



State Water Resources Control Board
 Temporary Urgency Change Order (2/4/2021)
 Russian River Hydrologic Report
 May 14, 2021 - May 20, 2021

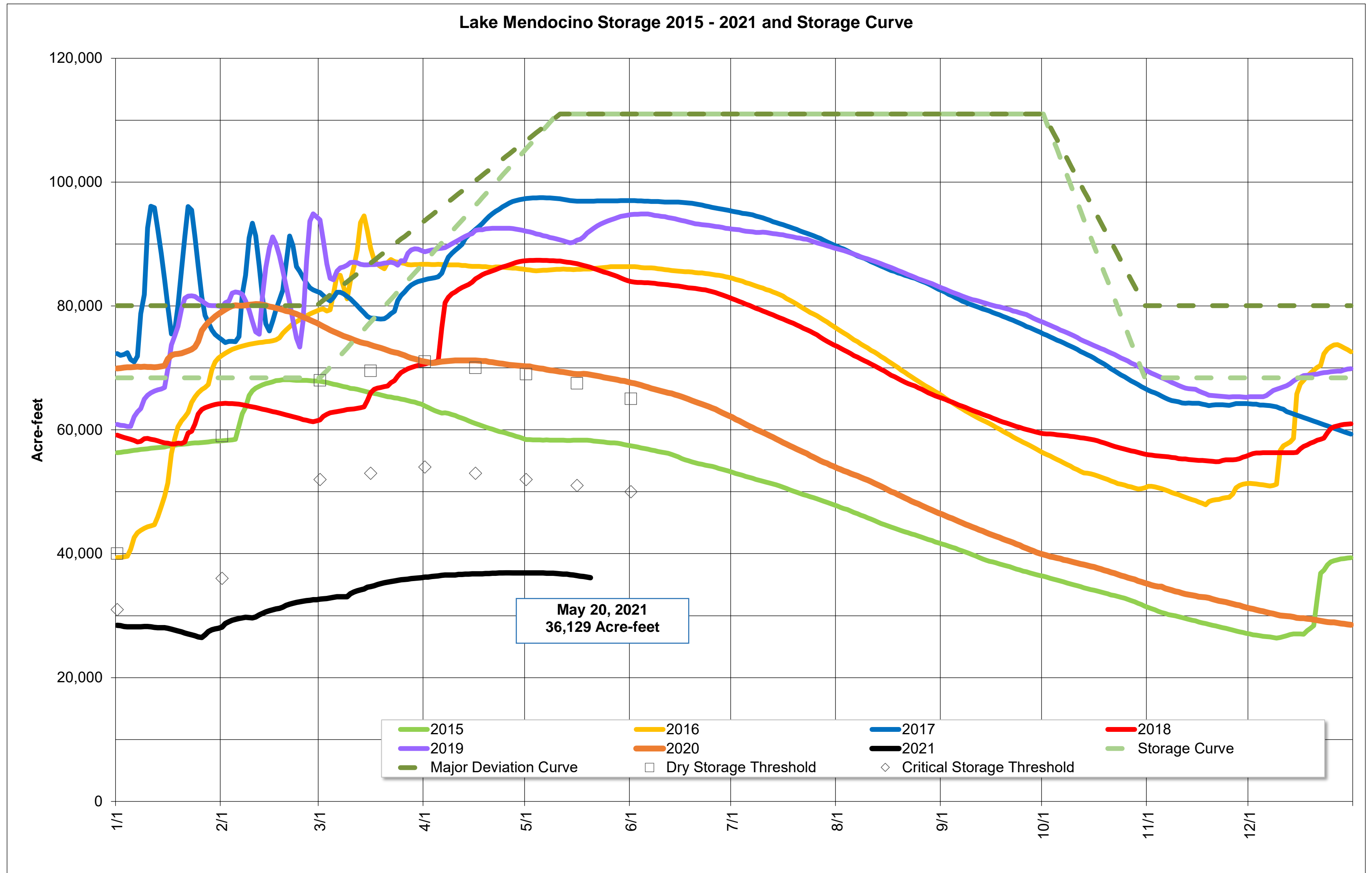
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A (Applications 12919A).

Instream Flow Requirements as of May 20, 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

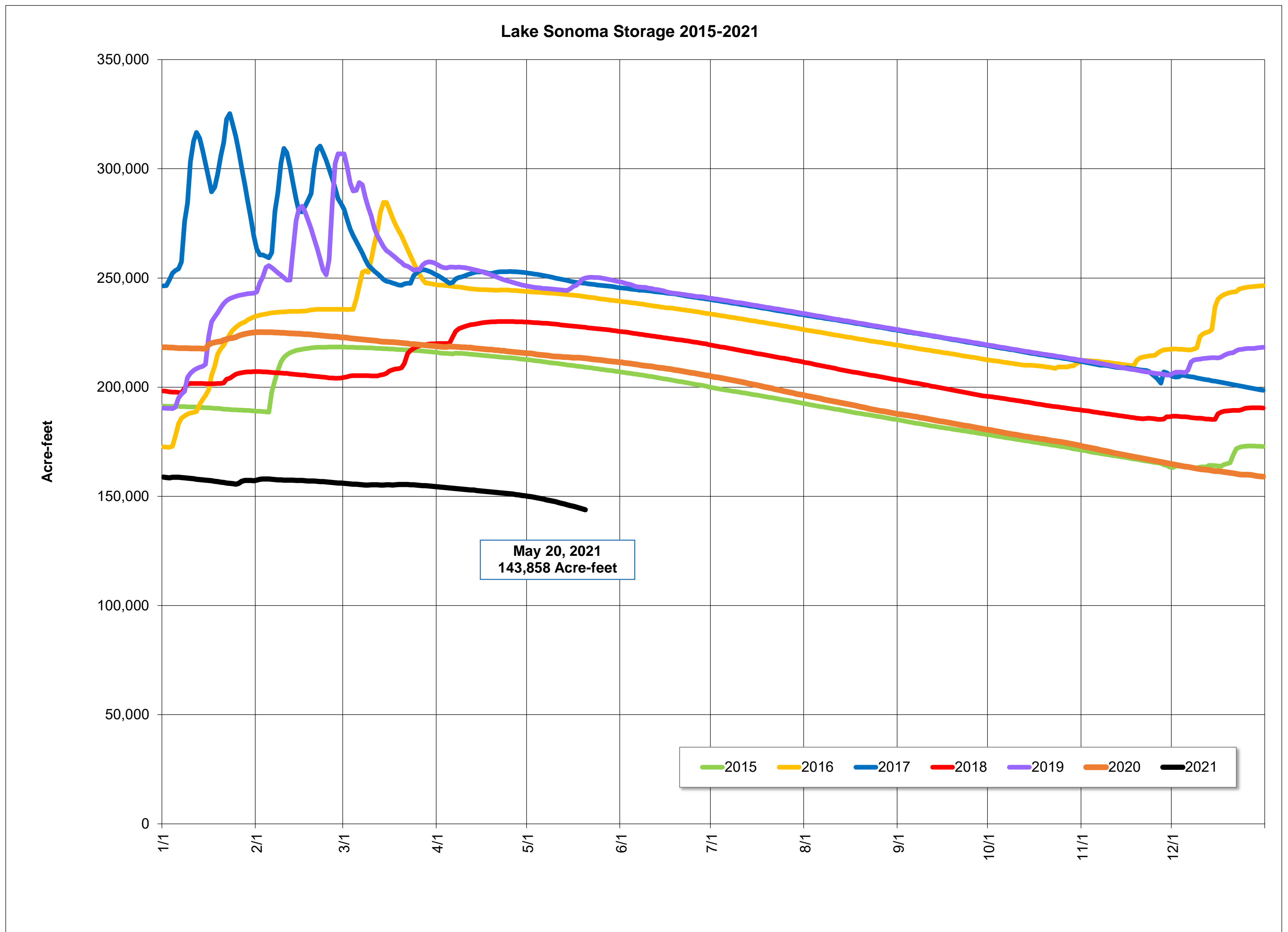


Storage (acre-feet)	May 20, 2021	36,129	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
	Last 7 days	-676	-23
Daily Inflow (cfs)	Last 7 days	Min	6
		Max	30
		Mean	19
Release (cfs)	Last 7 days	Min	38
		Max	50
		Mean	47

