



State Water Resources Control Board
 Temporary Urgency Change Order (2/4/2021)
 Russian River Hydrologic Report
 March 12, 2021 - March 18, 2021

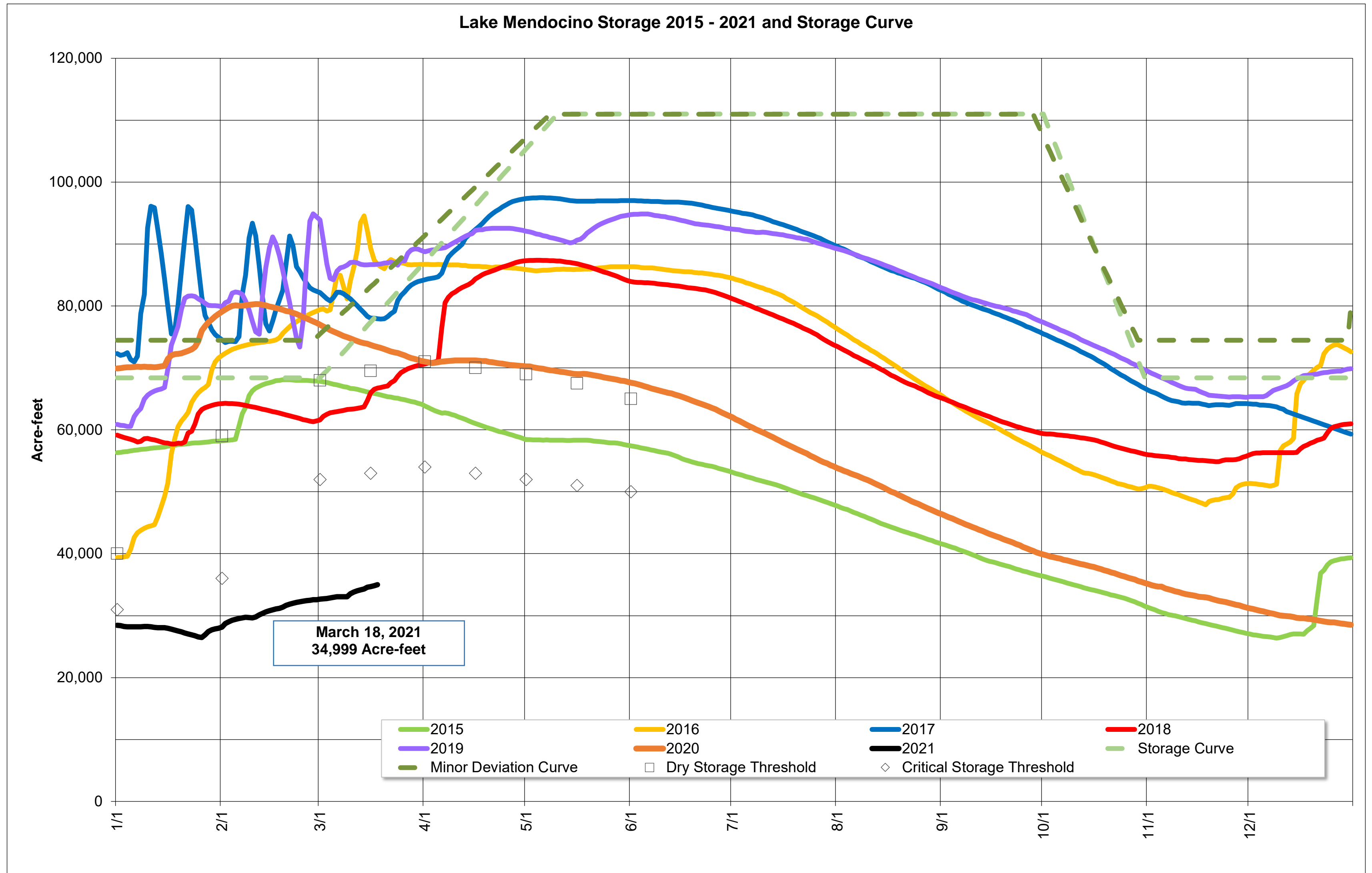
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A (Applications 12919A).

Instream Flow Requirements as of March 18, 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

