



State Water Resources Control Board
 Temporary Urgency Change Order (2/4/2021)
 Russian River Hydrologic Report
 May 7, 2021 - May 13, 2021

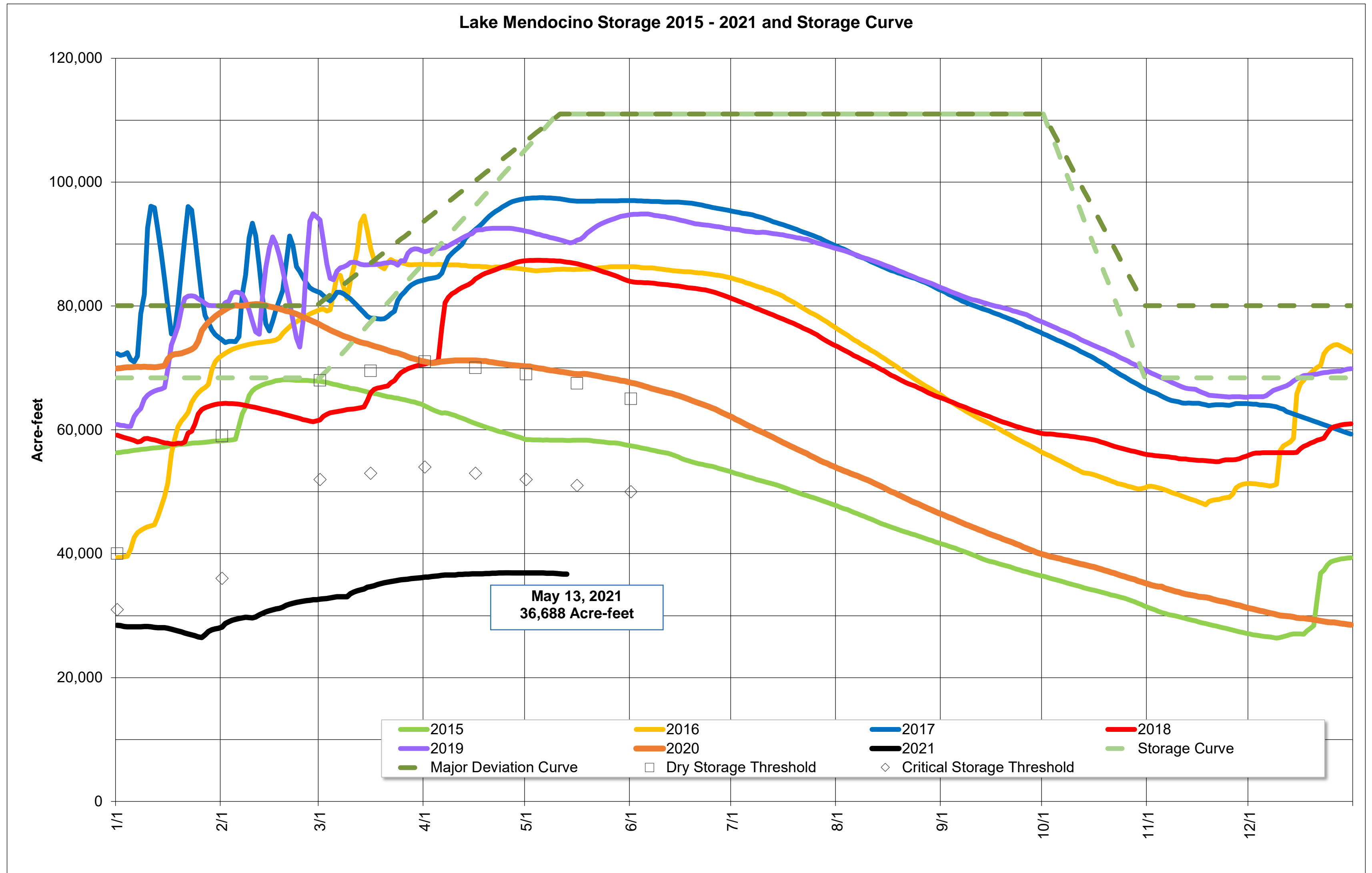
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A (Applications 12919A).

Instream Flow Requirements as of May 13, 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

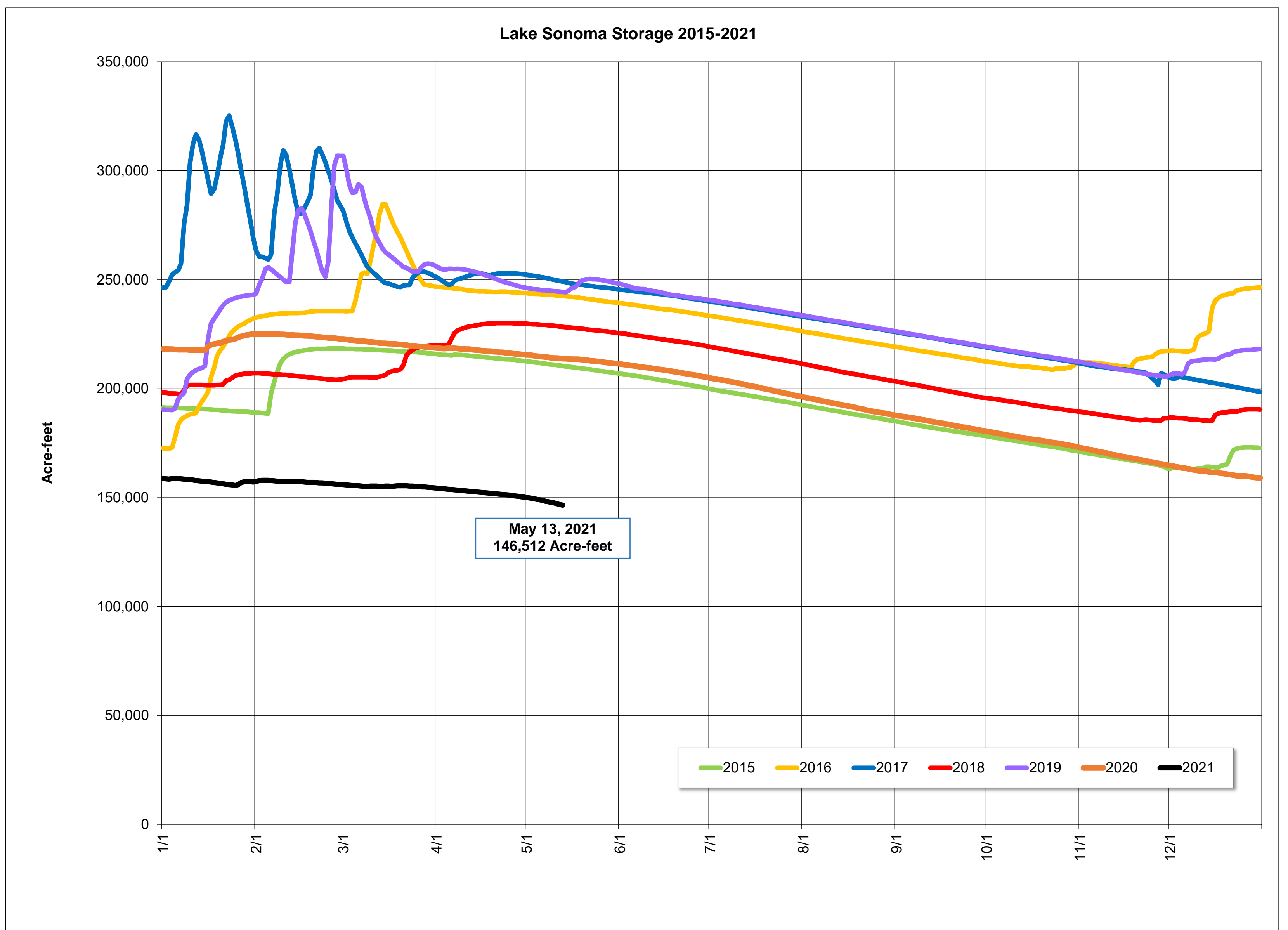


Storage (acre-feet)	May 13, 2021	36,688	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
	Last 7 days	-26	-1
Daily Inflow (cfs)	Last 7 days	Min	7
		Max	38
		Mean	28
Release (cfs)	Last 7 days	Min	29
		Max	38
		Mean	31

