



State Water Resources Control Board
 Temporary Urgency Change Order (2/4/2021)
 Russian River Hydrologic Report
 April 16, 2021 - April 22, 2021

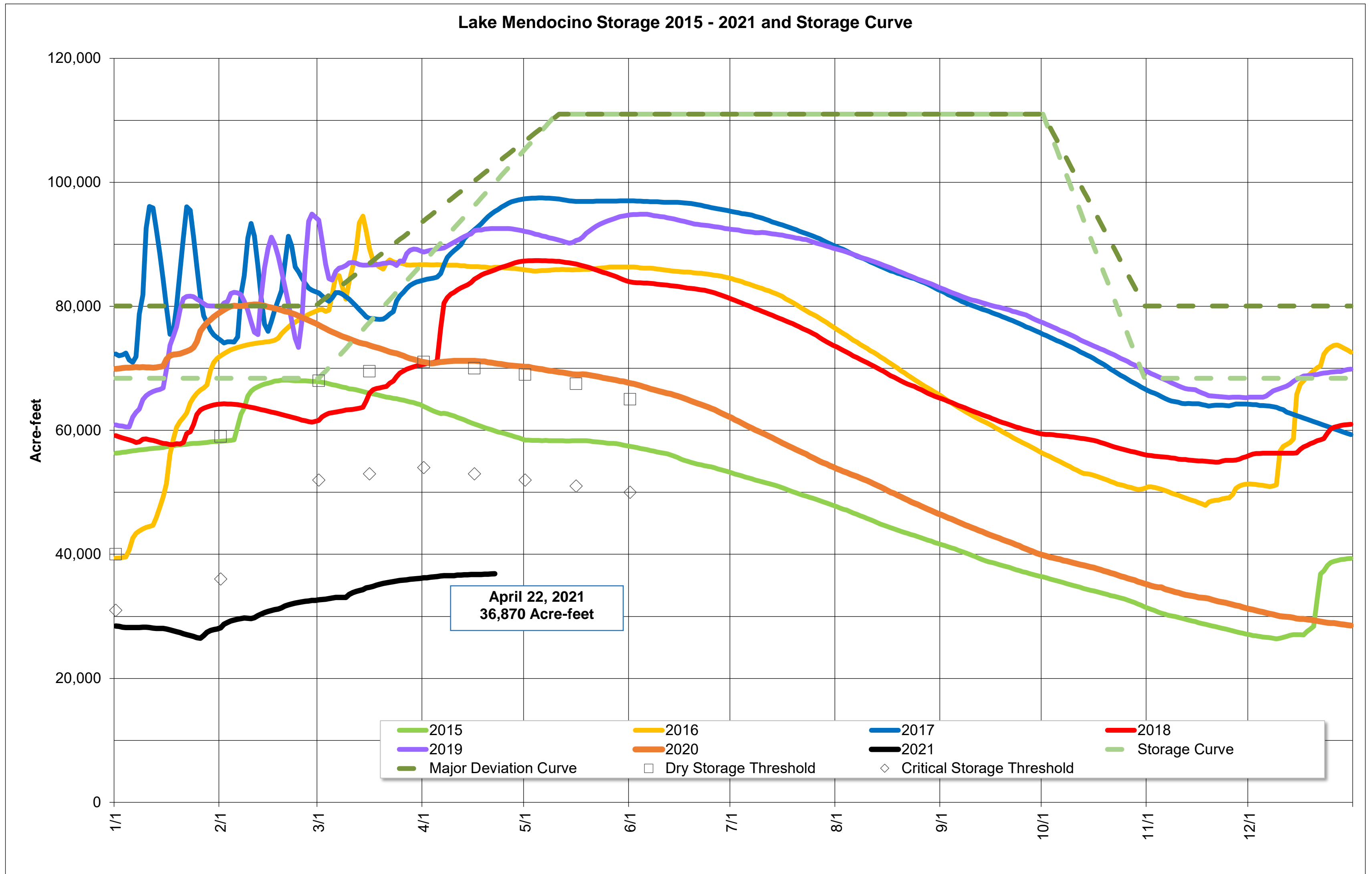
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A (Applications 12919A).

Instream Flow Requirements as of April 22, 2021

| Basis | Reach | Instantaneous (cfs) |
|----------------------------------------|---------------------|---------------------|
| Modified Per Order: Critical Condition | Upper Russian River | 25 |
| D-1610: Dry Condition | Dry Creek | 25 |
| D-1610: Dry Condition | Lower Russian River | 85 |

Upper Russian River based on criteria as established in the Order issued 2/4/2021 and amended 2/11/2021.