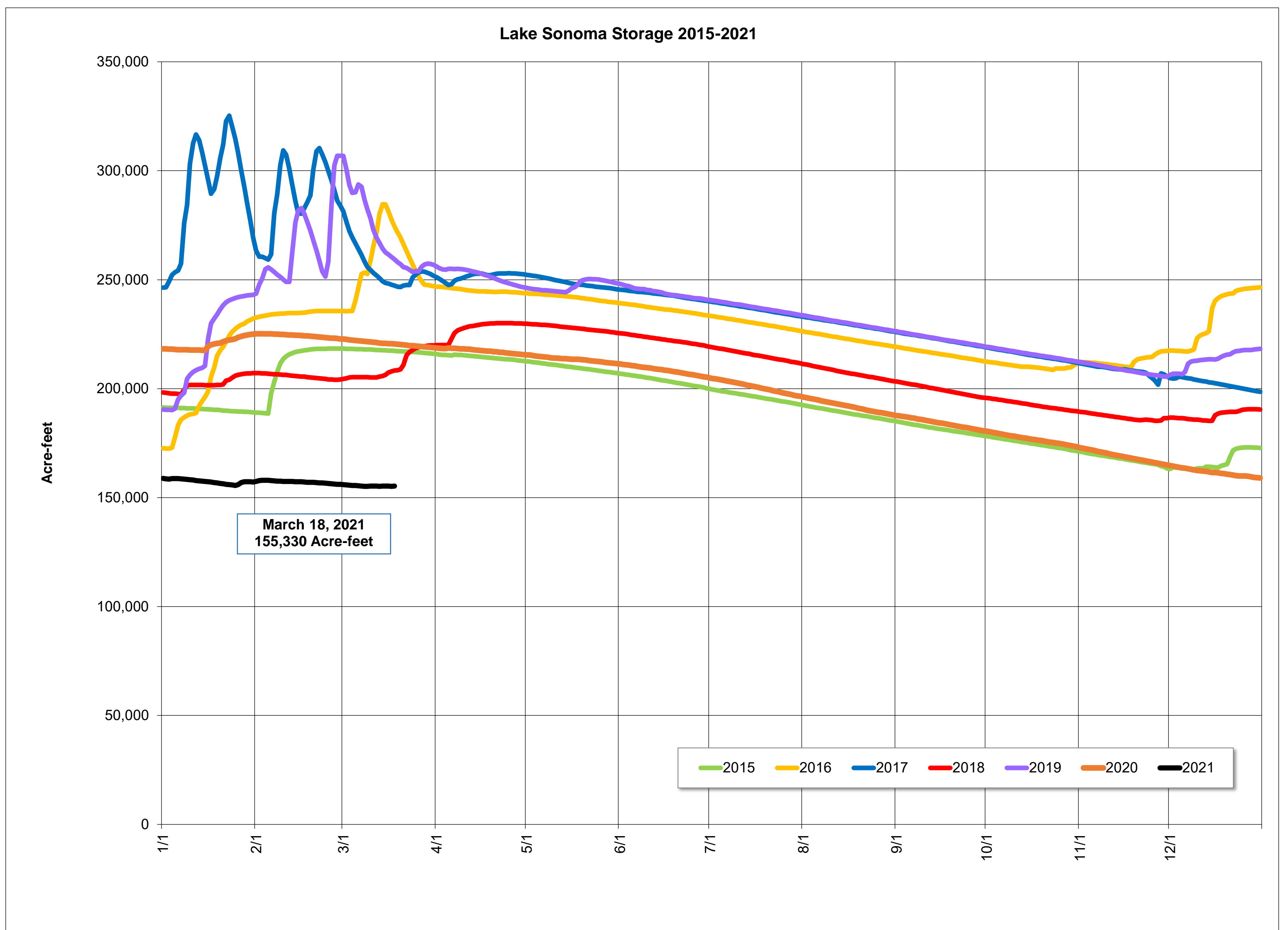


Storage (acre-feet)	March 18, 2021	34,999	
Change in Storage (acre-feet)	Last 30 days	3,940	131
	Last 7 days	1,162	166
Daily Inflow (cfs)	Last 7 days	Min	95
		Max	183
		Mean	122
Release (cfs)	Last 7 days	Min	27
		Max	29
		Mean	28

Lake Sonoma



Nathan Baskett, March 3, 2021



Storage (acre-feet)	March 18, 2021	155,330	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
		-1,794	-60
	Last 7 days	19	3
Daily Inflow (cfs)	Last 7 days	Min	30
		Max	116
		Mean	74
Release (cfs)	Last 7 days	Min	75
		Max	76
		Mean	76

Potter Valley Project

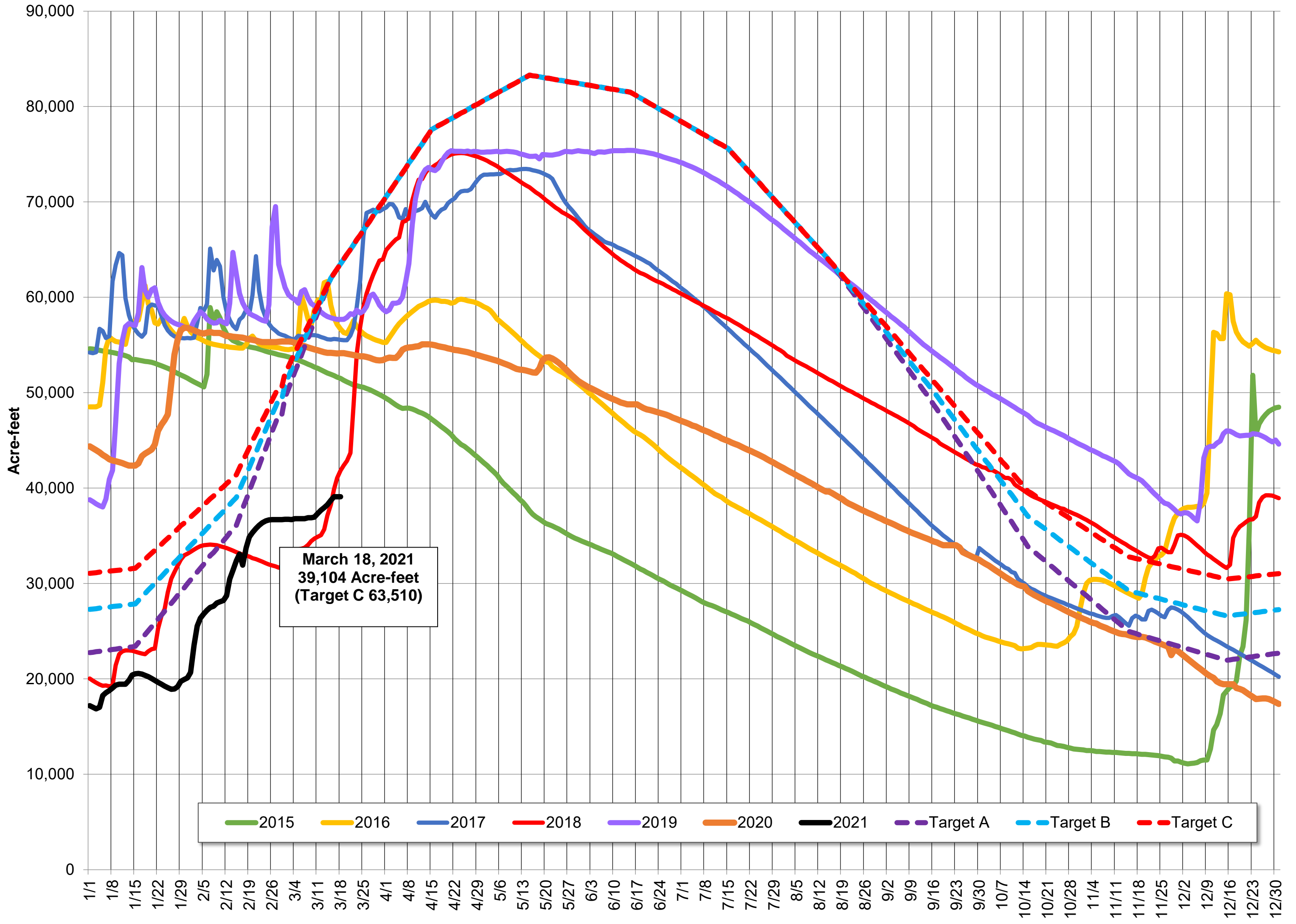
PVP Diversion (cfs)	March 18, 2021	47
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Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2020 - March 18, 2021	60,869	362
	Last 7 days	4,315	616

