



State Water Resources Control Board  
 Temporary Urgency Change Order (2/4/2021)  
 Russian River Hydrologic Report  
 June 4, 2021 - June 10, 2021

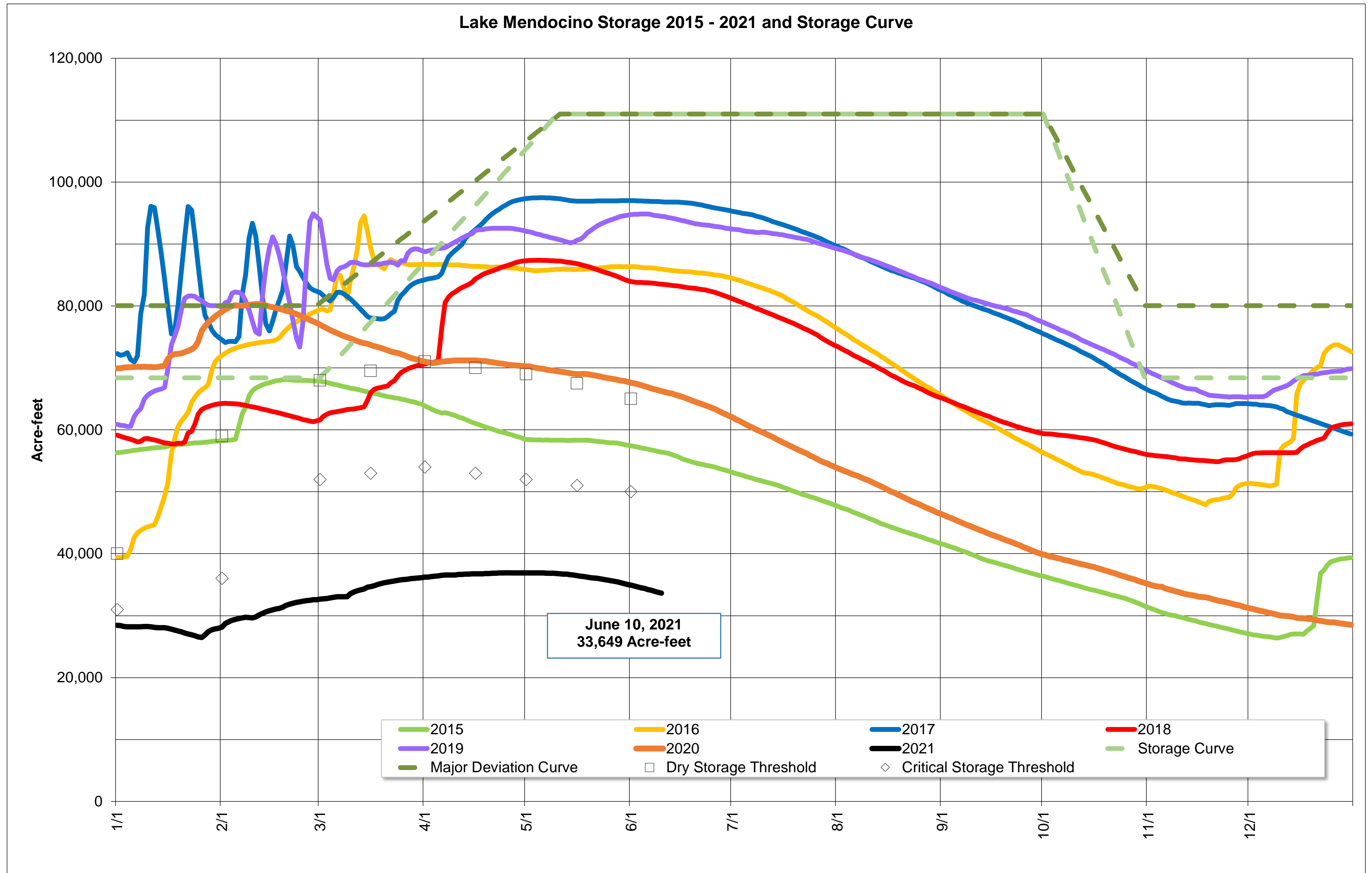
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A (Applications 12919A).

