



**State Water Resources Control Board
Temporary Urgency Change Order (2/4/2021)
Russian River Hydrologic Report
March 5, 2021 - March 11, 2021**

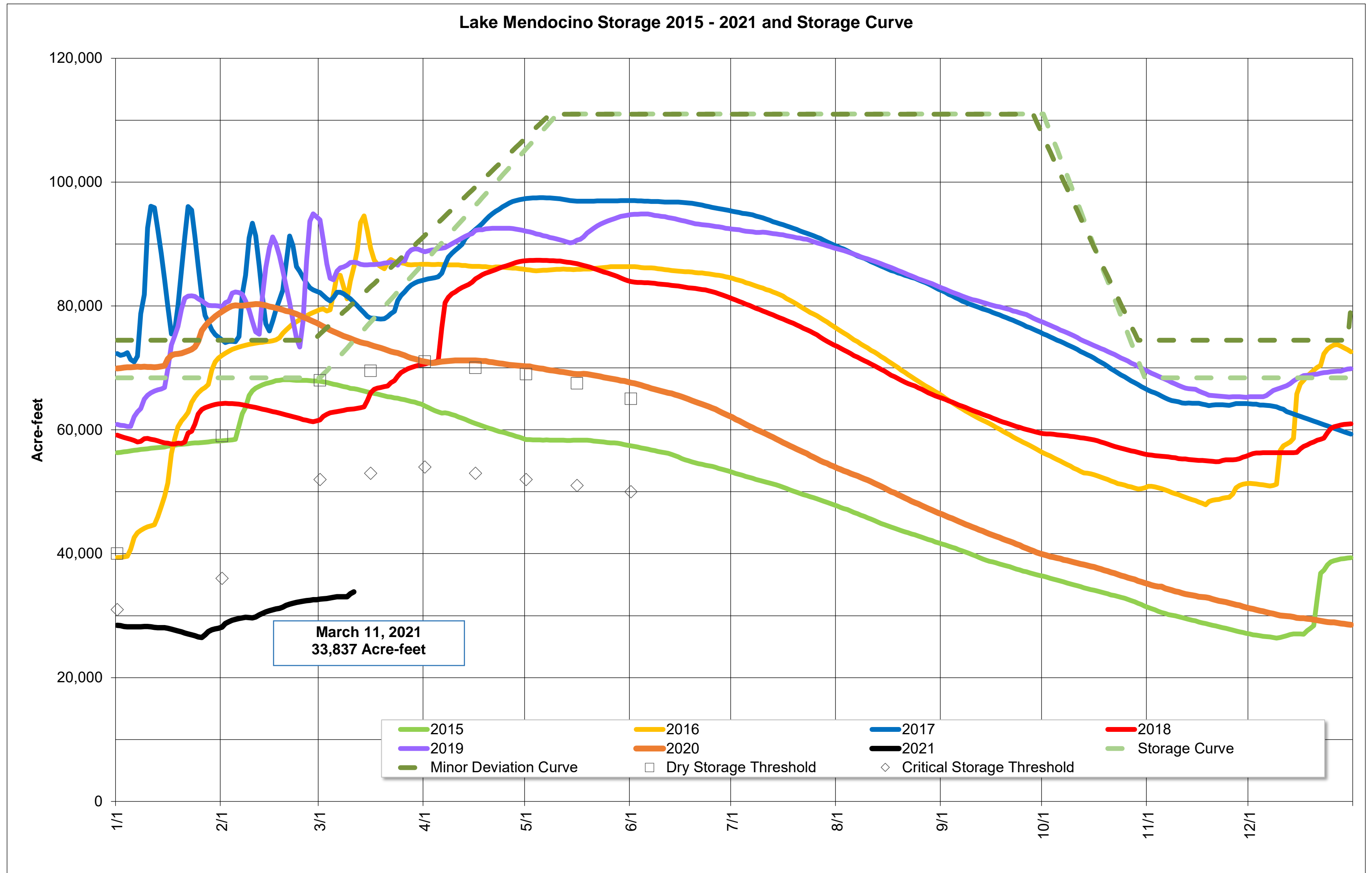
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A (Applications 12919A).

Instream Flow Requirements as of March 11, 2021

Basis	Reach	Instantaneous (cfs)
Modified Per Order: Critical Condition	Upper Russian River	25
D-1610: Dry Condition	Dry Creek	75
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)	March 11, 2021	33,837	
Change in Storage (acre-feet)	Last 30 days	4,175	139
	Last 7 days	987	141
Daily Inflow (cfs)	Last 7 days	Min	65
		Max	274
		Mean	121
Release (cfs)	Last 7 days	Min	27
		Max	102
		Mean	51

Release Flow Change Ramping Rates : Approved Adjusted Rates Event

Requested: 3/1/2021

Purpose: California Department of Fish and Wildlife (CDFW) and National Marine Fisheries Service (NMFS) has requested the discharge from Coyote Valley Dam be increased from 25 cfs to 100 cfs to facilitate the second and final release of steelhead smolts from the Coyote Valley Fish Facility. The increase in discharge is necessary to volitionally push the smolts out into the river to reduce the risk of predation.