Lake Sonoma



Nathan Baskett, March 3, 2021



Storage (acre-feet)	May 13, 2021	146,512	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
		-6,326	-211
	Last 7 days	-2,215	-316
Daily Inflow (cfs)	Last 7 days	Min	0
		Max	14
		Mean	0
Release (cfs)	Last 7 days	Min	119
		Max	164
		Mean	141

Potter Valley Project

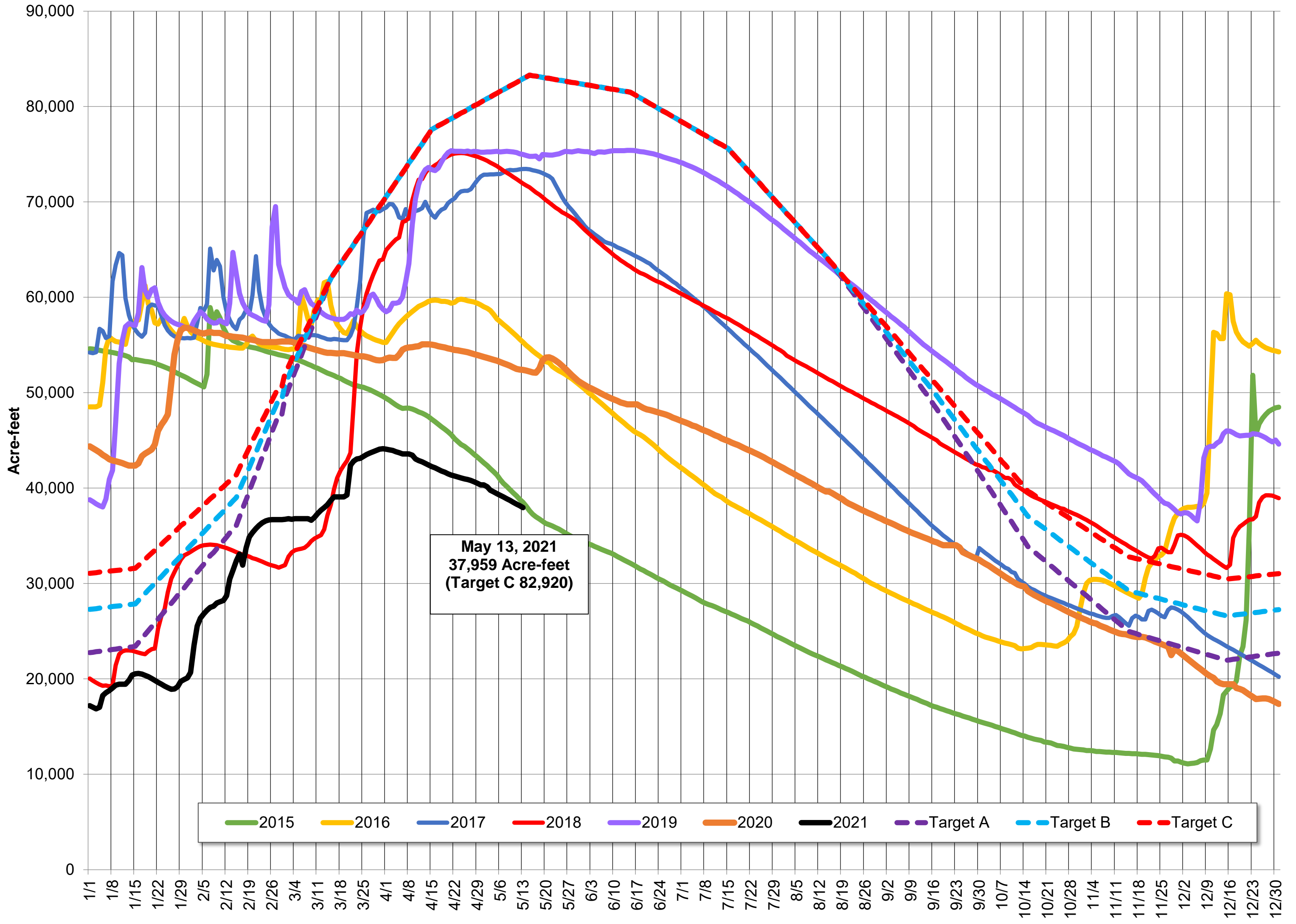
PVP Diversion (cfs)	May 13, 2021	36
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Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2020 - May 13, 2021	85,472	382
	Last 7 days	921	132

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2015-2021 and Target Storage Scenarios

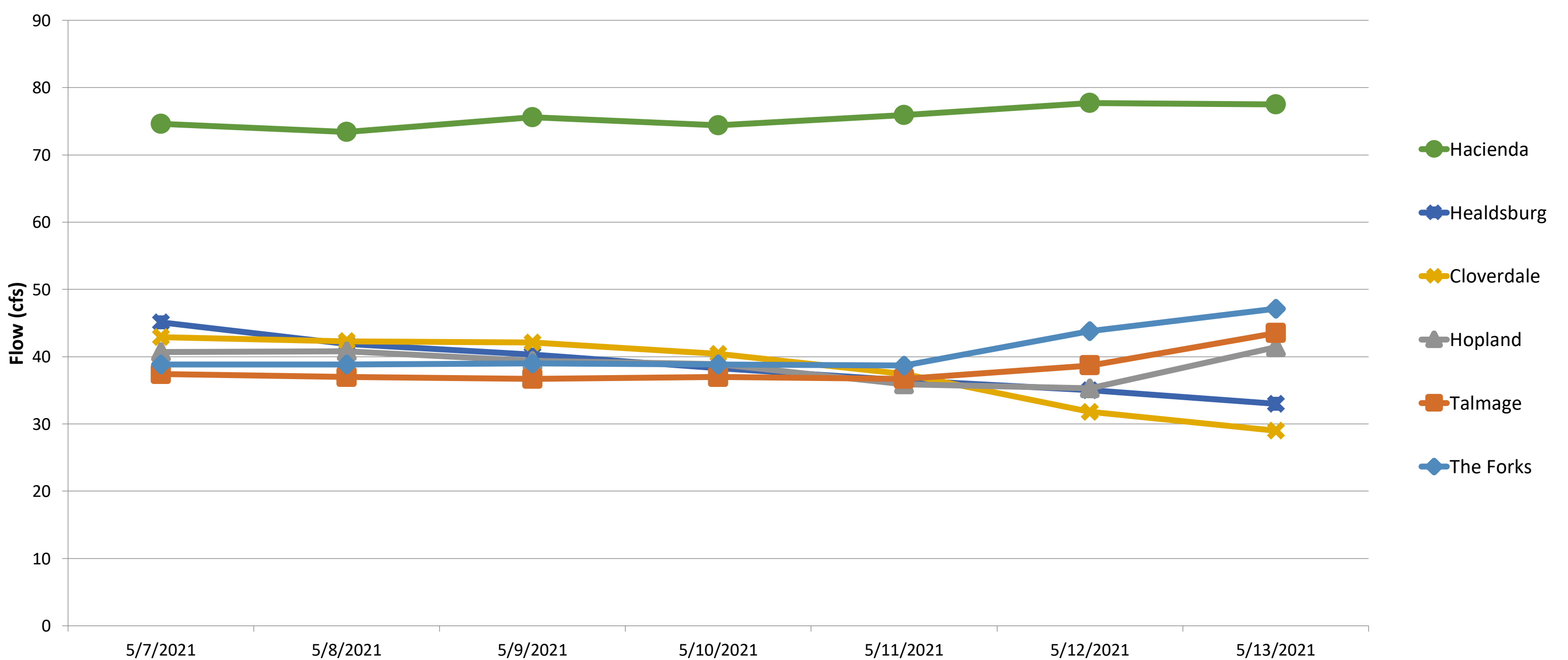


Russian River Flows (May 7 - May 13, 2021)