Lake Sonoma



Nathan Baskett, March 3, 2021



Storage (acre-feet)	May 20, 2021	143,858	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
		-8,003	-267
	Last 7 days	-2,654	-379
Daily Inflow (cfs)	Last 7 days	Min	0
		Max	14
		Mean	0
Release (cfs)	Last 7 days	Min	164
		Max	171
		Mean	167

Potter Valley Project

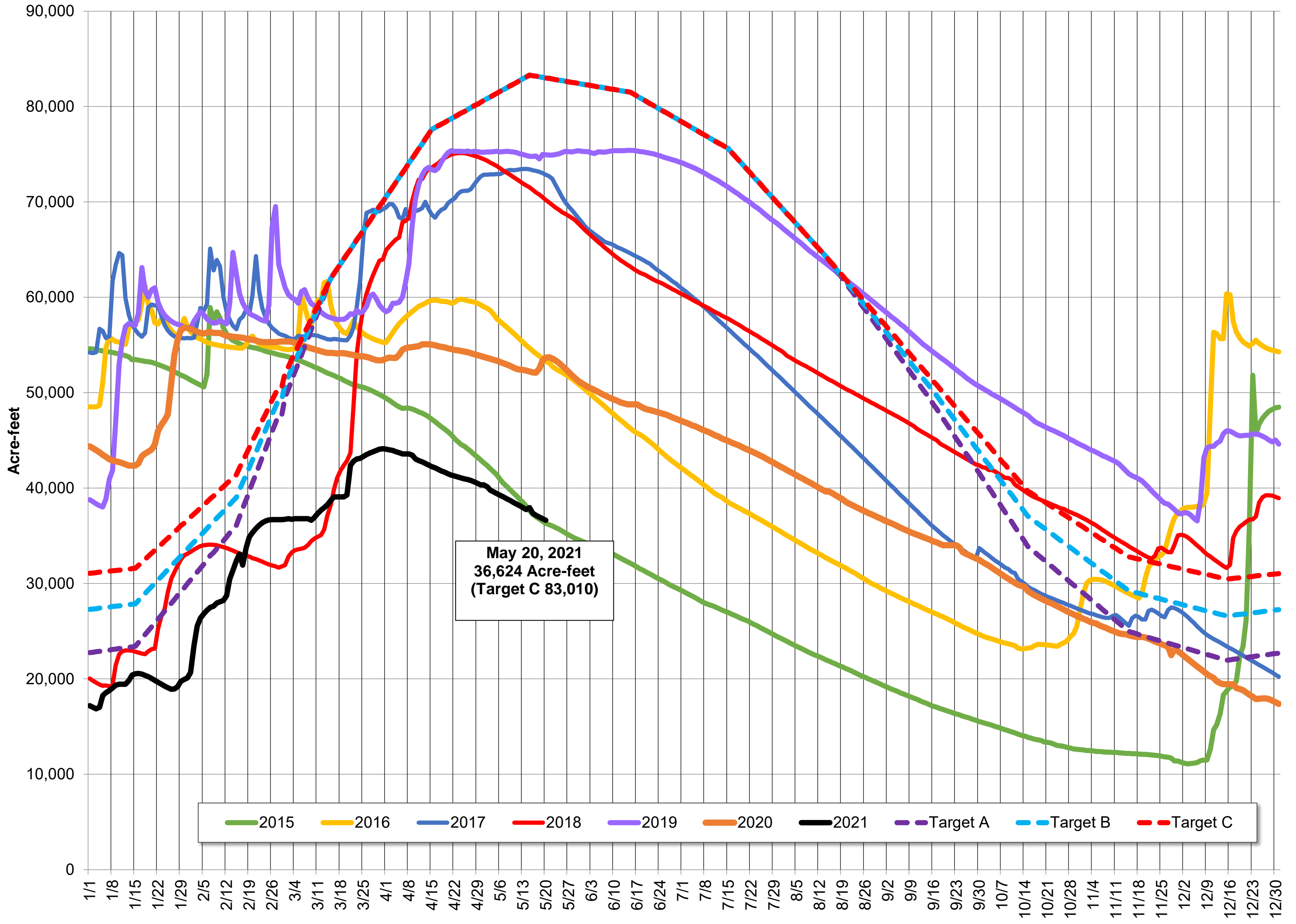
PVP Diversion (cfs)	May 20, 2021	40
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Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2020 - May 20, 2021	86,365	374
	Last 7 days	893	128

*Inflow calculation based on criteria established in D1610

Lake Pillsbury Storage 2015-2021 and Target Storage Scenarios

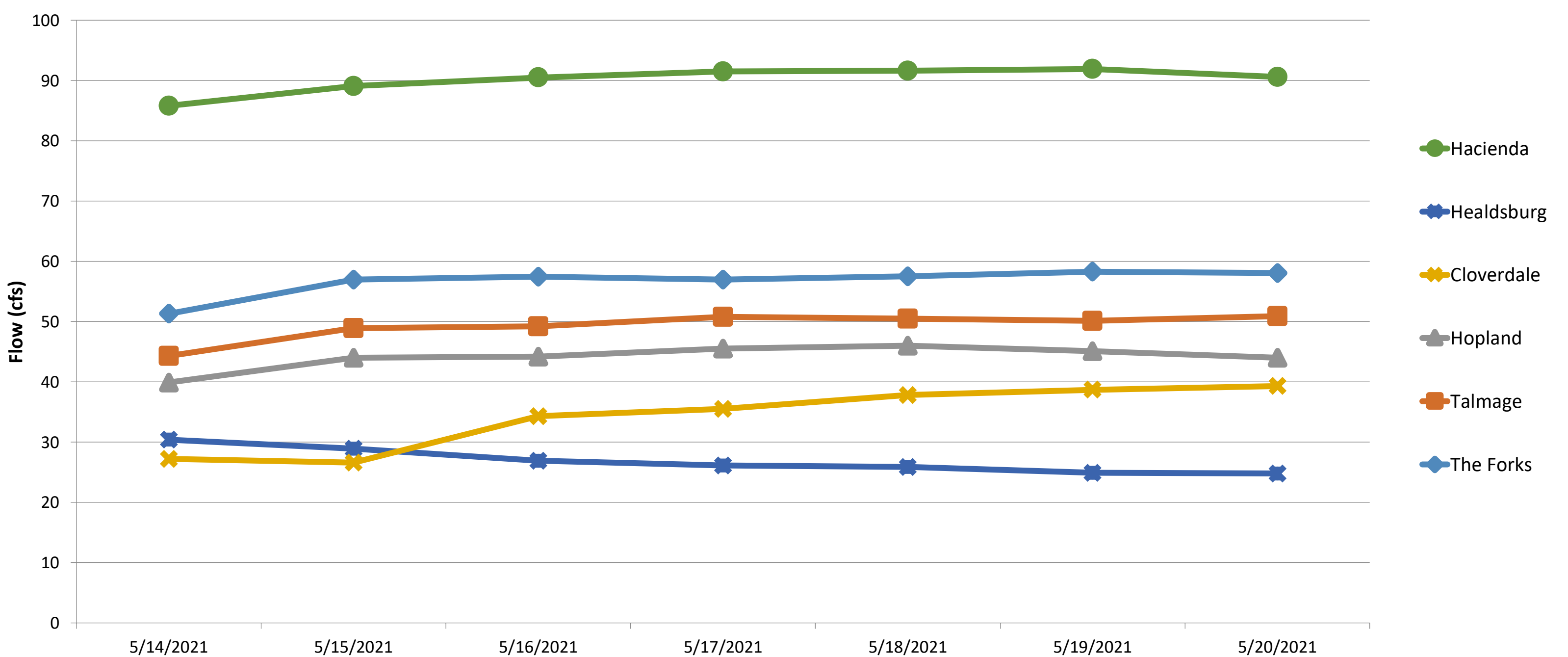


Russian River Flows (May 14 - May 20, 2021)