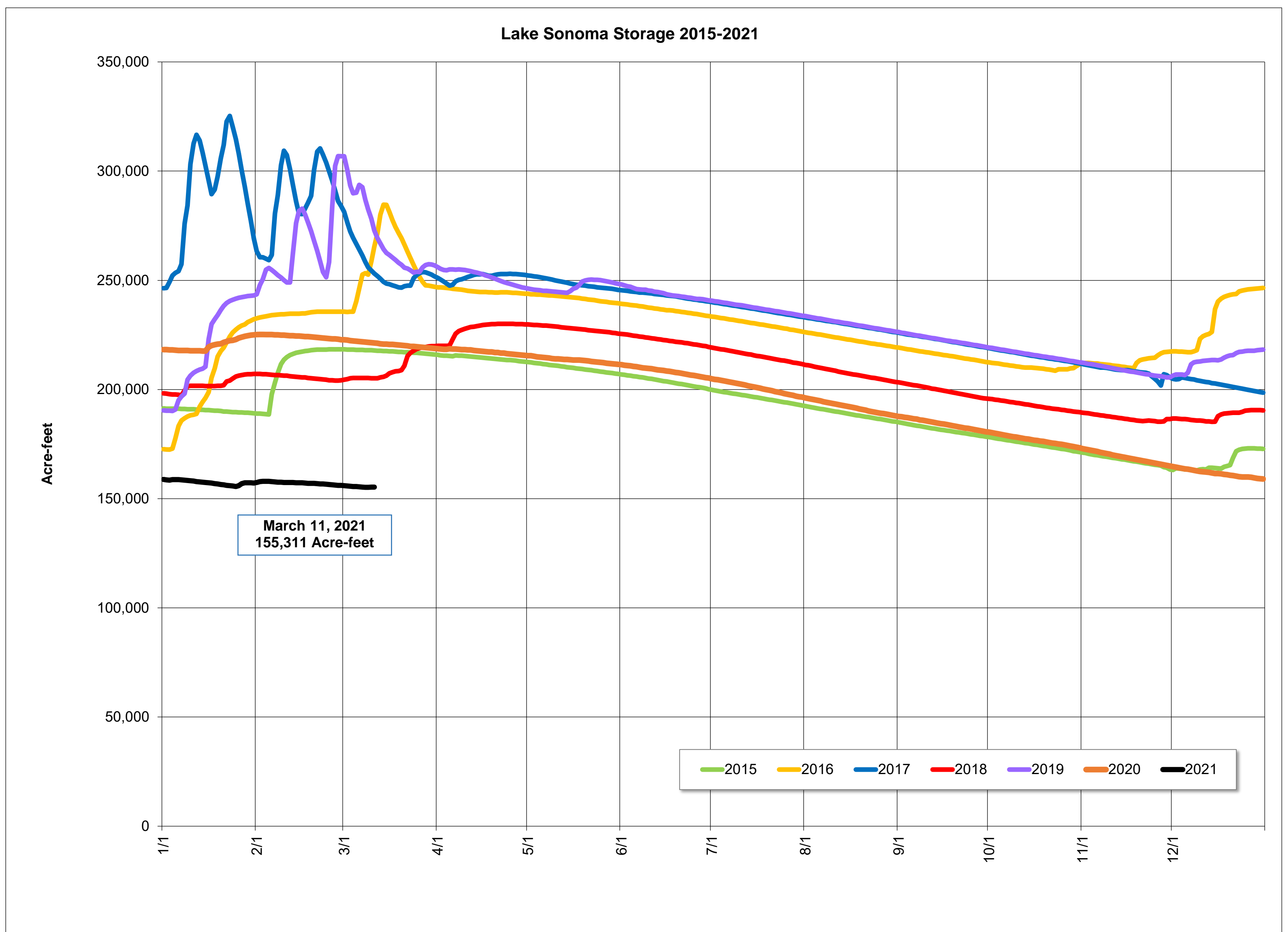
Consultation: Staff from Sonoma Water, CDFW and NMFS met on February 26th to discuss the smolt release and associated ramping schedule in light of the very low storage levels in Lake Mendocino. Based on that discussion, Sonoma Water, CDFW and NMFS agreed on the ramping schedule shown below starting on or around March 13th. On March 4th, CDFQ requested the flow changes to occur as soon as possible due to the Coyote Valley Fish Facility experiencing operation challenges. Flow increases will occur incrementally following a ramping rate of 25 cfs per hour. Flow decreases will follow a ramping rate of 25 cfs every eight hours.

Date	Time	Δ cfs	New Set Point (cfs)
7-Mar	9:00 AM	+25	50
7-Mar	10:00 AM	+25	75
7-Mar	11:00 AM	+25	100
9-Mar	12:00 PM	-25	75
9-Mar	8:00 PM	-25	50
10-Mar	4:00 AM	-25	25

Lake Sonoma



Nathan Baskett, March 3, 2021



Storage (acre-feet)	March 11, 2021	155,311	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
		-2,087	-70
	Last 7 days	-214	-31
Daily Inflow (cfs)	Last 7 days	Min	2
		Max	117
		Mean	55
Release (cfs)	Last 7 days	Min	75
		Max	78
		Mean	75

Potter Valley Project

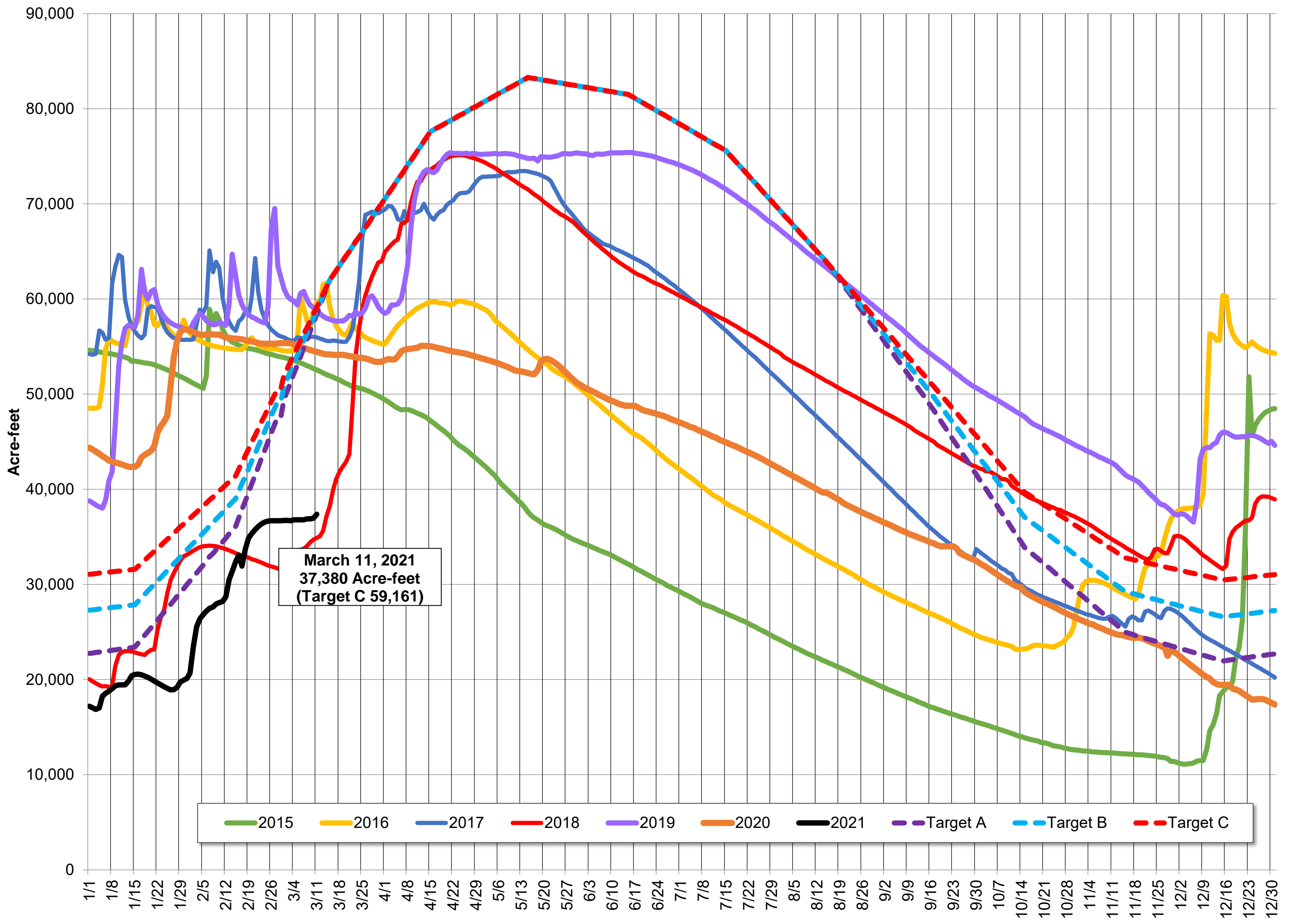
PVP Diversion (cfs)	March 11, 2021	47
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Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2020 - March 11, 2021	56,554	351
	Last 7 days	3,578	511

