



State Water Resources Control Board
 Temporary Urgency Change Order (2/4/2021)
 Russian River Hydrologic Report
 February 25, 2021 - March 4, 2021

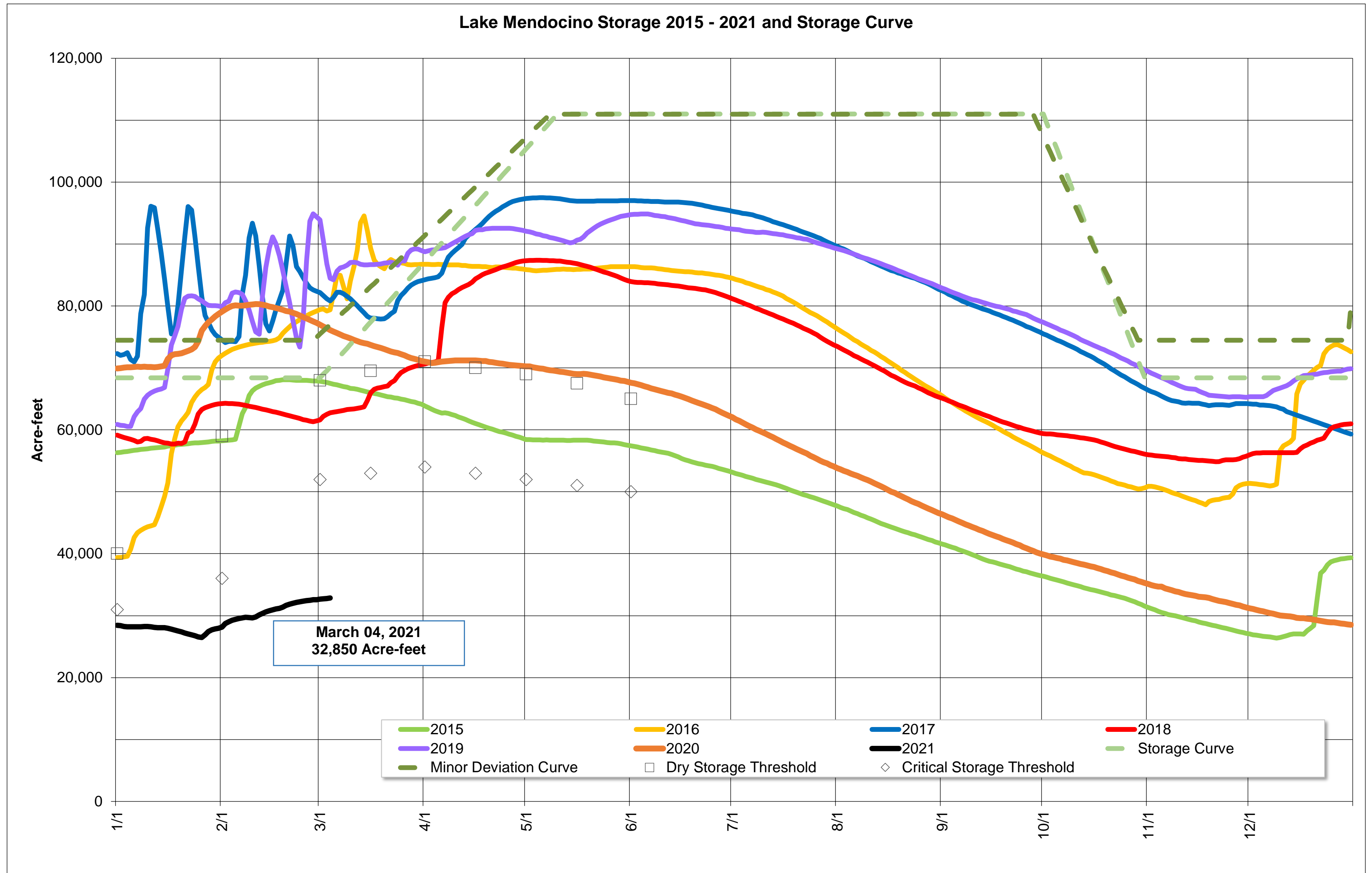
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A (Applications 12919A).

Instream Flow Requirements as of March 4, 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 4, 2021	32,850	
Change in Storage (acre-feet)	Last 30 days	6,563	219
	Last 7 days	535	76
Daily Inflow (cfs)	Last 7 days	Min	63
		Max	82
		Mean	70
Release (cfs)	Last 7 days	Min	25
		Max	30
		Mean	28

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.