Lake Mendocino

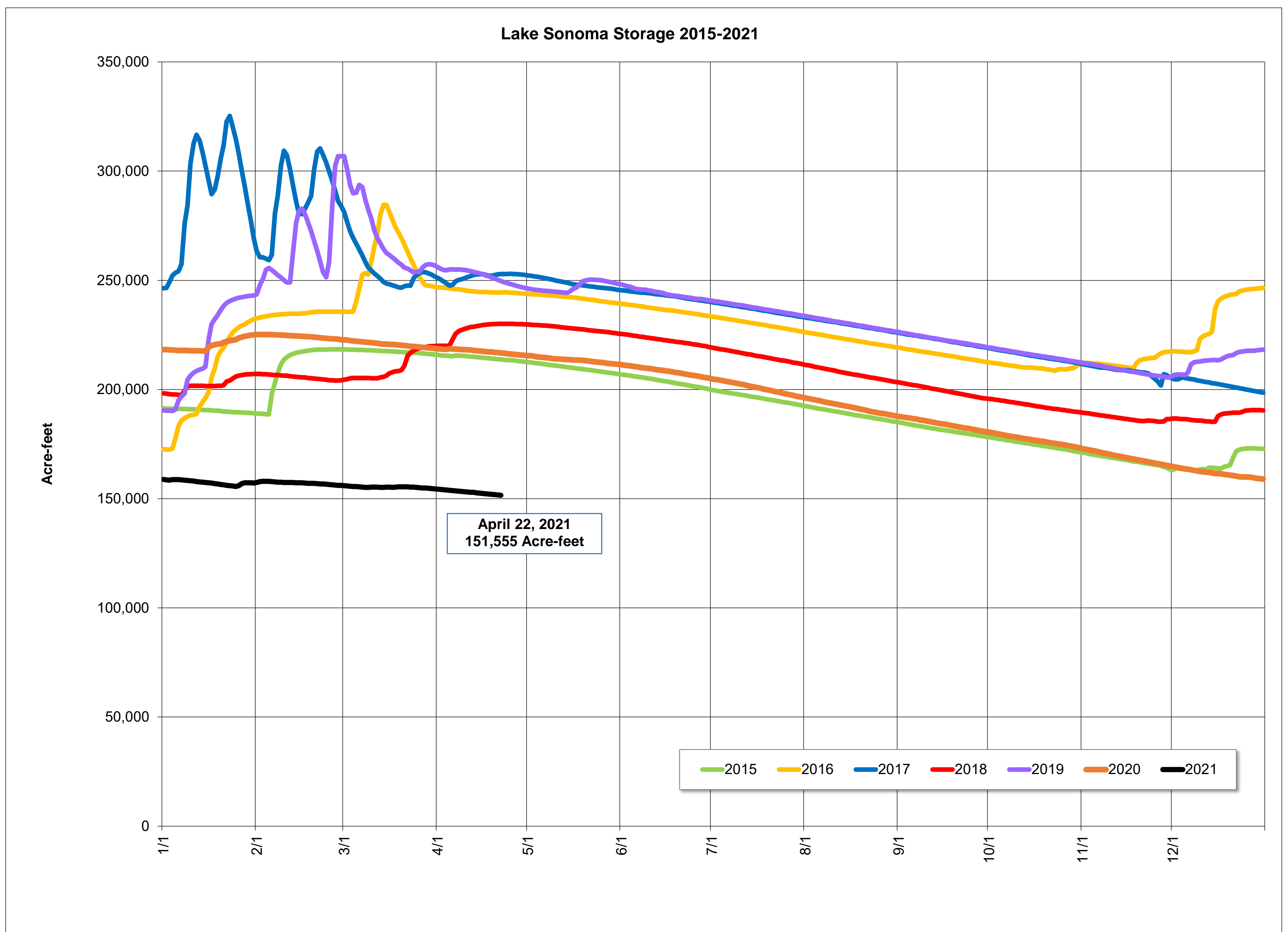


| | | | |
|-------------------------------|----------------|---------------|--------------------|
| Storage (acre-feet) | April 22, 2021 | 36,870 | |
| Change in Storage (acre-feet) | Last 30 days | Total | Average Daily Rate |
| | Last 7 days | 1,282 | 43 |
| Daily Inflow (cfs) | Last 7 days | Min | 36 |
| | | Max | 56 |
| | | Mean | 45 |
| Release (cfs) | Last 7 days | Min | 27 |
| | | Max | 29 |
| | | Mean | 28 |

Lake Sonoma



Nathan Baskett, March 3, 2021



| | | | |
|-------------------------------|----------------|---------|--------------------|
| Storage (acre-feet) | April 22, 2021 | 151,555 | |
| Change in Storage (acre-feet) | Last 30 days | Total | Average Daily Rate |
| | | -3,756 | -125 |
| | Last 7 days | -976 | -139 |
| Daily Inflow (cfs) | Last 7 days | Min | 0 |
| | | Max | 17 |
| | | Mean | 5 |
| Release (cfs) | Last 7 days | Min | 66 |
| | | Max | 66 |
| | | Mean | 66 |

Potter Valley Project

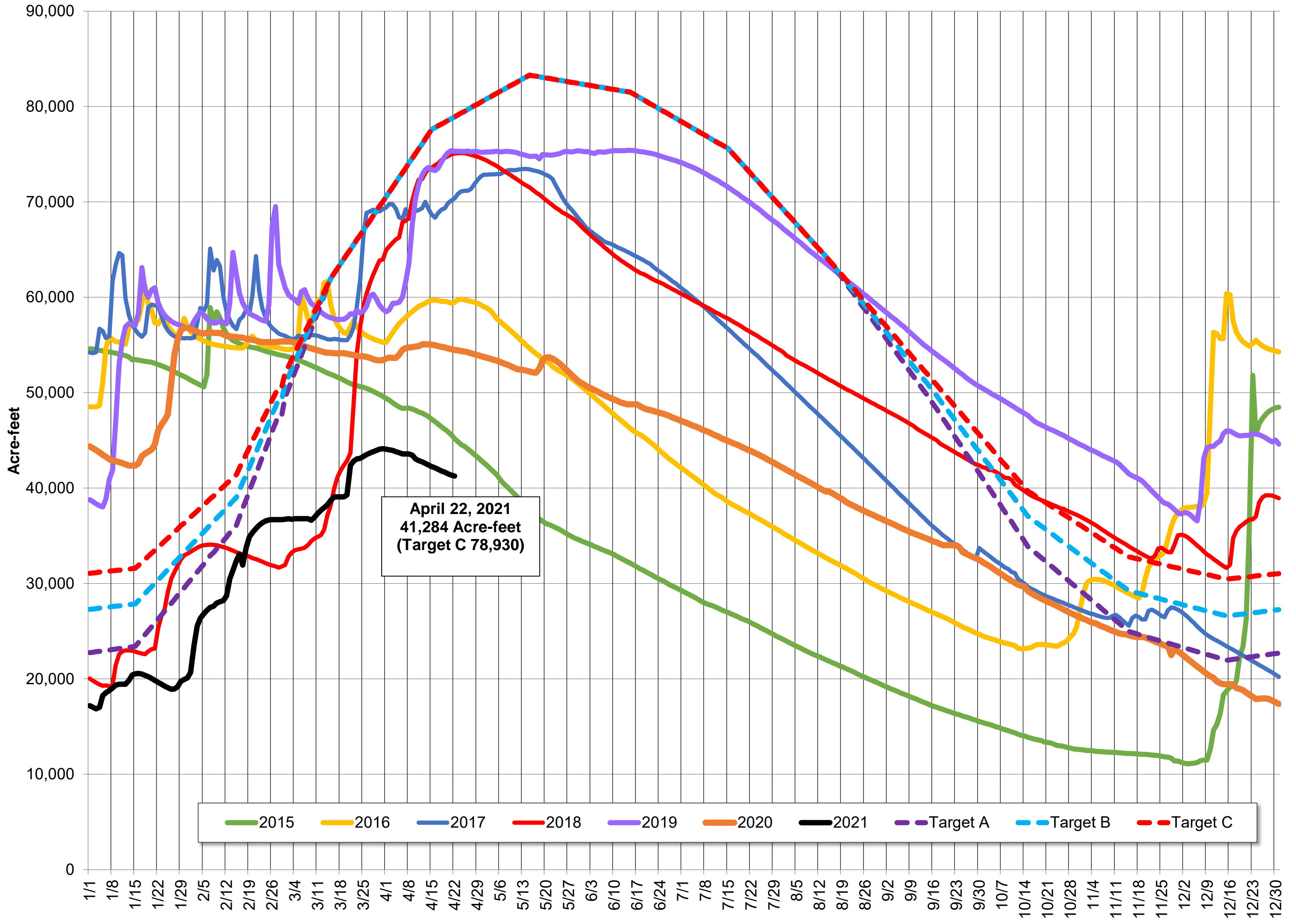
| | | |
|---------------------|----------------|----|
| PVP Diversion (cfs) | April 22, 2021 | 45 |
|---------------------|----------------|----|

Lake Pillsbury

| Parameter | Date Range | Cumulative | Daily Average |
|---------------------|----------------------------------|------------|---------------|
| Inflow* (acre-feet) | October 1, 2020 - April 22, 2021 | 81,684 | 402 |
| | Last 7 days | 1,732 | 247 |

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2015-2021 and Target Storage Scenarios