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2015-2021 and Target Storage Scenarios

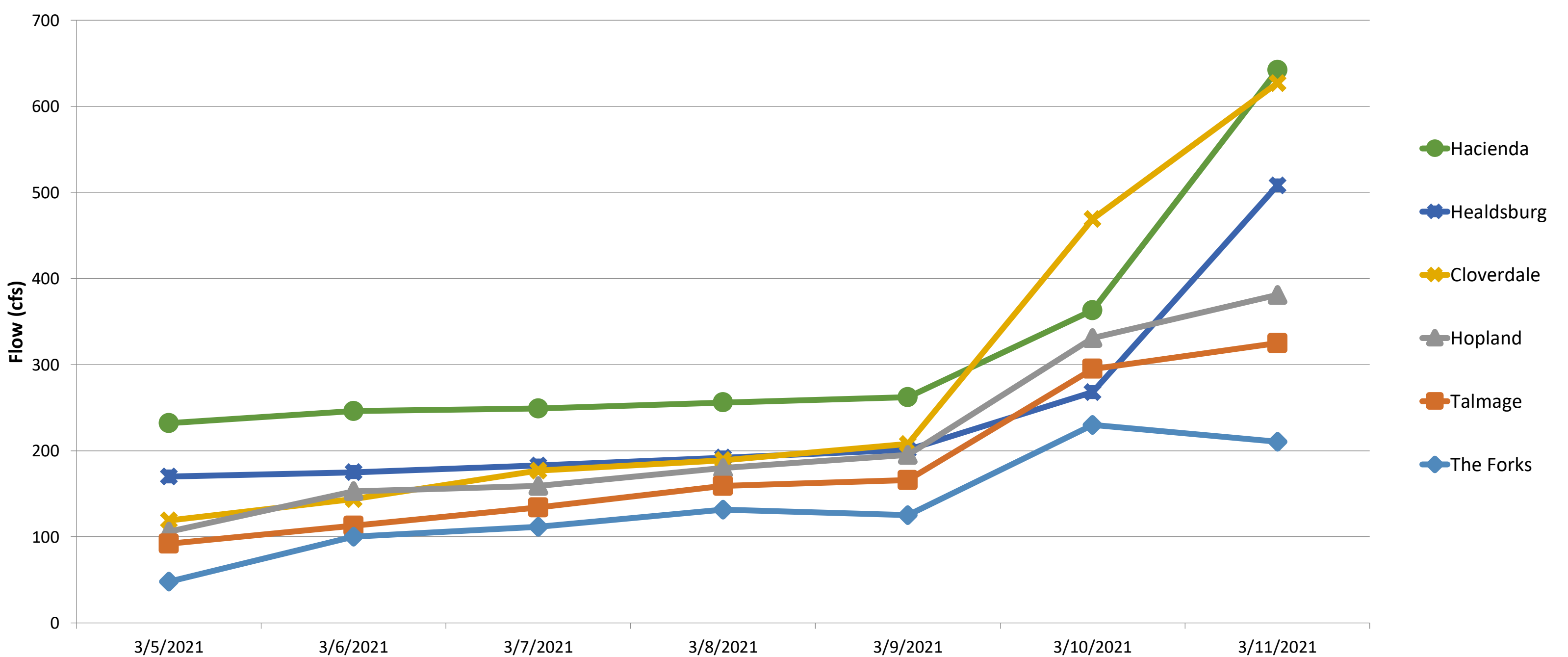


Russian River Flows (March 5 - March 11, 2021)

Gage	24-hr Average Flow (cfs)						
	Mar 5, 2021	Mar 6, 2021	Mar 7, 2021	Mar 8, 2021	Mar 9, 2021	Mar 10, 2021	Mar 11, 2021
The Forks*	48	100	112	131	125	230	210
Talmage USGS 11462080	92	113	134	159	166	295	325
Hopland USGS 11462500	106	153	159	180	195	331	381
Cloverdale USGS 11463000	119	144	177	189	208	469	627
Healdsburg USGS 11464000	170	175	183	192	201	268	508
Hacienda USGS 11467000	232	246	249	256	262	363	642

