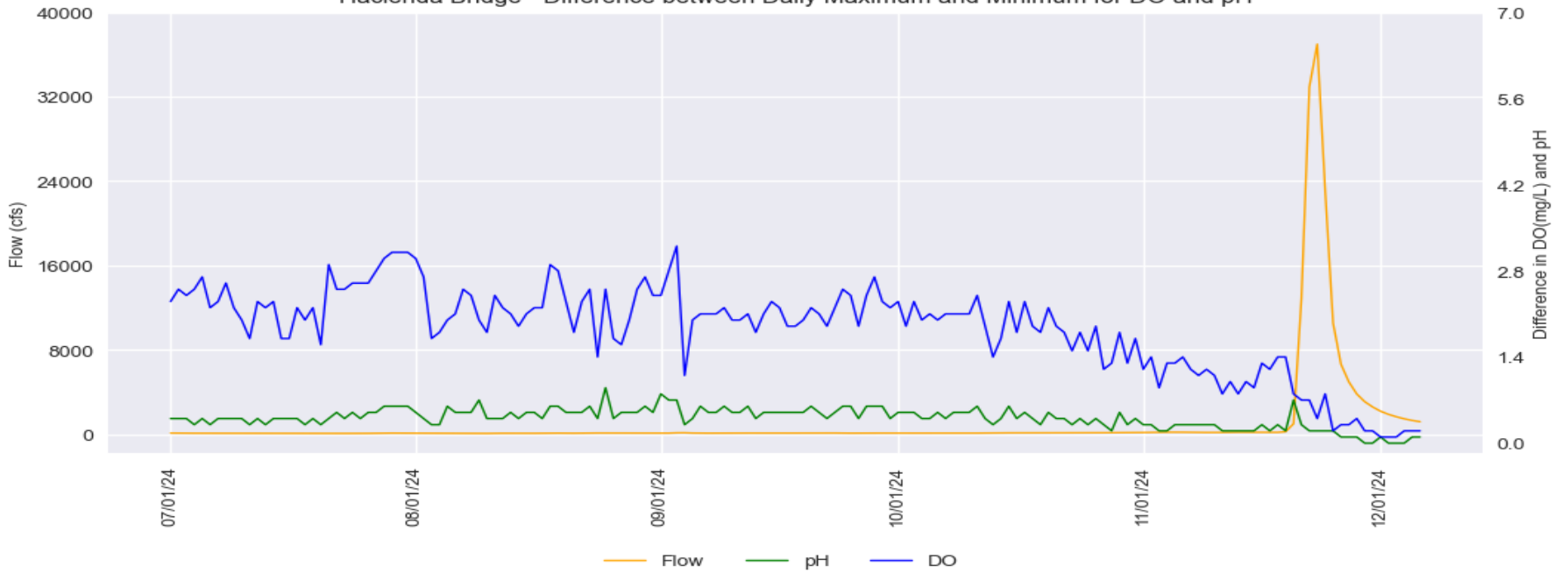


Hacienda Bridge

Hacienda Bridge Water Quality Trend



Hacienda Bridge - Difference between