**Instream Flow Requirements as of June 10, 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**

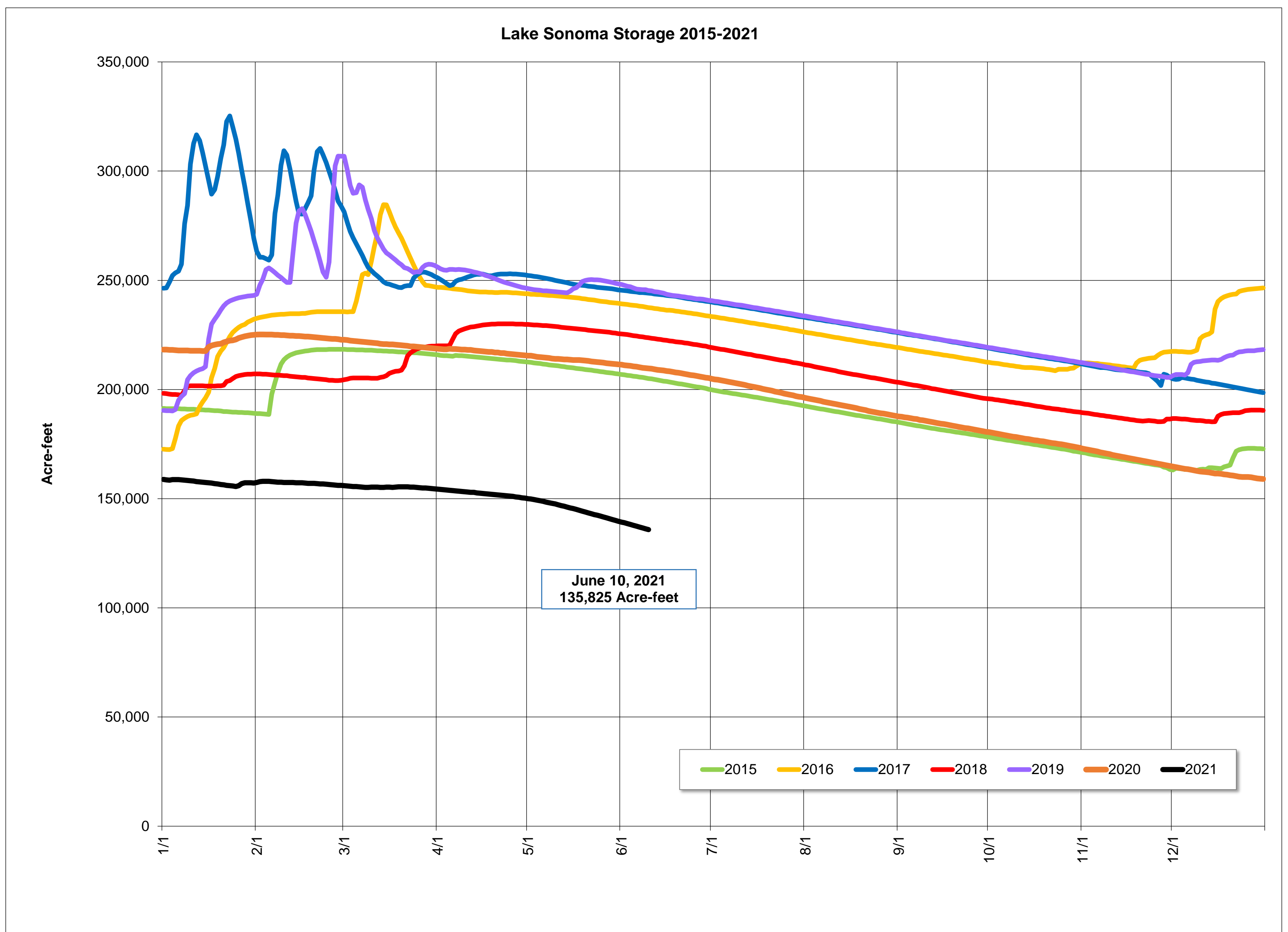


Storage (acre-feet)	June 10, 2021	<b>33,649</b>	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
	Last 7 days	<b>-3,104</b>	<b>-103</b>
Daily Inflow (cfs)	Last 7 days	Min	<b>0</b>
		Max	<b>18</b>
		Mean	<b>9</b>
Release (cfs)	Last 7 days	Min	<b>70</b>
		Max	<b>72</b>
		Mean	<b>71</b>