Gage	24-hr Average Flow (cfs)						
	May 14, 2021	May 15, 2021	May 16, 2021	May 17, 2021	May 18, 2021	May 19, 2021	May 20, 2021
The Forks*	51	57	57	57	58	58	58
Talmage USGS 11462080	44	49	49	51	51	50	51
Hopland USGS 11462500	40	44	44	46	46	45	44
Cloverdale USGS 11463000	27	27	34	36	38	39	39
Healdsburg USGS 11464000	30	29	27	26	26	25	25
Hacienda USGS 11467000	86	89	91	92	92	92	91

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

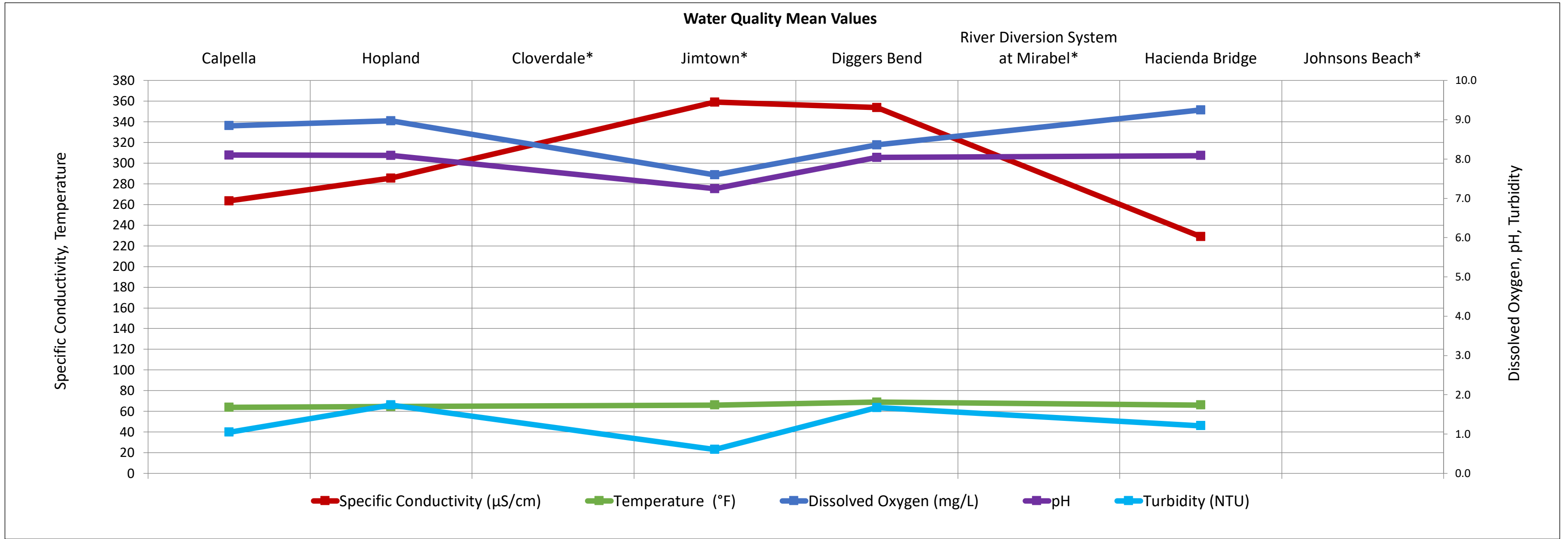
Russian River Flows



Russian River Water Quality (May 14 - May 20, 2021)

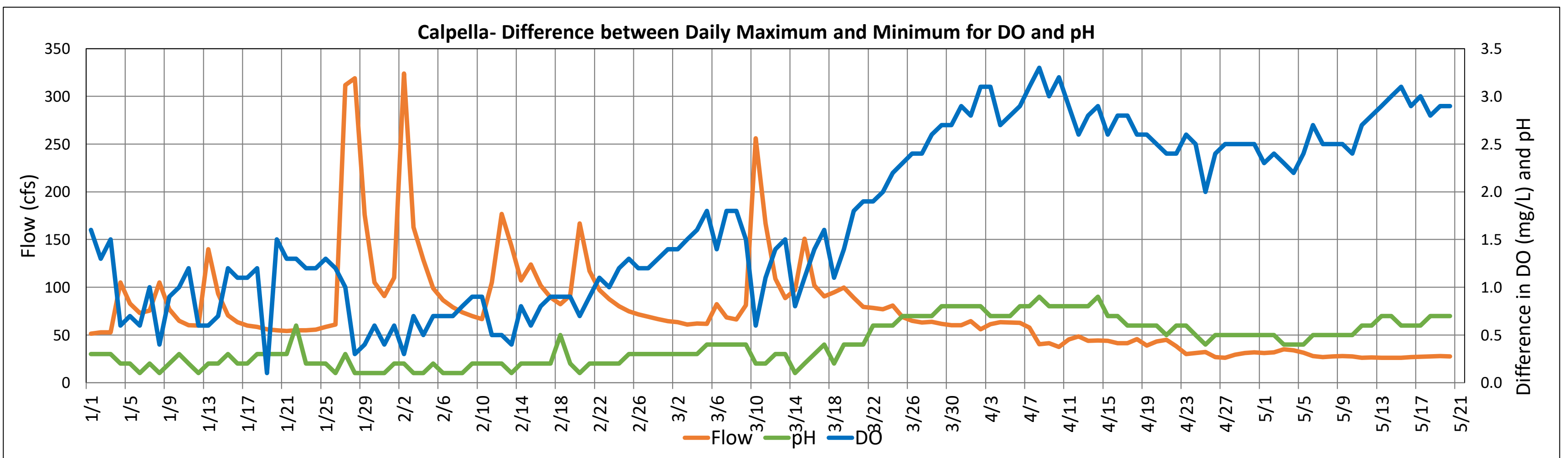
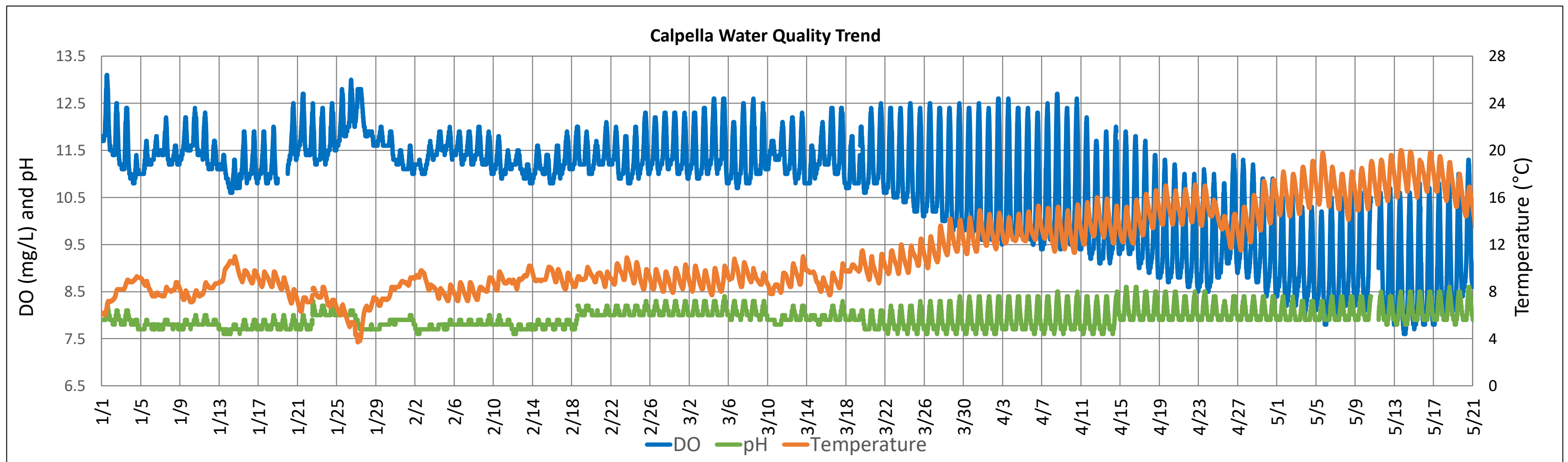
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	59.4	59.7		61.2	64.0		61.9	
	Max	68.0	68.7		71.1	74.5		69.8	
	Mean	63.9	64.6		66.0	69.0		66.0	
Specific Conductivity (µS/cm)	Min	252	277		356	351		223	
	Max	273	304		362	363		239	
	Mean	264	285		359	354		229	
Dissolved Oxygen (mg/L)	Min	7.6	6.4		5.2	6.4		7.8	
	Max	11.0	12.4		10.9	10.7		10.3	
	Mean	8.8	9.0		7.6	8.4		9.2	
Dissolved Oxygen (% Saturation)	Min	75	63		53	66		79	
	Max	121	136		122	125		115	
	Mean	92	95		80	92		98	
pH	Min	7.8	7.6		7.1	7.8		7.9	
	Max	8.6	8.6		7.4	8.3		8.3	
	Mean	8.1	8.1		7.2	8.0		8.1	
Turbidity (NTU)	Min	0.7	1.0		0.2	0.6		0.7	
	Max	2.6	15.5		1.4	4.4		2.4	
	Mean	1.0	1.7		0.6	1.7		1.2	

