State Water Resources Control Board
Temporary Urgency Change Order (2/4/2021)

Russian River Hydrologic Report
May 28, 2021 - June 3, 2021

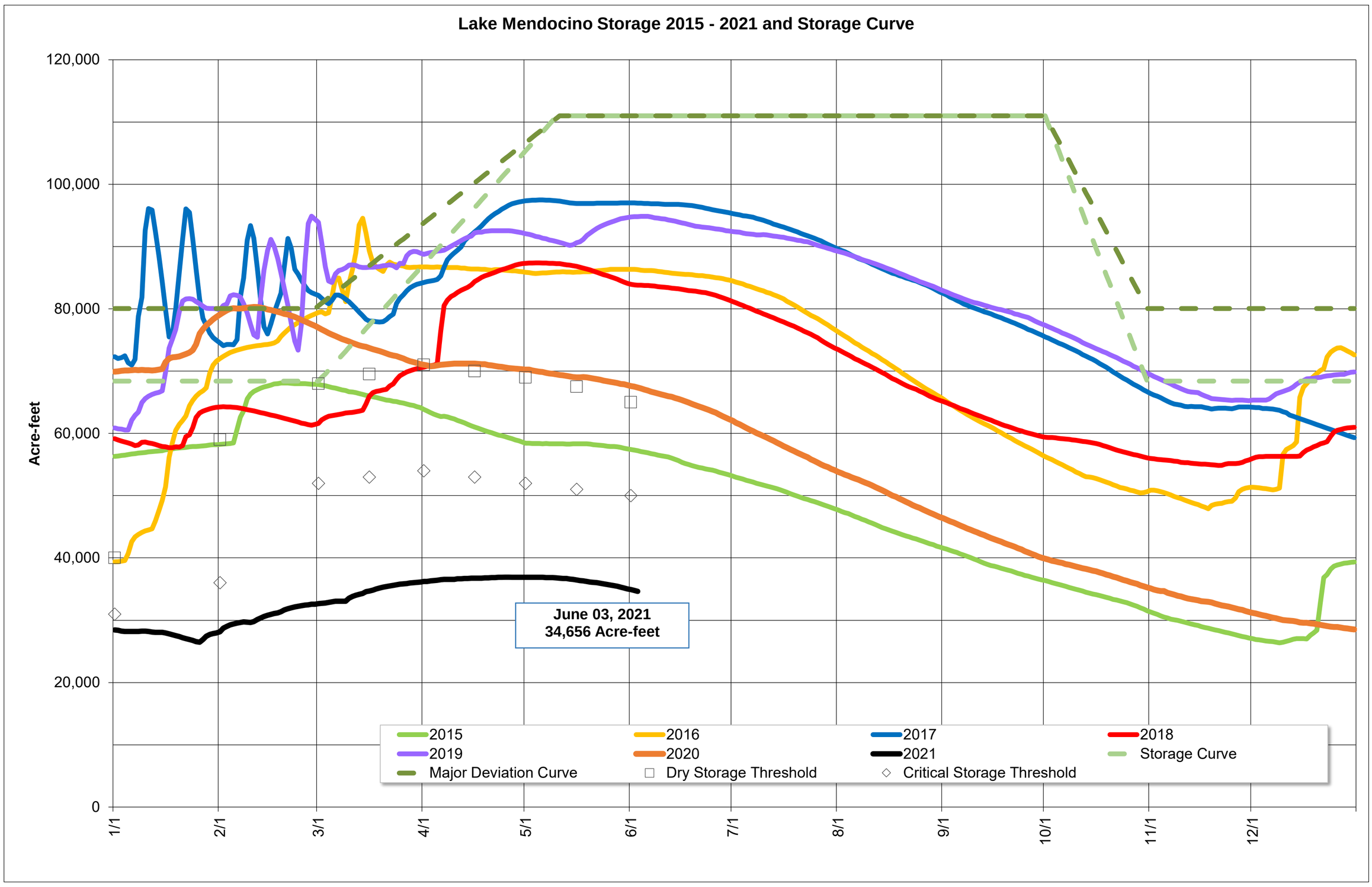
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A (Applications 12919A).

Instream Flow Requirements as of June 3, 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.

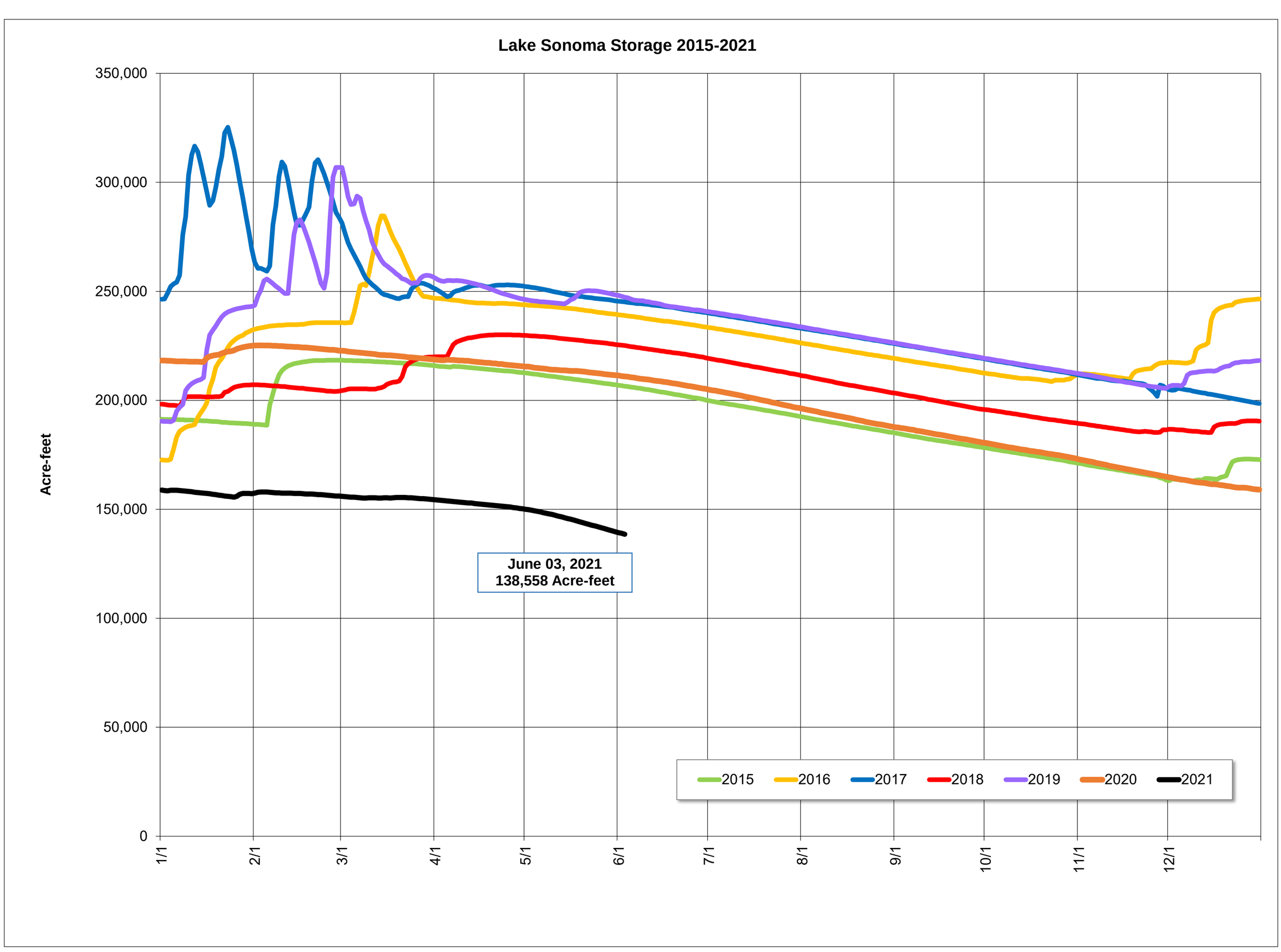
Lake Mendocino



Storage (acre-feet)	June 3, 2021	**34,656**	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	**-2,241**	**-75**
	Last 7 days	**-906**	**-129**
Daily Inflow (cfs)	Last 7 days	Min	**12**
		Max	**25**
		Mean	**17**
Release (cfs)	Last 7 days	Min	**60**
		Max	**70**
		Mean	**68**

Lake Sonoma

Nathan Baskett, March 3, 2021



Storage (acre-feet)	June 3, 2021	**138,558**	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	**-10,735**	**-358**
	Last 7 days	**-2,661**	**-380**
Daily Inflow (cfs)	Last 7 days	Min	**0**
		Max	**27**
		Mean	**3**
Release (cfs)	Last 7 days	Min	**171**
		Max	**190**
		Mean	**183**