# Lake Sonoma



Nathan Baskett, March 3, 2021



Storage (acre-feet)	June 10, 2021	135,825	
Change in Storage (acre-feet)	Last 30 days	Total	Average Daily Rate
		-11,360	-379
	Last 7 days	-2,733	-390
Daily Inflow (cfs)	Last 7 days	Min	0
		Max	9
		Mean	0
Release (cfs)	Last 7 days	Min	165
		Max	176
		Mean	173

# Potter Valley Project

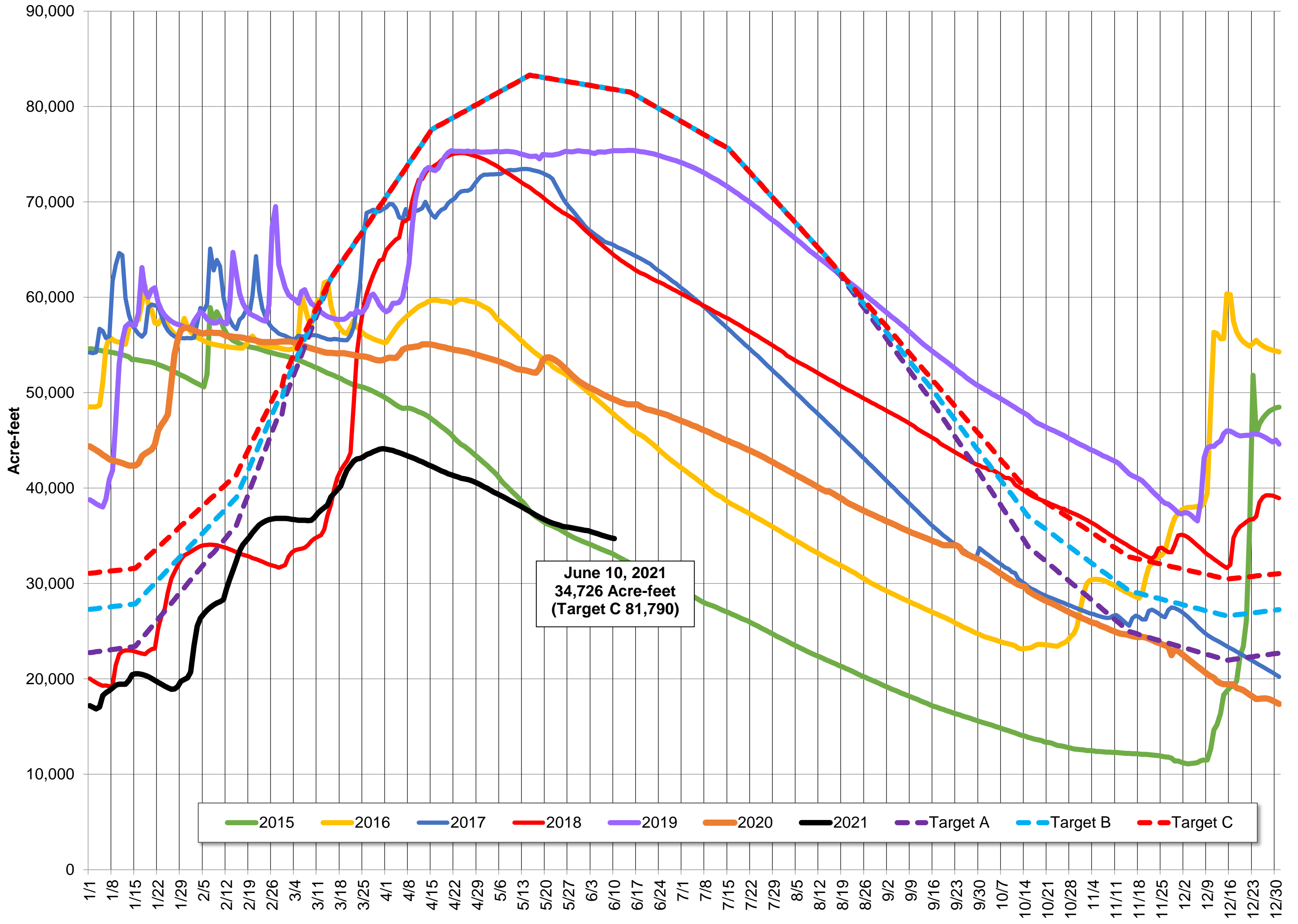
PVP Diversion (cfs)	June 10, 2021	31
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## Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2020 - June 10, 2021	86,401	343
	Last 7 days	406	58