*Station operated seasonally



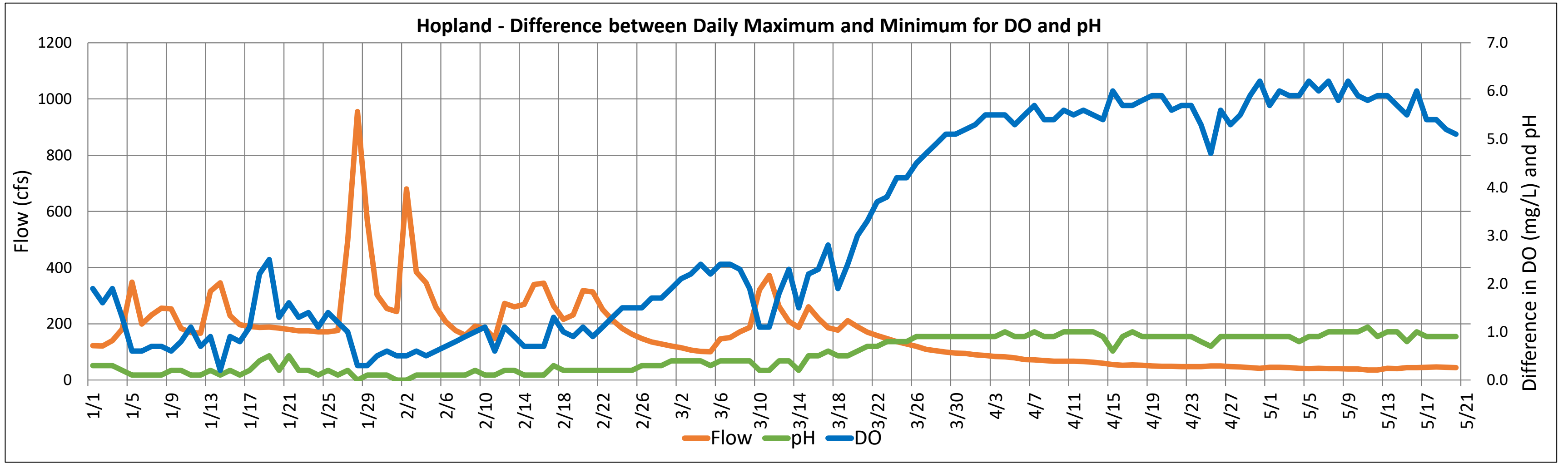
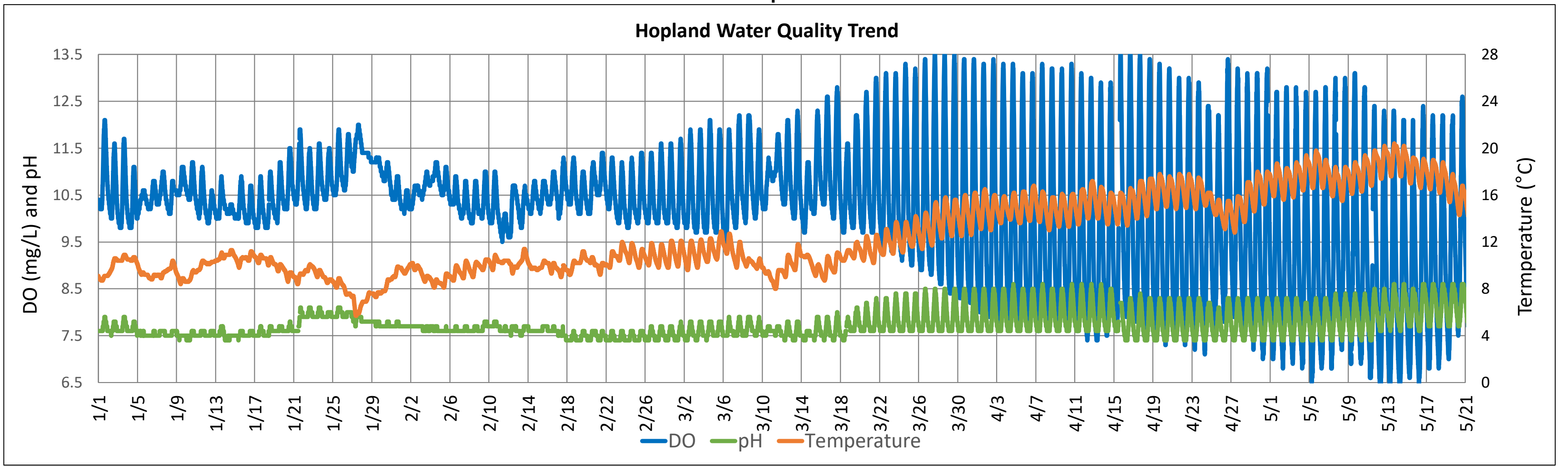
Russian River Water Quality (January 1 - May 20, 2021)

Calpella (East Fork Russian River)