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

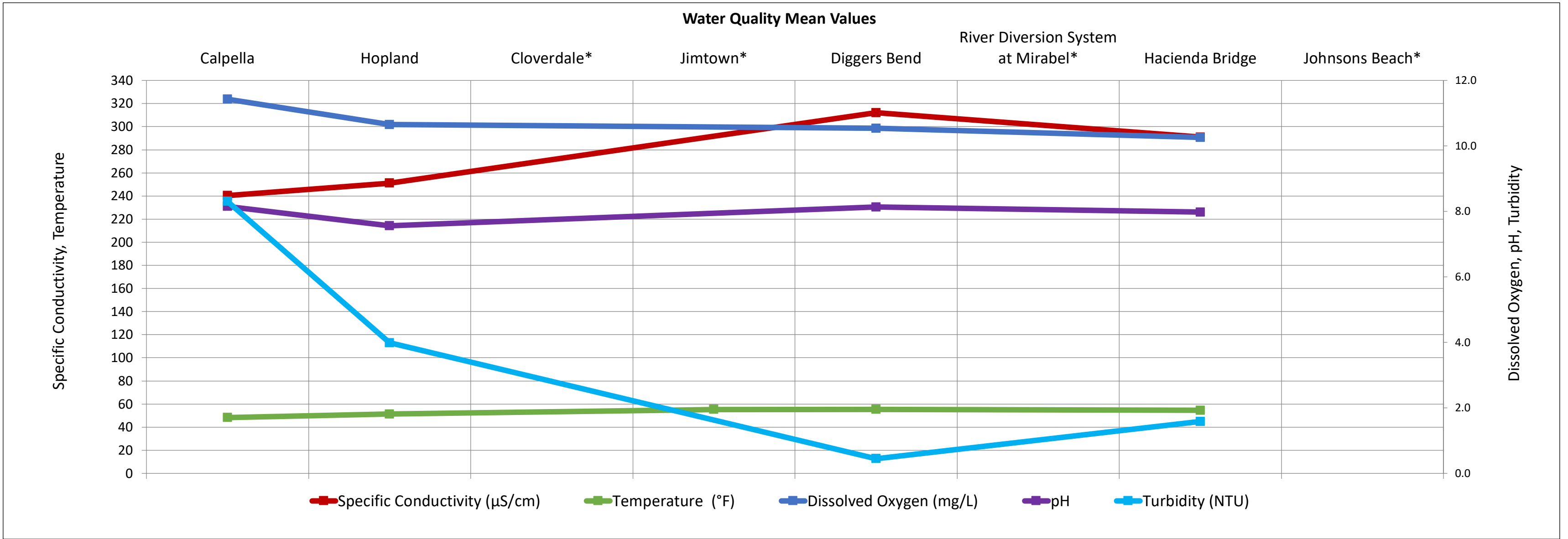
Russian River Flows



Russian River Water Quality (March 5 - March 11, 2021)

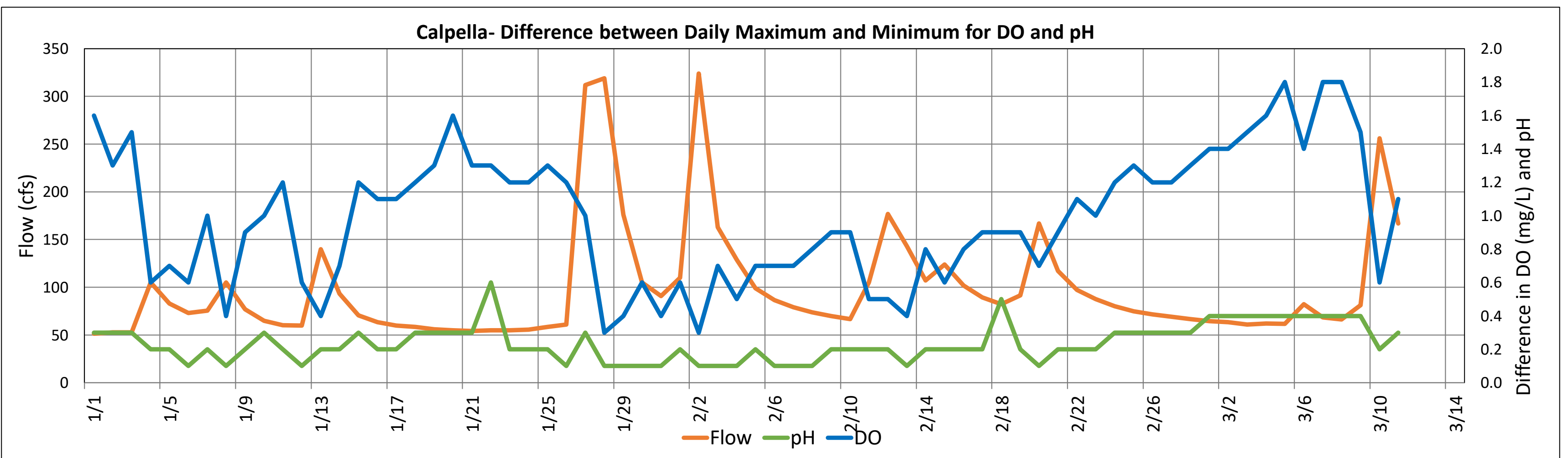
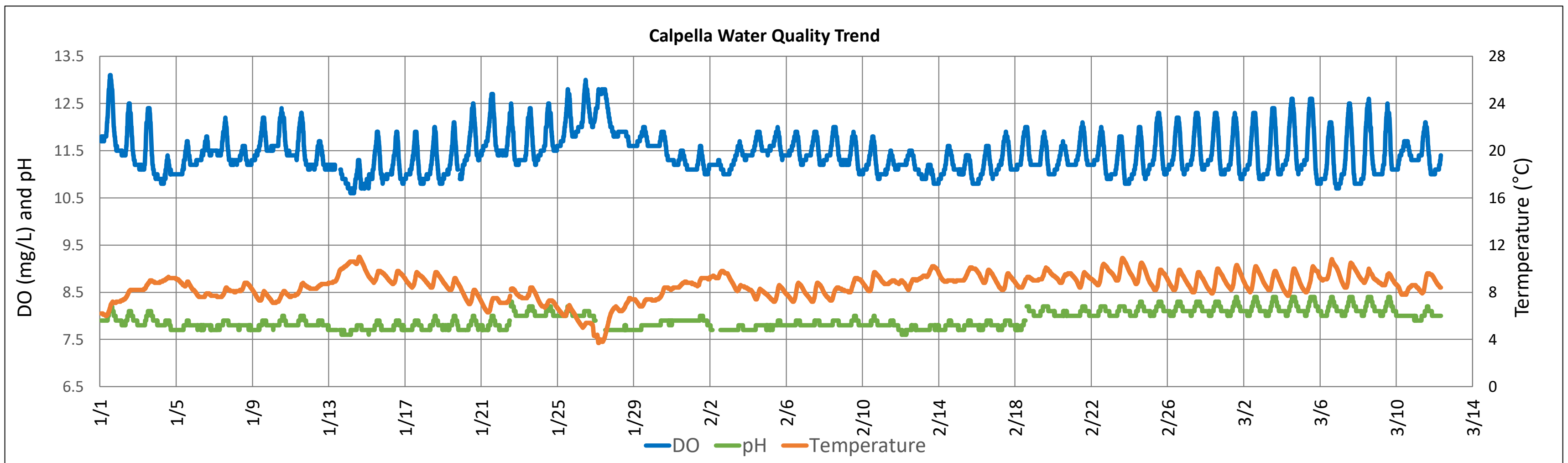
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	45.9	47.7		50.9	50.7		52.2	
	Max	51.4	55.2		59.7	59.9		56.8	
	Mean	48.3	51.4		55.3	55.4		54.7	
Specific Conductivity (µS/cm)	Min	198	200			290		280	
	Max	258	275			320		304	
	Mean	240	251			312		291	
Dissolved Oxygen (mg/L)	Min	10.7	9.5			9.0		9.6	
	Max	12.6	12.2			13.4		11.0	
	Mean	11.4	10.7			10.5		10.3	
Dissolved Oxygen (% Saturation)	Min	88	80			80		87	
	Max	112	113			133		104	
	Mean	99	94			98		95	
pH	Min	7.9	7.4			7.9		7.8	
	Max	8.4	7.8			8.6		8.2	
	Mean	8.2	7.6			8.1		8.0	
Turbidity (NTU)	Min	1.0	0.9			0.1		0.9	
	Max	69.9	17.0			3.5		3.2	
	Mean	8.3	4.0			0.4		1.6	