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2015-2021 and Target Storage Scenarios

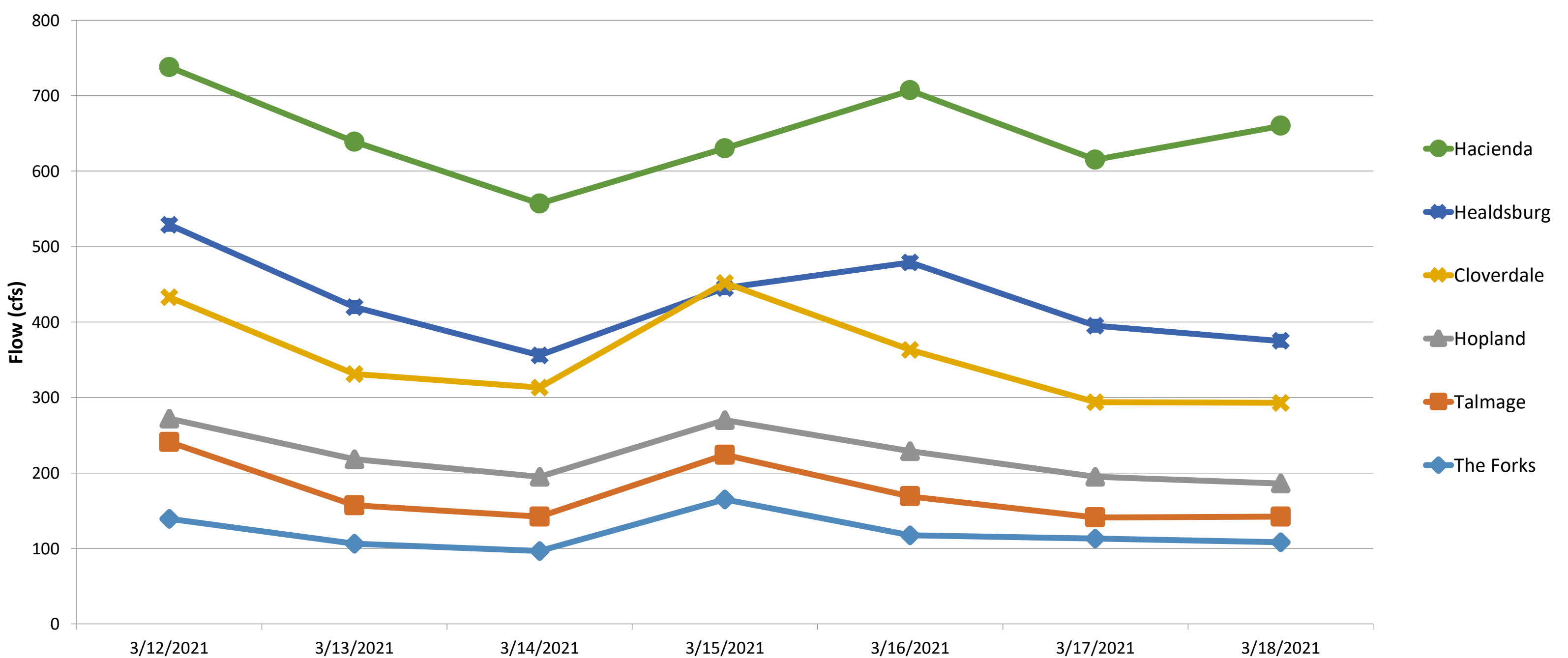


Russian River Flows (March 12 - March 18, 2021)

Gage	24-hr Average Flow (cfs)						
	Mar 12, 2021	Mar 13, 2021	Mar 14, 2021	Mar 15, 2021	Mar 16, 2021	Mar 17, 2021	Mar 18, 2021
The Forks*	139	106	97	165	117	113	108
Talmage USGS 11462080	241	157	142	224	169	141	142
Hopland USGS 11462500	272	218	195	270	229	195	186
Cloverdale USGS 11463000	433	331	313	452	363	294	293
Healdsburg USGS 11464000	529	420	356	445	479	395	375
Hacienda USGS 11467000	738	639	557	630	707	615	660