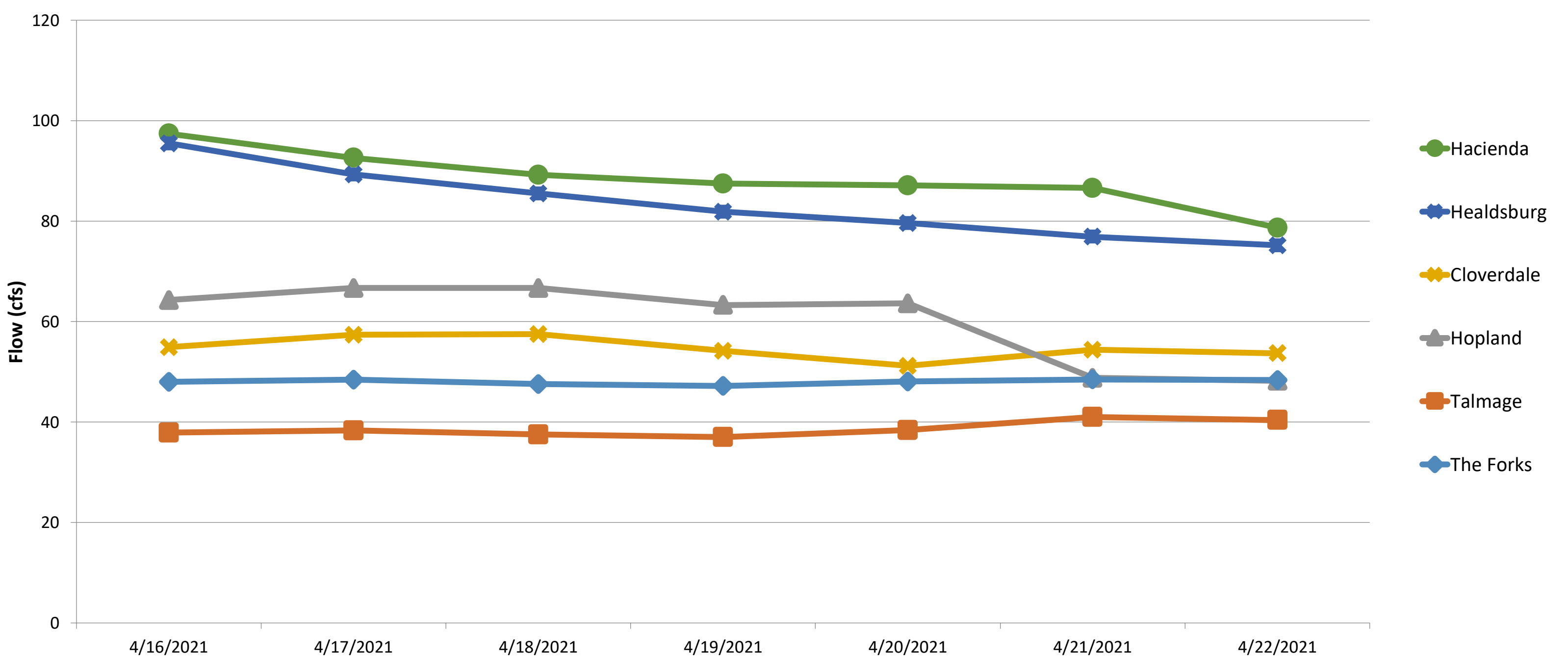


Russian River Flows (April 16 - April 22, 2021)

| Gage | 24-hr Average Flow (cfs) | | | | | | |
|-----------------------------|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | Apr 16, 2021 | Apr 17, 2021 | Apr 18, 2021 | Apr 19, 2021 | Apr 20, 2021 | Apr 21, 2021 | Apr 22, 2021 |
| The Forks* | 48 | 48 | 48 | 47 | 48 | 48 | 48 |
| Talmage USGS 11462080 | 38 | 38 | 38 | 37 | 38 | 41 | 40 |
| Hopland USGS 11462500 | 64 | 67 | 67 | 63 | 64 | 49 | 48 |
| Cloverdale USGS 11463000 | 55 | 57 | 58 | 54 | 51 | 54 | 54 |
| Healdsburg USGS 11464000 | 96 | 89 | 86 | 82 | 80 | 77 | 75 |
| Hacienda USGS 11467000 | 97 | 93 | 89 | 88 | 87 | 87 | 79 |

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

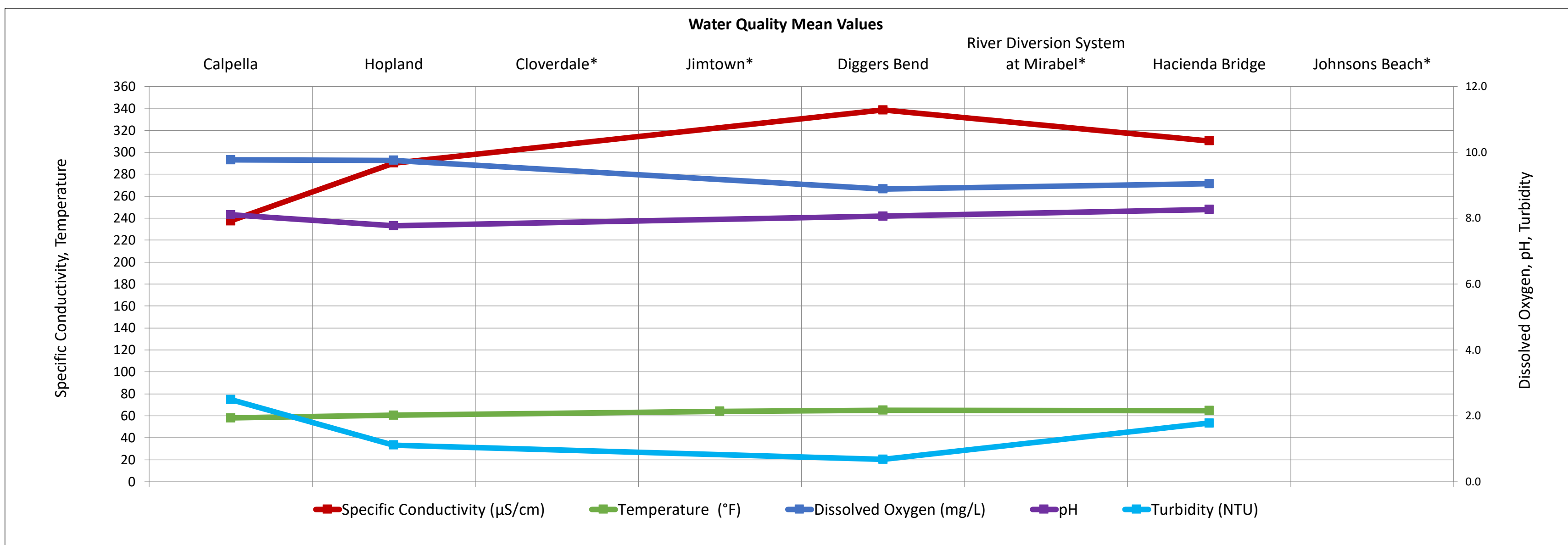
Russian River Flows



Russian River Water Quality (April 16 - April 22, 2021)