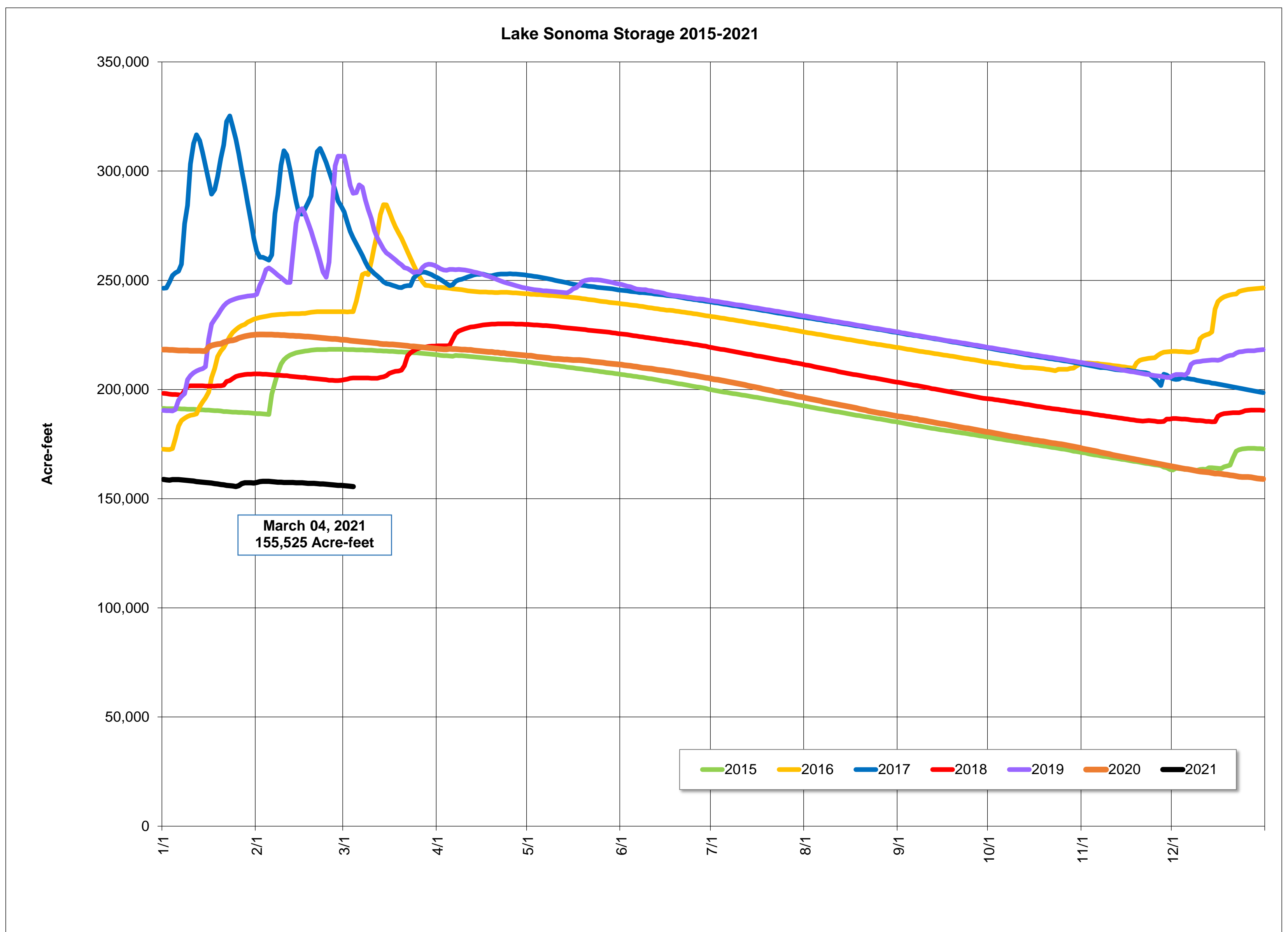
Consultation: Staff from Sonoma Water, CDFW and NMFS met on February 26th to discuss the smolt release and associated ramping schedule in light of the very low storage levels in Lake Mendocino. Based on that discussion, Sonoma Water, CDFW and NMFS agreed on a ramping schedule starting on or around March 13th. On March 4th, CDFW requested the flow changes to occur as soon as possible due to the Coyote Valley Fish Facility experiencing operational challenges. The original requested schedule for the start of flow changes is found below. 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	Start Time	Flow Change (cfs)	New Set Point (cfs)
13-Mar	9:00 AM	+75	100
15-Mar	12:00 PM	-75	25

Lake Sonoma



Nathan Baskett, March 3, 2021



Storage (acre-feet)	March 4, 2021	155,525	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
		8,876	296
	Last 7 days	-934	-133
Daily Inflow (cfs)	Last 7 days	Min	0
		Max	31
		Mean	14
Release (cfs)	Last 7 days	Min	75
		Max	80
		Mean	77

Potter Valley Project

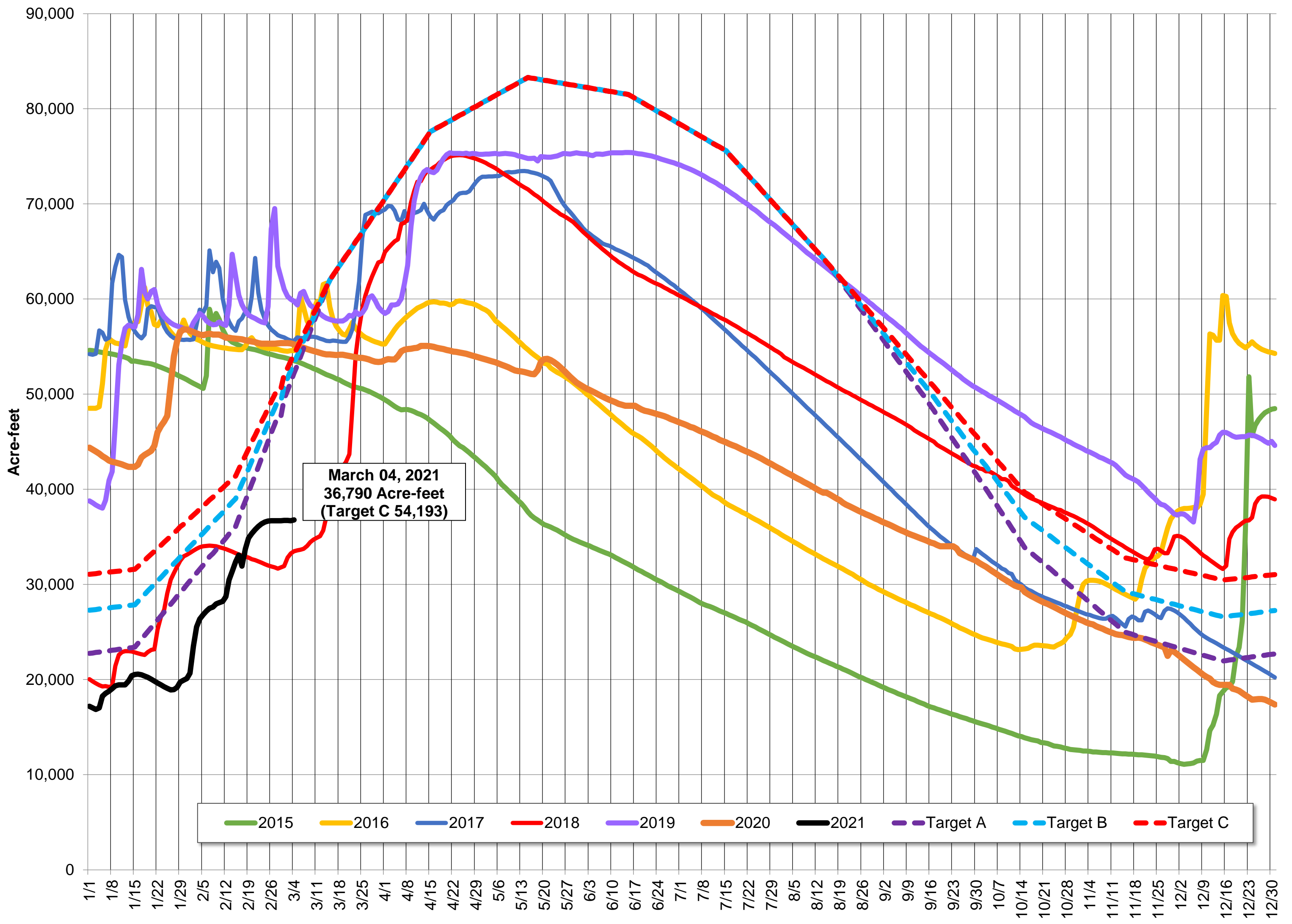
PVP Diversion (cfs)	March 4, 2021	47
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Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2020 - March 4, 2021	52,976	344
	Last 7 days	3,121	446