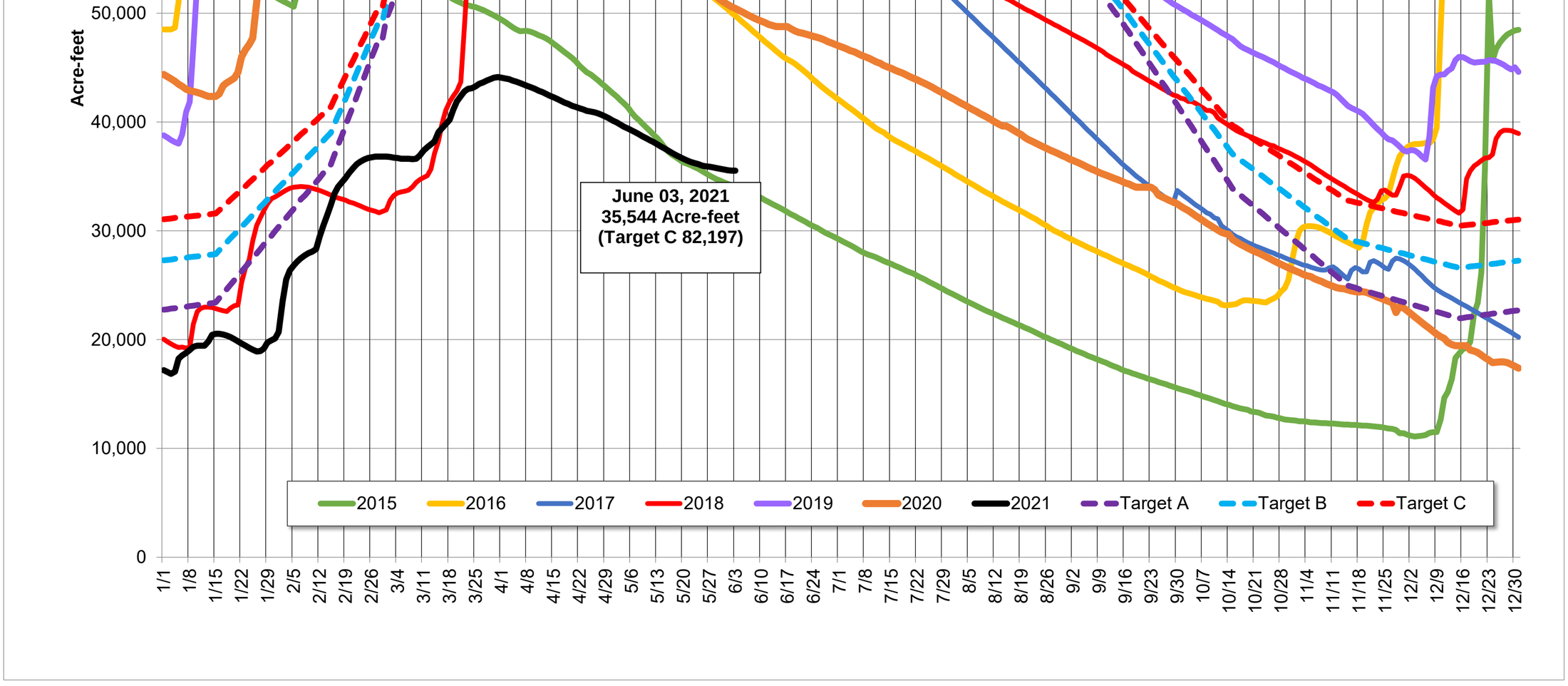
Potter Valley Project

PVP Diversion (cfs)	June 3, 2021	**30**

Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2020 - June 3, 2021	**86,121**	**352**
	Last 7 days	**772**	**110**

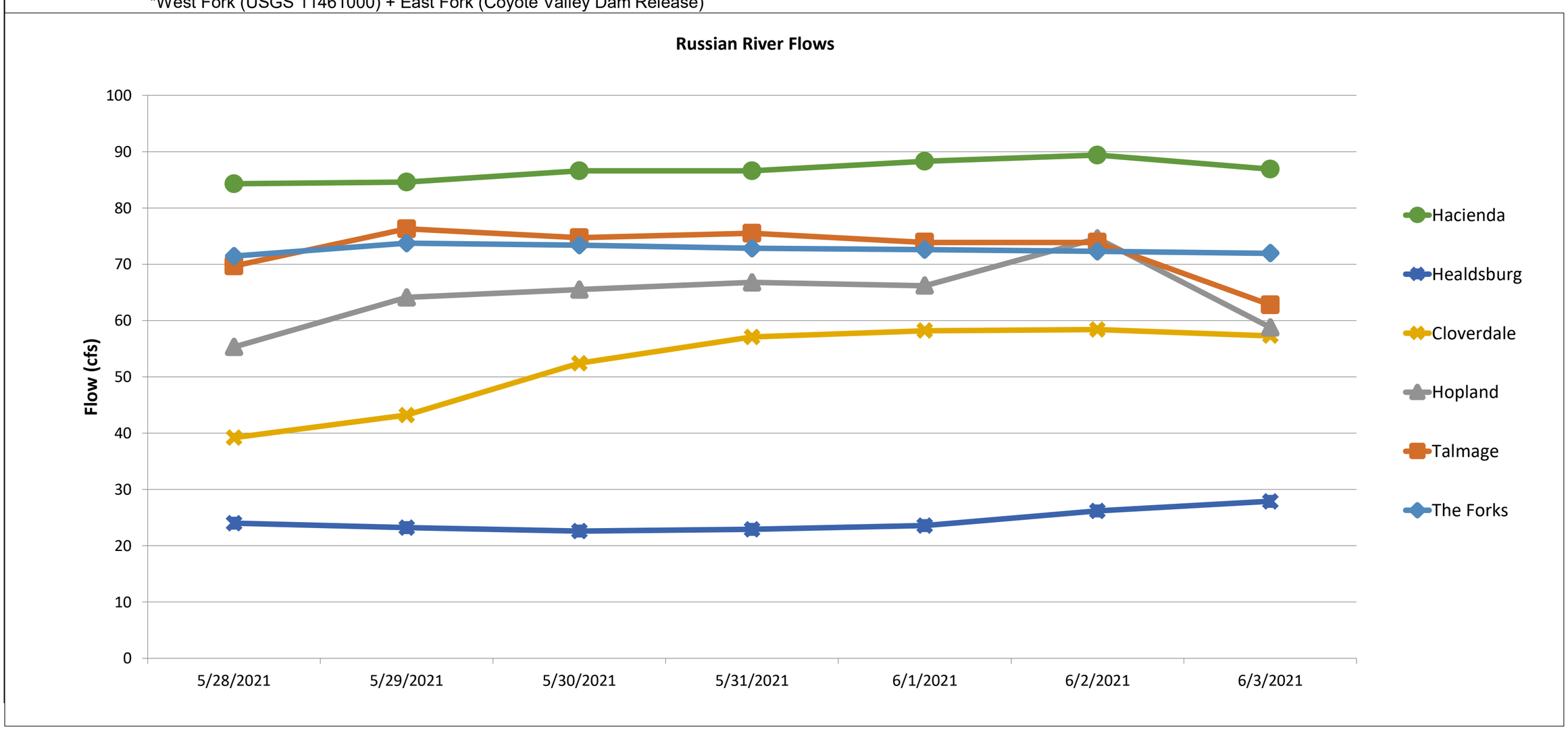
*Inflow calculation based on criteria established in D1610



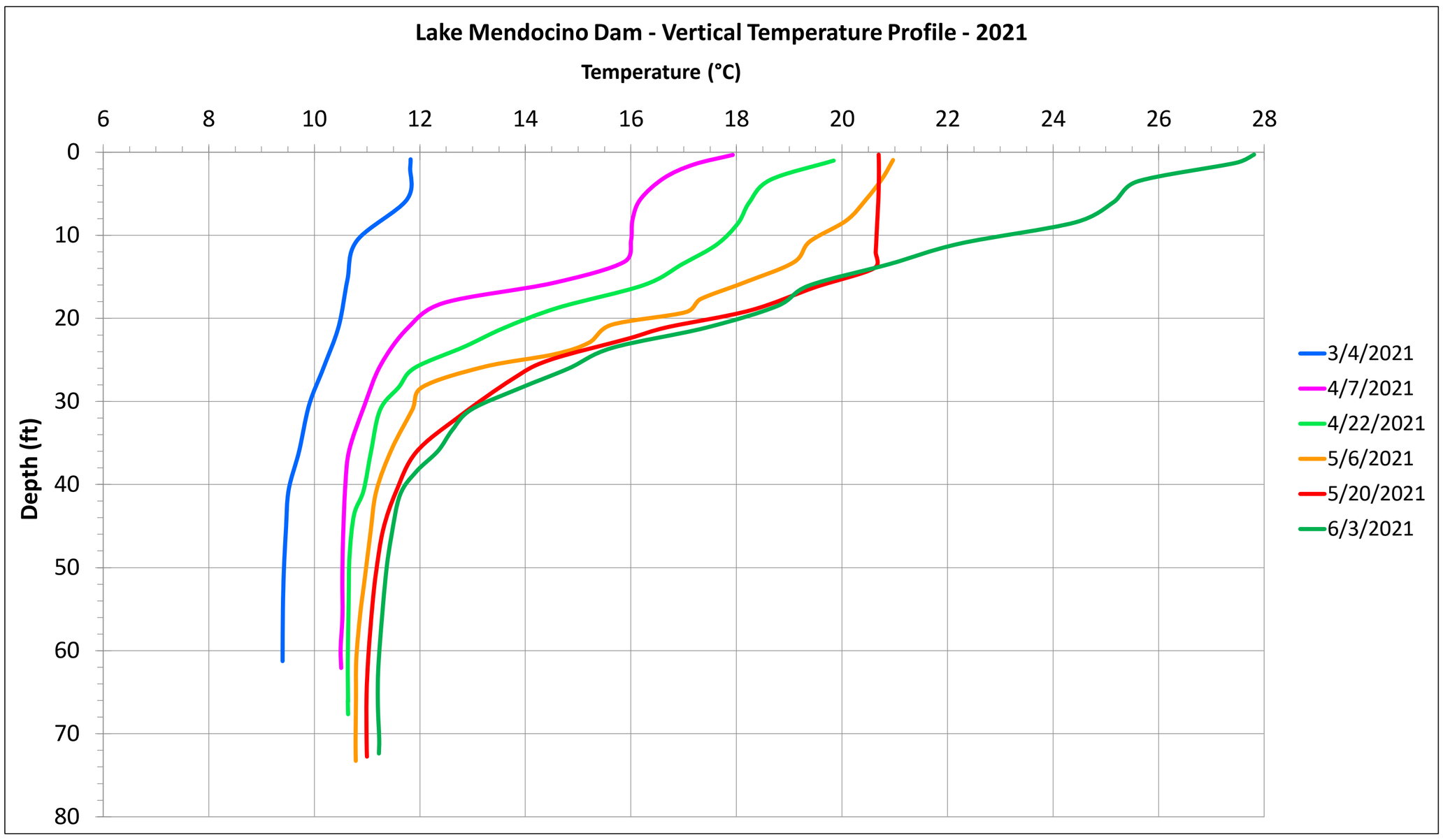
Russian River Flows (May 28 - June 3, 2021)