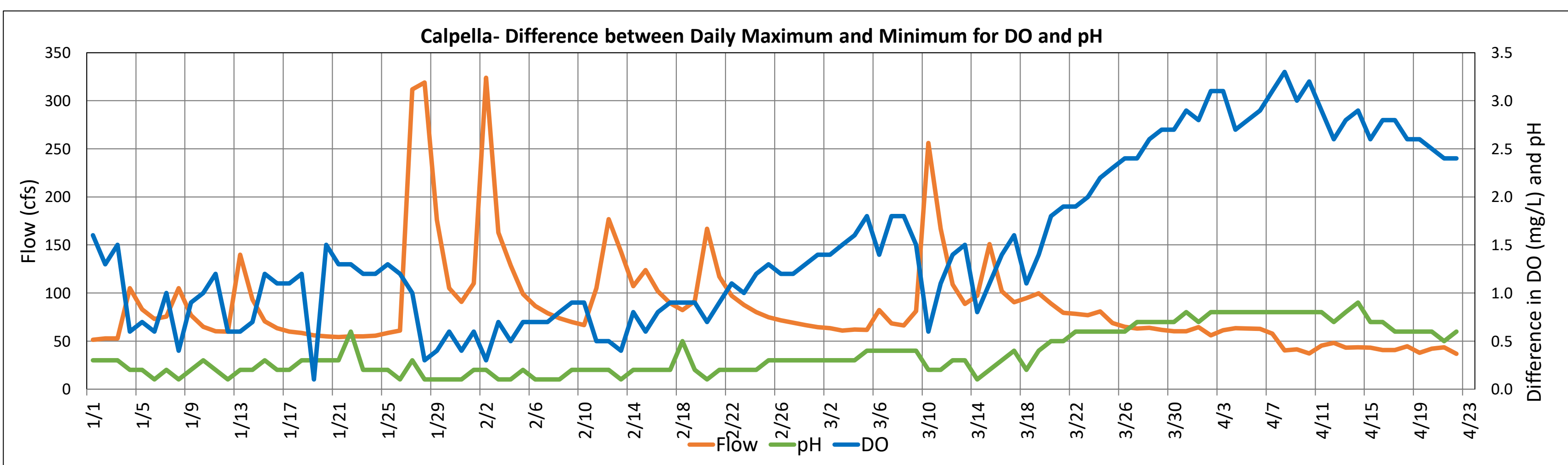
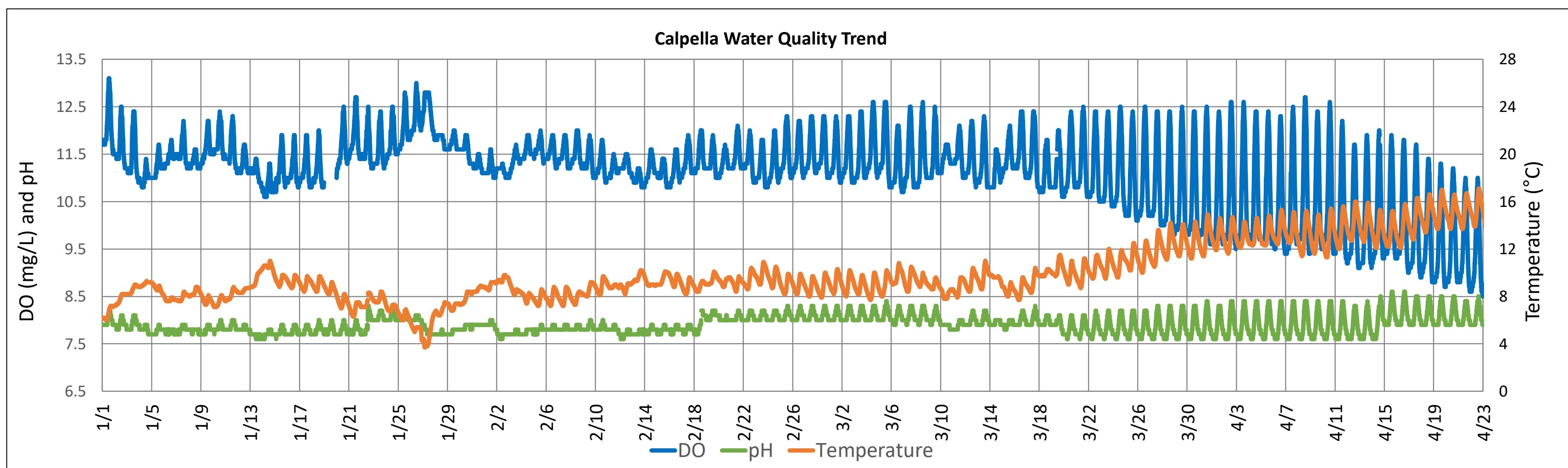
| Parameter | | Calpella | Hopland | Cloverdale* | Jimtown* | Diggers Bend | River Diversion System at Mirabel* | Hacienda Bridge | Johnsons Beach* |
|---------------------------------|------|---------------|---------------|---------------|---------------|---------------|------------------------------------|-----------------|-----------------|
| | | USGS 11461500 | USGS 11462500 | USGS 11463200 | USGS 11463682 | USGS 11463980 | SCWA | USGS 11467000 | SCWA |
| Temperature (°F) | Min | 53.8 | 56.1 | | 60.1 | 60.3 | | 60.4 | |
| | Max | 62.6 | 64.0 | | 69.3 | 70.7 | | 68.0 | |
| | Mean | 58.2 | 60.6 | | 64.1 | 65.1 | | 64.8 | |
| Specific Conductivity (µS/cm) | Min | 232 | 284 | | | 335 | | 306 | |
| | Max | 242 | 294 | | | 344 | | 313 | |
| | Mean | 238 | 290 | | | 339 | | 310 | |
| Dissolved Oxygen (mg/L) | Min | 8.6 | 7.3 | | | 6.9 | | 7.6 | |
| | Max | 11.9 | 13.6 | | | 10.6 | | 10.6 | |
| | Mean | 9.8 | 9.8 | | | 8.9 | | 9.0 | |
| Dissolved Oxygen (% Saturation) | Min | 80 | 69 | | | 68 | | 75 | |
| | Max | 123 | 141 | | | 119 | | 117 | |
| | Mean | 95 | 97 | | | 94 | | 96 | |
| pH | Min | 7.9 | 7.4 | | | 7.8 | | 7.9 | |
| | Max | 8.6 | 8.4 | | | 8.4 | | 9.0 | |
| | Mean | 8.1 | 7.8 | | | 8.1 | | 8.3 | |
| Turbidity (NTU) | Min | 1.8 | 0.6 | | | 0.2 | | 0.7 | |
| | Max | 7.0 | 4.6 | | | 2.1 | | 3.5 | |
| | Mean | 2.5 | 1.1 | | | 0.7 | | 1.8 | |