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2015-2021 and Target Storage Scenarios

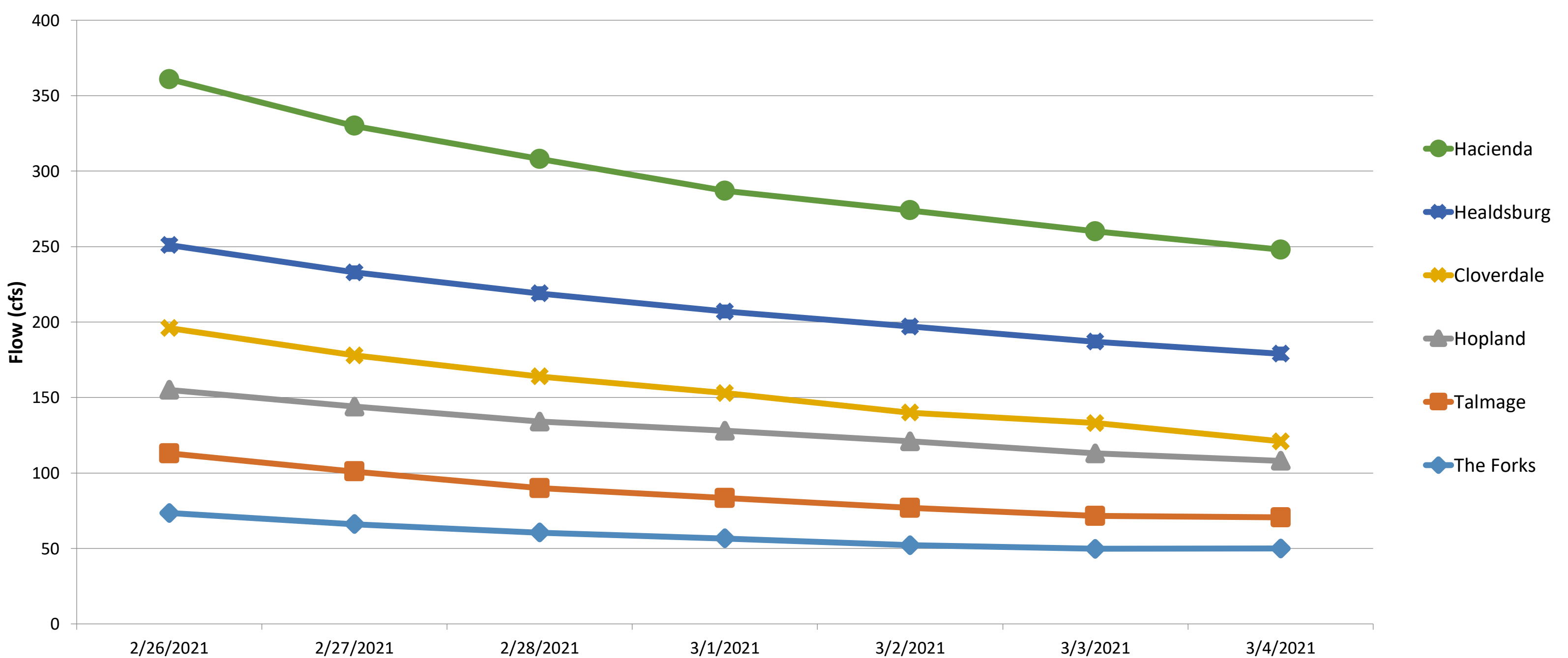


Russian River Flows (February 25 - March 4, 2021)

Gage	24-hr Average Flow (cfs)						
	Feb 26, 2021	Feb 27, 2021	Feb 28, 2021	Mar 1, 2021	Mar 2, 2021	Mar 3, 2021	Mar 4, 2021
The Forks*	74	66	61	57	52	50	50
Talmage USGS 11462080	113	101	90	83	77	72	71
Hopland USGS 11462500	155	144	134	128	121	113	108
Cloverdale USGS 11463000	196	178	164	153	140	133	121
Healdsburg USGS 11464000	251	233	219	207	197	187	179
Hacienda USGS 11467000	361	330	308	287	274	260	248