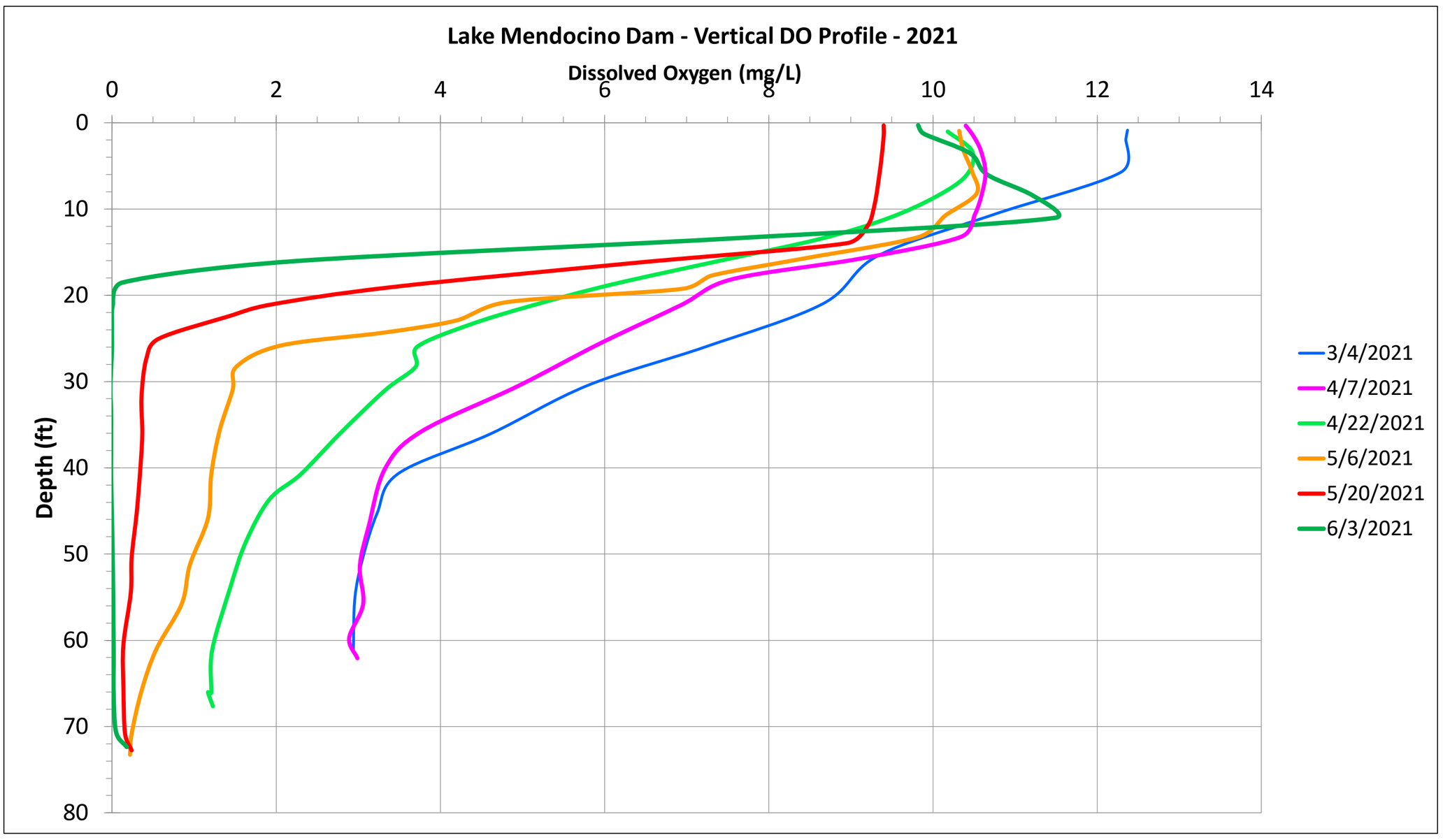
Gage	24-hr Average Flow (cfs)						
	May 28, 2021	May 29, 2021	May 30, 2021	May 31, 2021	Jun 1, 2021	Jun 2, 2021	Jun 3, 2021
The Forks*	71	74	73	73	73	72	72
Talmage USGS 11462080	70	76	75	76	74	74	63
Hopland USGS 11462500	55	64	66	67	66	75	59
Cloverdale USGS 11463000	39	43	52	57	58	58	57
Healdsburg USGS 11464000	24	23	23	23	24	26	28
Hacienda USGS 11467000	84	85	87	87	88	89	87

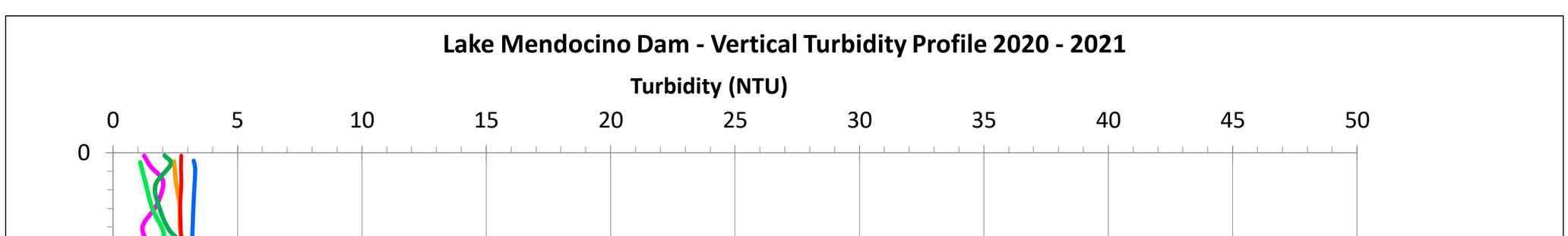
*West Fork (USGS 11461000) + East Fork (Coyote Valley Dam Release)



Lake Mendocino Water Quality Vertical Profiles (May 28 - June 3, 2021)



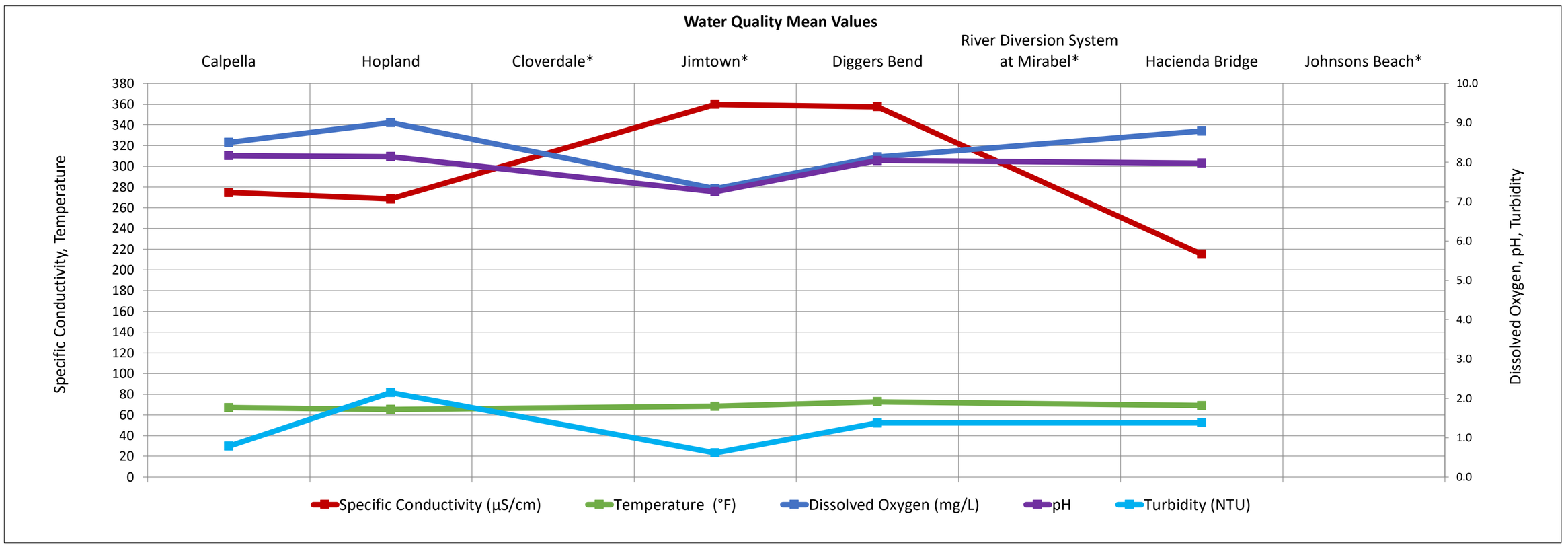




Russian River Water Quality (May 28 - June 3, 2021)