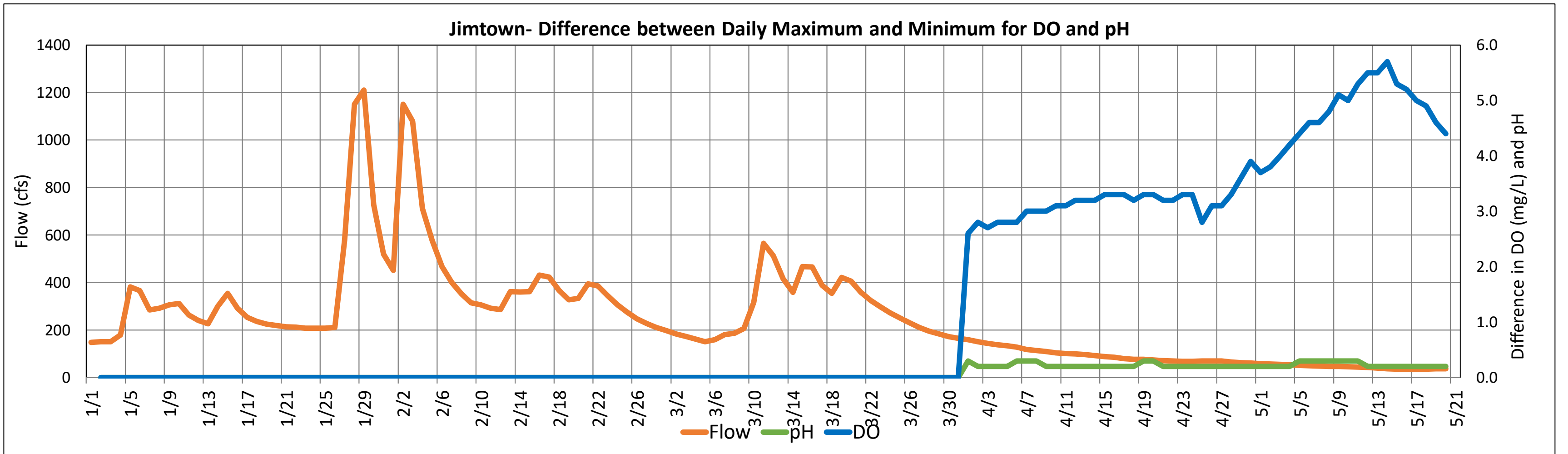
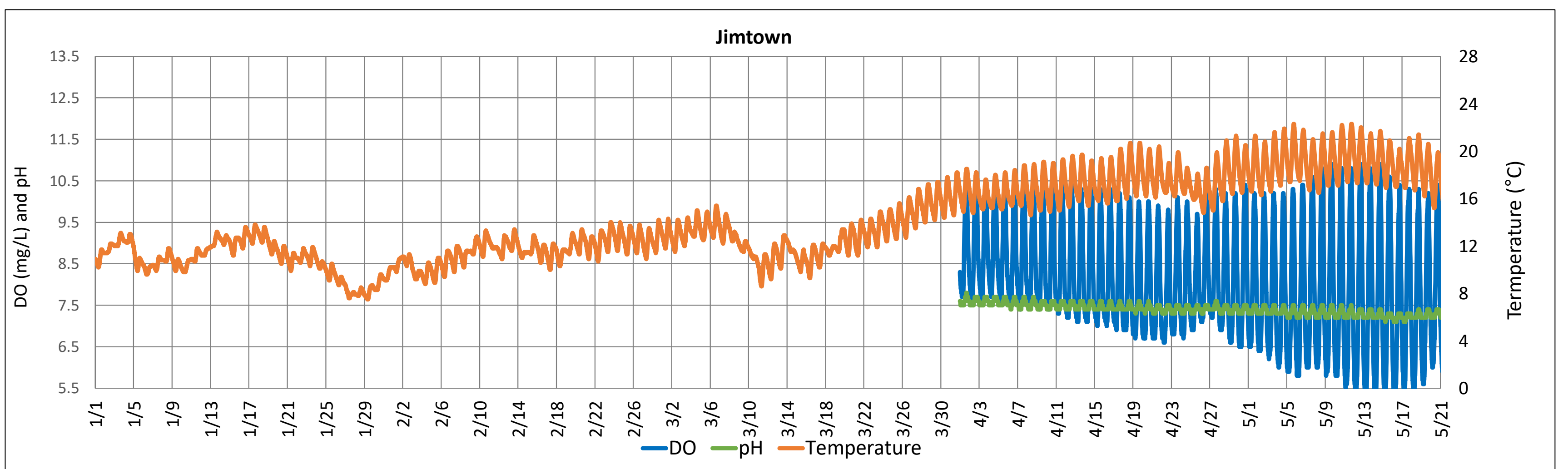


Russian River Water Quality (January 1 - May 20, 2021)

Hopland

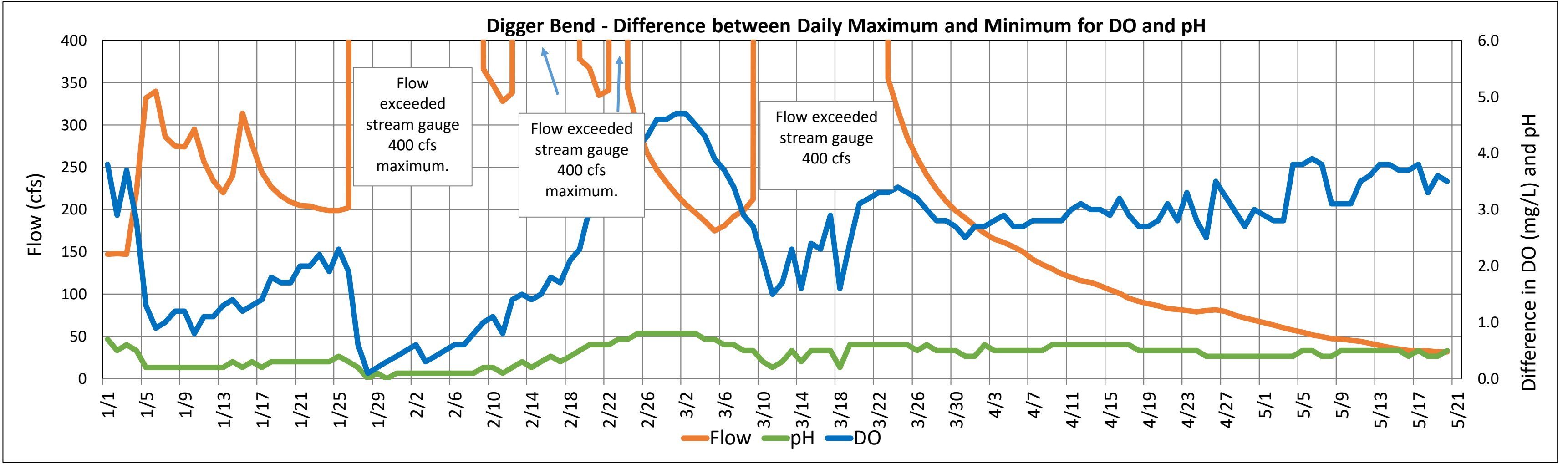
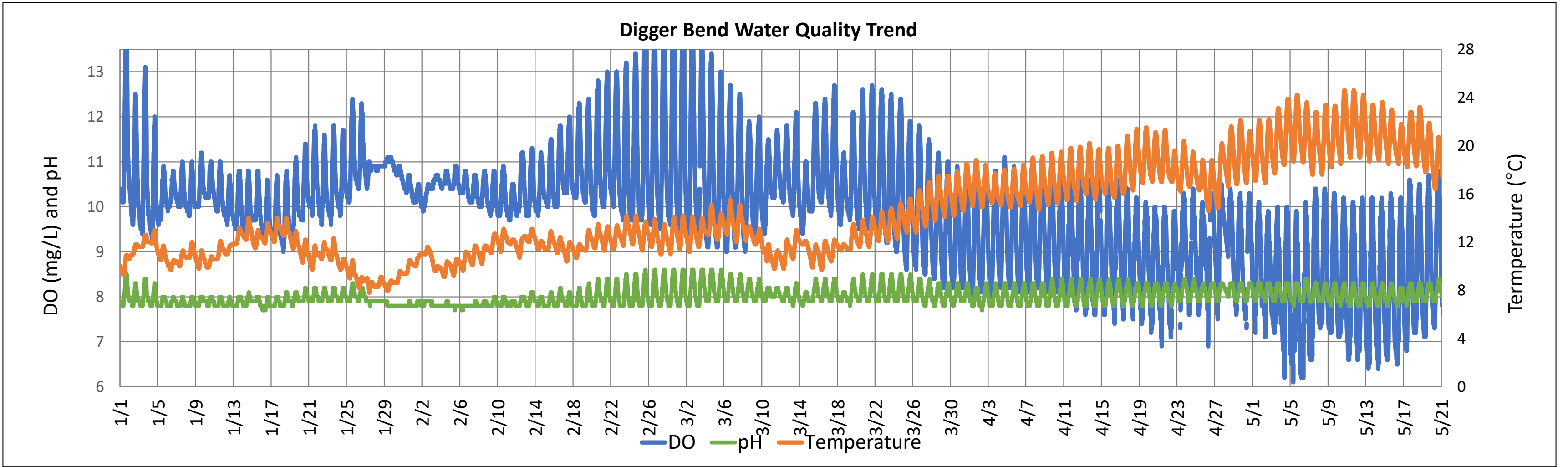