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

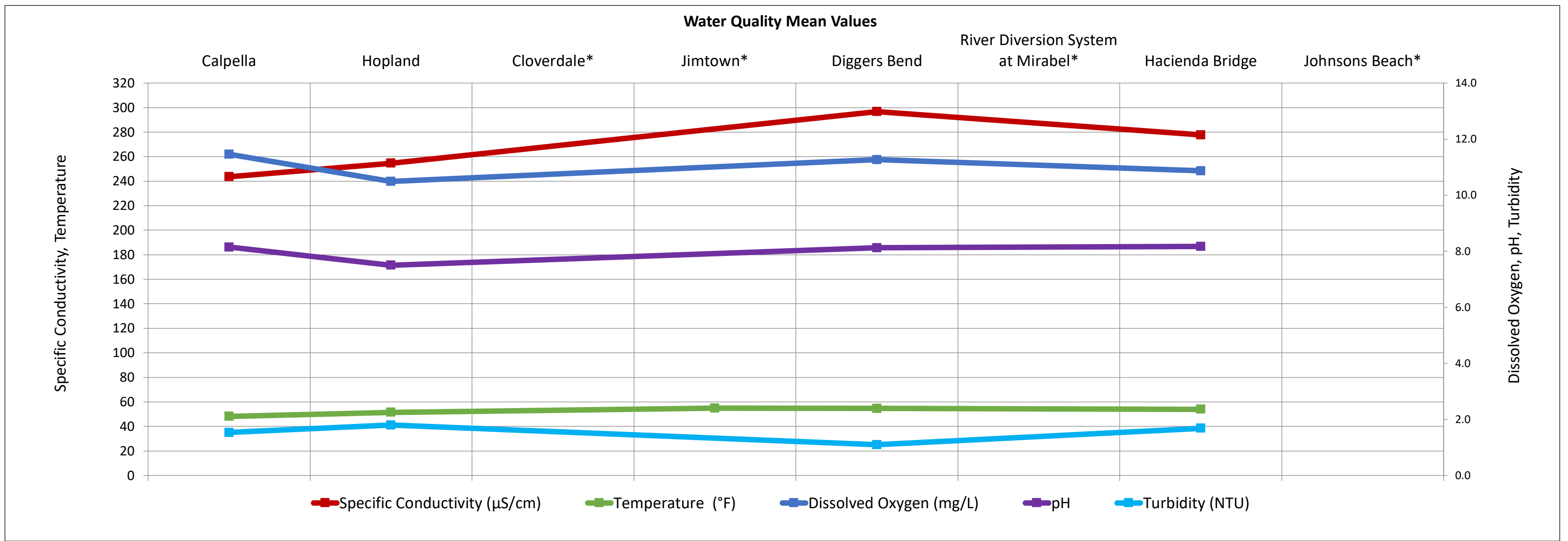
Russian River Flows



Russian River Water Quality (February 25 - March 4, 2021)

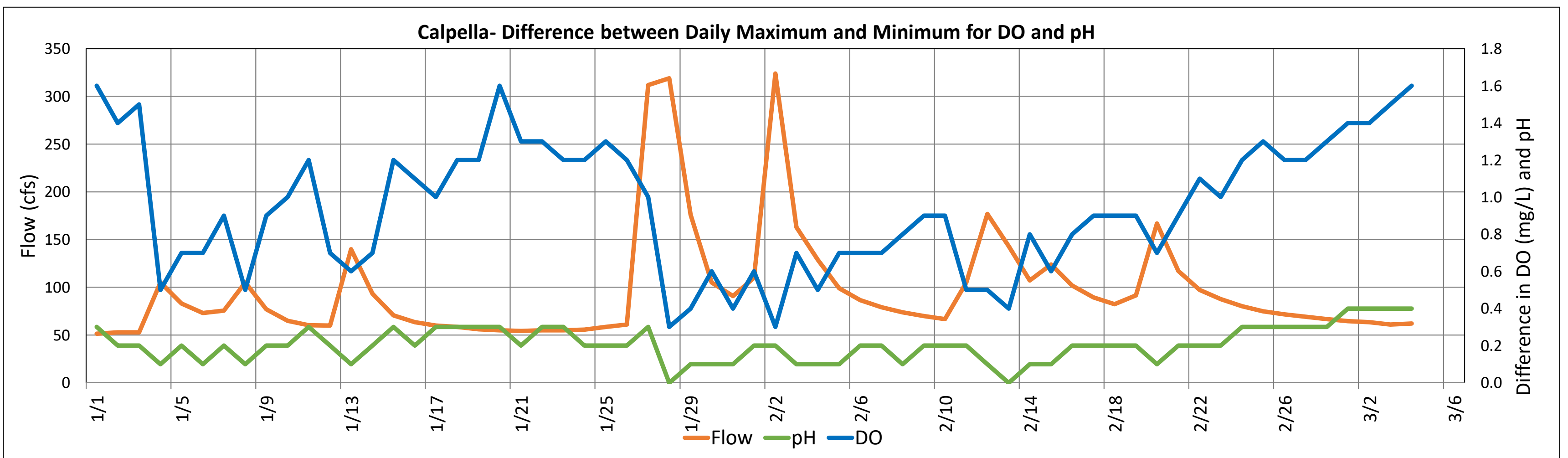
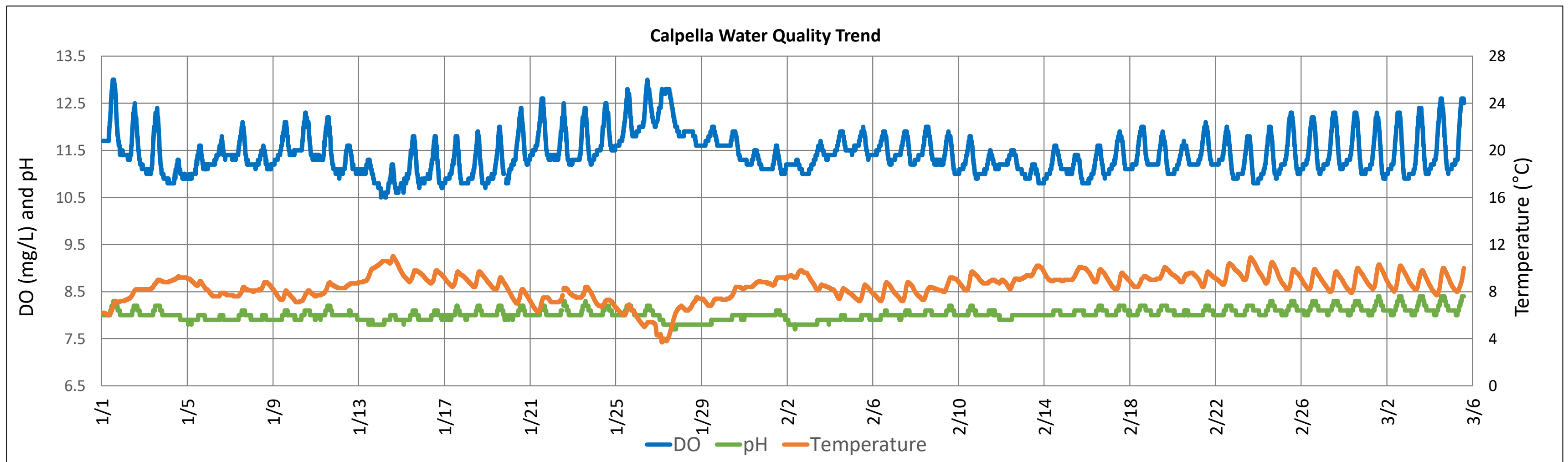
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	46.2	49.3		51.6	51.8		52.0	
	Max	50.5	54.0		57.9	57.6		55.8	
	Mean	48.1	51.5		54.9	54.6		54.0	
Specific Conductivity (µS/cm)	Min	242	230			272		259	
	Max	245	276			313		287	
	Mean	244	255			297		278	
Dissolved Oxygen (mg/L)	Min	10.9	9.7			9.2		9.7	
	Max	12.4	11.9			14.2		12.3	
	Mean	11.5	10.5			11.3		10.9	
Dissolved Oxygen (% Saturation)	Min	90	84			83		88	
	Max	110	110			138		117	
	Mean	97	93			105		101	
pH	Min	8.0	7.4			7.8		7.9	
	Max	8.4	7.8			8.6		8.4	
	Mean	8.2	7.5			8.1		8.2	
Turbidity (NTU)	Min	1.1	1.0			0.1		1.0	
	Max	3.3	11.1			1.9		3.4	
	Mean	1.5	1.8			1.1		1.7	