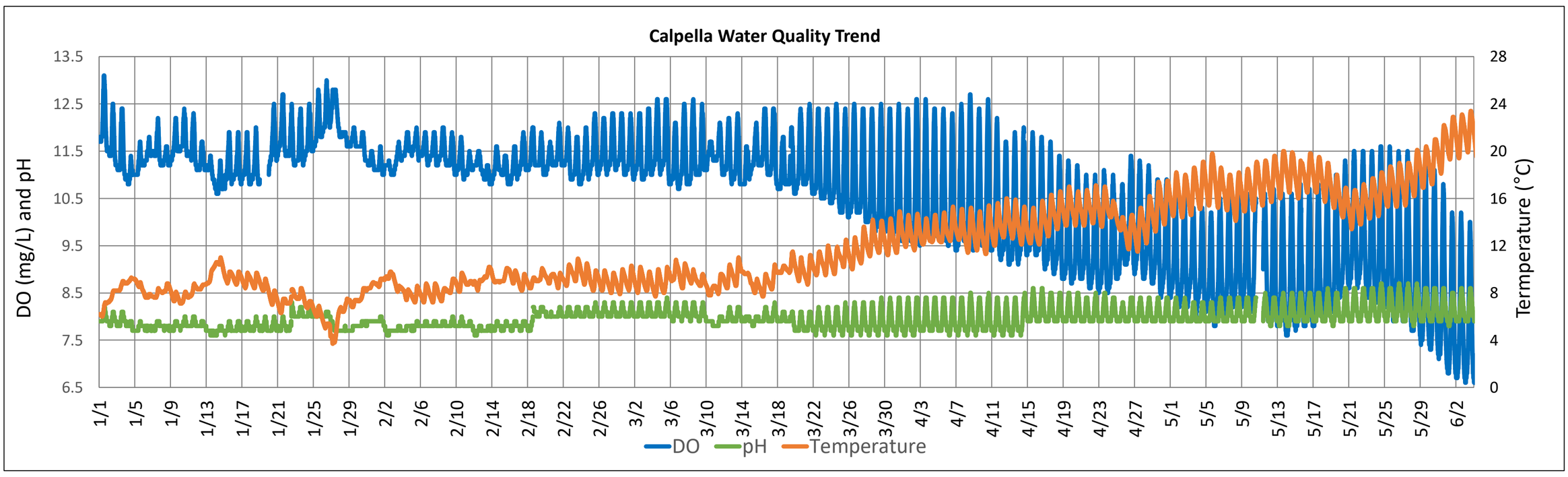
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	59.7	61.0		62.1	65.8		65.1	
	Max	73.6	69.3		74.3	79.3		72.0	
	Mean	67.0	65.2		68.3	72.6		68.9	
Specific Conductivity (µS/cm)	Min	266	264		356	355		212	
	Max	283	279		364	360		220	
	Mean	275	269		360	357		215	
Dissolved Oxygen (mg/L)	Min	6.7	6.6		4.7	5.9		7.6	
	Max	11.5	12.4		10.7	10.5		9.8	
	Mean	8.5	9.0		7.3	8.1		8.8	
Dissolved Oxygen (% Saturation)	Min	66	67		48	62		80	
	Max	134	136		125	129		112	
	Mean	92	95		81	93		97	
pH	Min	7.8	7.7		7.1	7.8		7.5	
	Max	8.7	8.7		7.5	8.3		8.2	
	Mean	8.2	8.1		7.2	8.0		8.0	
Turbidity (NTU)	Min	0.5	1.2		0.2	0.2		0.7	
	Max	8.5	4.1		1.7	4.1		2.7	
	Mean	0.8	2.1		0.6	1.4		1.4	

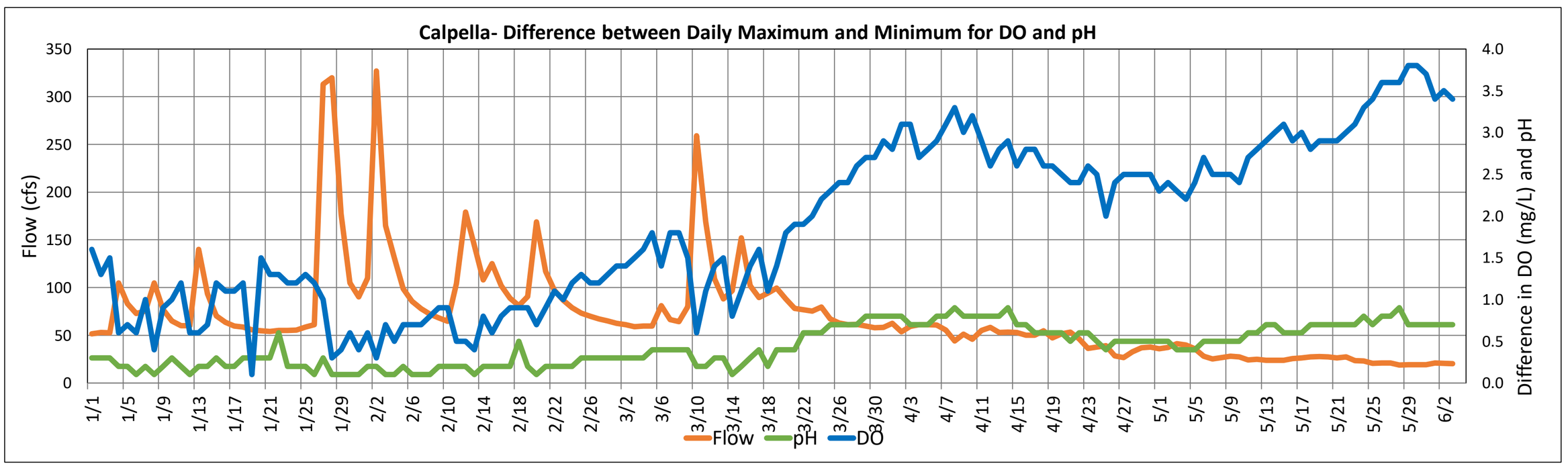
*Station operated seasonally



Russian River Water Quality (January 1 - June 3, 2021)

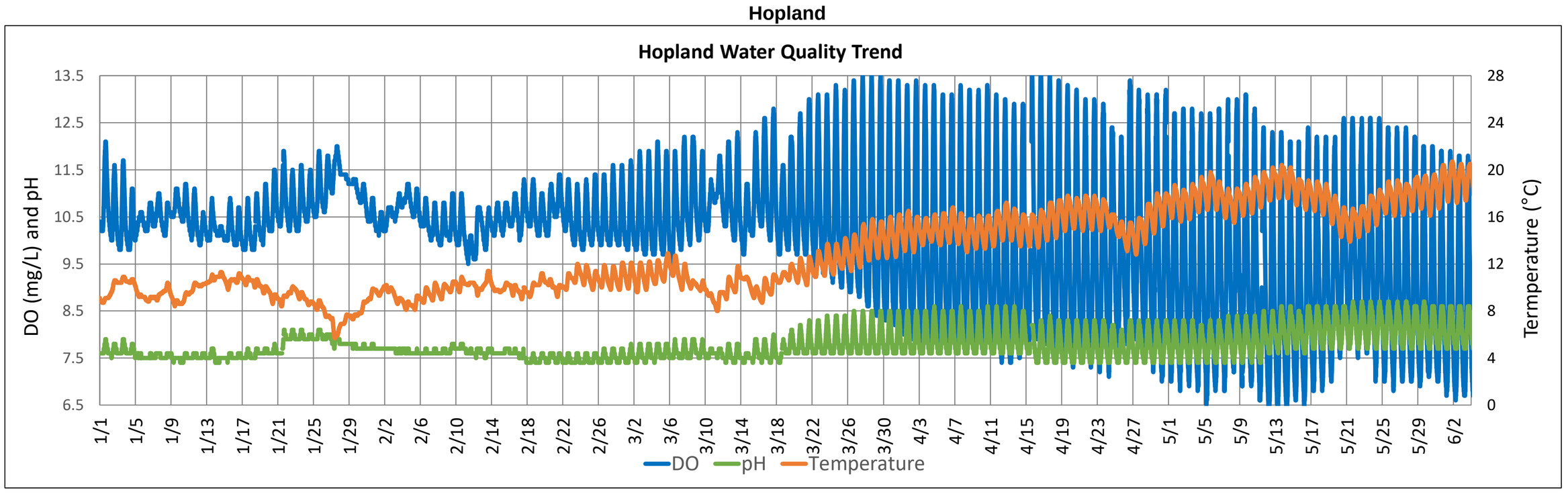
Calpella (East Fork Russian River)