*Station operated seasonally



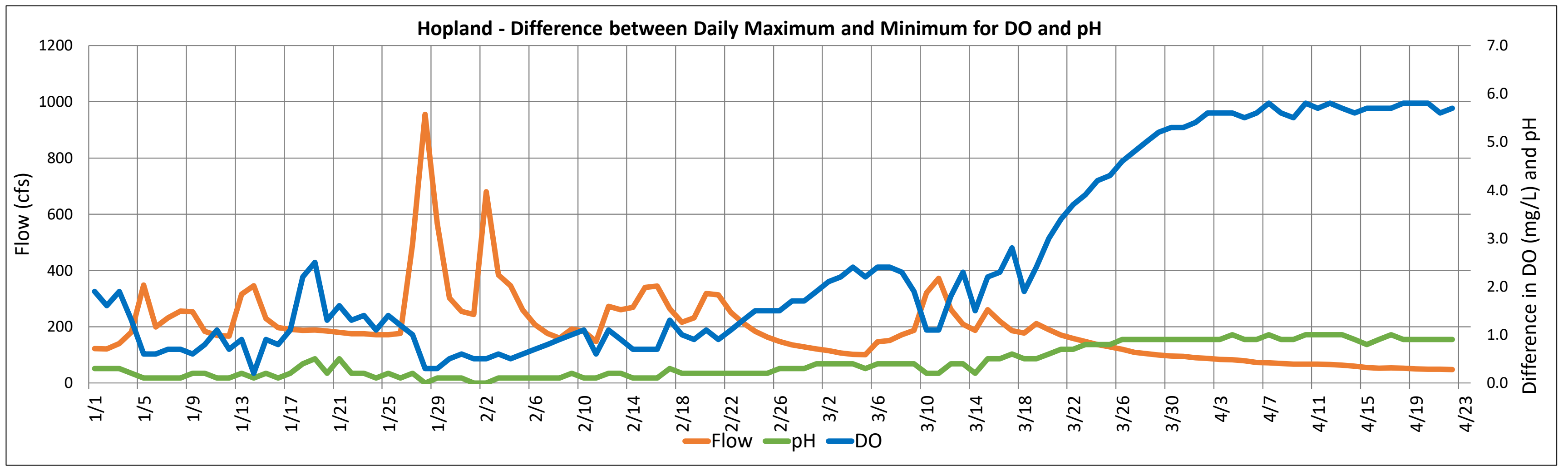
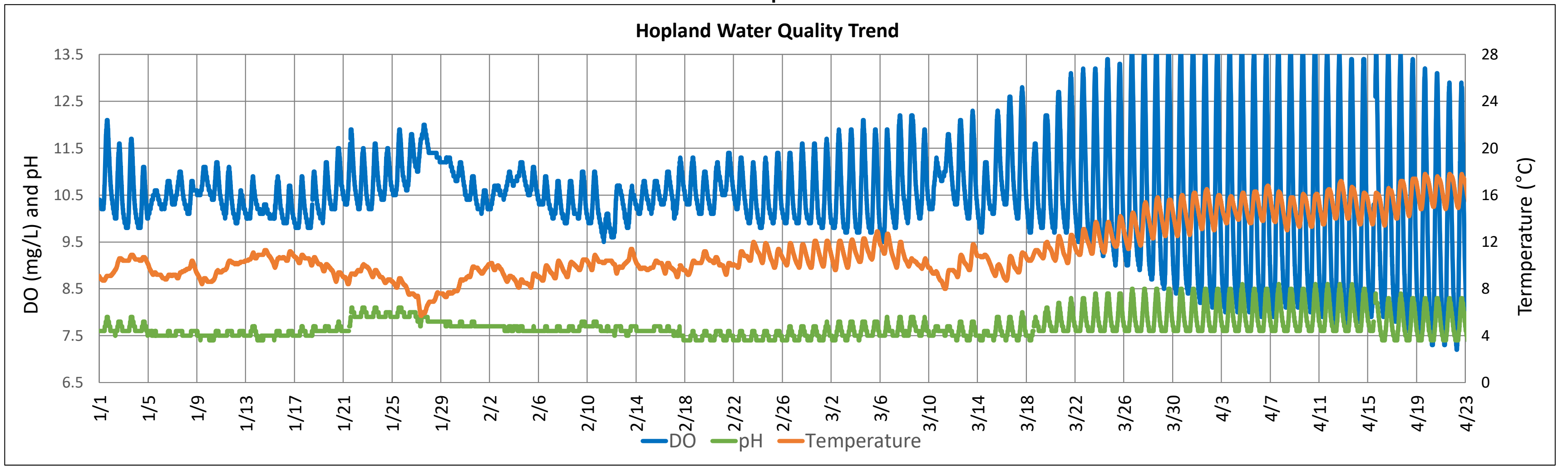
Russian River Water Quality (January 1 - April 22, 2021)

Calpella (East Fork Russian River)

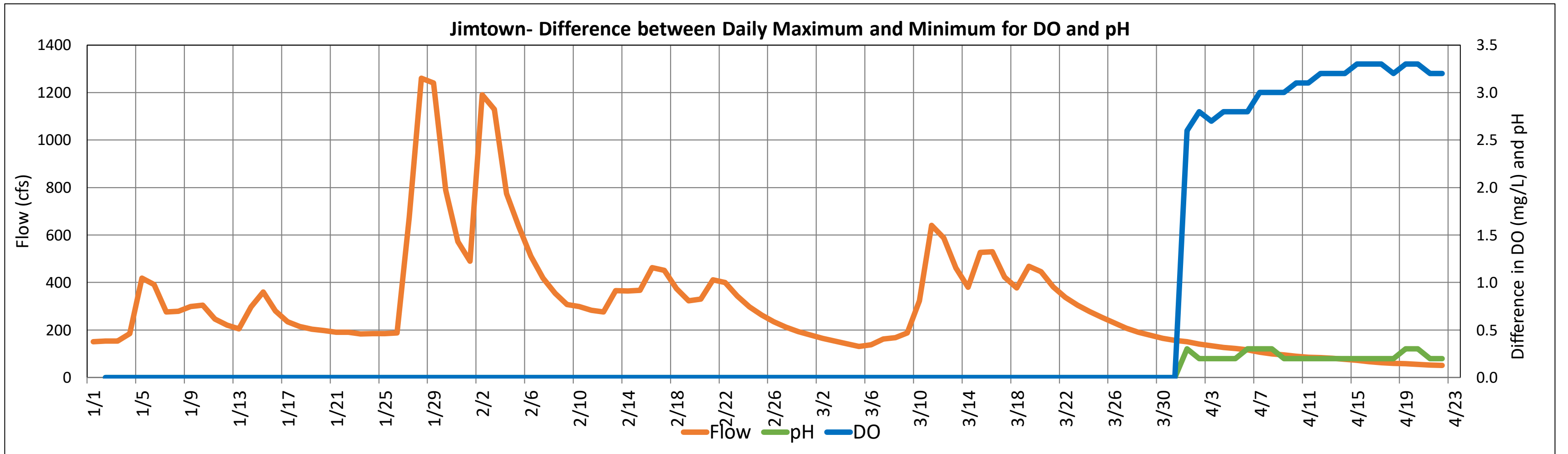
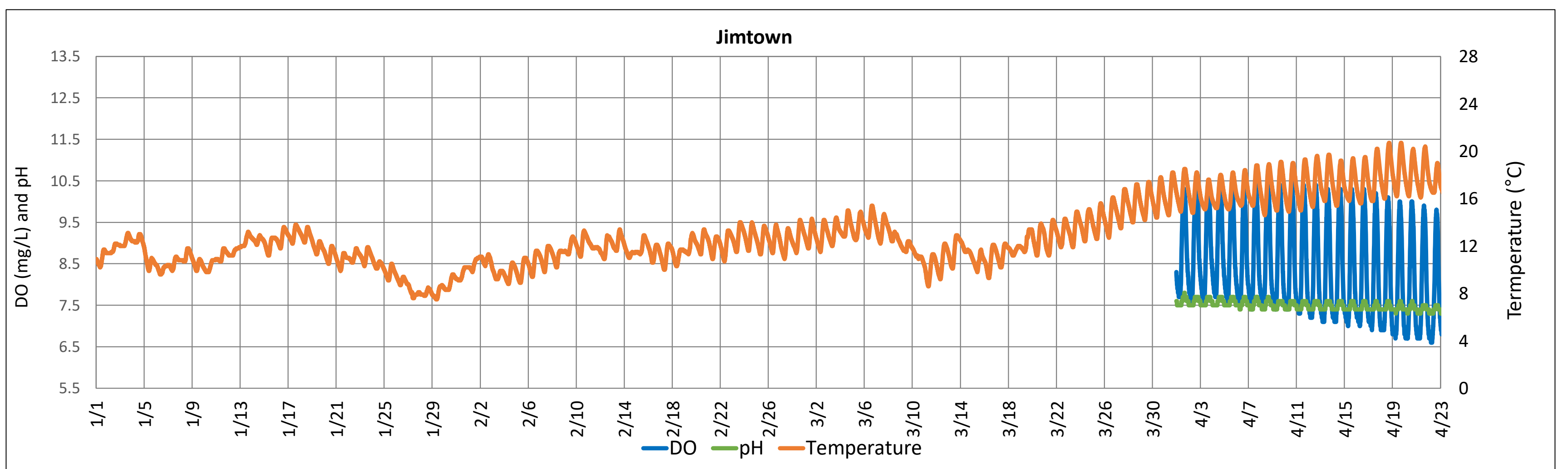