*Station operated seasonally



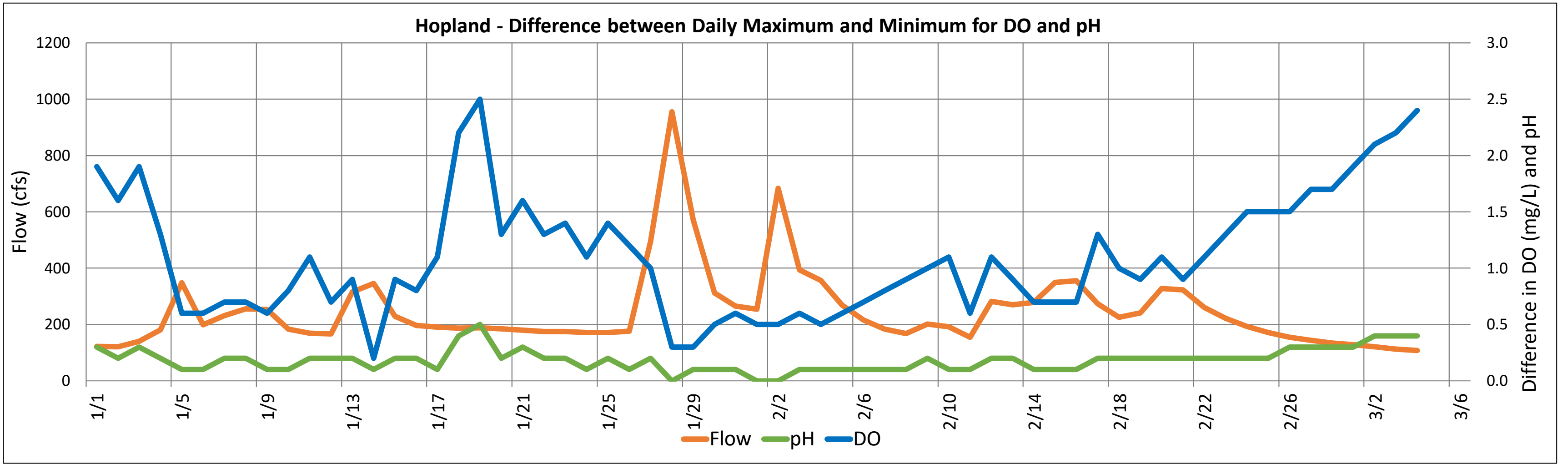
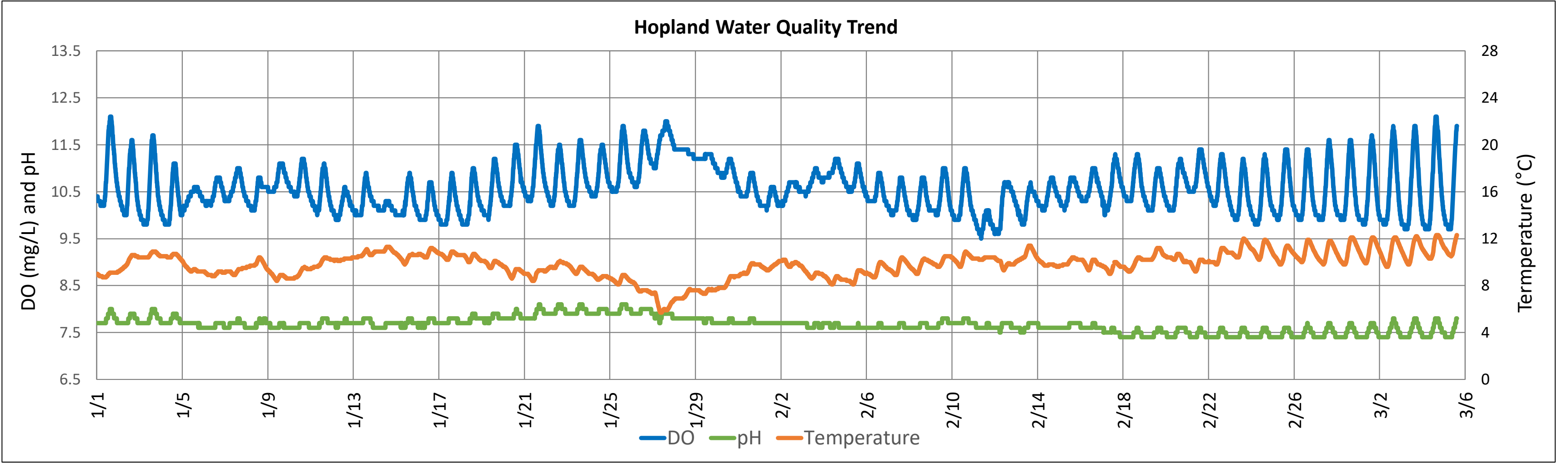
Russian River Water Quality (January 1 - March 4, 2021)

Calpella (East Fork Russian River)