Daily Maximum and Minimum for DO and pH

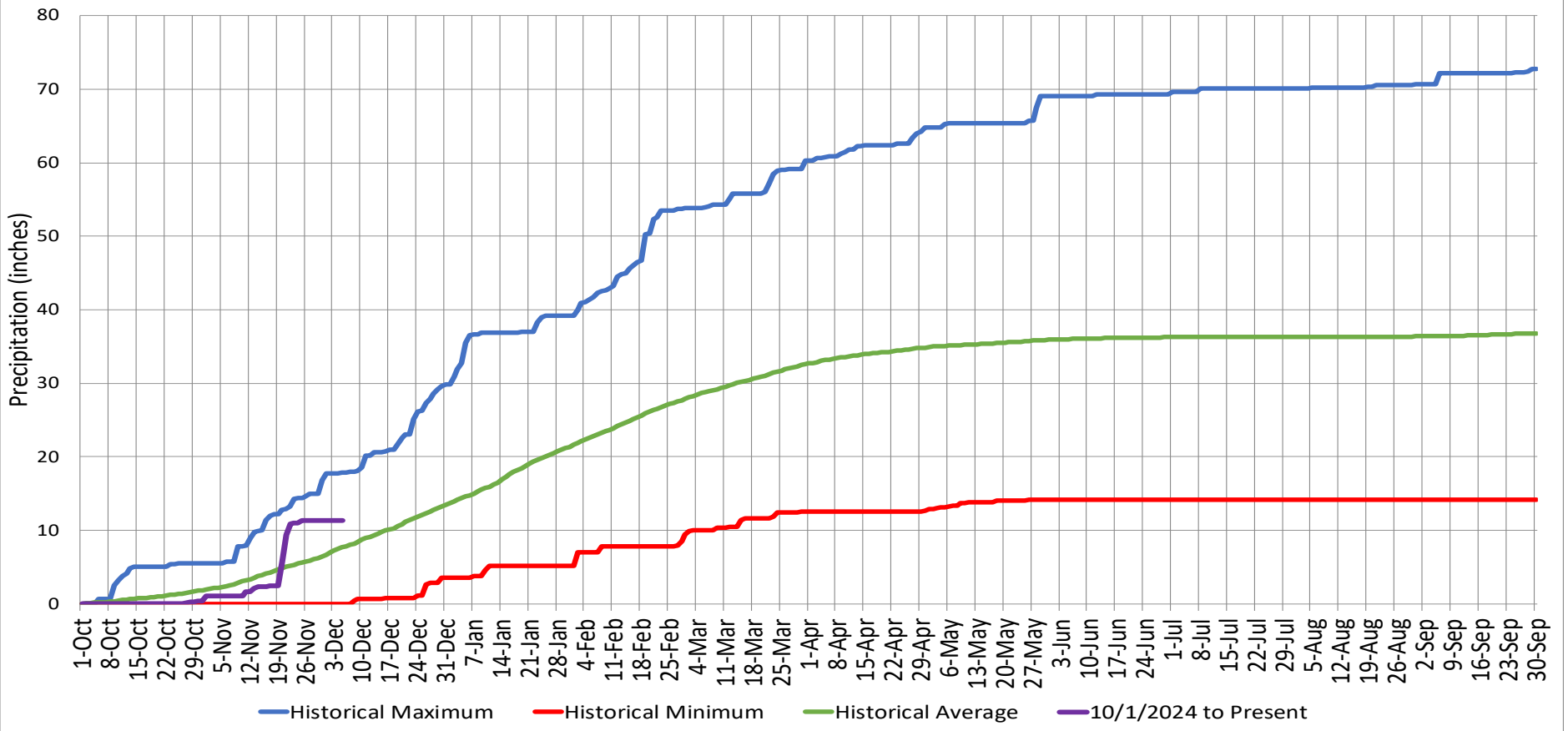


Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))