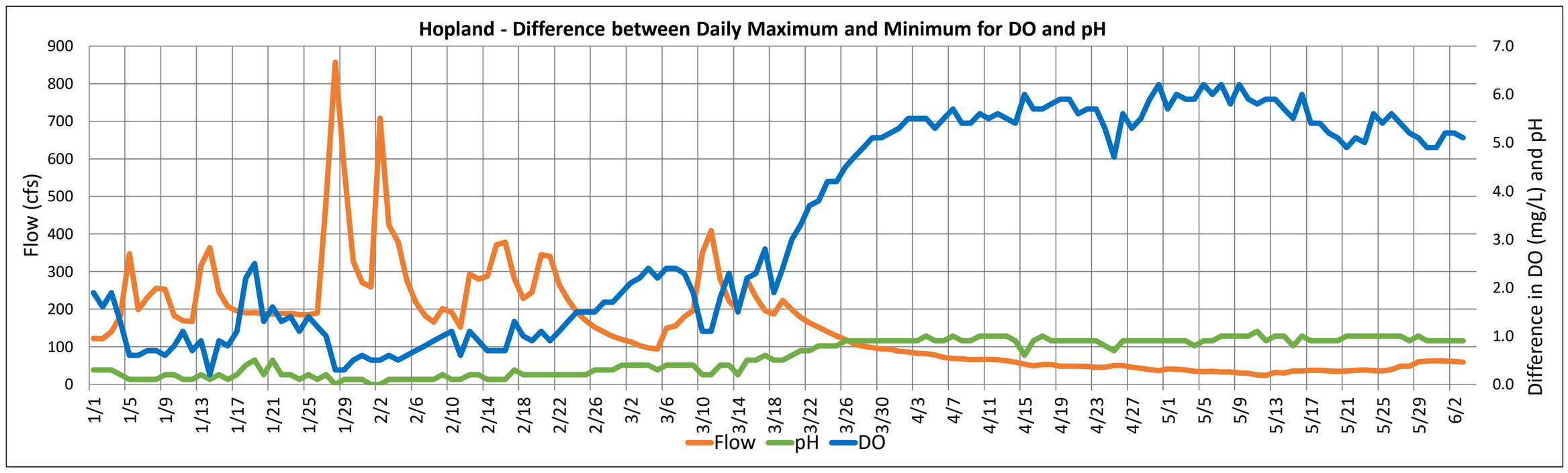




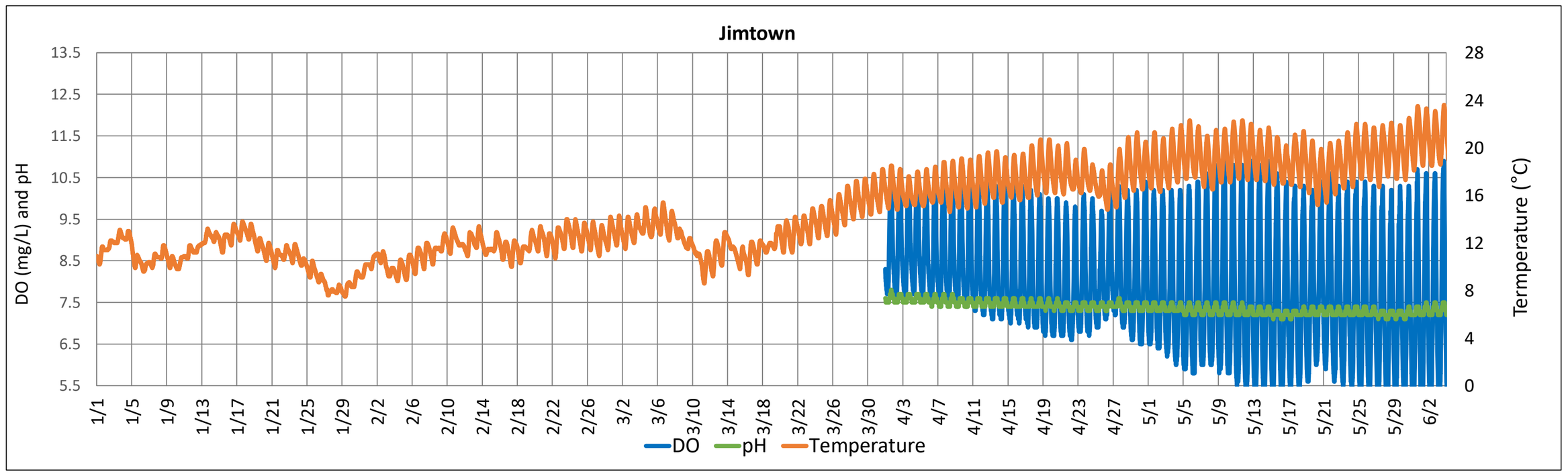
Russian River Water Quality (January 1 - June 3, 2021)