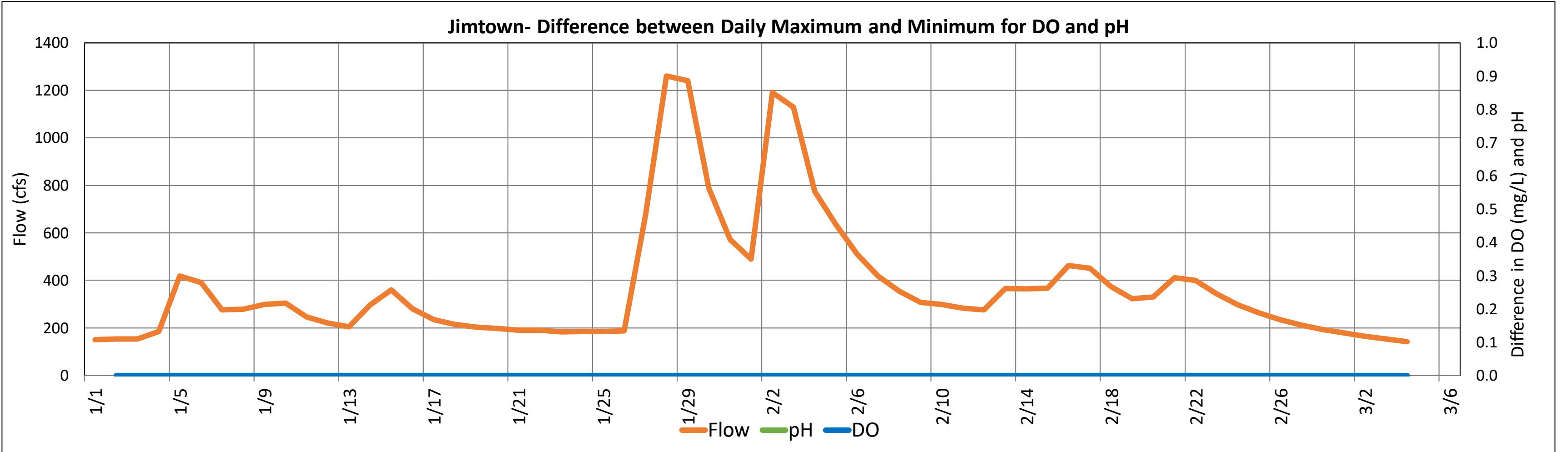
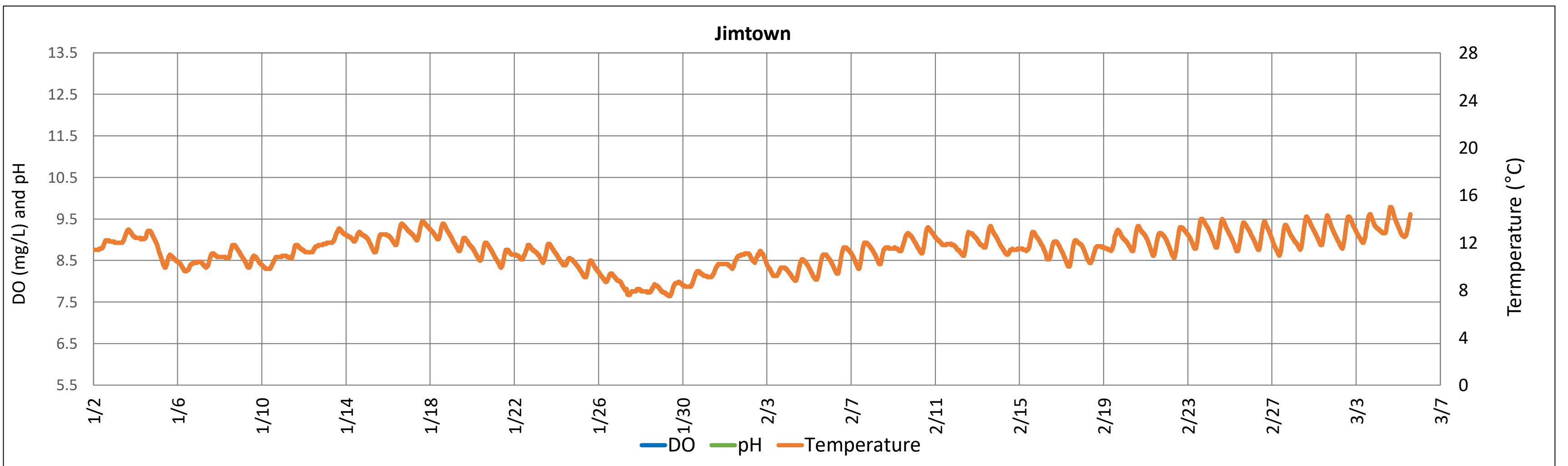


Russian River Water Quality (January 1 - March 4, 2021)