*Station operated seasonally



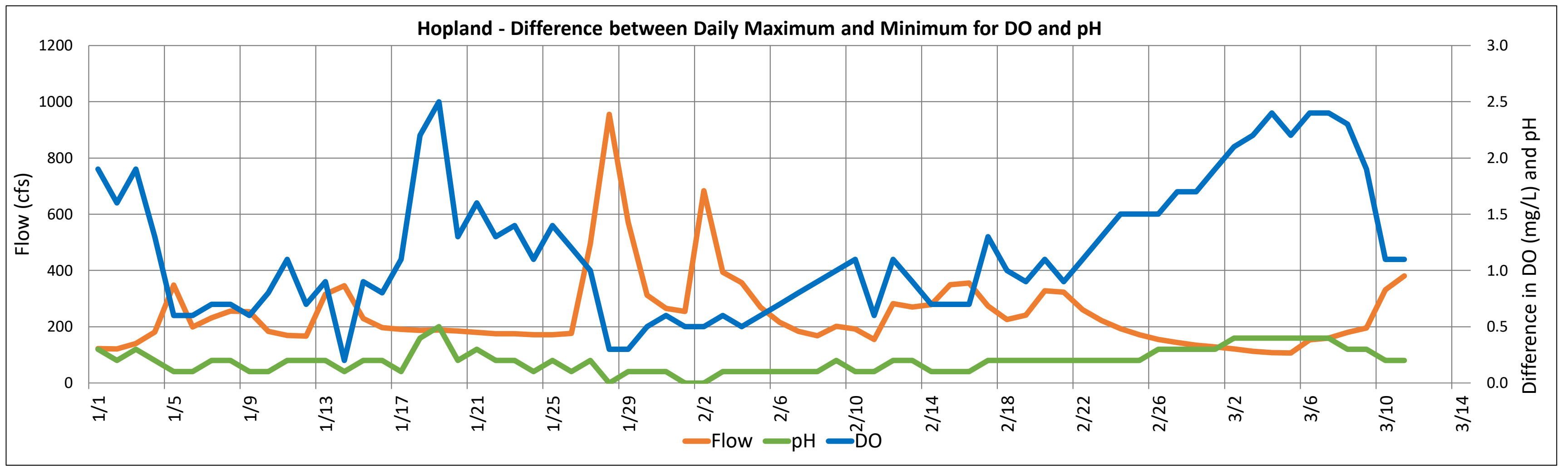
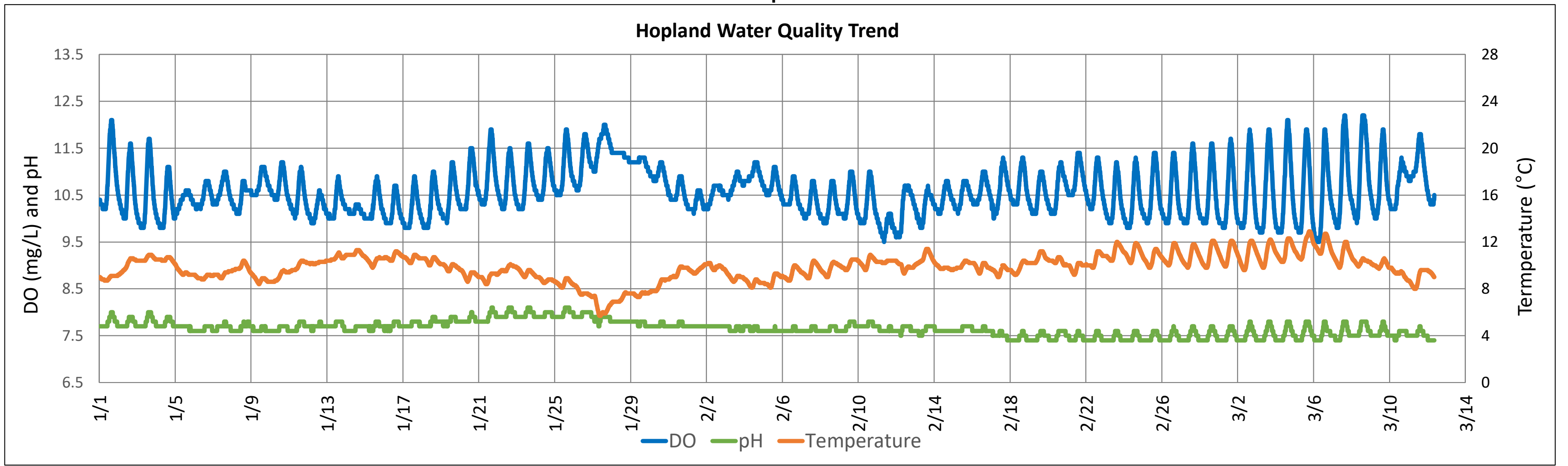
Russian River Water Quality (January 1 - March 11, 2021)