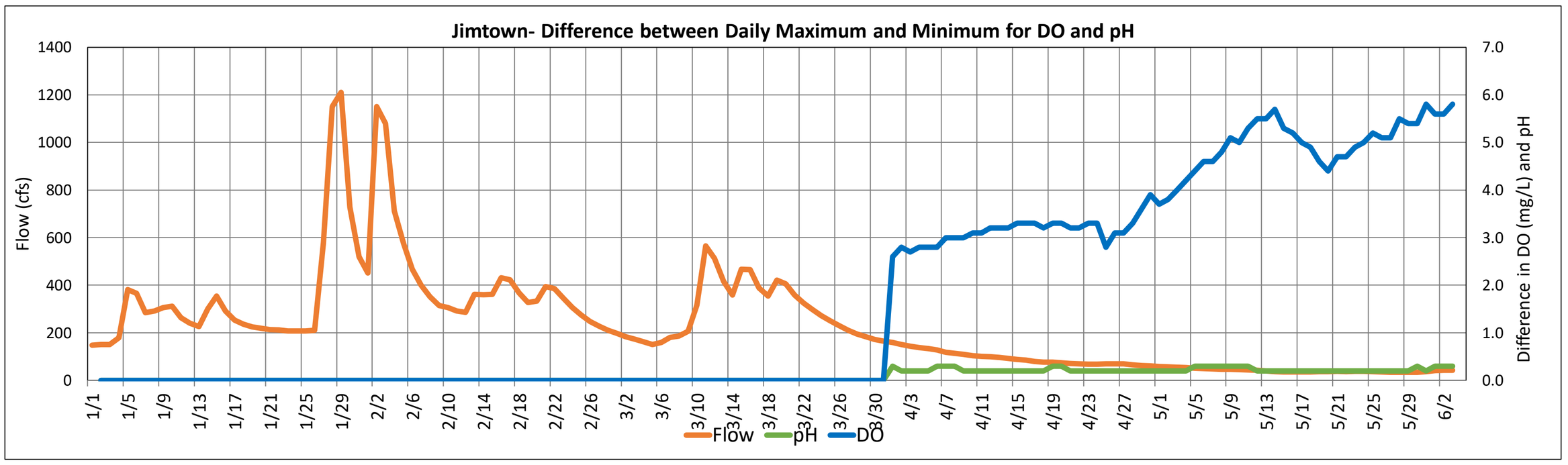
Hopland





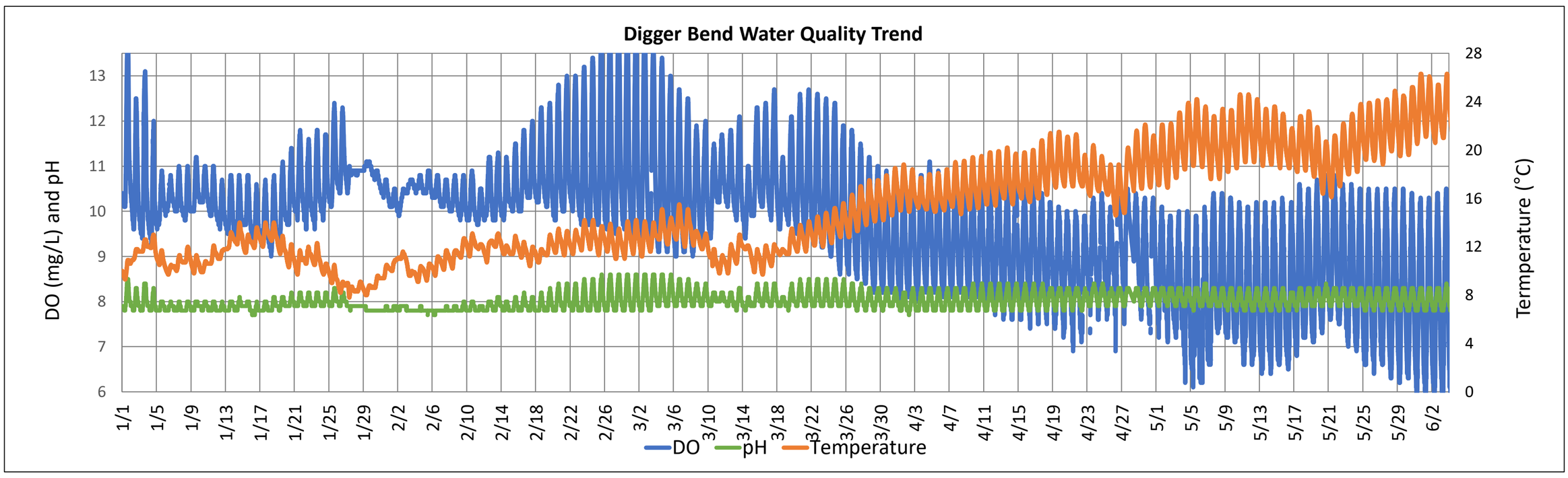
Jimtown Water Quality

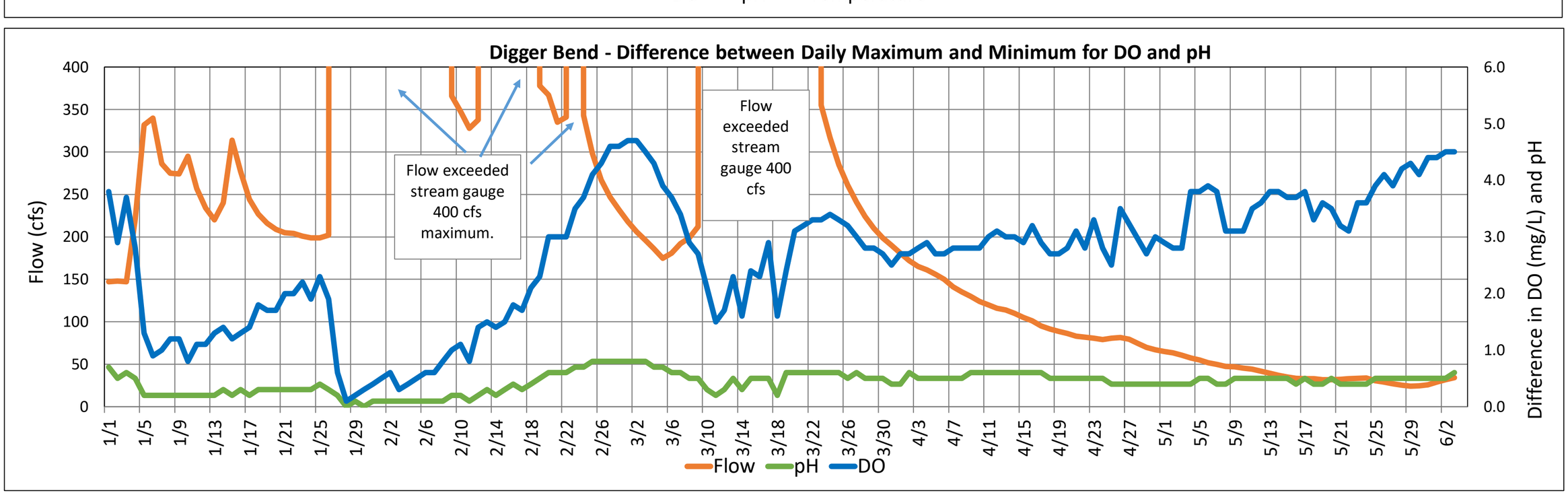




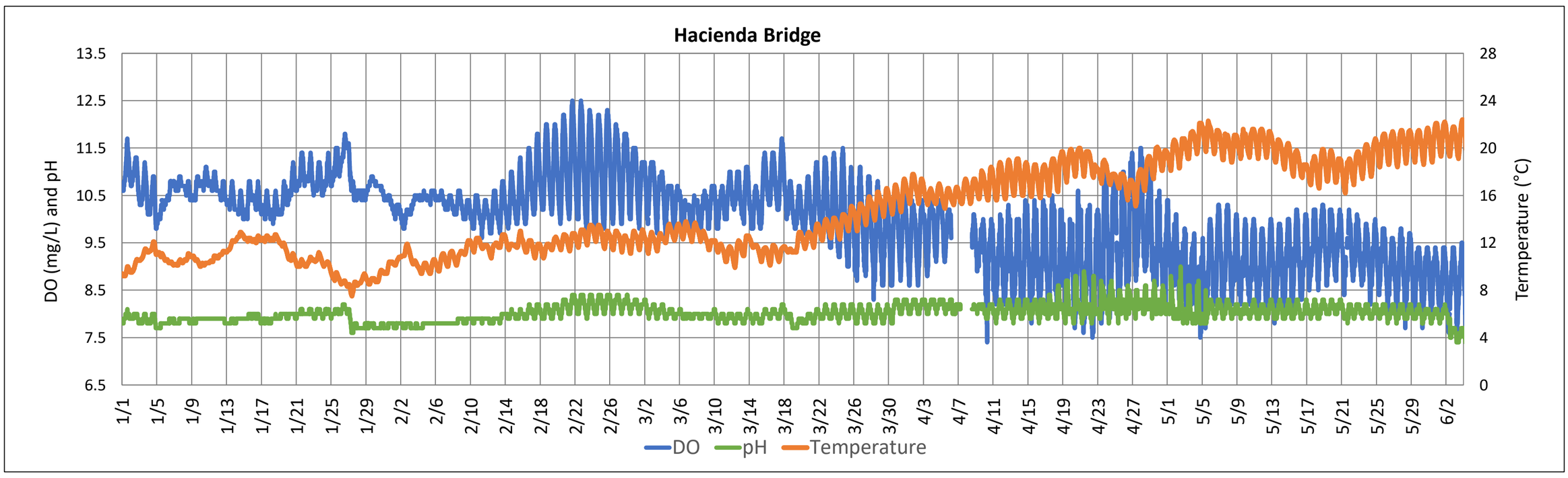
Russian River Water Quality (January 1 - June 3, 2021)