Hopland

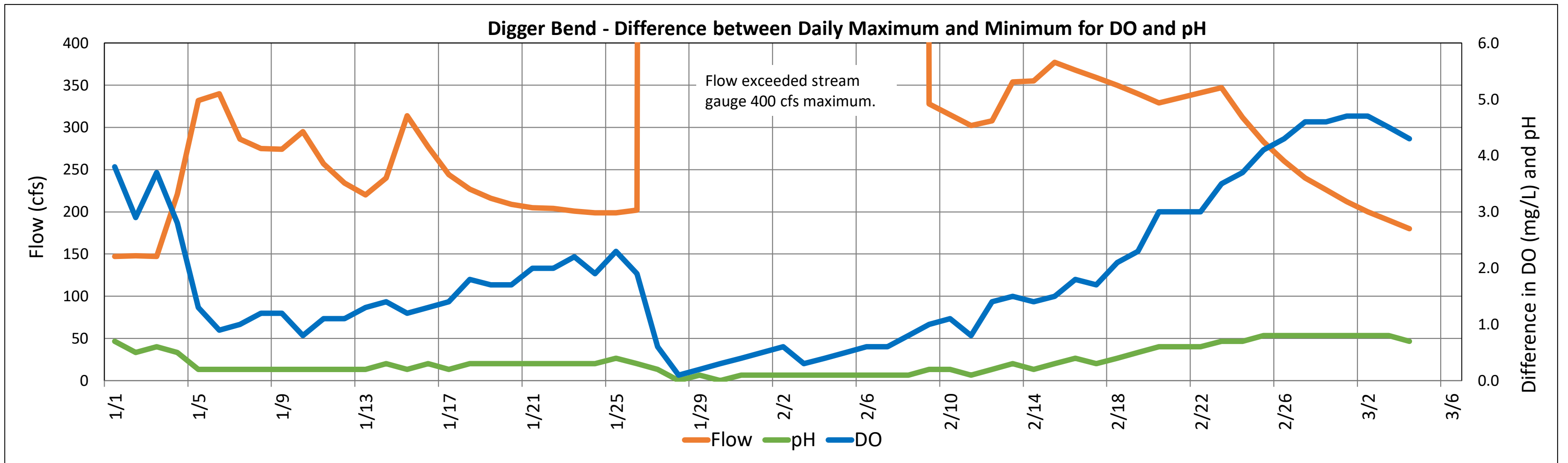
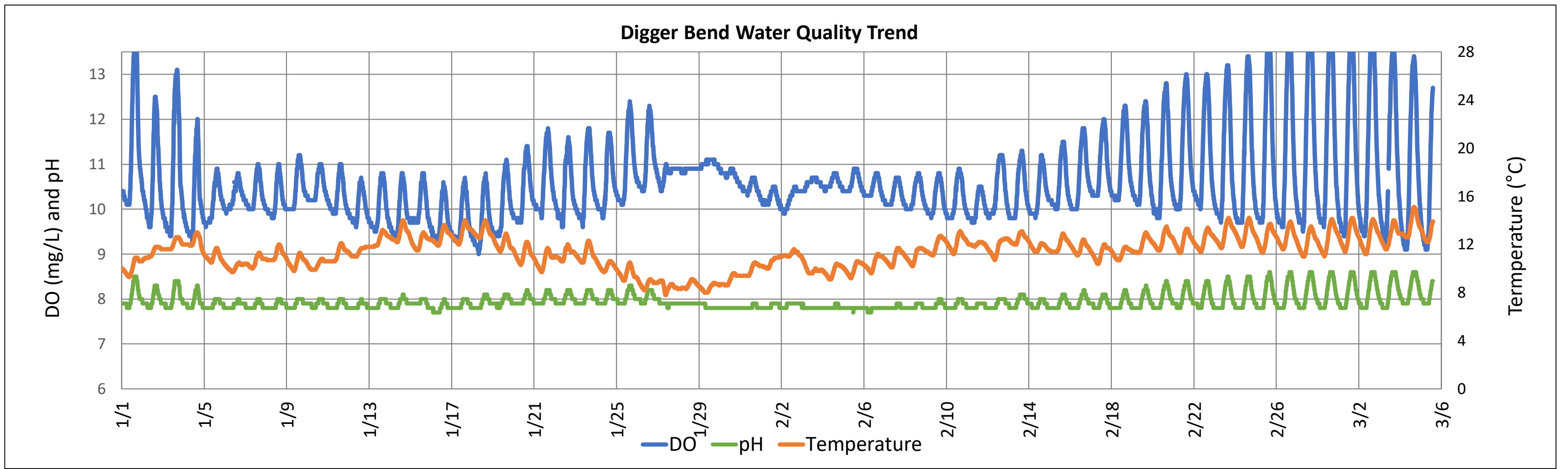


Jimtown Water Quality

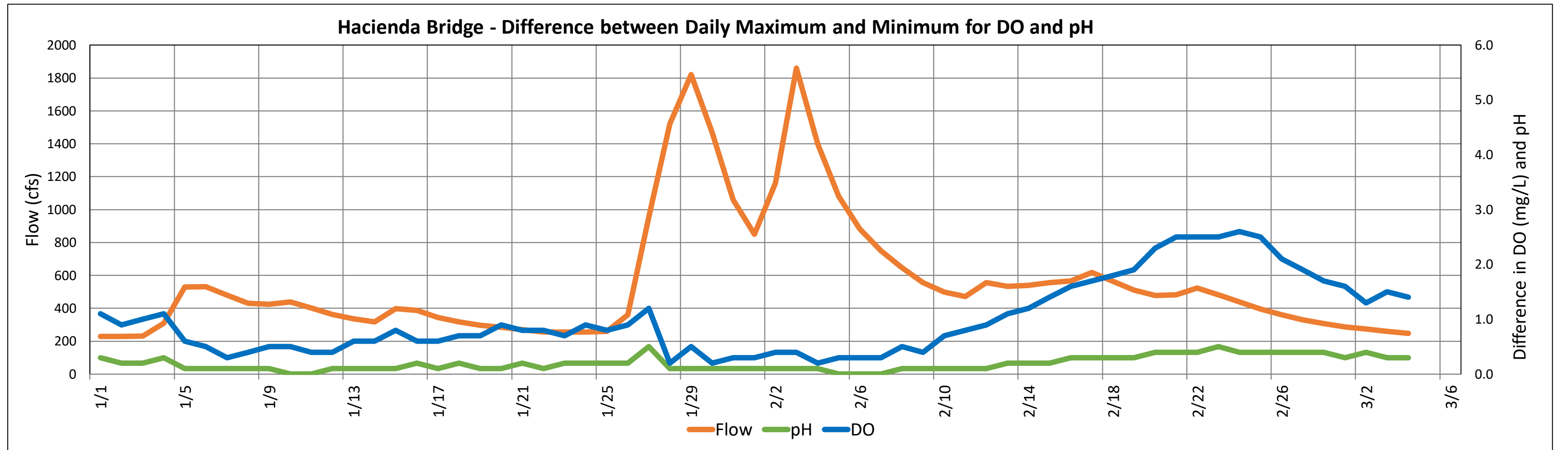
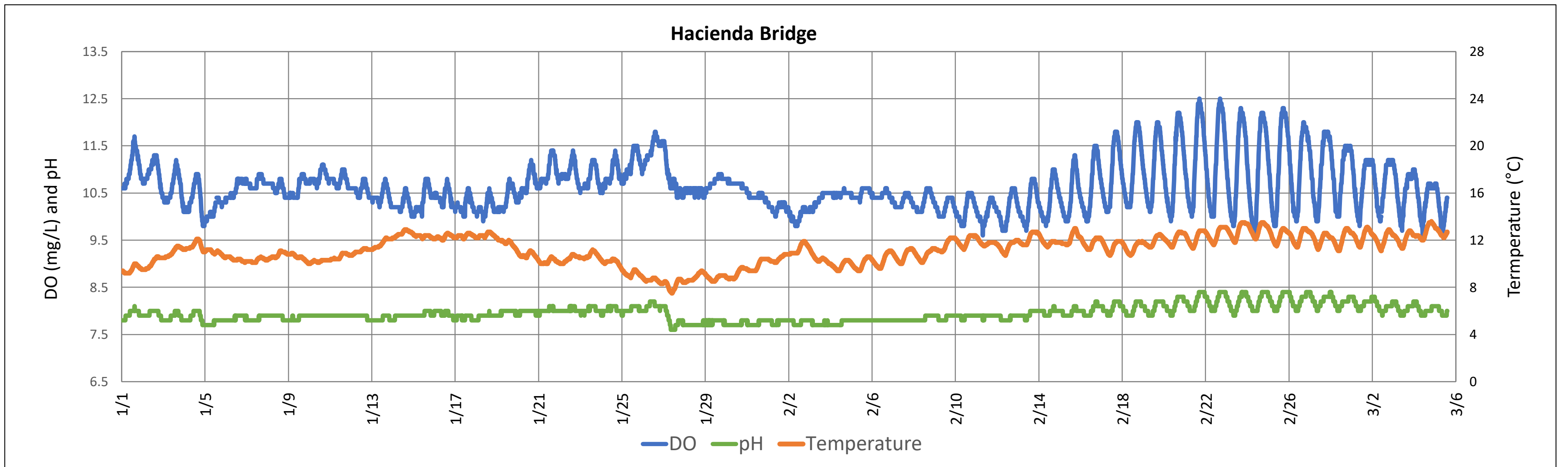