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

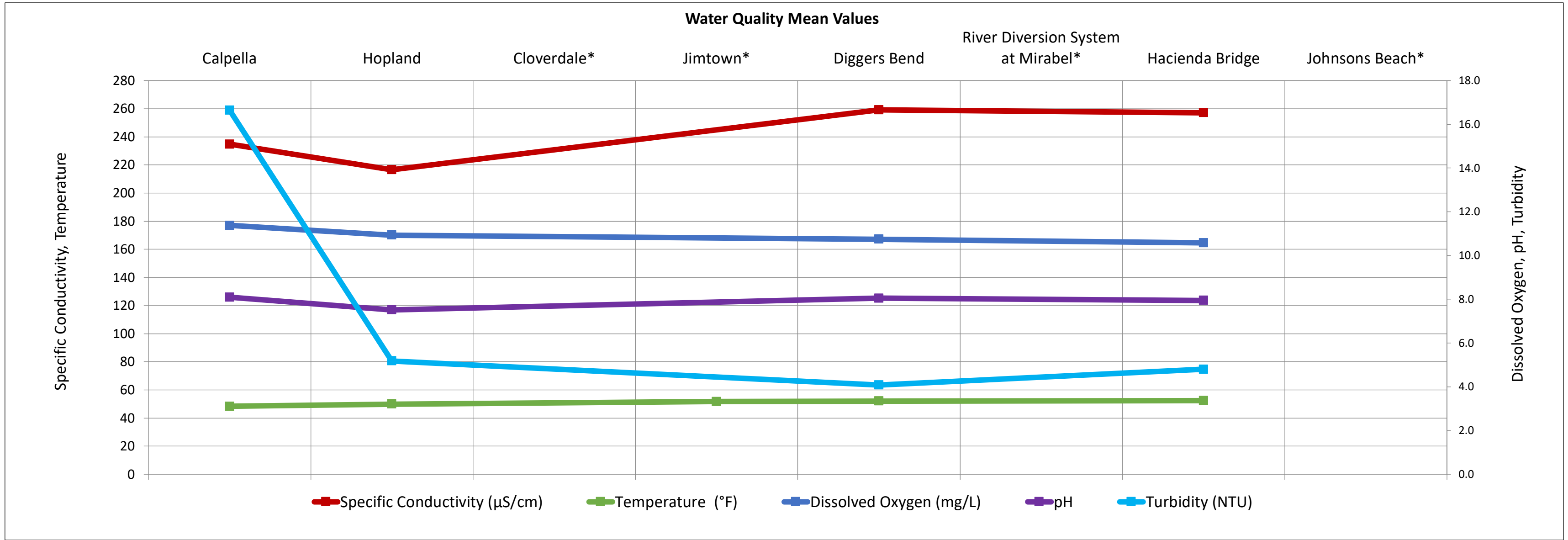
Russian River Flows



Russian River Water Quality (March 12 - March 18, 2021)

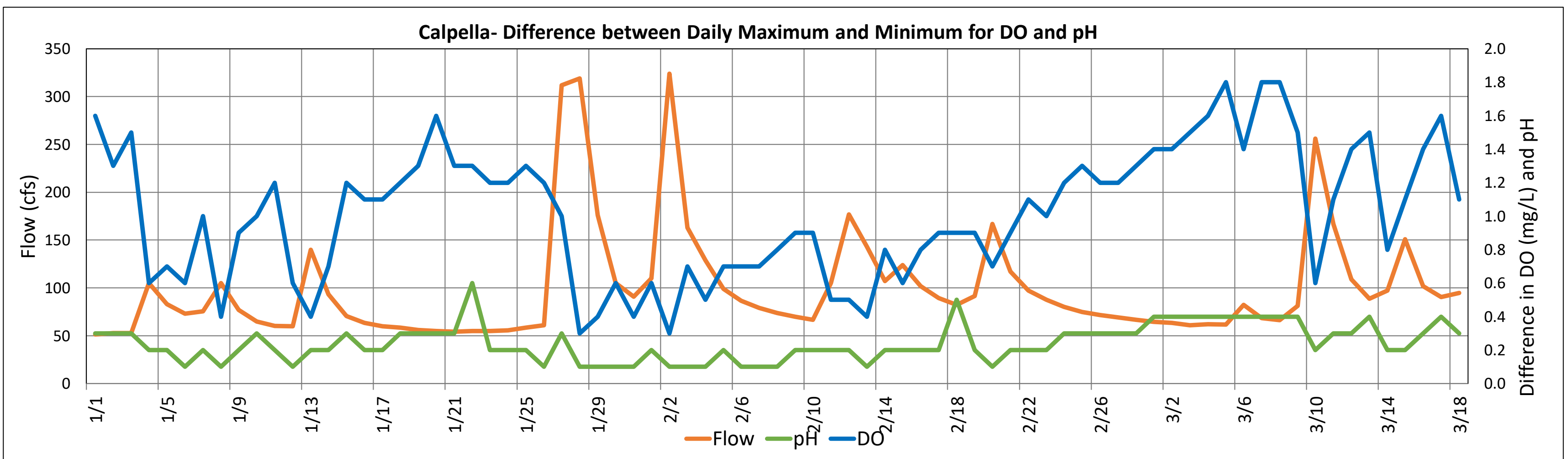
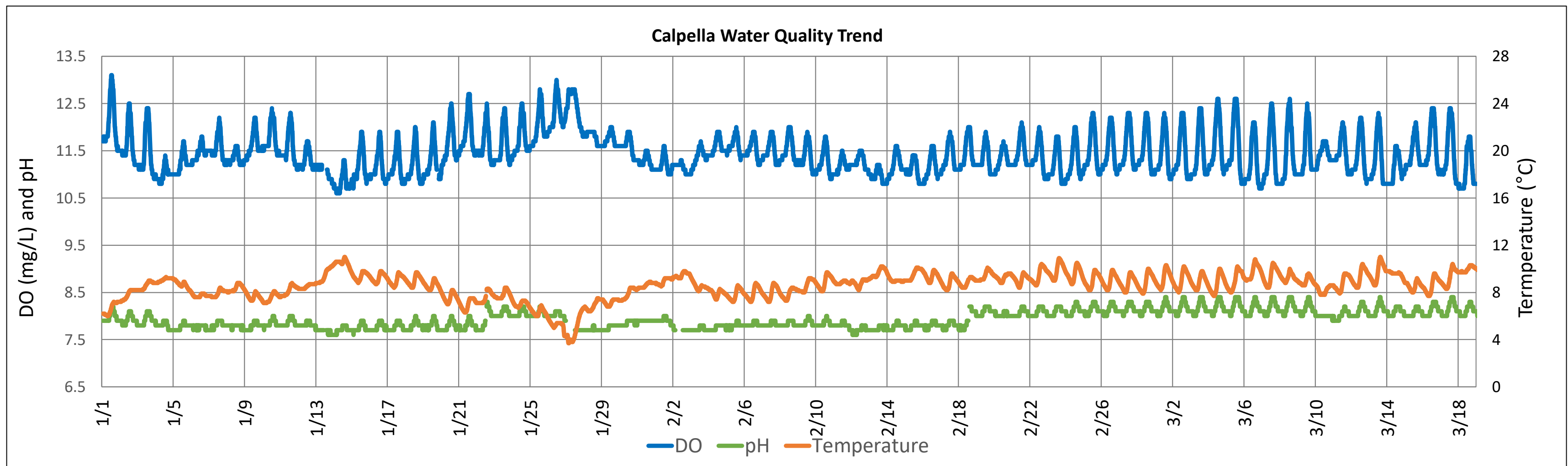
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	45.9	46.4		47.5	49.5		49.8	
	Max	51.8	53.2		55.2	55.4		54.7	
	Mean	48.4	49.9		51.8	52.1		52.4	
Specific Conductivity (µS/cm)	Min	205	182			239		240	
	Max	248	237			290		281	
	Mean	235	217			259		257	
Dissolved Oxygen (mg/L)	Min	10.8	9.7			9.4		9.8	
	Max	12.4	12.8			12.7		11.7	
	Mean	11.4	10.9			10.7		10.6	
Dissolved Oxygen (% Saturation)	Min	89	82			81		85	
	Max	112	116			120		109	
	Mean	98	95			97		96	
pH	Min	7.9	7.3			7.8		7.8	
	Max	8.4	7.9			8.4		8.2	
	Mean	8.1	7.5			8.1		8.0	
Turbidity (NTU)	Min	12.0	1.4			1.1		2.3	
	Max	27.9	21.3			10.1		9.0	
	Mean	16.6	5.2			4.1		4.8	