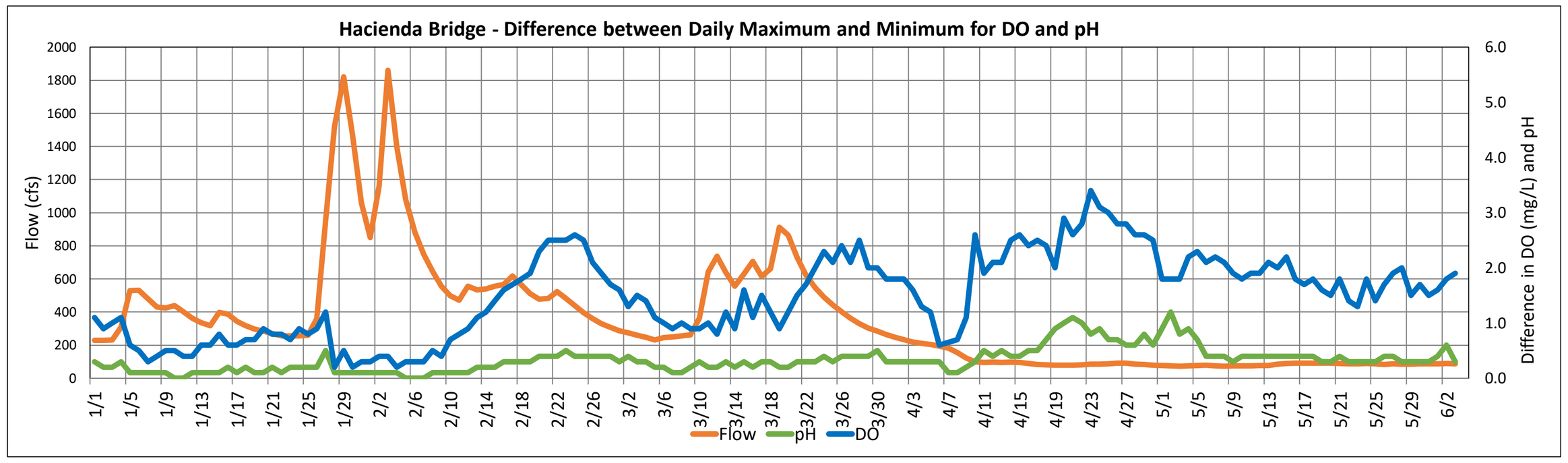
Digger Bend





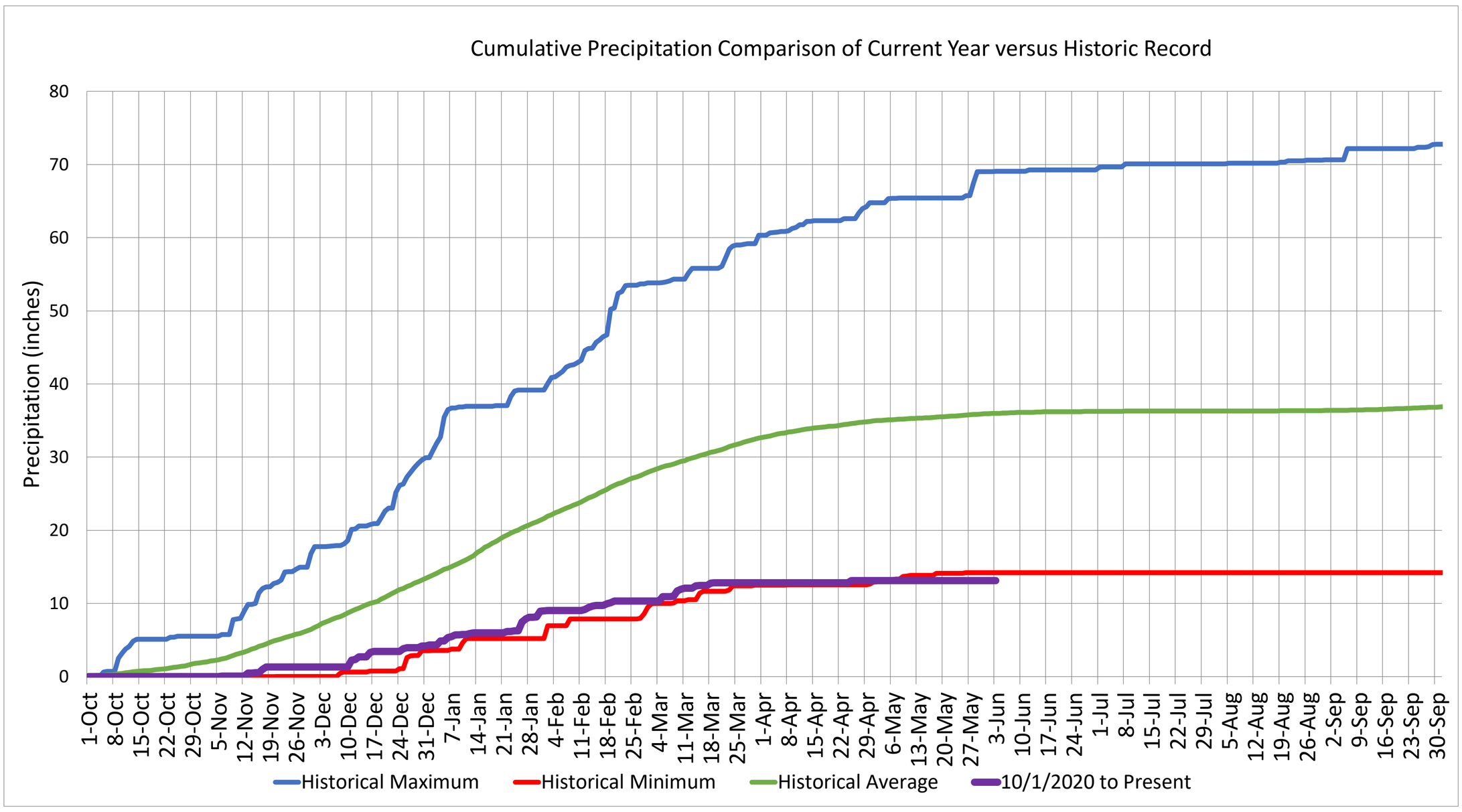
Hacienda Bridge Water Quality



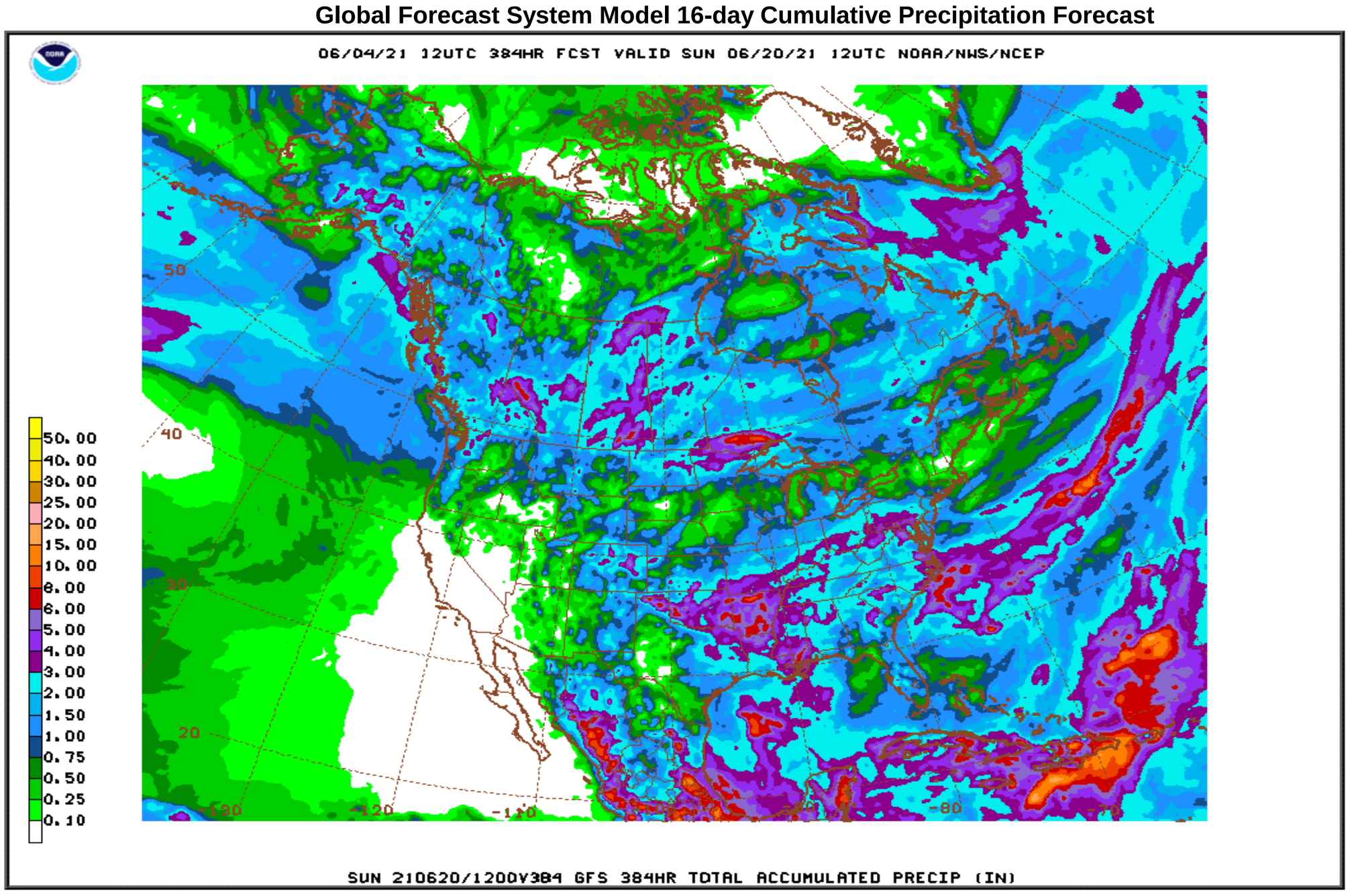


Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))	
Date Range	Cumulative (inches)
Oct 1, 2020 - Jun 3, 2021	**13.12**
Last 7 Days*	**0.00**



Global Forecast System Model 16-day Cumulative Precipitation Forecast



Date Range	Forecasted Cumulative (inches)
Jun 4 - Jun 19, 2021	**0.0**

Lake Mendocino Water Accounting Weekly Report (Term 11)