Gage	24-hr Average Flow (cfs)						
	May 7, 2021	May 8, 2021	May 9, 2021	May 10, 2021	May 11, 2021	May 12, 2021	May 13, 2021
The Forks*	39	39	39	39	39	44	47
Talmage USGS 11462080	37	37	37	37	37	39	44
Hopland USGS 11462500	41	41	39	39	36	35	41
Cloverdale USGS 11463000	43	42	42	40	37	32	29
Healdsburg USGS 11464000	45	42	40	38	37	35	33
Hacienda USGS 11467000	75	73	76	74	76	78	78

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

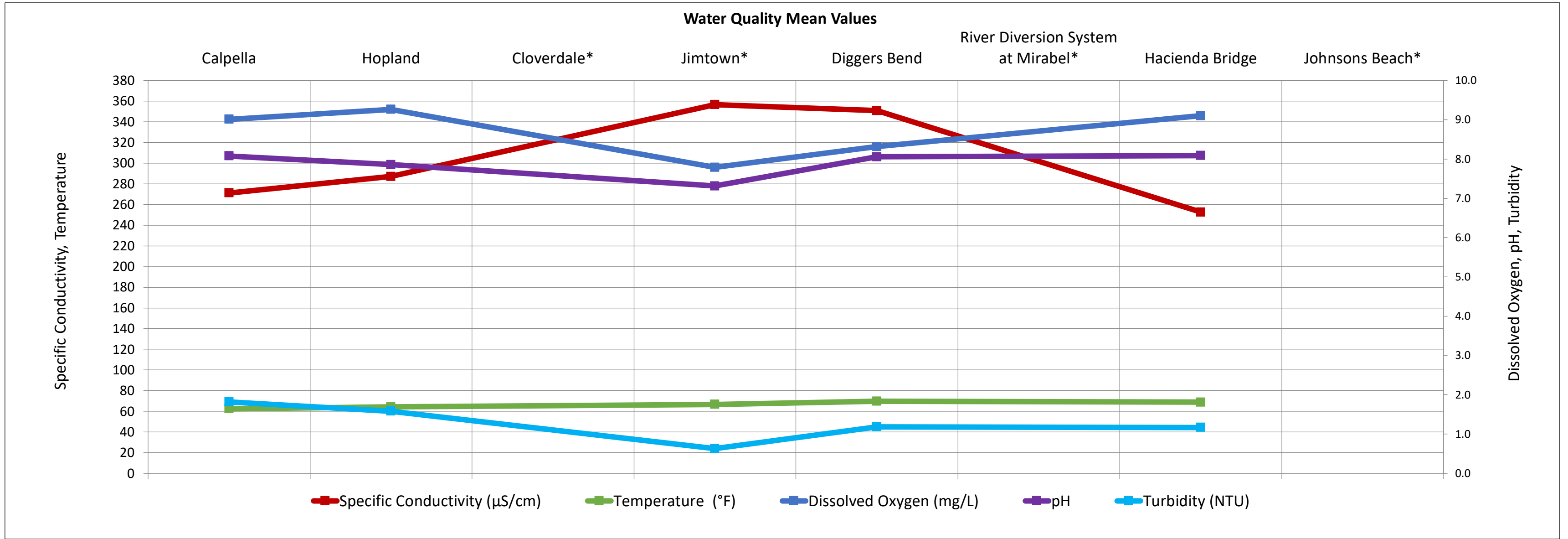
Russian River Flows



Russian River Water Quality (May 7 - May 13, 2021)

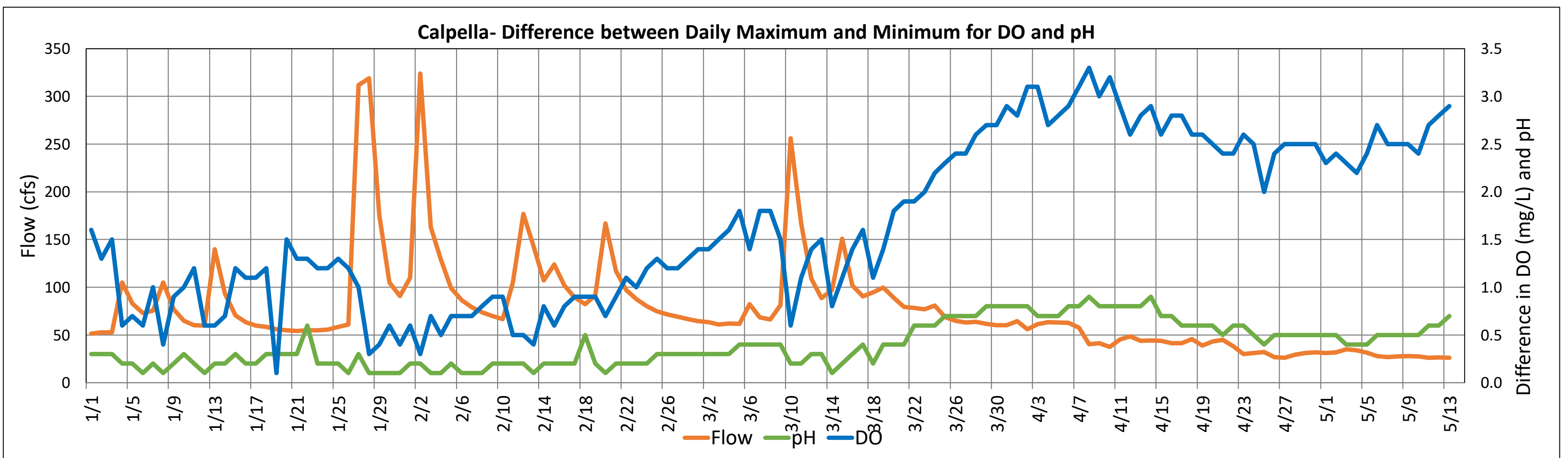
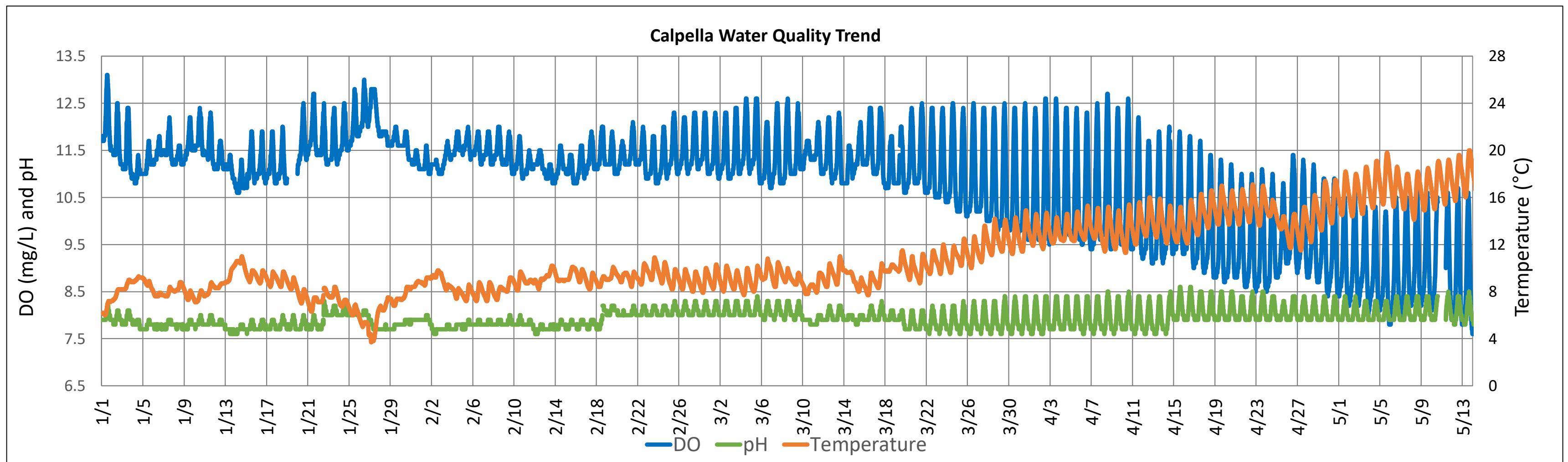
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	57.4	59.9		61.7	63.7		65.8	
	Max	67.3	68.4		72.1	76.3		71.1	
	Mean	62.4	64.2		66.8	69.8		68.9	
Specific Conductivity (µS/cm)	Min	251	279		354	345		237	
	Max	281	300		359	355		268	
	Mean	271	287		357	351		253	
Dissolved Oxygen (mg/L)	Min	7.8	6.4		5.4	6.2		8.0	
	Max	10.7	13.1		10.9	10.4		10.3	
	Mean	9.0	9.3		7.8	8.3		9.1	
Dissolved Oxygen (% Saturation)	Min	76	63		55	64		84	
	Max	115	144		125	124		115	
	Mean	91	96		84	91		100	
pH	Min	7.8	7.4		7.2	7.8		7.9	
	Max	8.5	8.5		7.5	8.4		8.3	
	Mean	8.1	7.9		7.3	8.1		8.1	
Turbidity (NTU)	Min	0.6	0.7		0.1	0.3		0.6	
	Max	19.6	6.9		1.6	2.5		3.1	
	Mean	1.8	1.6		0.6	1.2		1.2	