*Station operated seasonally



Russian River Water Quality (January 1 - March 18, 2021)

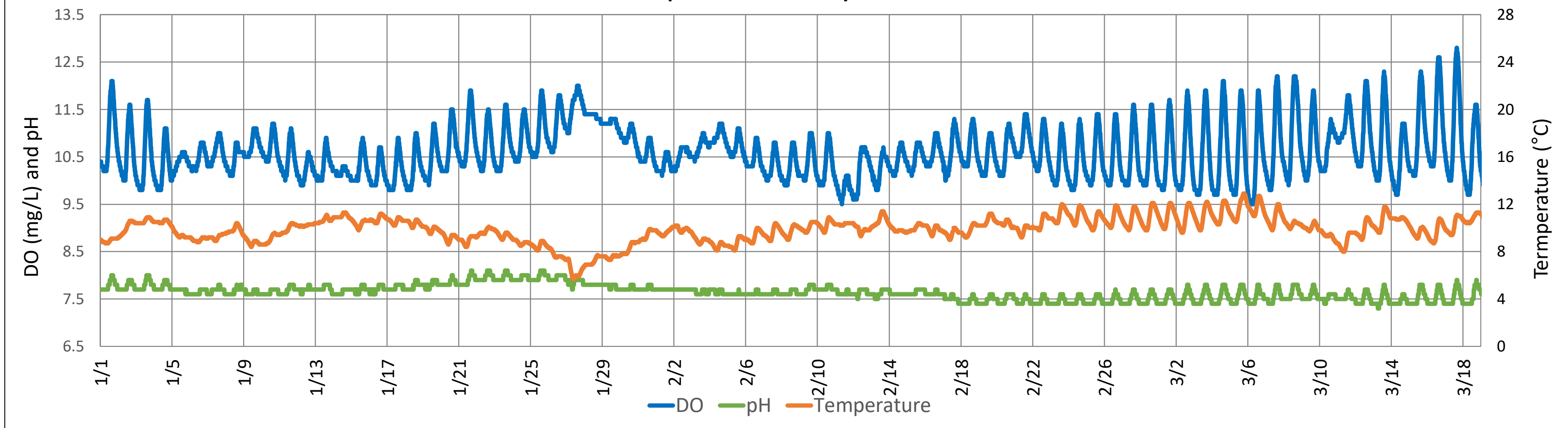
Calpella (East Fork Russian River)



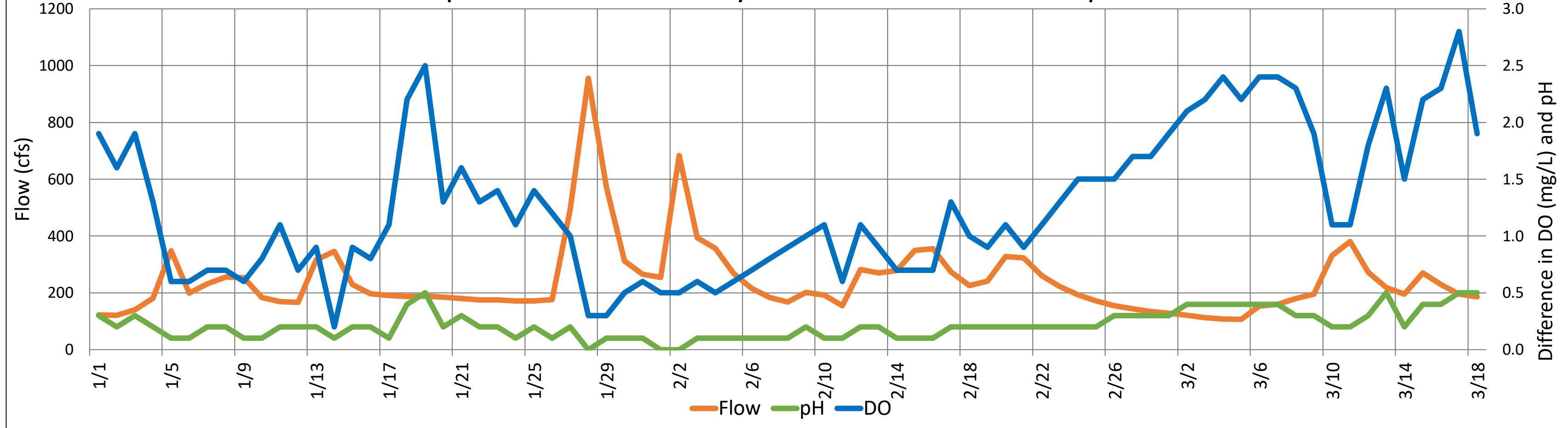
Russian River Water Quality (January 1 - March 18, 2021)