Russian River Water Quality (January 1 - March 4, 2021)

Digger Bend



Hacienda Bridge Water Quality



Russian River Fisheries Monitoring



Report on 3/4/21: 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 one salmonid and one redd was observed in the Alexander Valley reach of the Russian River. In Dry Creek, 2 steelhead, 32 unidentified adult salmonids, and 20 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 16, on the west fish ladder at the Mirabel dam, and through January 24 on the east fish ladder. To date, 537 steelhead, 609 Chinook salmon, and 309 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	537
West ladder	1/16/2021	Chinook	609
		Coho	309
		Unidentified Salmonid	64

Salmonid Redd and Spawner Survey

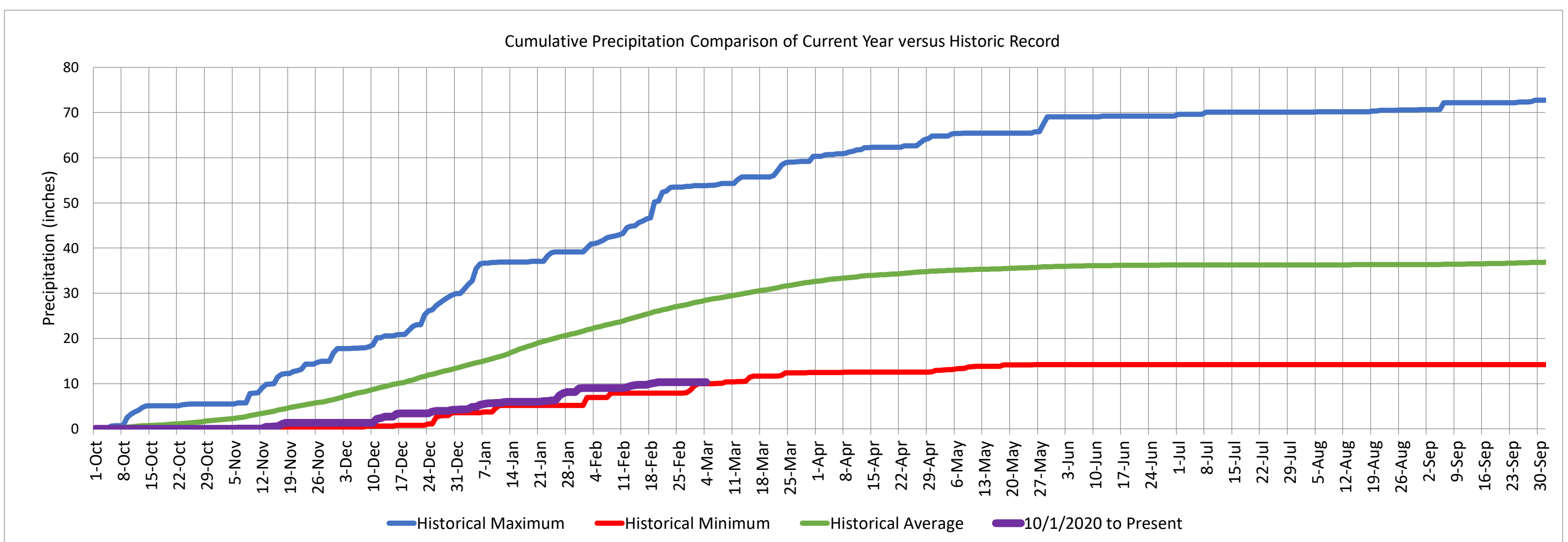
Tributary	Reach	Number of Trips to Date	Earliest Survey Date	Previous Week Survey	Recent Survey Date
Dry Creek	Dry Creek	4	2/7/2021	2/21/2021	2/28/2021
Russian River	Alexander Valley	3	2/14/2021	2/21/2021	2/28/2021
Russian River	Upper Mainstem	3	2/14/2021	2/21/2021	2/28/2021

Tributary	Previous Week's Survey			Recent Survey Date		
	Fish Species		Redds	Fish Species		Redds
	Steelhead	Salmonid Species		Steelhead	Salmonid Species	
Dry Creek	16	0	14	2	32	20
Russian River	0	0	1	0	1	1
Russian River	0	0	0	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 4, 2021	10.32
Last 7 Days*	0.00



Global Forecast System Model 16-day Cumulative Precipitation Forecast