Jimtown Water Quality

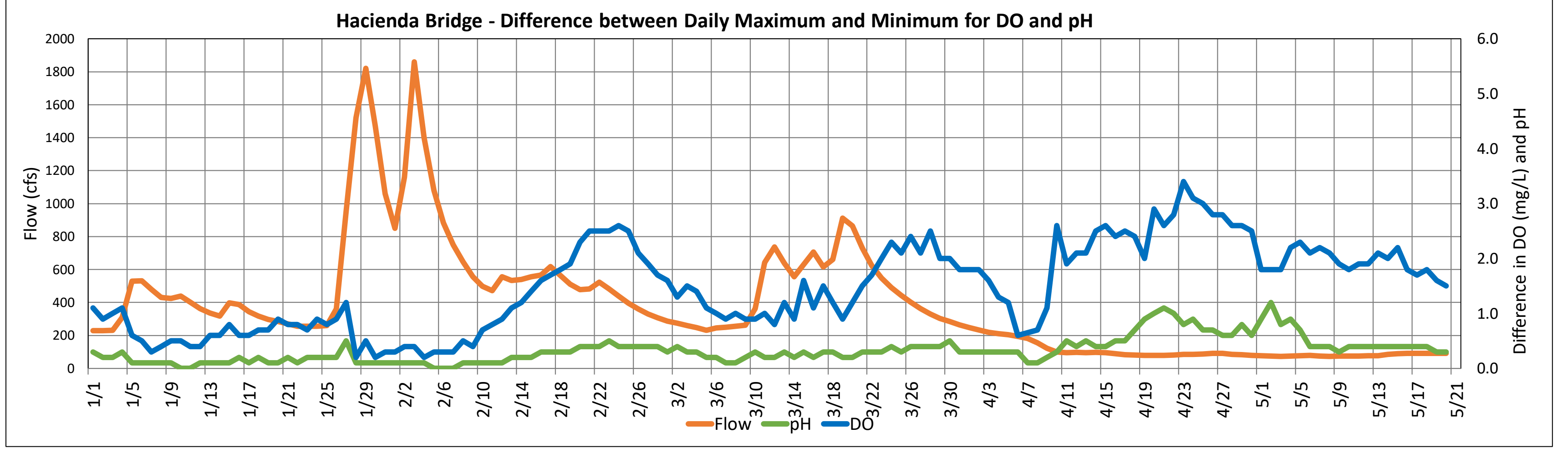
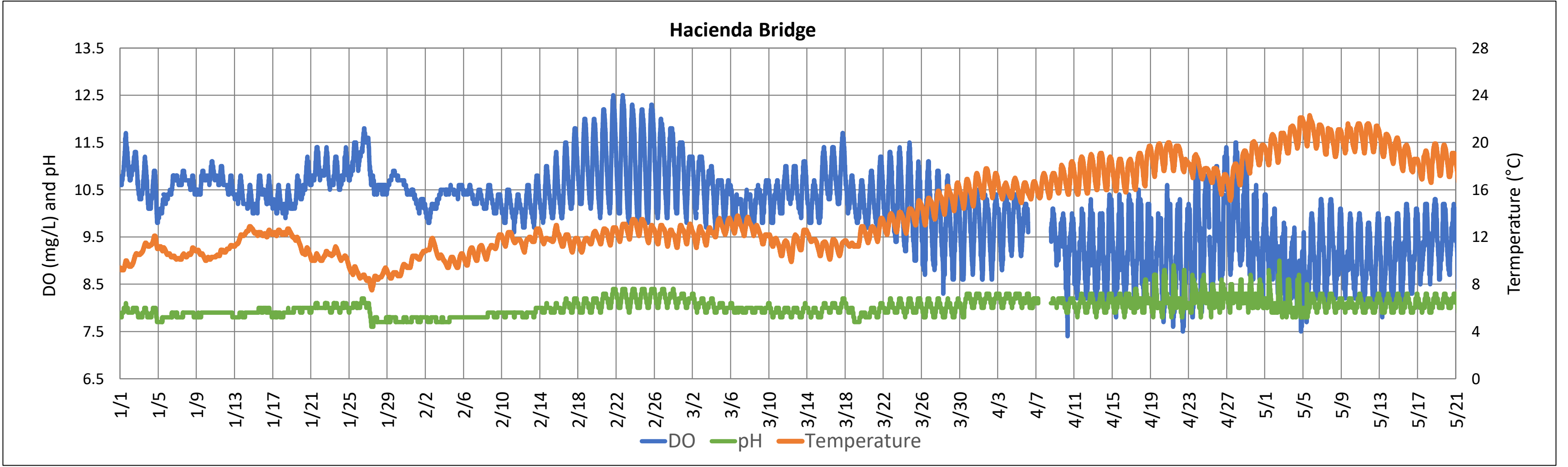


Russian River Water Quality (January 1 - May 20, 2021)