Hopland

Hopland Water Quality Trend

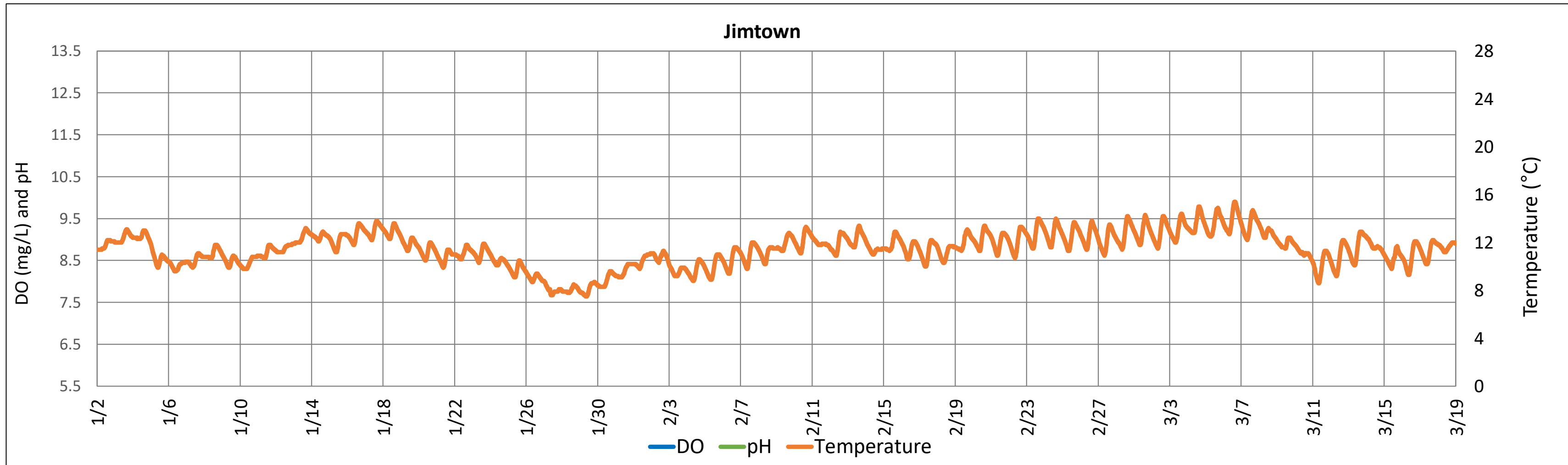


Hopland - Difference between Daily Maximum and Minimum for DO and pH

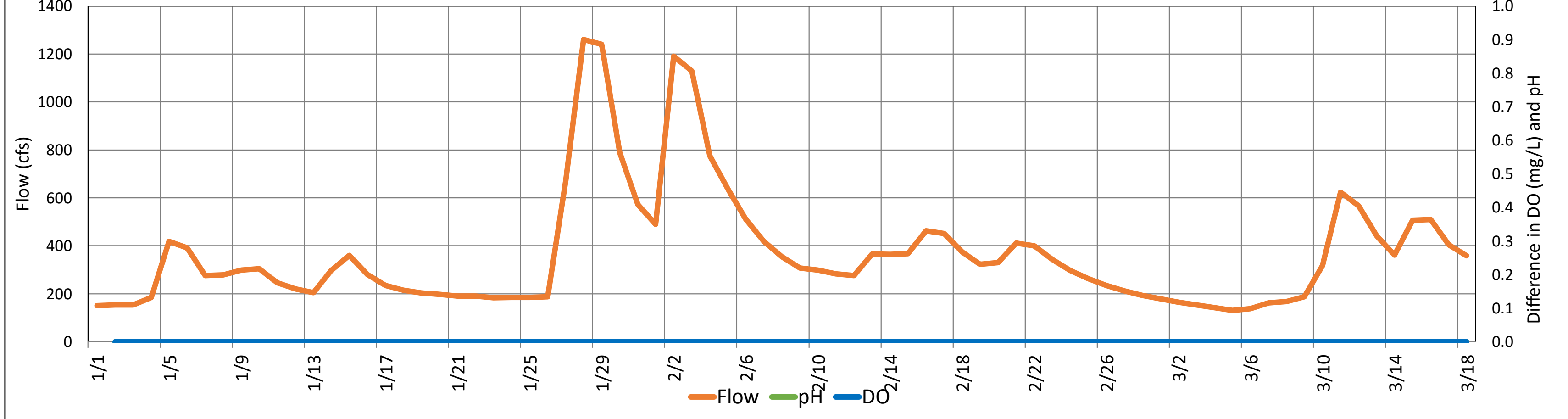


Jimtown Water Quality

Jimtown