*Station operated seasonally



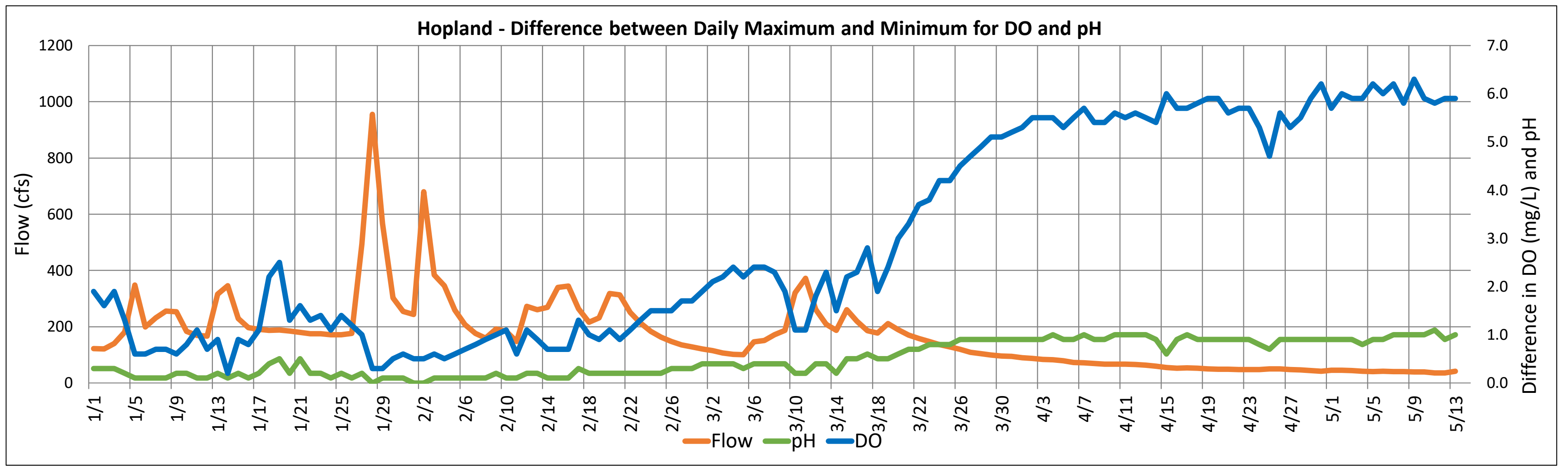
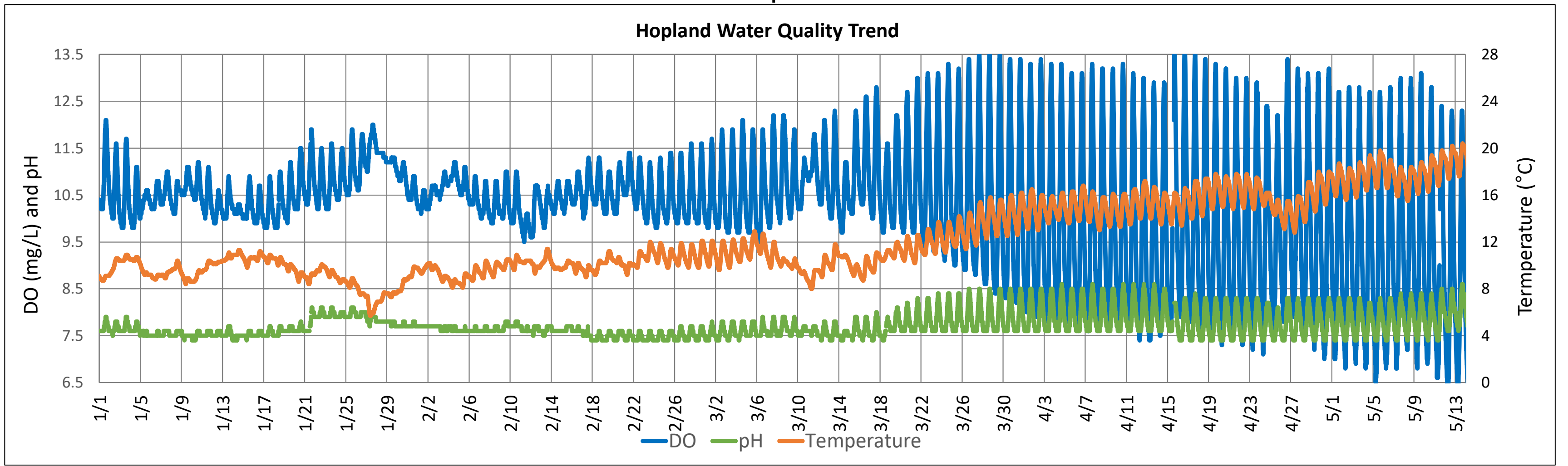
Russian River Water Quality (January 1 - May 13, 2021)

Calpella (East Fork Russian River)