Russian River Water Quality (January 1 - April 22, 2021)

Hopland

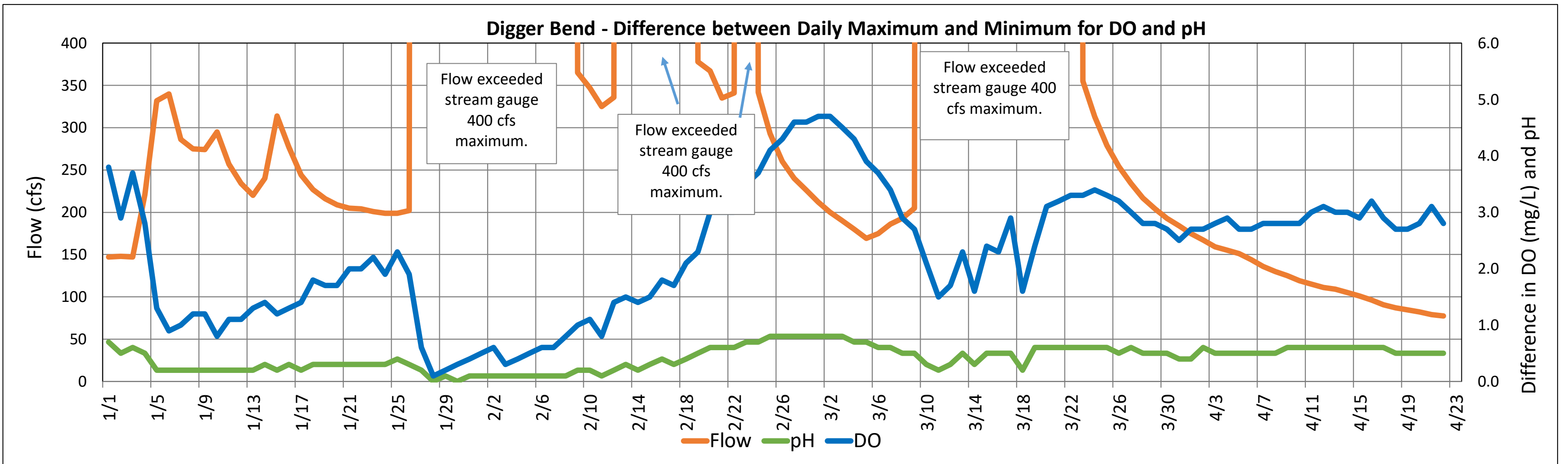
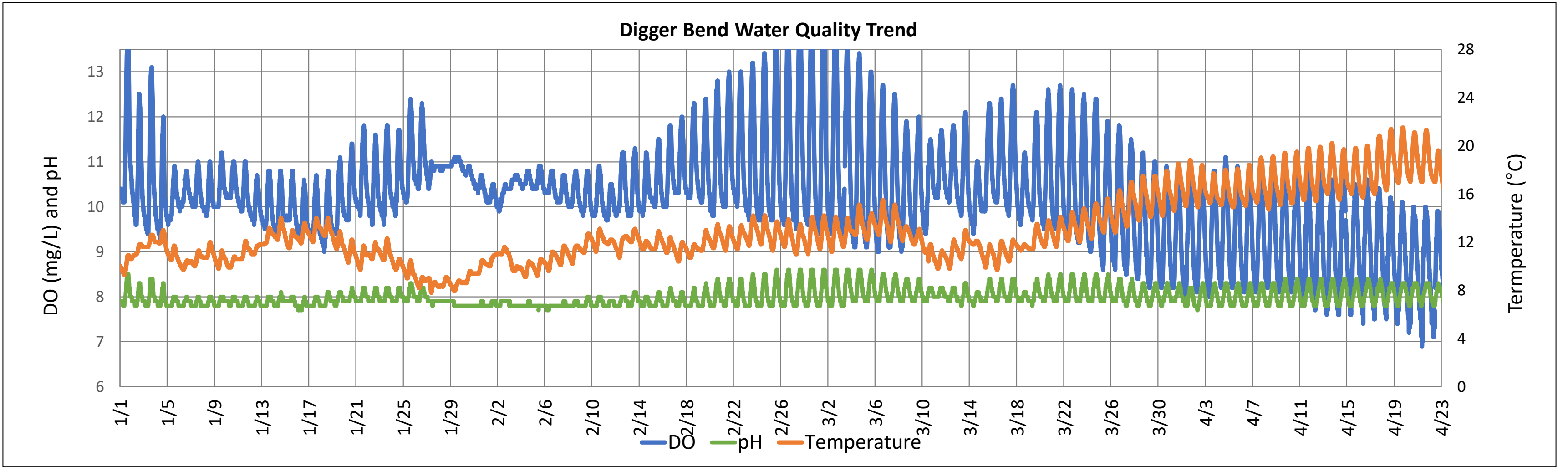