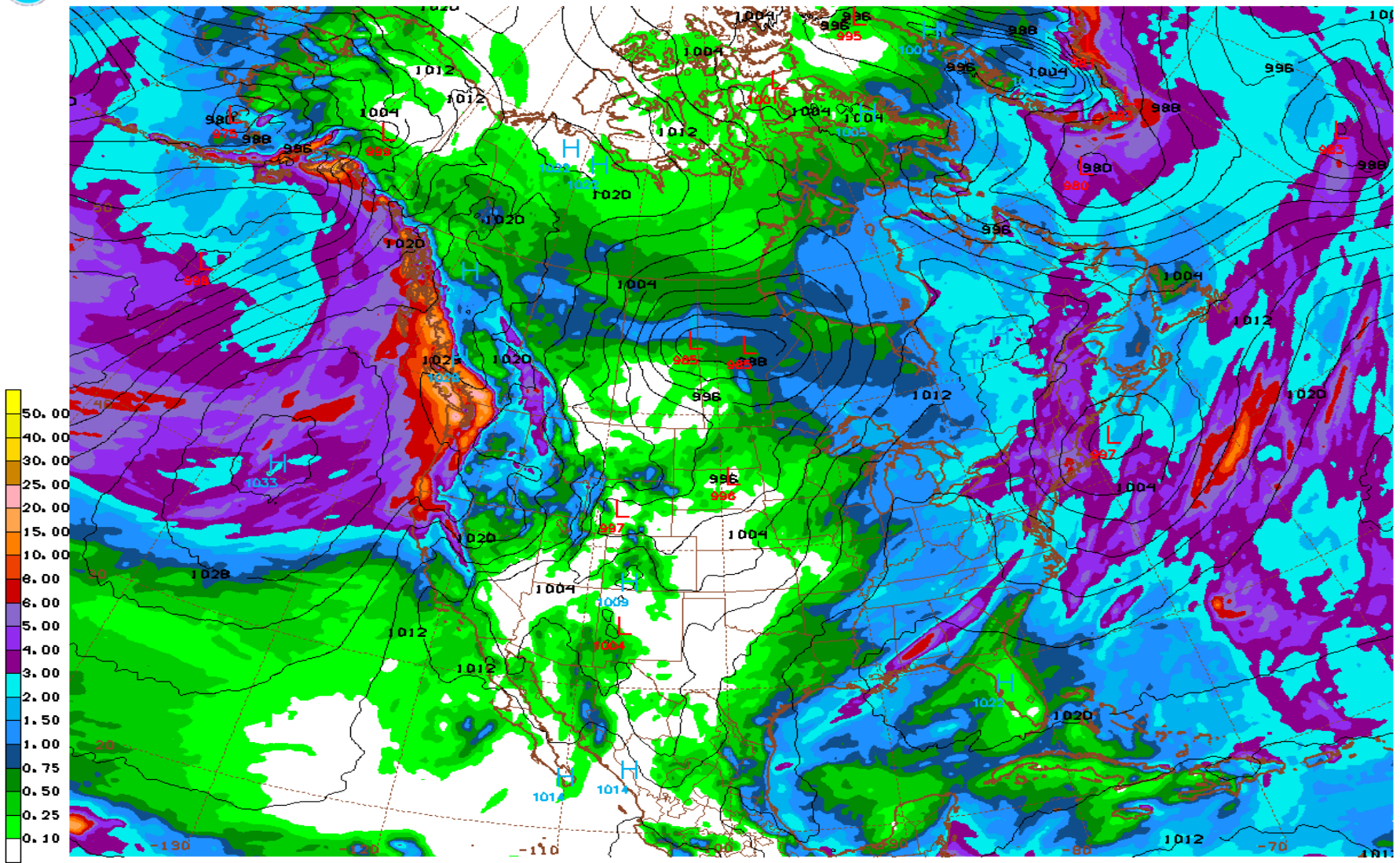
| Date Range | Cumulative (inches) |
|---------------------------|---------------------|
| Oct 1, 2024 - Dec 5, 2024 | 11.39 |
| Last 7 Days* | 0.00 |

Cumulative Precipitation Comparison of Current Year versus Historic Record



Global Forecast System Model 16-day Cumulative Precipitation Forecast

GFS 12/09/24 12UTC 384HR FCST VALID HED 12/25/24 12UTC NOAA/NWS/NCEP



GFS HED 241225/1200V384 ENSL (4MB) 384HR ACCUMULATED PRECIP (IN)

Date Range
Dec 9 - Dec 25, 2024

Forecasted Cumulative (inches)
3.40

Russian River Fisheries Monitoring



Sonoma Water operates a video camera at the Mirabel Inflatable dam to count the number of adult salmonids returning to the Russian River. Due to an impending storm the dam was deflated on November 19, 2024, and the video equipment was removed for the season. Sonoma Water has completed reviewing the data collected during the 2024 season and the preliminary count is 1,512 adult Chinook. The 2024 count is less than the long-term average of 2,610 Chinook, but the camera was removed earlier in the year than typical, and it is likely that many adult Chinook have returned since removing the camera.