Calpella (East Fork Russian River)

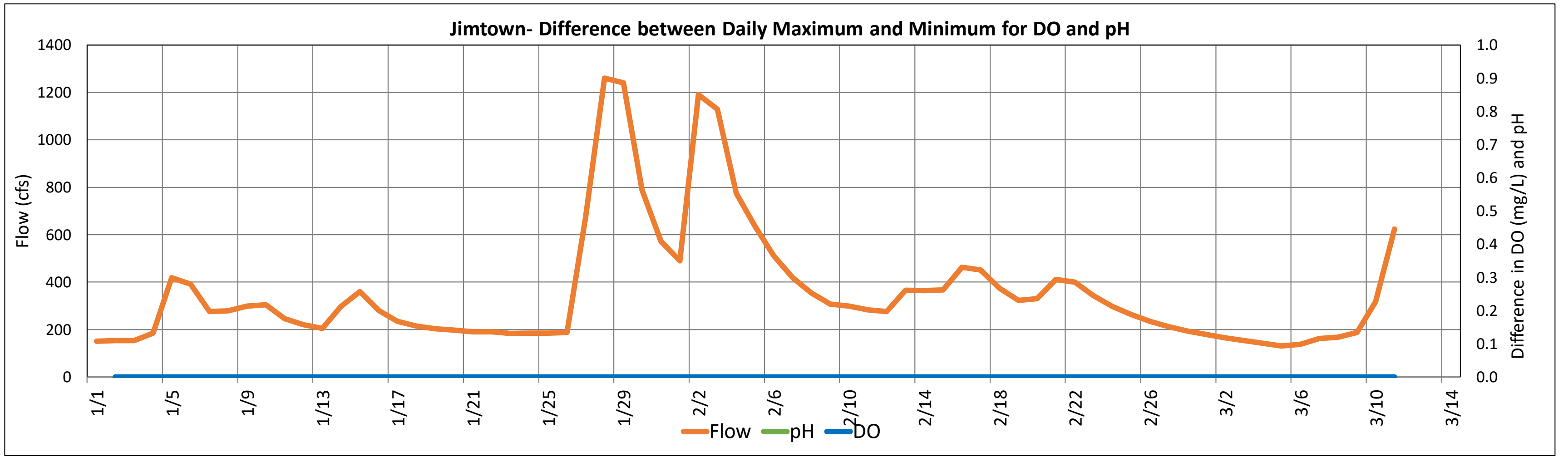
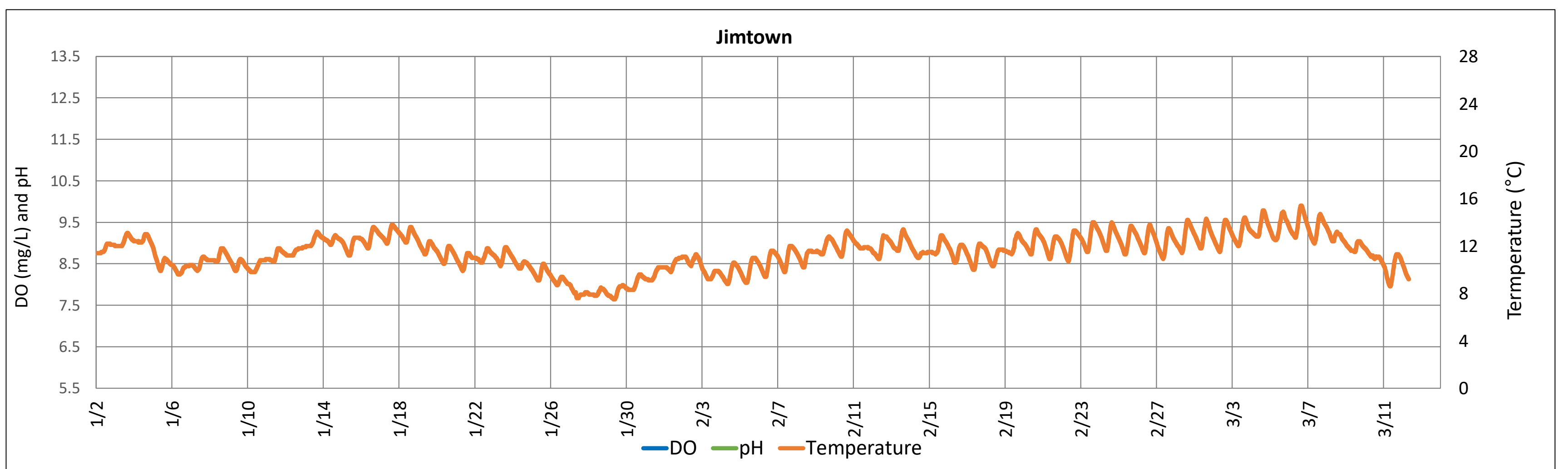


Russian River Water Quality (January 1 - March 11, 2021)