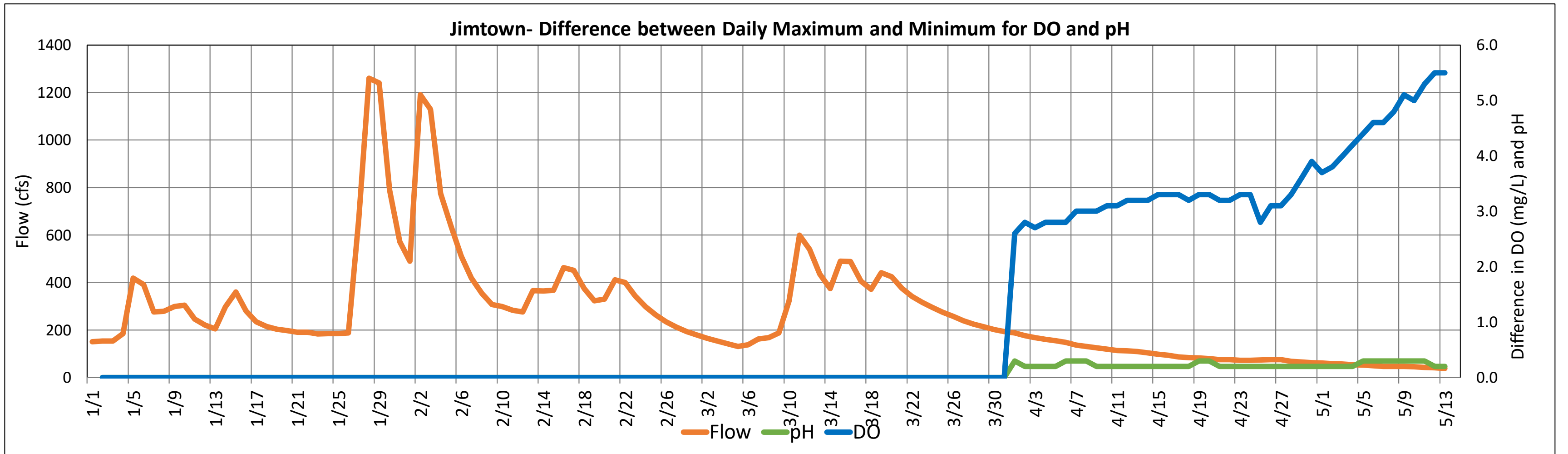
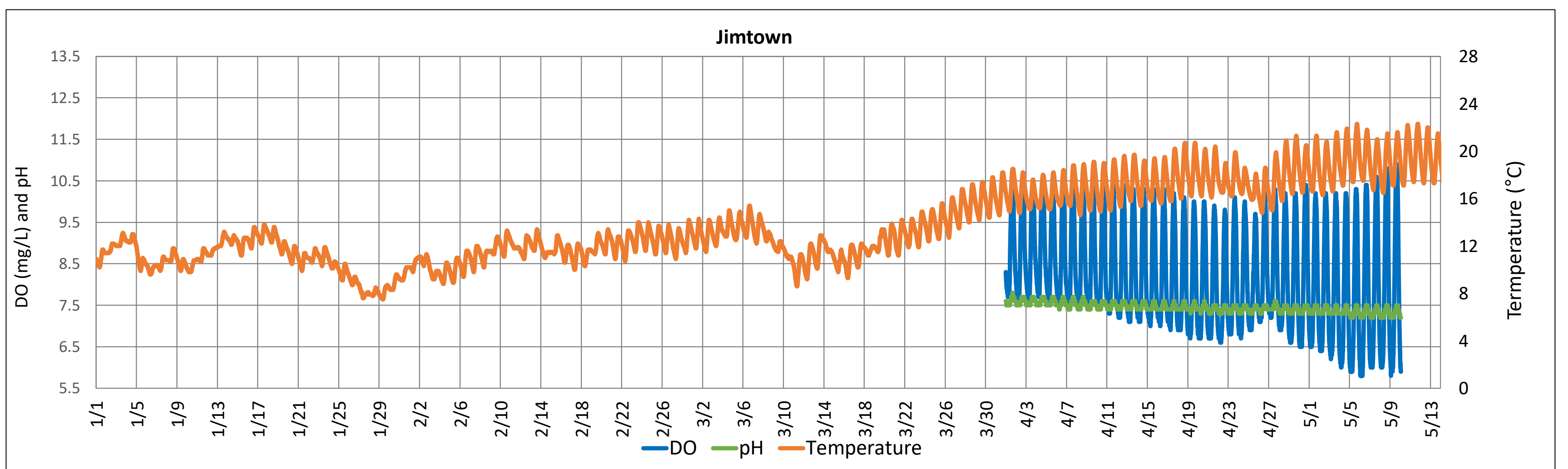


Russian River Water Quality (January 1 - May 13, 2021)

Hopland

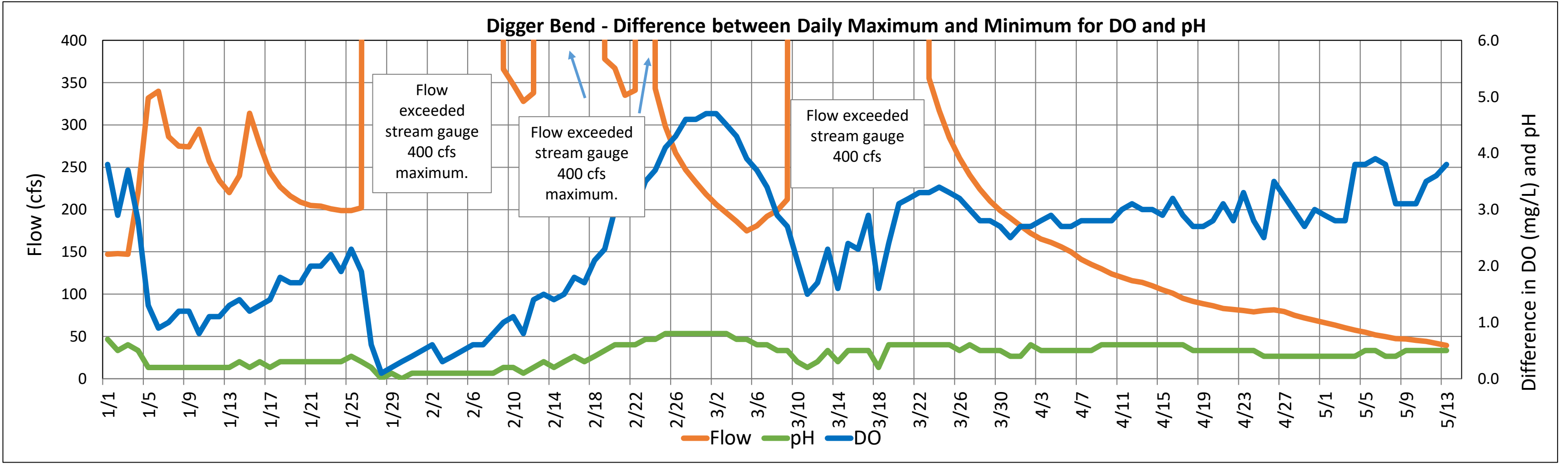
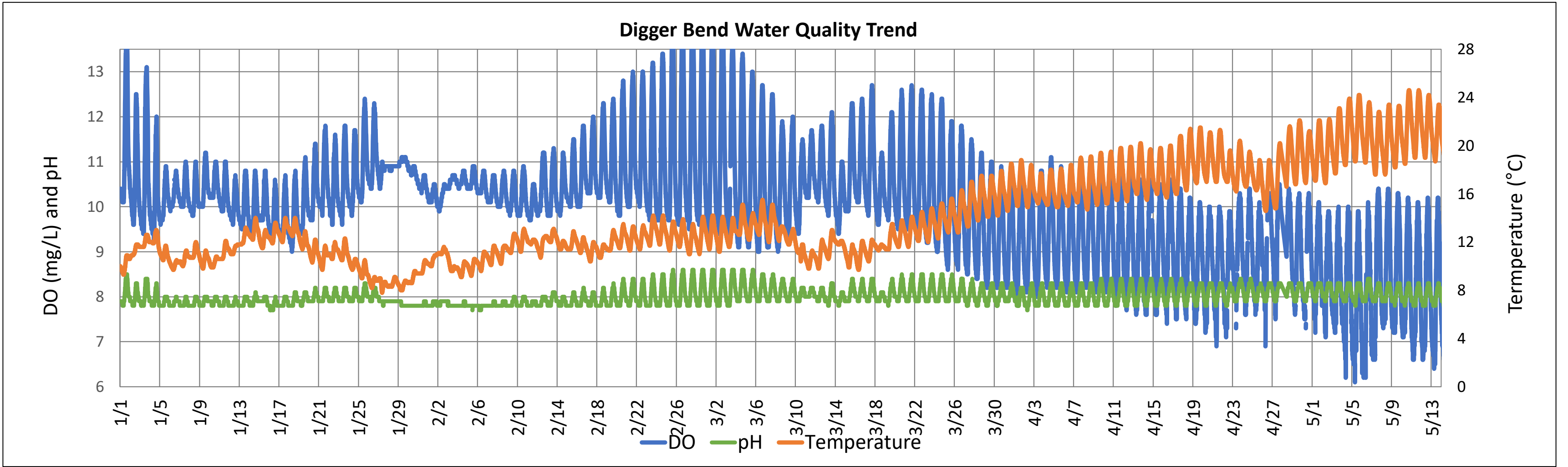