Digger Bend



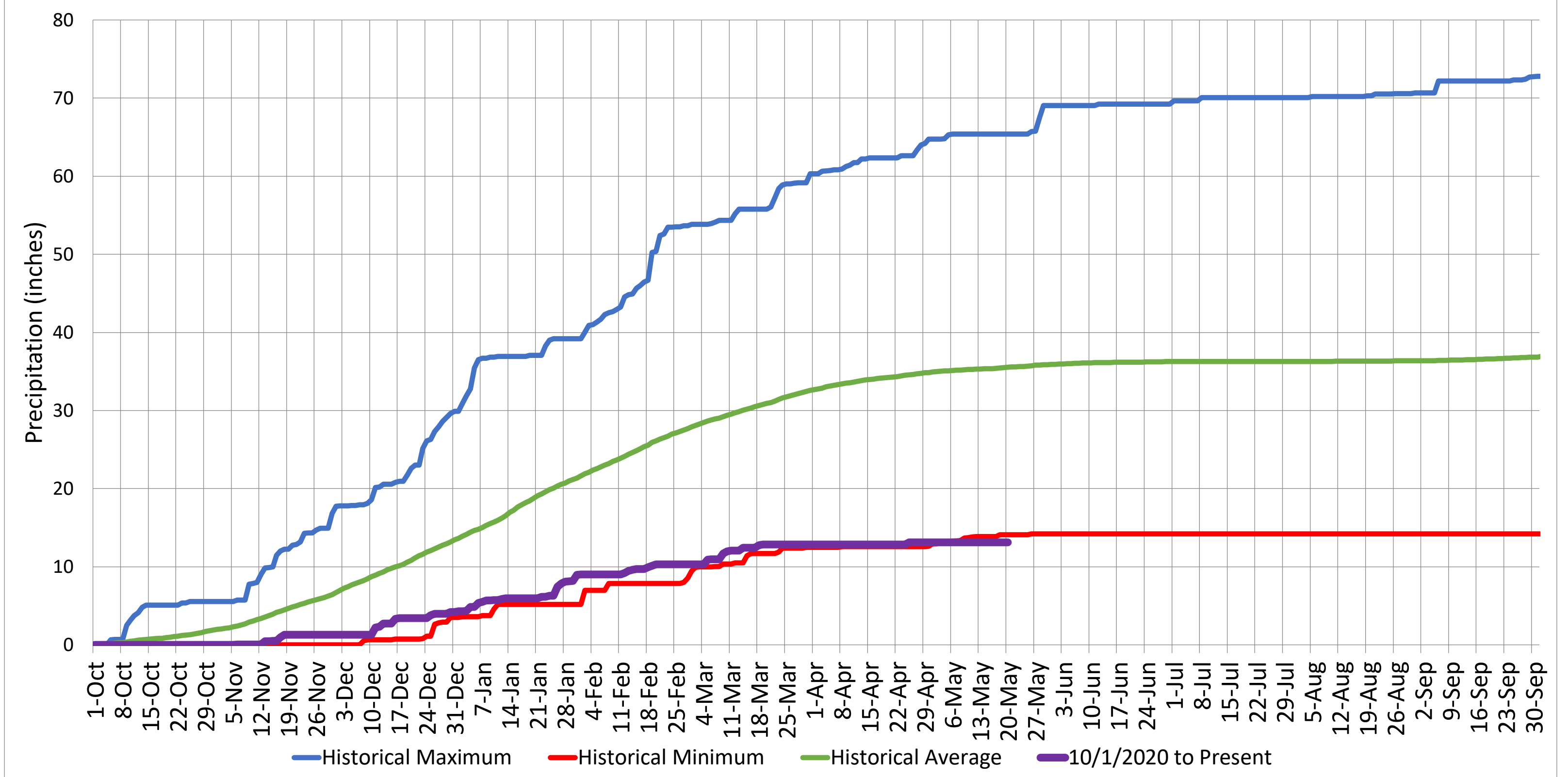
Hacienda Bridge Water Quality



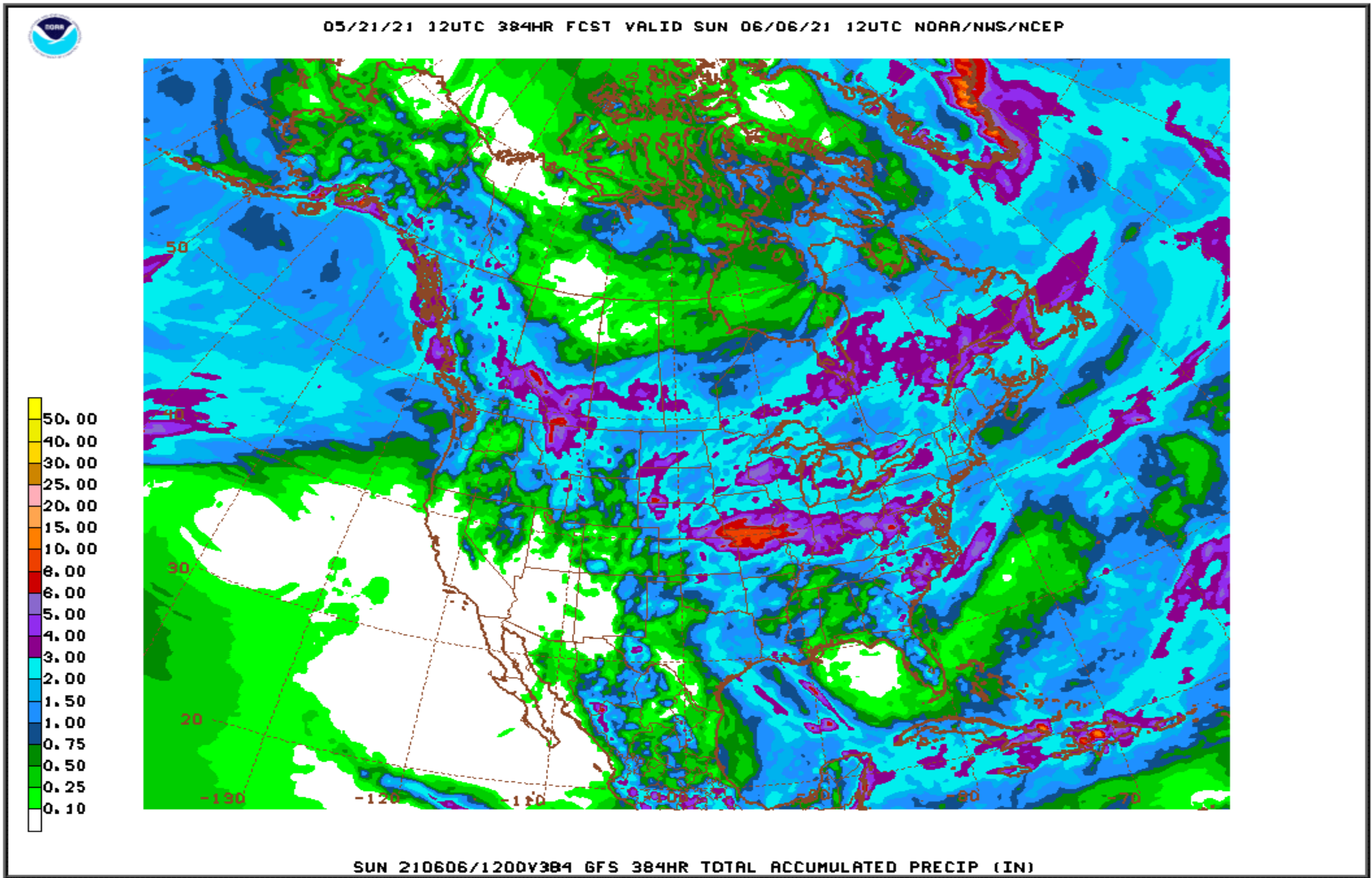
Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))	
Date Range	Cumulative (inches)
Oct 1, 2020 - May 20, 2021	13.12
Last 7 Days*	0.00

Cumulative Precipitation Comparison of Current Year versus Historic Record



Global Forecast System Model 16-day Cumulative Precipitation Forecast



Date Range	Forecasted Cumulative (inches)
May 21 - Jun 5, 2021	0.0

Lake Mendocino Water Accounting Weekly Report (Term 11)

Report Date: 5/19/2021

Units are cfs unless noted otherwise

	5/12/2021	5/13/2021	5/14/2021	5/15/2021	5/16/2021	5/17/2021	5/18/2021
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	35.0	35.0	35.0	37.0	39.0	39.0	39.0
PVID Canals Delivery Requested	30.0	30.0	31.4	34.0	34.0	34.0	34.0
PVID Canals Delivery Actual	15.8	15.9	16.4	16.5	16.3	16.2	16.1
East Fork Release	19.2	19.1	18.6	20.6	22.7	22.8	22.9
PVID Canal Return Flow (assumed)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PVID Canal Diversions	15.8	15.9	16.4	16.5	16.3	16.2	16.1
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.)	15.8	15.9	16.4	16.5	16.3	16.2	16.1
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	26.2	26.6	25.9	25.6	27.0	26.8	27.3
Net Reach Loss(-)/Gain(+)	-8.8	-8.4	-9.1	-11.4	-12.0	-12.2	-11.7
Unimpaired Natural Flow @ Calpella (est.)	6.5	6.4	6.4	6.4	6.6	6.4	6.2
Non-PVID East Fork Estimated Reach Losses	-12.7	-13.2	-12.9	-10.8	-9.9	-9.8	-10.4
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)	64.7	59.3	12.2	60.0	37.7	36.2	40.2
(cfs)	33	30	6	30	19	18	20
Natural Flow	26	23	0	22	8	8	10
Import	7	7	6	8	11	11	11
Storage Change (ac-ft)	-26.0	-39.0	-92.0	-52.0	-78.0	-78.0	-77.0
(cfs)	-13	-20	-46	-26	-39	-39	-39
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)	22.1	22.9	20.6	16.8	20.5	19.0	19.7
RVCWD Diversion (ac-ft) (assum.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CVD Release Gage	35	38	42	48	48	48	49
Storage (Project Water)	13	20	42	26	39	39	39
Natural Flow	20	17	0	18	3	3	5
Import Water	1	1	0	4	5	6	6
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage		<i>Rvr mi.</i>					
CVD Release	35	38	42	48	48	48	49
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	21	18	0	22	9	9	10
Project Water Release Required	Yes	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	26	29	27	26	26	26	26
Controlling Gage	Geyserville	Cloverdale	Cloverdale	Geyserville	Geyserville	Healdsburg	Healdsburg
All Compliance Gages							
		<i>Rvr mi.</i>					
Forks (CVD + USGS 11461000)	99.0	44	47	51	57	57	58
Talmage (USGS 11462080)	96.1	39	44	44	49	49	51
Hopland (USGS 11462500)	84.8	35	41	40	44	44	46
Cloverdale (USGS 11463000)	70.9	32	29	27	27	34	38
Geyserville (USGS 11463500)	54.4	26	32	29	26	26	30
Jimtown (USGS 11463682)	48.5	40	38	35	33	32	36
Digger Bend (USGS 11463980)	38.2	42	40	37	35	33	33
Healdsburg (USGS 11464000)	35.6	35	33	30	29	27	26
Net Reach Loss(-)/Gain(+)							
Forks - Talmage	-2	-4	-4	-8	-8	-7	-7
Talmage - Hopland	-1	-1	-3	-3	-5	-5	-5
Hopland - Cloverdale	-4	-7	-14	-14	-10	-9	-8
Cloverdale - Jimtown	+10	+10	+10	+10	+1	+0	-2
Jimtown - Digger Bend	-1	-1	-2	-1	-2	-2	-3
Digger Bend - Healdsburg	-7	-7	-7	-6	-7	-7	-7
CVD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss(-)/Gain(+) to Controlling Gage	+2	-12	-21	-16	-23	-29	-31
Storage (Project Water)	+0	+12	+21	+16	+23	+29	+31
Pass-through Water (Natural + Import)	+2	-24	-42	-31	-45	-58	-62
Total Pass-through Water	24	-5	-42	-10	-36	-50	-52
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes

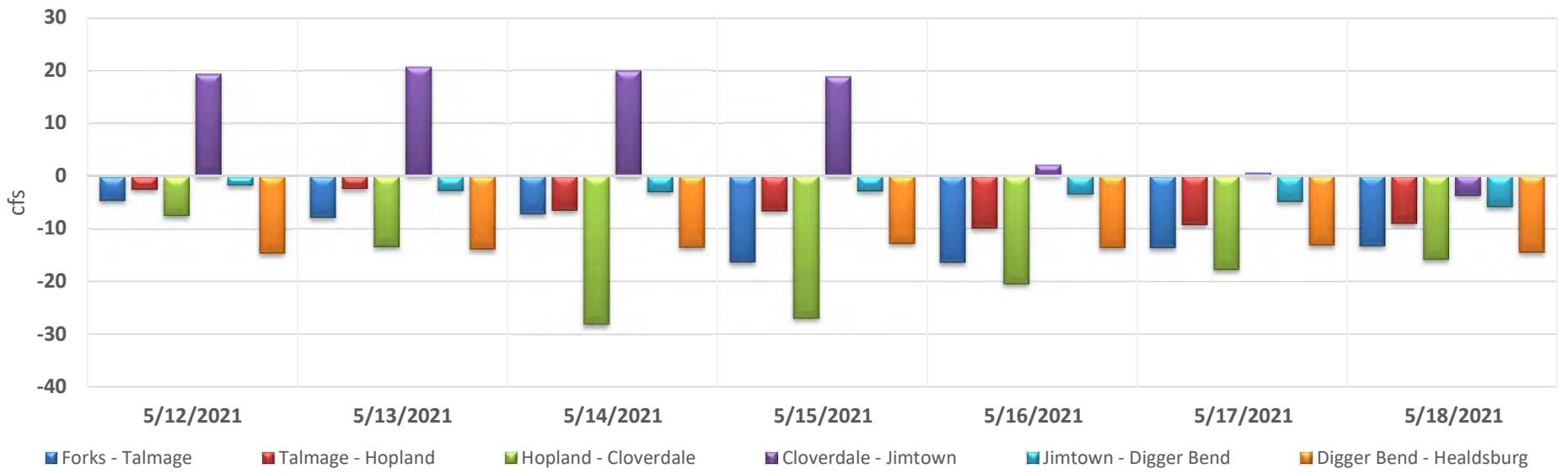
Notes:

- 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.

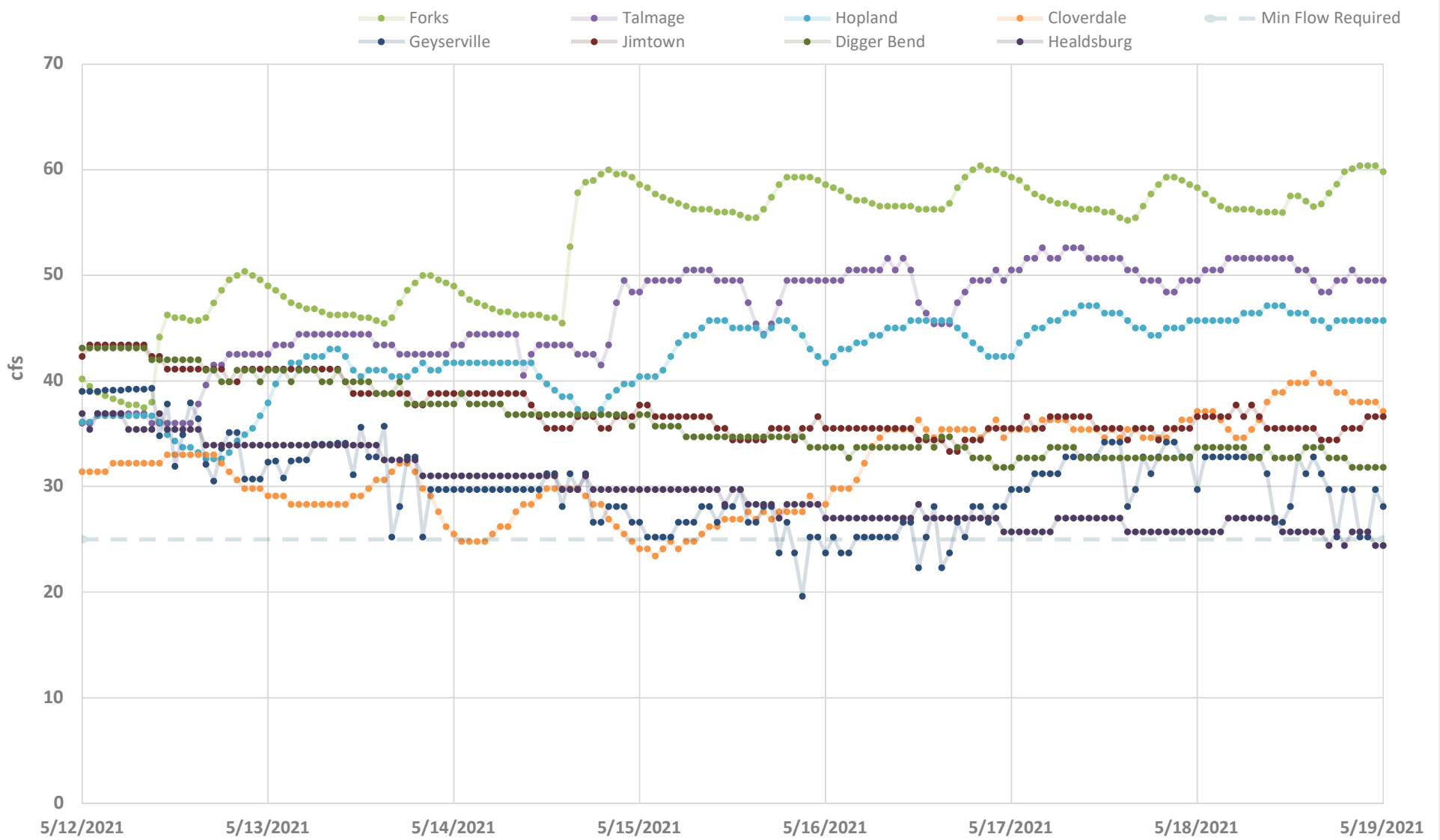
Lake Mendocino Water Accounting Weekly Report (Term 11)

Report Date: 5/19/2021

UPPER RUSSIAN RIVER NET REACH GAIN (+) / LOSSES (-)



UPPER RUSSIAN RIVER STREAM FLOWS



MAP OF UPPER RUSSIAN RIVER and STREAM GAGES