Hopland

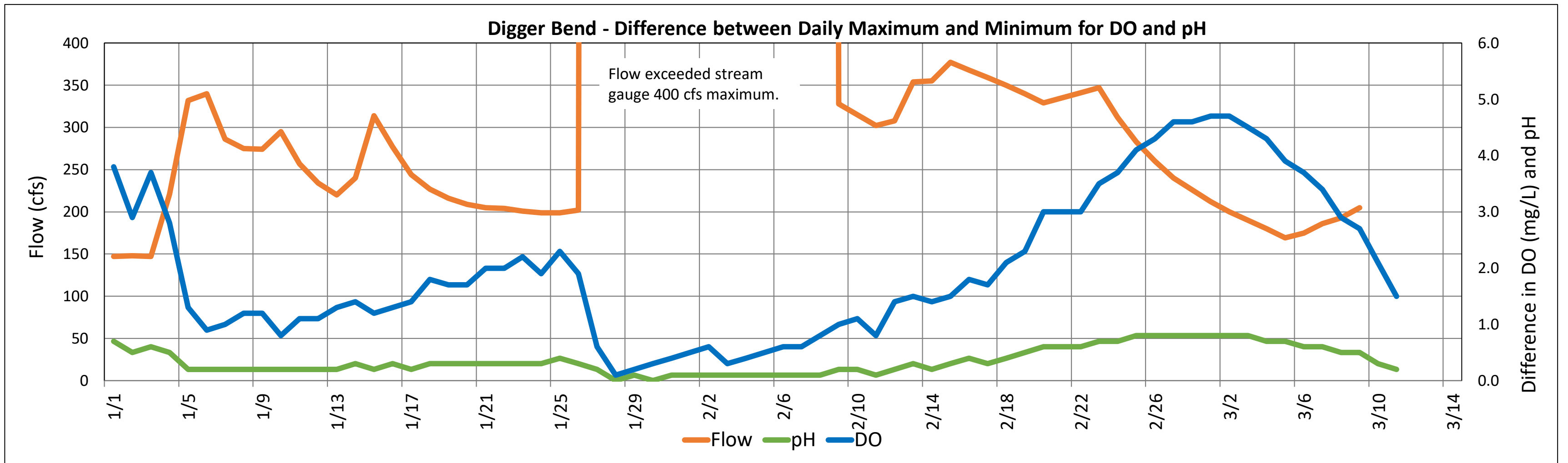
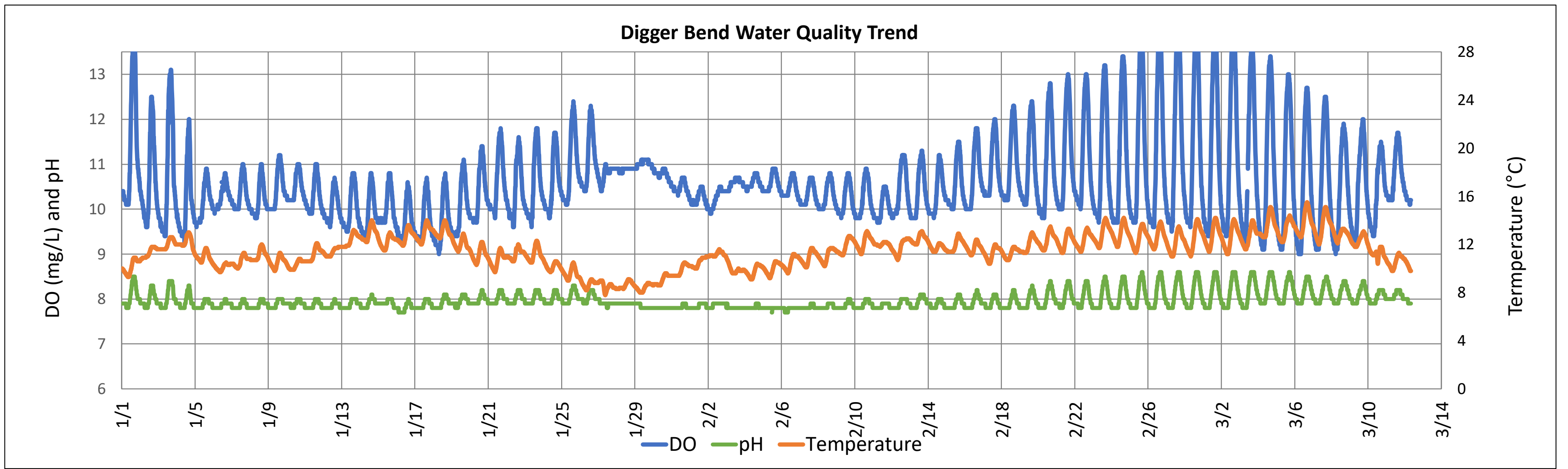


Jimtown Water Quality

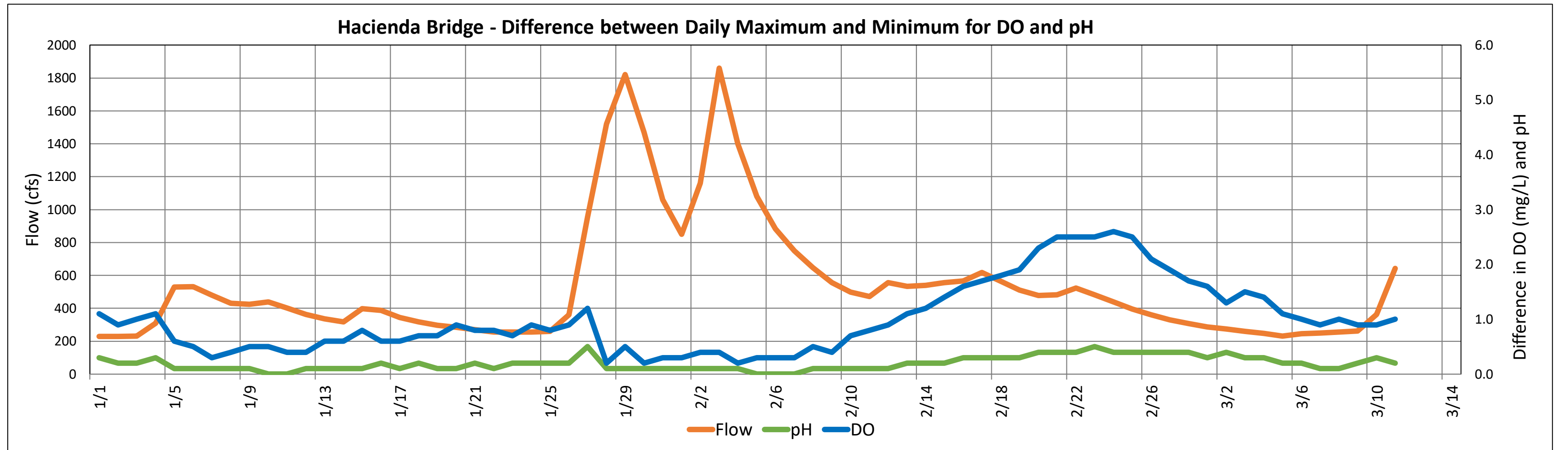
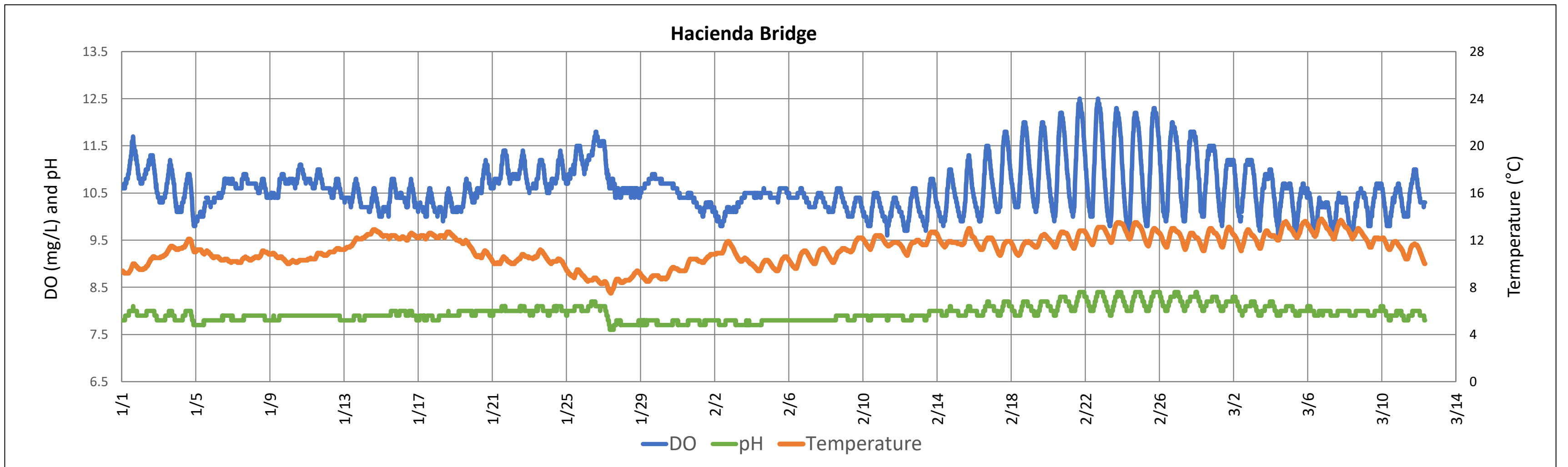