Jimtown Water Quality

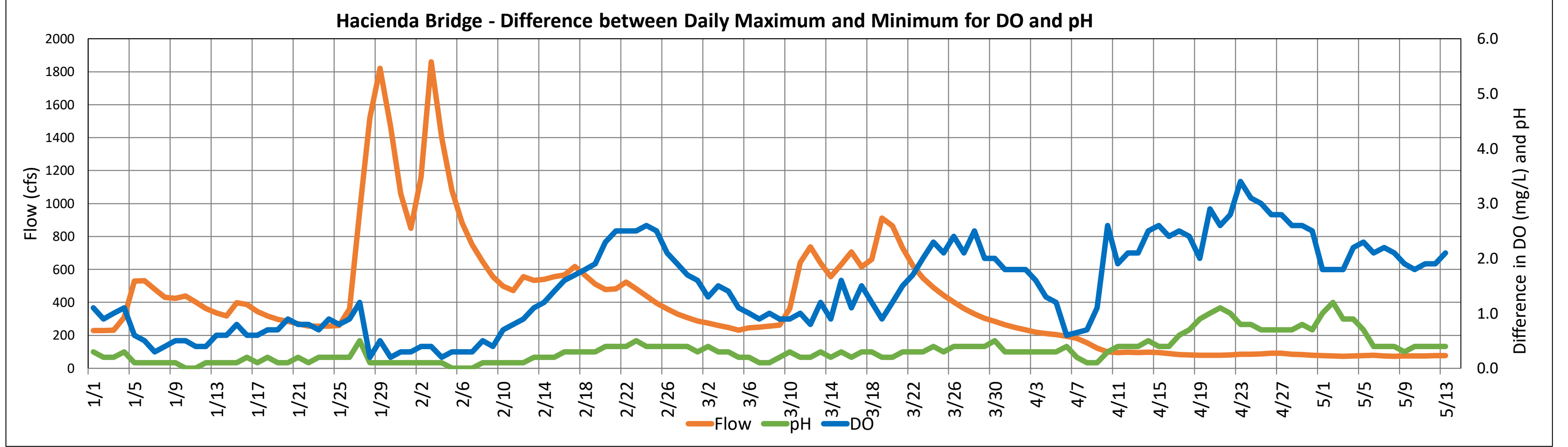
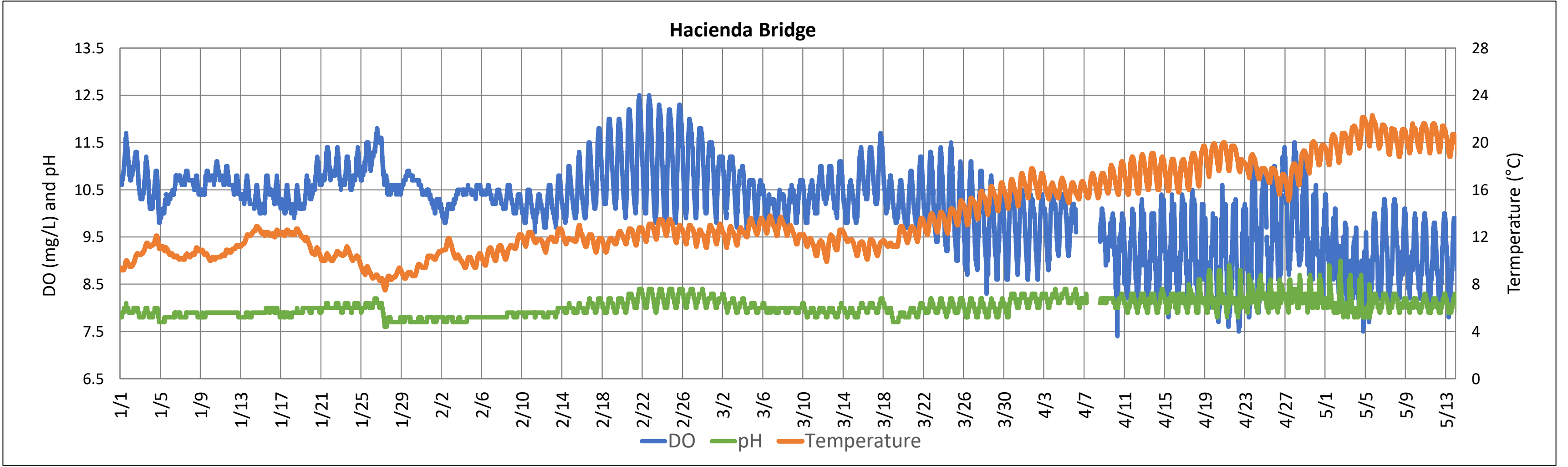


Russian River Water Quality (January 1 - May 13, 2021)

Digger Bend



Hacienda Bridge Water Quality



Russian River Fisheries Monitoring



Report on 5/13/2021: No report for spawning and redd surveys available this week.

The Mirabel dam video monitoring station closed for the season on January 26, 2021, but Sonoma Water continues to review video that was collected earlier in the season. Sonoma Water has reviewed all the video that was collected during the 2020 return year. 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	1/26/2021	Steelhead	661
West ladder	1/26/2021	Chinook	609
		Coho	316
		Unidentified Salmonid	64

Salmonid Redd and Spawner Survey

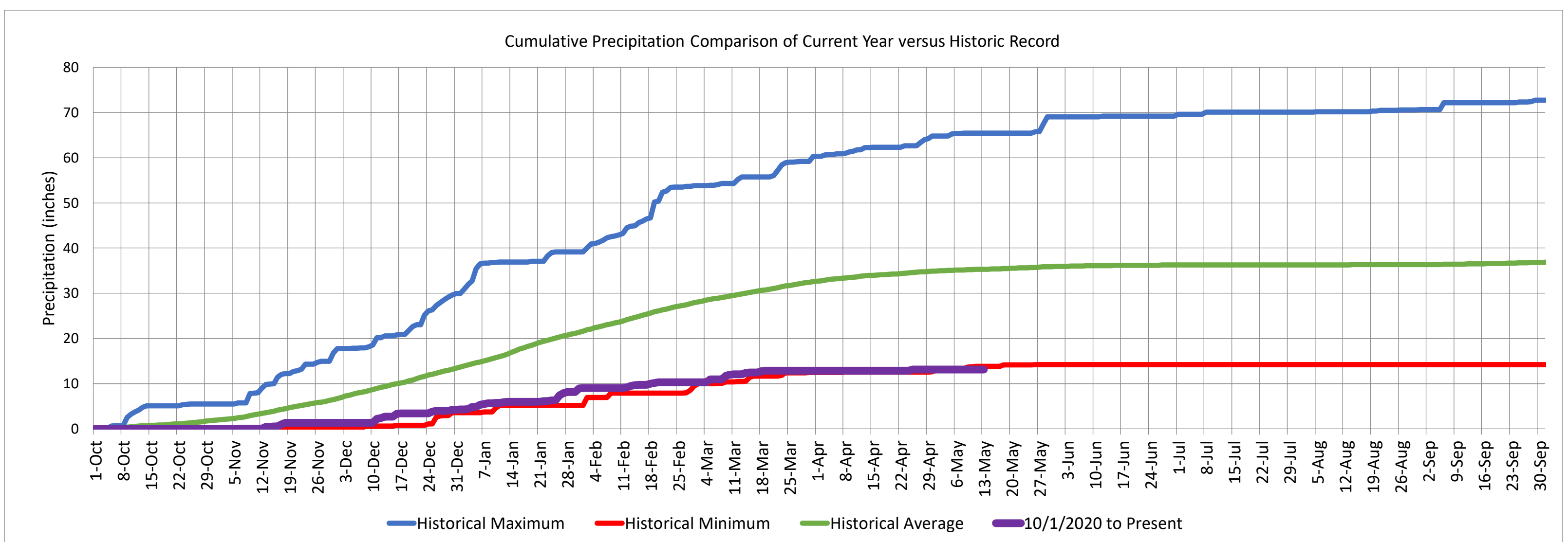
Tributary	Reach	Number of Trips to Date	Earliest Survey Date	Previous Week Survey	Recent Survey Date
Dry Creek	Dry Creek	11	2/7/2021	4/18/2021	4/25/2021
Russian River	Alexander Valley	10	2/14/2021	4/18/2021	4/25/2021
Russian River	Upper Mainstem	10	2/14/2021	4/18/2021	4/25/2021