Jimtown Water Quality

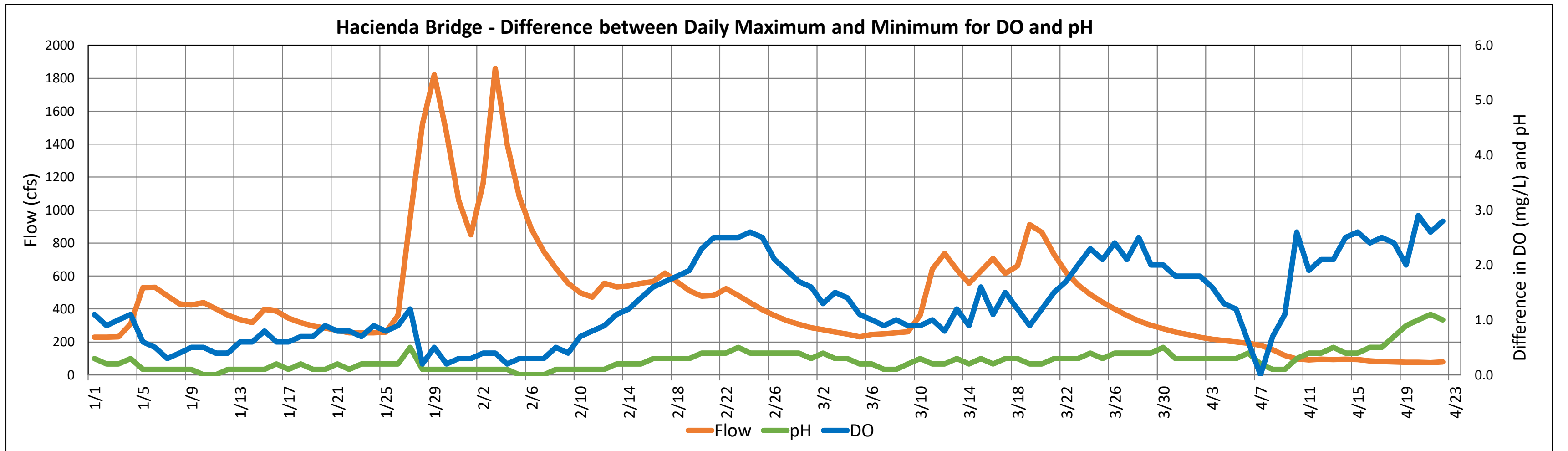
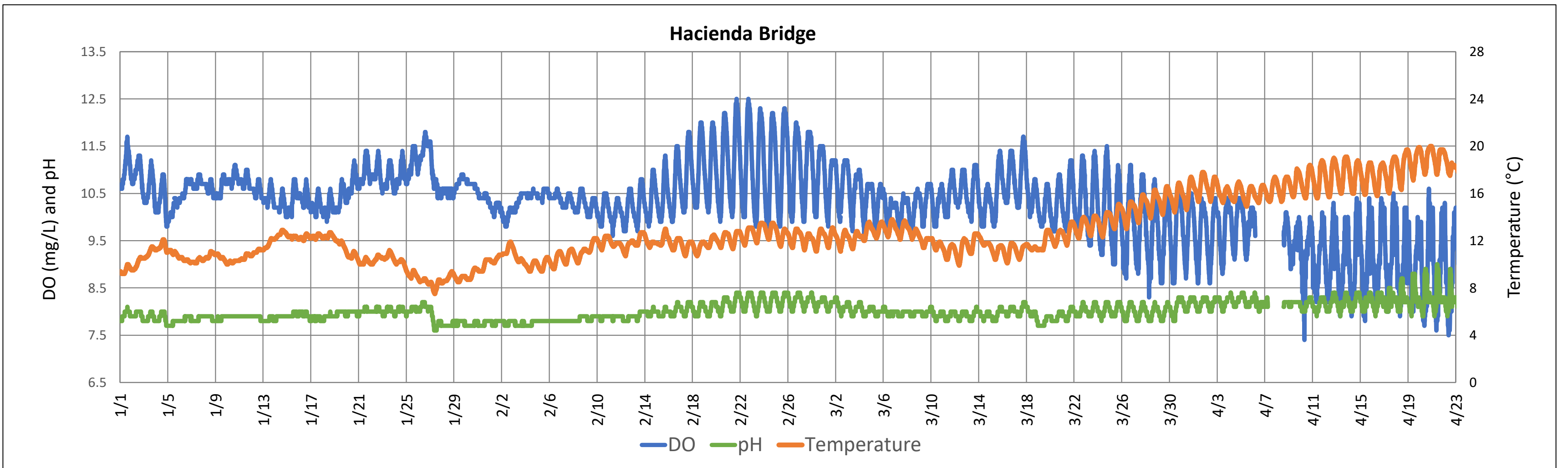


Russian River Water Quality (January 1 - April 22, 2021)

Digger Bend



Hacienda Bridge Water Quality



Russian River Fisheries Monitoring



Report on 4/22/21: Sonoma Water surveyed sites in the upper Russian River and in Dry Creek to collect information on spawning salmonids and their redds. In total 5 redds were observed in the upper reach of the Russian River and 4 redds were observed in the Alexander Valley reach of the Russian River. In Dry Creek, 1 adult steelhead and 2 redds were observed.

The Mirabel dam video monitoring station closed for the season on January 24, 2021, but Sonoma Water continues to review video that was collected earlier in the season. Video has been reviewed through January 19, on the west fish ladder at the Mirabel dam, and through January 24, on the east fish ladder. To date, 661 steelhead, 609 Chinook salmon, and 316 coho, as well as 64 salmonids that could not be identified to species have been observed.

Salmonid Count at Mirabel Fish Ladder

| Video camera location | Most recent footage reviewed | Species | Season total |
|-----------------------|------------------------------|-----------------------|--------------|
| East ladder | 1/24/2021 | Steelhead | 661 |
| West ladder | 1/26/2021 | Chinook | 609 |
| | | Coho | 316 |
| | | Unidentified Salmonid | 64 |