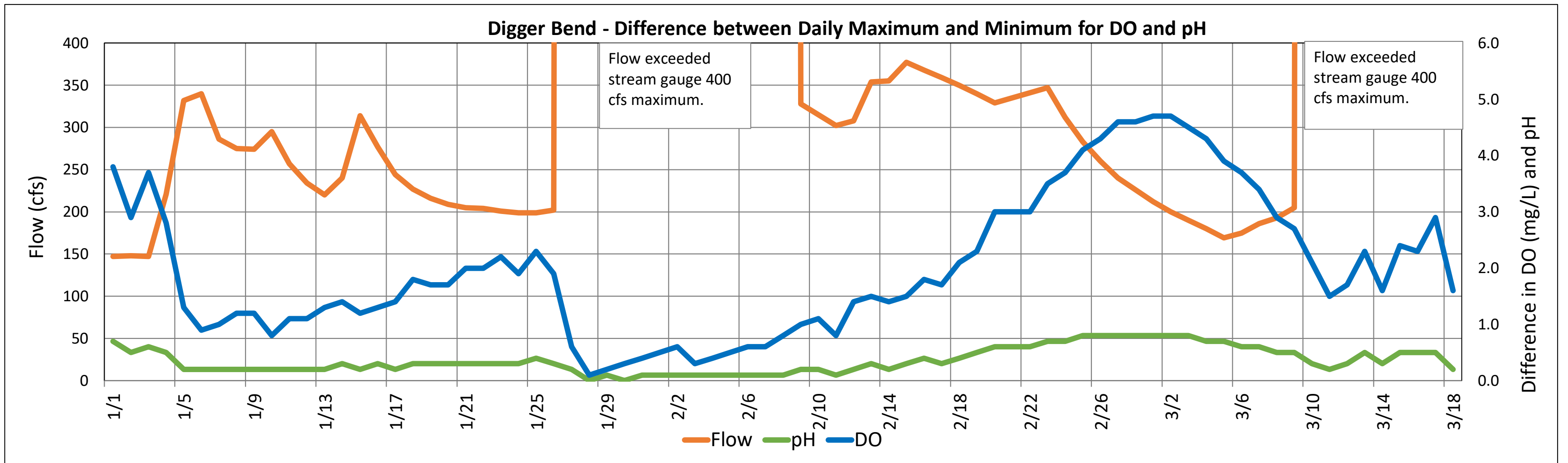
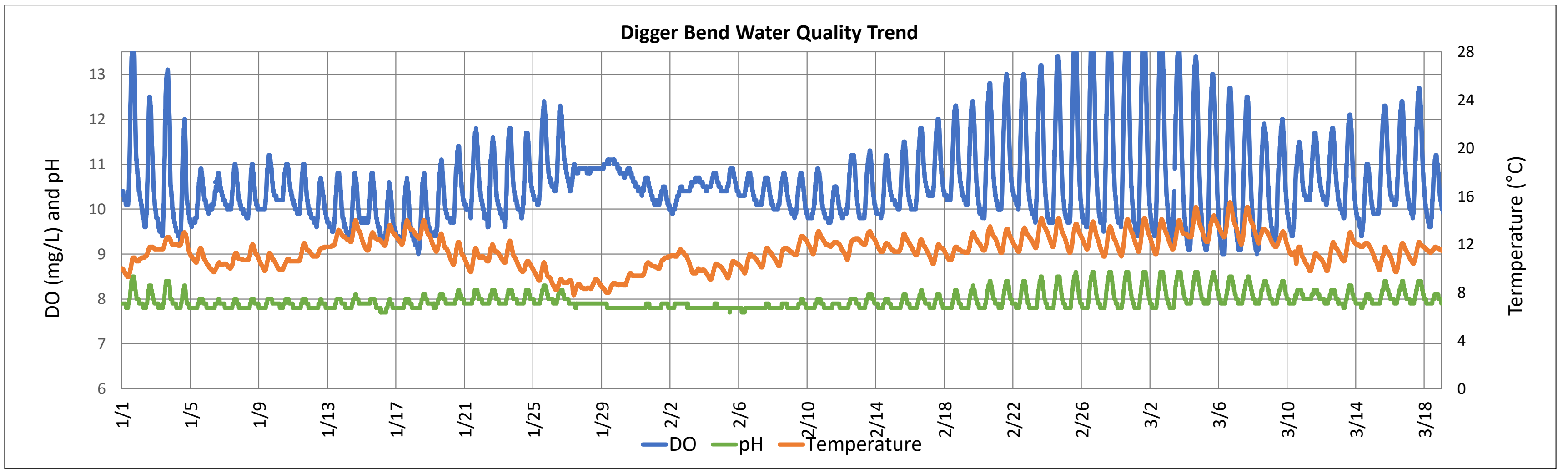


Jimtown- Difference between Daily Maximum and Minimum for DO and pH

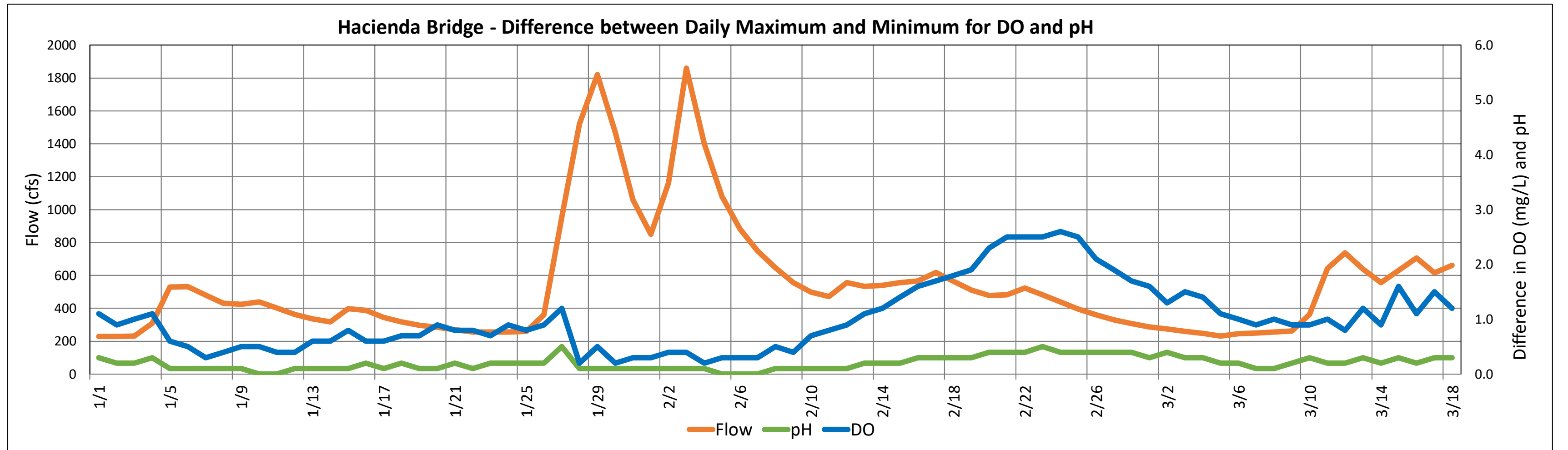
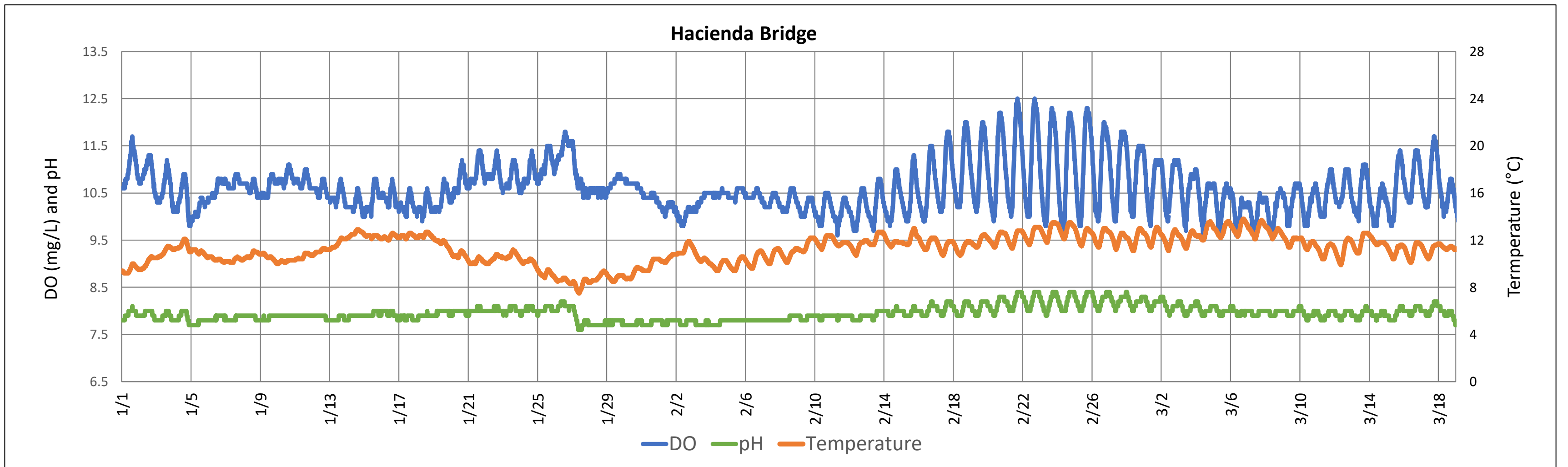