Russian River Water Quality (January 1 - March 11, 2021)

Digger Bend



Hacienda Bridge Water Quality



Russian River Fisheries Monitoring



Report on 3/12/21: Sonoma Water surveyed sites in the upper Russian River and in Dry Creek to collect information on spawning salmonids and their redds. In total 4 redds were observed in the upper reach of the Russian River, and 1 steelhead and 2 redds was observed in the Alexander Valley reach of the Russian River. In Dry Creek, 34 steelhead, and 13 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, 565 steelhead, 609 Chinook salmon, and 312 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	565
West ladder	1/19/2021	Chinook	609
		Coho	312
		Unidentified Salmonid	64

Salmonid Redd and Spawner Survey

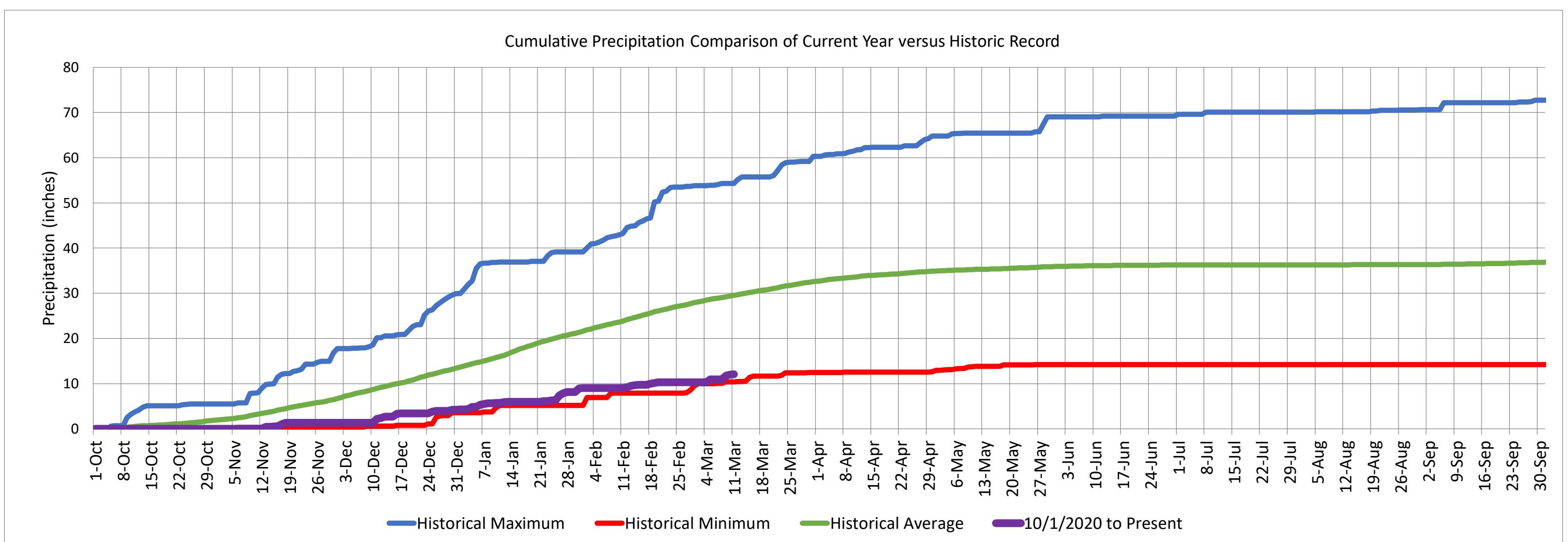
Tributary	Reach	Number of Trips to Date	Earliest Survey Date	Previous Week Survey	Recent Survey Date
Dry Creek	Dry Creek	5	2/7/2021	2/28/2021	3/7/2021
Russian River	Alexander Valley	4	2/14/2021	2/28/2021	3/7/2021
Russian River	Upper Mainsteam	4	2/14/2021	2/28/2021	3/7/2021

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	2	32	20	34	0	13
Russian River	Alexander Valley	0	1	1	1	0	2
Russian River	Upper Mainsteam	0	0	4	0	0	4

*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 - Mar 11, 2021	12.07
Last 7 Days*	1.75



Global Forecast System Model 16-day Cumulative Precipitation Forecast