Report Date: 6/4/2021

Units are cfs unless noted otherwise

			5/28/2021	5/29/2021	5/30/2021	5/31/2021	6/1/2021	6/2/2021	6/3/2021
I. Upper East Fork Reach									
Potter Valley Project									
Tunnel Diversion			30.0	30.0	30.0	30.0	30.0	30.0	32.0
PVID Canals Delivery Requested			25.0	25.0	25.0	25.0	25.0	25.0	27.5
PVID Canals Delivery Actual			7.2	6.5	6.6	6.7	6.2	5.1	5.1
East Fork Release			22.8	23.5	23.4	23.3	23.8	24.9	26.9
PVID Canal Return Flow (assumed)			0.0	0.0	0.0	0.0	0.0	0.0	0.0
PVID Canal Diversions			7.2	6.5	6.6	6.7	6.2	5.1	5.1
PVID E Fork Diversions (est.)			12.2	12.2	12.2	12.2	27.4	27.4	27.4
PVID Water Use under PG&E Contract (est.)			7.2	6.5	6.6	6.7	6.2	5.1	5.1
PVID Water Use under Water Right (est.)			12.2	12.2	12.2	12.2	27.4	27.4	27.4
East Fork / Potter Valley Reach Analysis									
USGS E Fork @ Calpella			19.7	19.2	19.1	19.6	19.6	20.9	20.7
Net Reach Loss(-)/Gain(+)			-10.3	-10.8	-10.9	-10.4	-10.4	-9.1	-11.3
Unimpaired Natural Flow @ Calpella (est.)			4.9	4.5	4.4	4.2	4.1	4.0	3.8
Non-PVID East Fork Estimated Reach Losses			-4.2	-3.3	-3.5	-4.3	-19.1	-19.5	-17.4
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									
Resrvoir Operations									
Calculated Inflow (ac-ft)			25.7	32.4	34.8	24.2	50.0	36.4	24.9
(cfs)			13	16	18	12	25	18	13
Natural Flow			2	5	6	1	29	21	13
Import			11	11	11	11	-4	-2	0
Storage Change (ac-ft)			-128.0	-128.0	-128.0	-140.0	-115.0	-127.0	-140.0
(cfs)			-65	-65	-65	-71	-58	-64	-71
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)			21.7	21.7	23.9	25.4	26.2	24.6	26.1
RVCWD Diversion (ac-ft) (assum.)			0.0	0.0	0.0	0.0	0.0	0.0	0.0
CVD Release Gage			67	70	70	70	70	70	70
Storage (Project Water)			65	65	65	70	58	64	70
Natural Flow			0	0	0	0	12	6	0
Import Water			2	5	5	0	0	0	0
East Fork Min Instream Flow Requirement			25	25	25	25	25	25	25
Compliance Gage		*Rvr mi.*							
CVD Release		*99.9*	67	70	70	70	70	70	70
CVD Project Water Release to Meet Min Flow Requirement									
Total Pass-through Water			2	5	5	0	12	6	0
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			24	23	23	23	24	26	28
Controlling Gage			Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg
All Compliance Gages		*Rvr mi.*							
Forks	(CVD + USGS 11461000)	*99.0*	71	74	73	73	73	72	72
Talmage	(USGS 11462080)	*96.1*	70	76	75	76	74	74	63
Hopland	(USGS 11462500)	*84.8*	55	64	66	67	66	75	59
Cloverdale	(USGS 11463000)	*70.9*	39	43	52	57	58	58	57
Geyserville	(USGS 11463500)	*54.4*	33	31	37	43	46	47	50
Jimtown	(USGS 11463682)	*48.5*	34	33	34	37	40	42	43
Digger Bend	(USGS 11463980)	*38.2*	26	24	25	26	29	32	34
Healdsburg	(USGS 11464000)	*35.6*	24	23	23	23	24	26	28
Net Reach Loss(-)/Gain(+)									
Forks - Talmage			-6	-8	-8	-7	-9	-8	-9
Talmage - Hopland			-10	-6	-5	-2	-2	-3	-5
Hopland - Cloverdale			-11	-11	-12	-9	-9	-8	-7
Cloverdale - Jimtown			-3	-5	-14	-16	-14	-12	-10
Jimtown - Digger Bend			-8	-10	-9	-10	-10	-10	-8
Digger Bend - Healdsburg			-2	-1	-2	-3	-4	-2	-1
CVD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss(-)/Gain(+) to Controlling Gage			-41	-41	-50	-46	-48	-42	-41
Storage (Project Water)			+41	+41	+50	+46	+48	+42	+41
Pass-through Water (Natural + Import)			-81	-82	-101	-93	-96	-85	-82
Total Pass-through Water			-79	-76	-95	-93	-84	-79	-82
Project Water Release Required			Yes	Yes	Yes	Yes	Yes	Yes	Yes

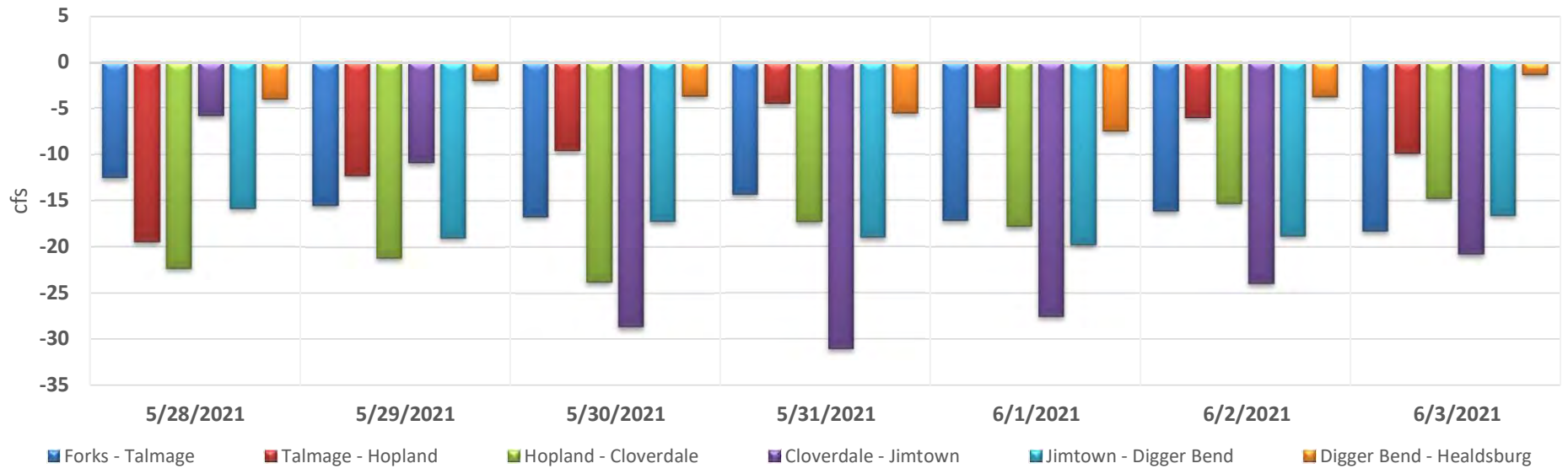
Notes:

- 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.

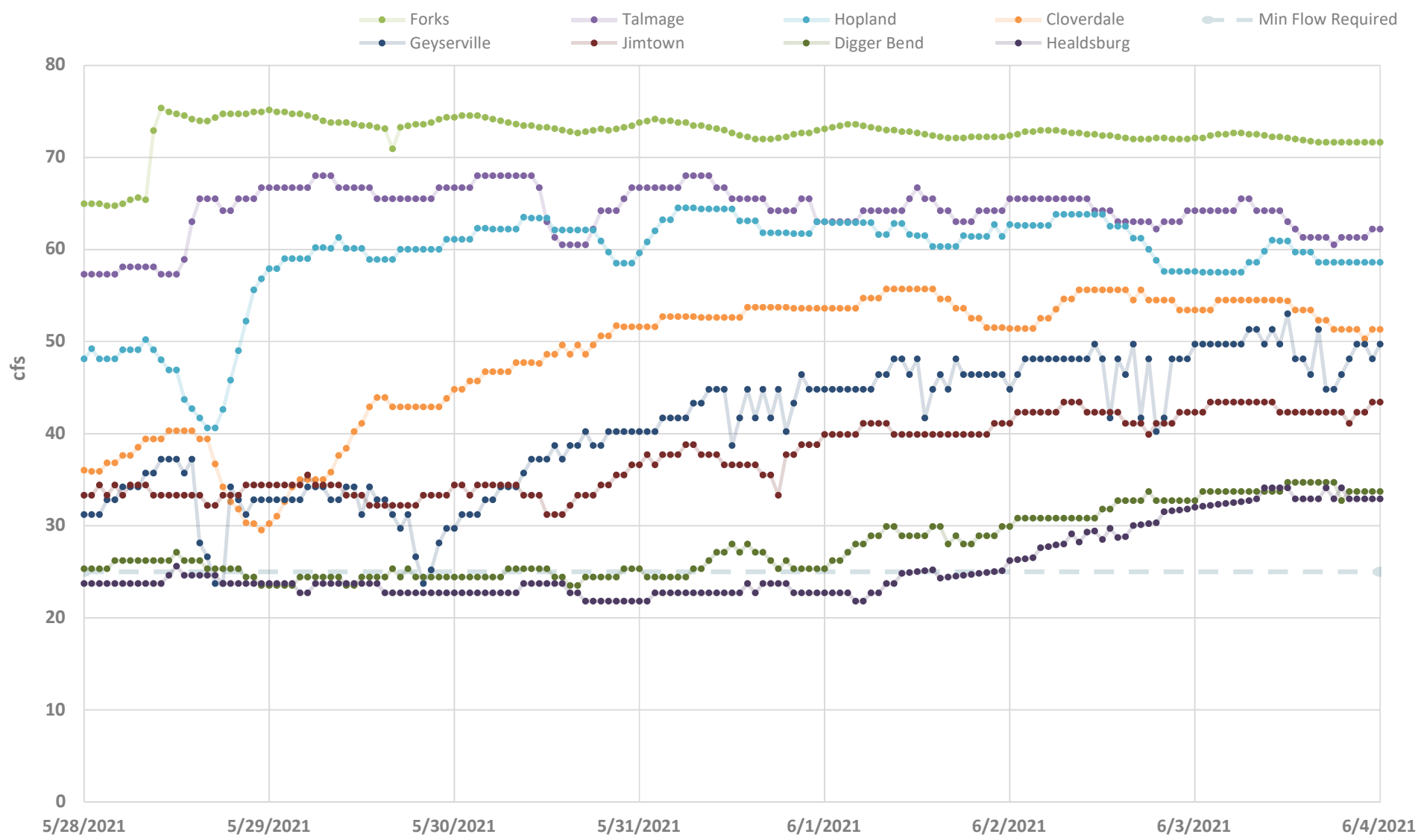
Lake Mendocino Water Accounting Weekly Report (Term 11)

Report Date: 6/4/2021

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



UPPER RUSSIAN RIVER STREAM FLOWS



MAP OF UPPER RUSSIAN RIVER and STREAM GAGES