Russian River Water Quality (January 1 - March 18, 2021)

Digger Bend



Hacienda Bridge Water Quality



Russian River Fisheries Monitoring



Report on 3/18/21: Sonoma Water surveyed sites in the upper Russian River and in Dry Creek to collect information on spawning salmonids and their redds. Turbidity was high in the mainstem Russian River due to the recent rain events. No salmonids or redds were observed in the mainstem Russian River. In Dry Creek, 14 steelhead, 22 adult salmonids, and 12 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

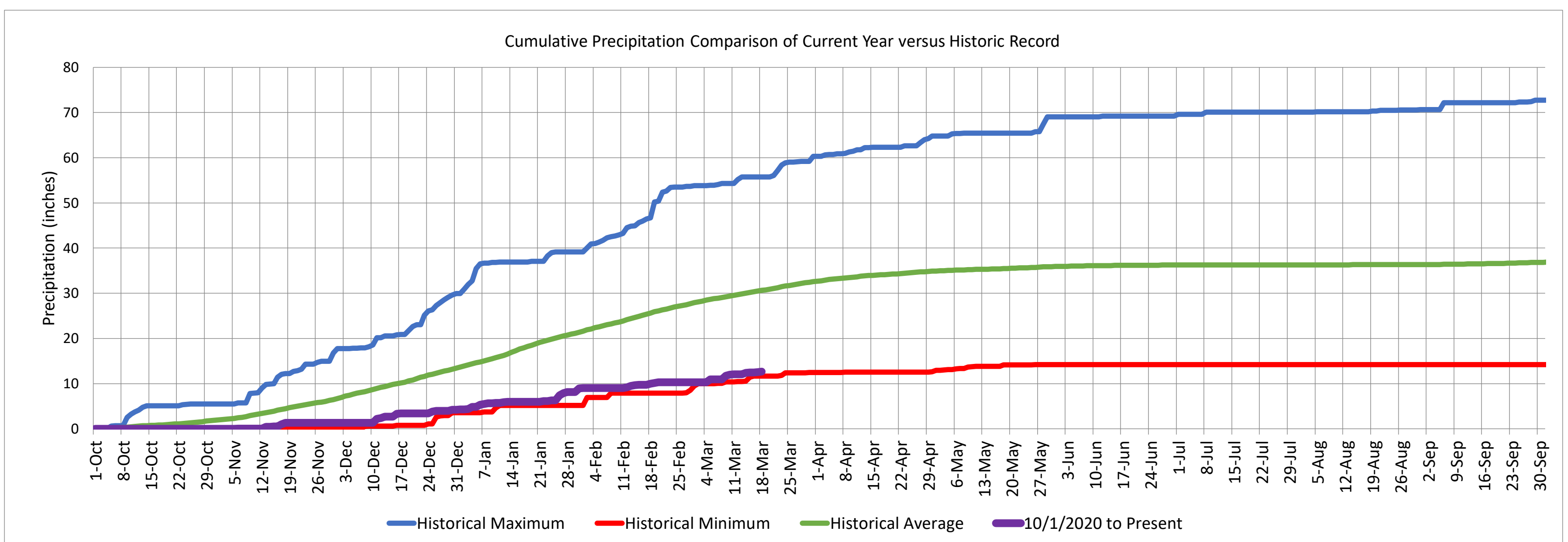
Tributary	Reach	Number of Trips to Date	Earliest Survey Date	Previous Week Survey	Recent Survey Date
Dry Creek	Dry Creek	6	2/7/2021	3/7/2021	3/14/2021
Russian River	Alexander Valley	5	2/14/2021	3/7/2021	3/14/2021
Russian River	Upper Mainstem	5	2/14/2021	3/7/2021	3/14/2021

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	34	0	13	14	22	12
Russian River	Alexander Valley	1	0	2	0	0	0
Russian River	Upper Mainstem	0	0	4	0	0	0

*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 18, 2021	12.66
Last 7 Days*	0.59



Global Forecast System Model 16-day Cumulative Precipitation Forecast