Salmonid Redd and Spawner Survey

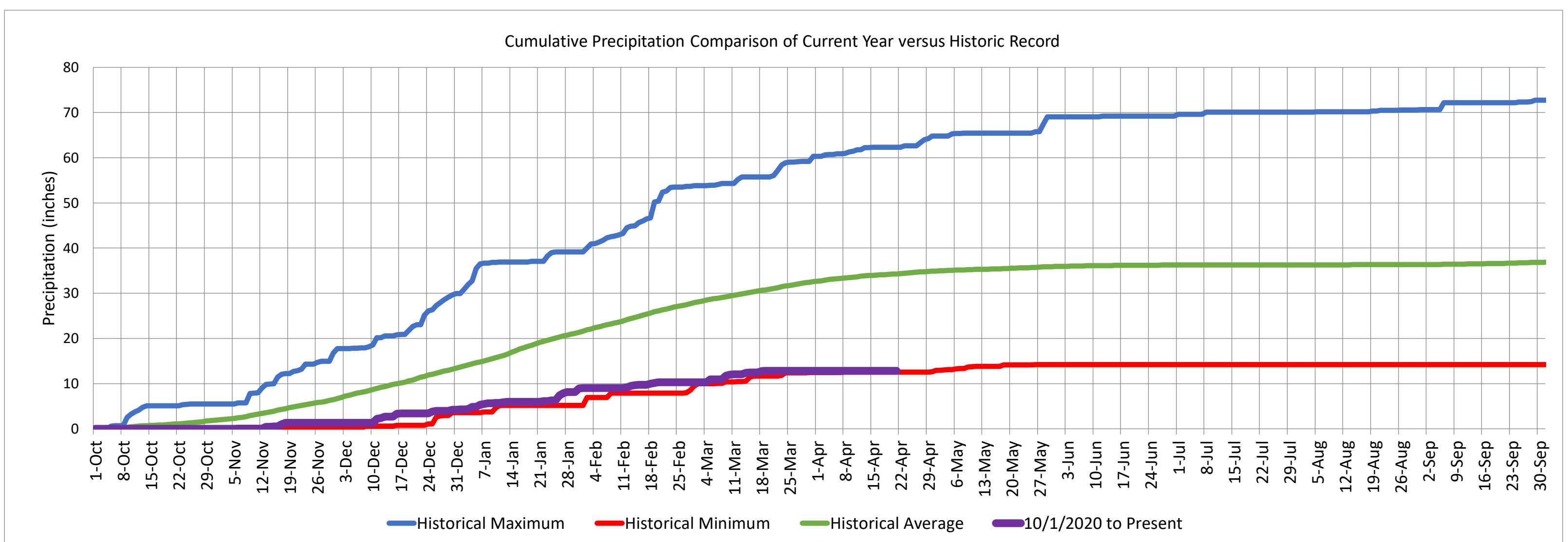
| Tributary | Reach | Number of Trips to Date | Earliest Survey Date | Previous Week Survey | Recent Survey Date |
|---------------|------------------|-------------------------|----------------------|----------------------|--------------------|
| Dry Creek | Dry Creek | 11 | 2/7/2021 | 4/11/2021 | 4/18/2021 |
| Russian River | Alexander Valley | 10 | 2/14/2021 | 4/11/2021 | 4/18/2021 |
| Russian River | Upper Mainstem | 10 | 2/14/2021 | 4/11/2021 | 4/18/2021 |

| Tributary | Reach | Previous Week's Survey | | | Recent Survey Date | | |
|---------------|------------------|------------------------|------------------|-------|--------------------|------------------|-------|
| | | Fish Species | | Redds | Fish Species | | Redds |
| | | Steelhead | Salmonid Species | | Steelhead | Salmonid Species | |
| Dry Creek | Dry Creek | 11 | 0 | 2 | 1 | 0 | 2 |
| Russian River | Alexander Valley | 2 | 0 | 0 | 0 | 0 | 4 |
| Russian River | Upper Mainstem | 4 | 0 | 10 | 0 | 0 | 5 |

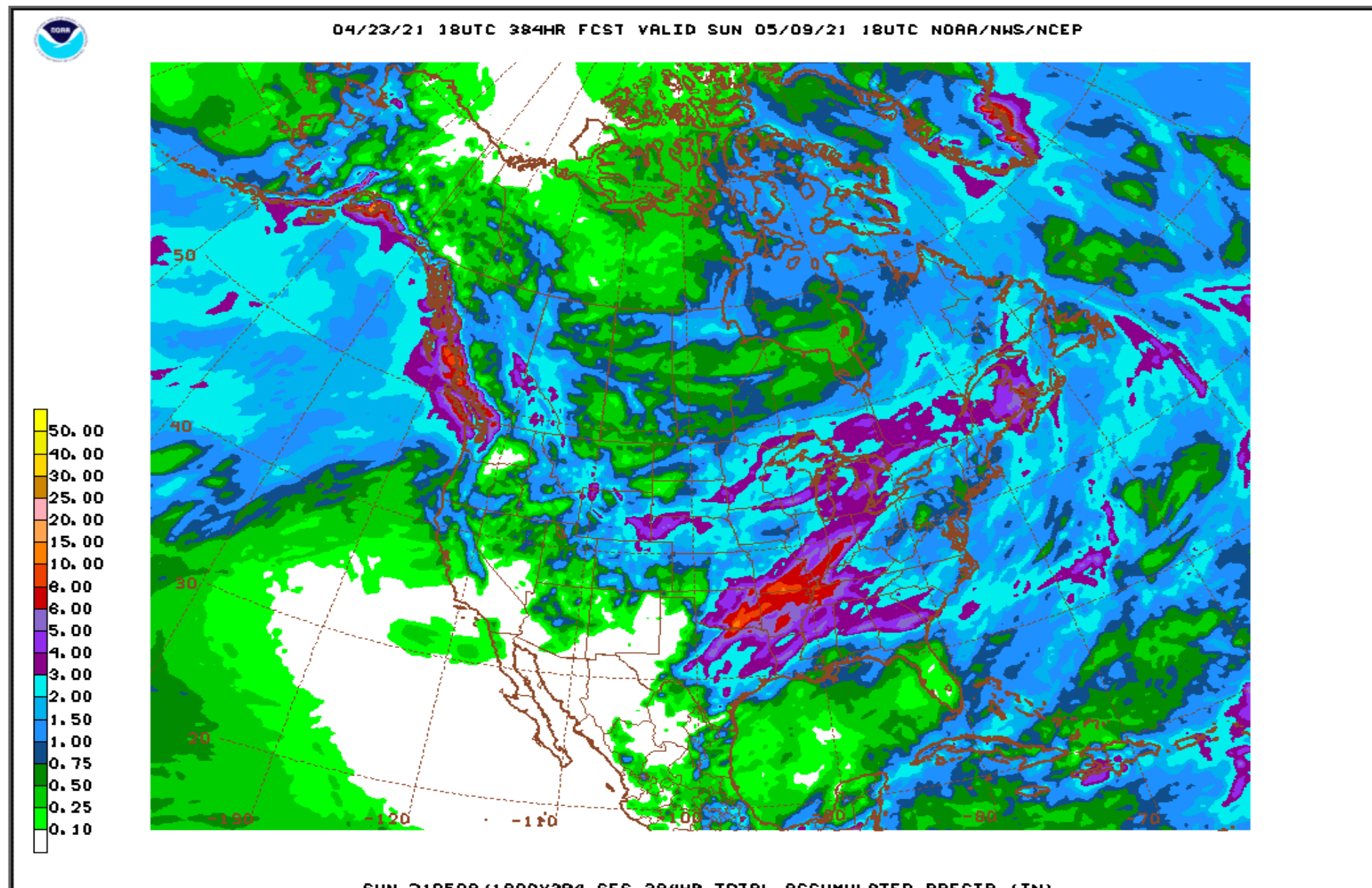
*Redd counts may include old redds that were observed in previous surveys.

Precipitation

| Ukiah Municipal Airport (WBAN: 72590523275 (KUKI)) | |
|----------------------------------------------------|---------------------|
| Date Range | Cumulative (inches) |
| Oct 1, 2020 - Apr 22, 2021 | 12.83 |
| Last 7 Days* | 0.00 |



Global Forecast System Model 16-day Cumulative Precipitation Forecast



| | |
|----------------------|--------------------------------|
| Date Range | Forecasted Cumulative (inches) |
| Apr 23 - May 8, 2021 | 0.5 |