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	1	0	2	1	0	2
Russian River	Alexander Valley	0	0	4	0	0	0
Russian River	Upper Mainstem	0	0	5	0	0	5

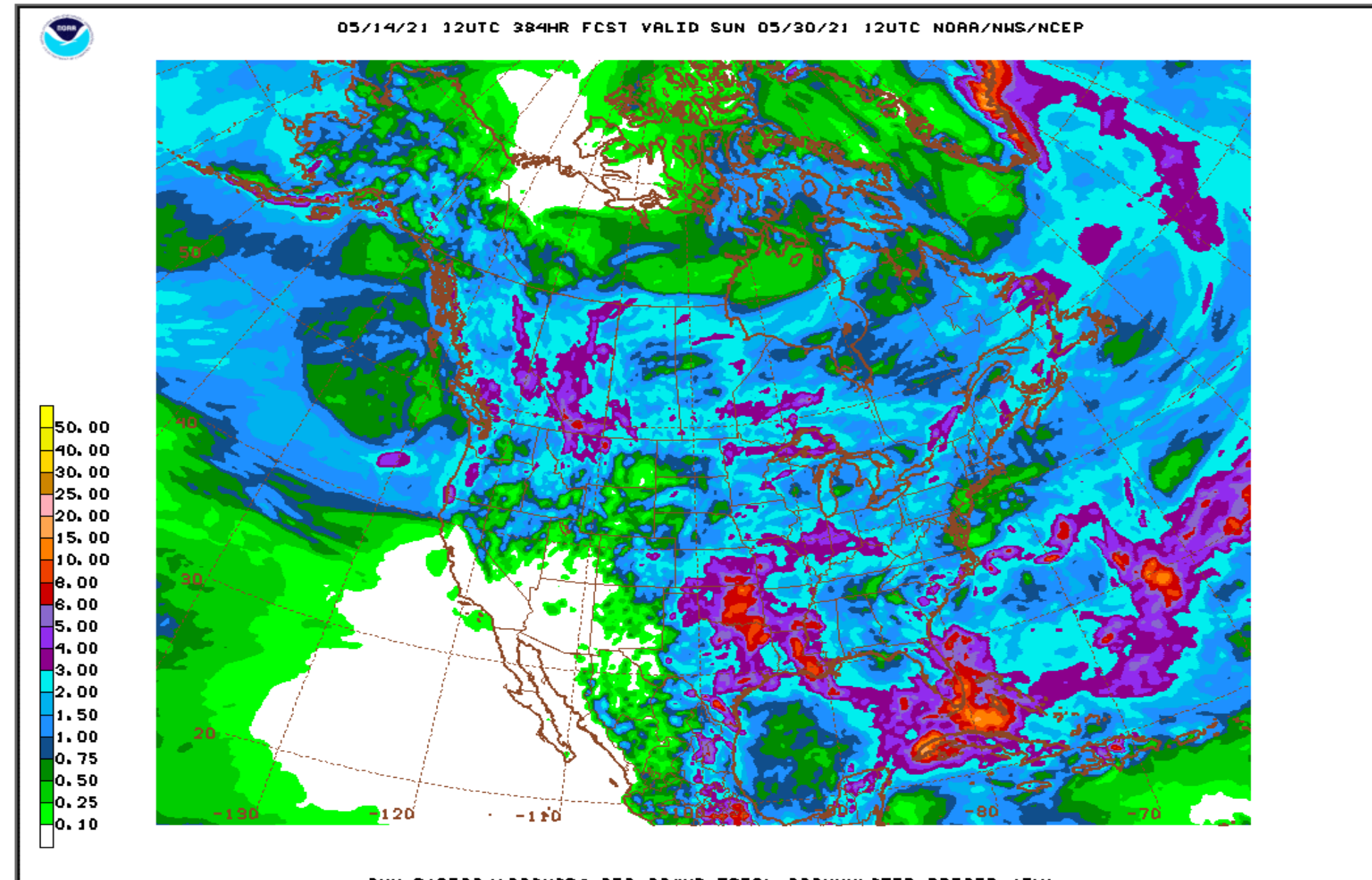
*Redd counts may include old redds that were observed in previous surveys.

Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))	
Date Range	Cumulative (inches)
Oct 1, 2020 - May 13, 2021	13.12
Last 7 Days*	0.00



Global Forecast System Model 16-day Cumulative Precipitation Forecast



Date Range	Forecasted Cumulative (inches)
May 14 - May 29, 2021	0.0

Lake Mendocino Water Accounting Weekly Report (Term 11)

Report Date: 5/13/2021

Units are cfs unless noted otherwise

	<u>5/6/2021</u>	<u>5/7/2021</u>	<u>5/8/2021</u>	<u>5/9/2021</u>	<u>5/10/2021</u>	<u>5/11/2021</u>	<u>5/12/2021</u>
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	35.0	38.0	37.0	34.0	34.0	35.0	35.0
PVID Canals Delivery Requested	30.0	33.1	32.7	30.0	30.0	30.0	30.0
PVID Canals Delivery Actual	19.5	18.7	17.3	15.1	15.3	16.0	15.8
East Fork Release	15.5	19.3	19.7	18.9	18.7	19.1	19.2
PVID Canal Return Flow (assumed)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PVID Canal Diversions	19.5	18.7	17.3	15.1	15.3	16.0	15.8
PVID E Fork Diversions (est.)	12.2	12.2	12.2	12.2	12.2	12.2	12.2
PVID Water Use under PG&E Contract (est.)	19.5	18.7	17.3	15.1	15.3	16.0	15.8
PVID Water Use under Water Right (est.)	12.2	12.2	12.2	12.2	12.2	12.2	12.2
East Fork / Potter Valley Reach Analysis							
USGS E Fork @ Calpella	29.7	27.3	26.5	28.2	27.9	27.0	26.2
Net Reach Loss(-)/Gain(+)	-5.3	-10.7	-10.5	-5.8	-6.1	-8.0	-8.8
Unimpaired Natural Flow @ Calpella (est.)	6.7	6.7	6.7	6.8	6.7	6.7	6.5
Non-PVID East Fork Estimated Reach Losses	-19.7	-13.4	-12.2	-14.7	-14.6	-13.5	-12.7
Natural Flow	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Import	0.0	0.0	0.0	0.0	0.0	0.0	0.0
II. Lake Mendocino							
Reservoir Operations							
Calculated Inflow (ac-ft)	75.1	48.1	65.0	50.4	66.7	14.7	64.7
(cfs)	38	24	33	25	34	7	33
Natural Flow	35	17	25	19	27	0	26
Import	3	7	8	7	7	7	7
Storage Change (ac-ft)	+0.0	-27.0	-13.0	-26.0	-13.0	-65.0	-26.0
(cfs)	+0	-14	-7	-13	-7	-33	-13
Stored Natural Flow (cfs)	0	0	0	0	0	0	0
Stored Import Water (cfs)	0	0	0	0	0	0	0
Evaporation (ac-ft)	17.6	17.6	20.7	19.1	22.2	22.1	22.1
RVCWD Diversion (ac-ft)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CVD Release Gage	29	29	29	29	29	29	35
Storage (Project Water)	0	14	7	13	7	29	13
Natural Flow	29	13	20	14	21	0	20
Import Water	0	3	2	2	1	0	1
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage		<i>Rvr mi.</i>					
CVD Release	29	99.9	29	29	29	29	35
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	29	15	22	16	22	0	21
Project Water Release Required	No	Yes	Yes	Yes	Yes	Yes	Yes
III. Upper Russian River Reach							
Minimum Instream Flow Requirement	25	25	25	25	25	25	25
Controlling Compliance Gage							
Min Gage Flow	38	33	37	35	35	31	26
Controlling Gage	Talmage	Geyserville	Geyserville	Geyserville	Geyserville	Geyserville	Geyserville
All Compliance Gages							
		<i>Rvr mi.</i>					
Forks (CVD + USGS 11461000)	99.0	39	39	39	39	39	44
Talmage (USGS 11462080)	96.1	38	37	37	37	37	39
Hopland (USGS 11462500)	84.8	42	41	41	39	39	35
Cloverdale (USGS 11463000)	70.9	40	43	42	42	40	32
Geyserville (USGS 11463500)	54.4	38	33	37	35	35	26
Jimtown (USGS 11463682)	48.5	50	47	46	46	45	40
Digger Bend (USGS 11463980)	38.2	52	50	47	47	46	42
Healdsburg (USGS 11464000)	35.6	47	45	42	40	38	35
Net Reach Losses							
Forks - Talmage	-2	-2	-2	-3	-2	-2	-2
Talmage - Hopland	+4	+3	+4	+3	+2	-1	-1
Hopland - Cloverdale	-1	+1	+2	+2	+1	-1	-4
Cloverdale - Jimtown	+10	+5	+4	+4	+4	+5	+9
Jimtown - Digger Bend	+1	+1	+1	+1	-0	+0	+0
Digger Bend - Healdsburg	-5	-5	-6	-7	-8	-8	-7
CVD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-2	+5	+4	+4	+4	+5	+9
Storage (Project Water)	-0	+0	+0	+0	+0	+0	+0
Pass-through Water (Natural + Import)	-2	+5	+4	+4	+4	+5	+9
Total Pass-through Water	27	20	26	19	27	5	30
Project Water Release Required	No	Yes	No	Yes	No	Yes	No

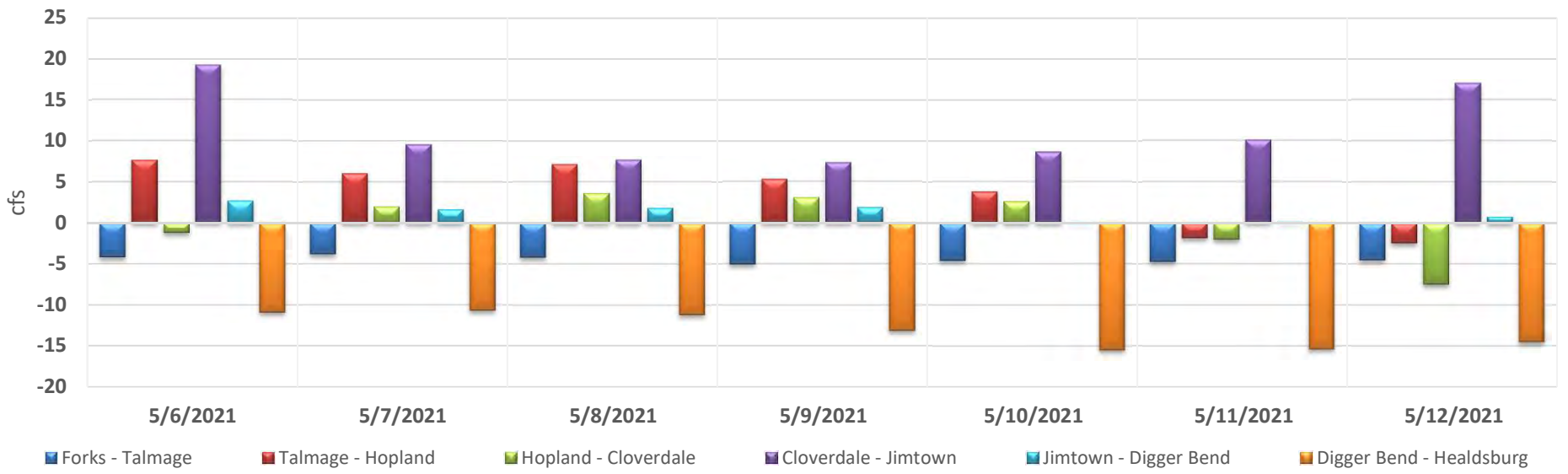
Notes:

- Water Accounting for the Upper Russian River is an analysis that approximates the current conditions based on methodology in Term 11 report and forthcoming update. Values listed include estimated and assumed values where measurements were not currently available.

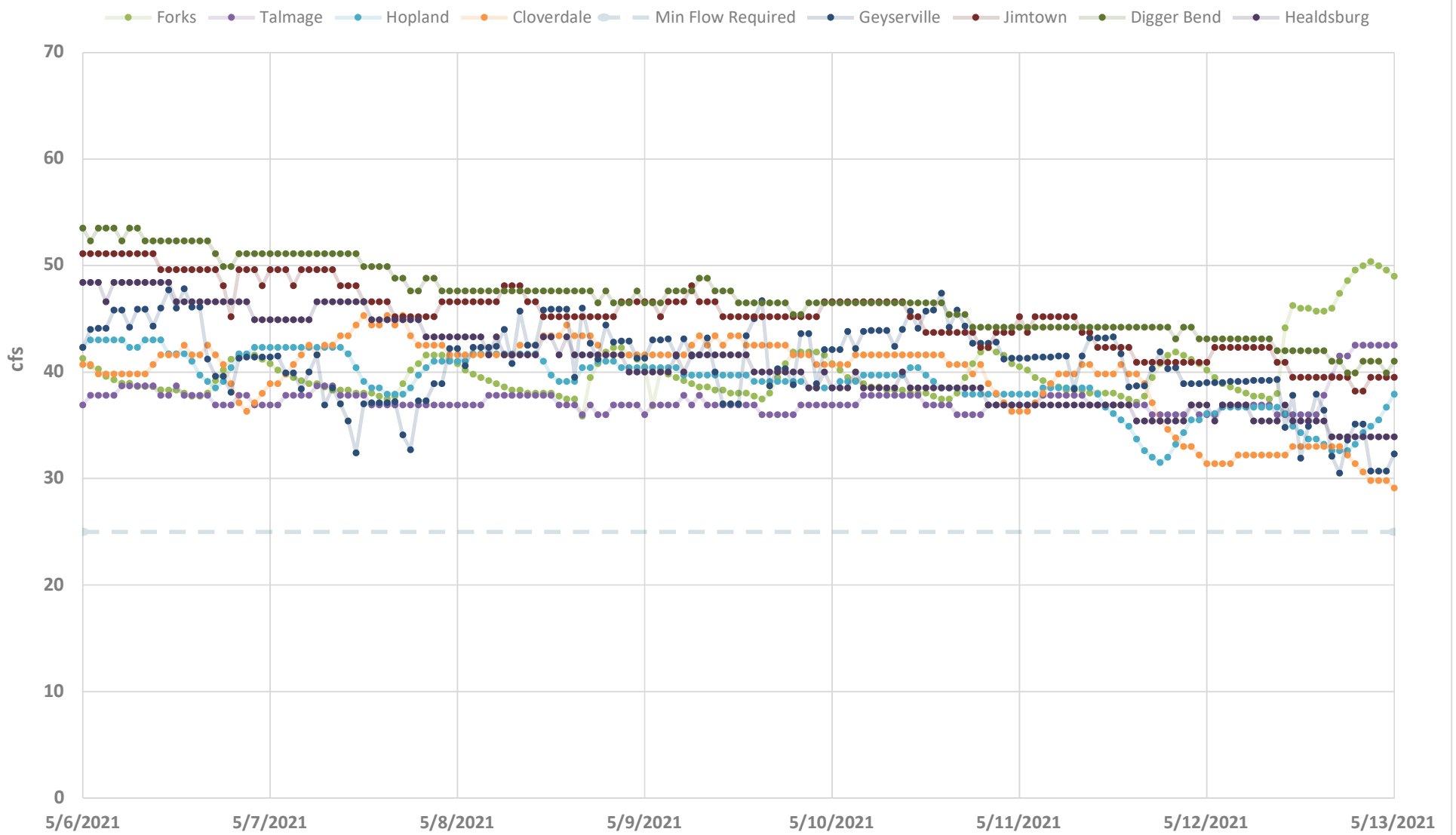
Lake Mendocino Water Accounting Weekly Report (Term 11)

Report Date: 5/13/2021

UPPER RUSSIAN RIVER NET REACH LOSSES



UPPER RUSSIAN RIVER STREAM FLOWS



MAP OF UPPER RUSSIAN RIVER and STREAM GAGES