\*Inflow calculation based on criteria established in D1610

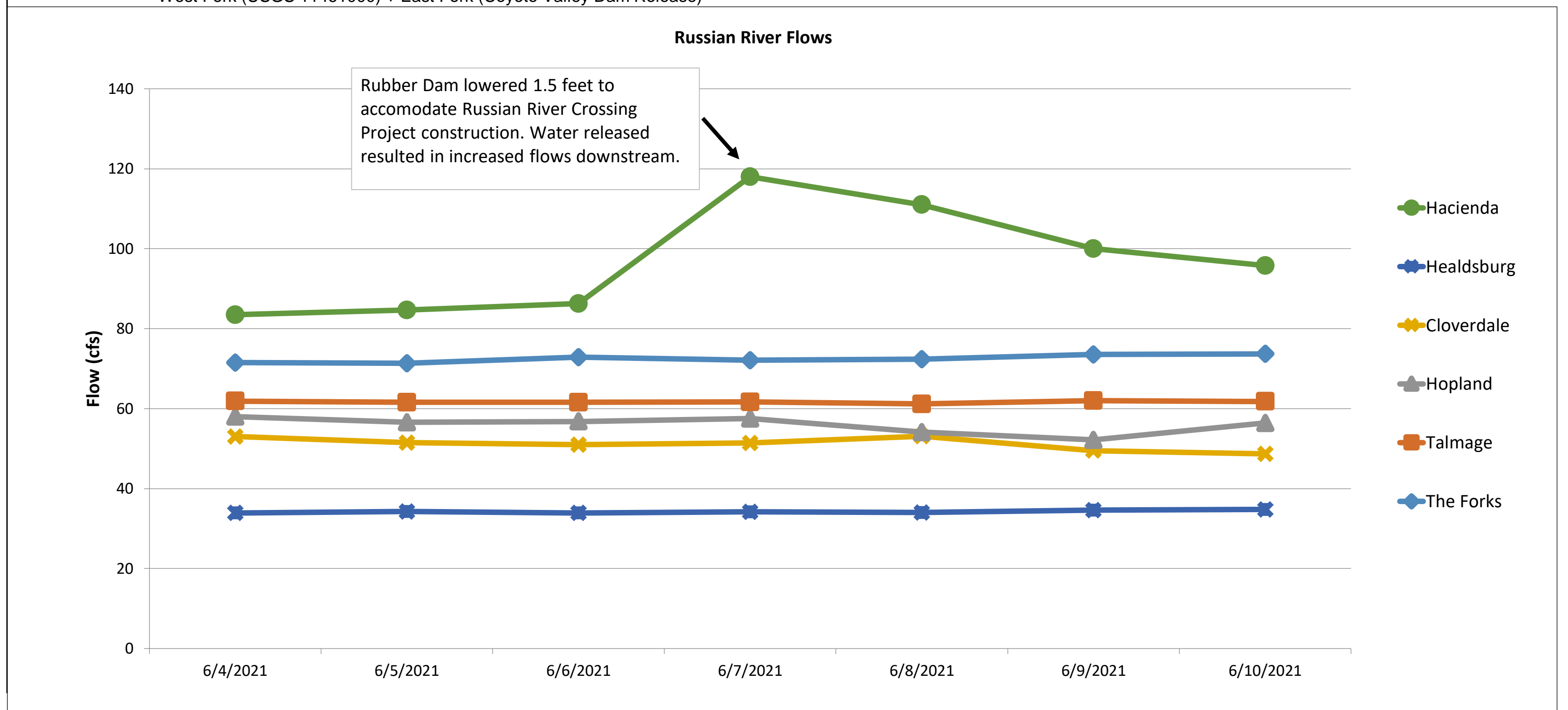
Lake Pillsbury Storage 2015-2021 and Target Storage Scenarios



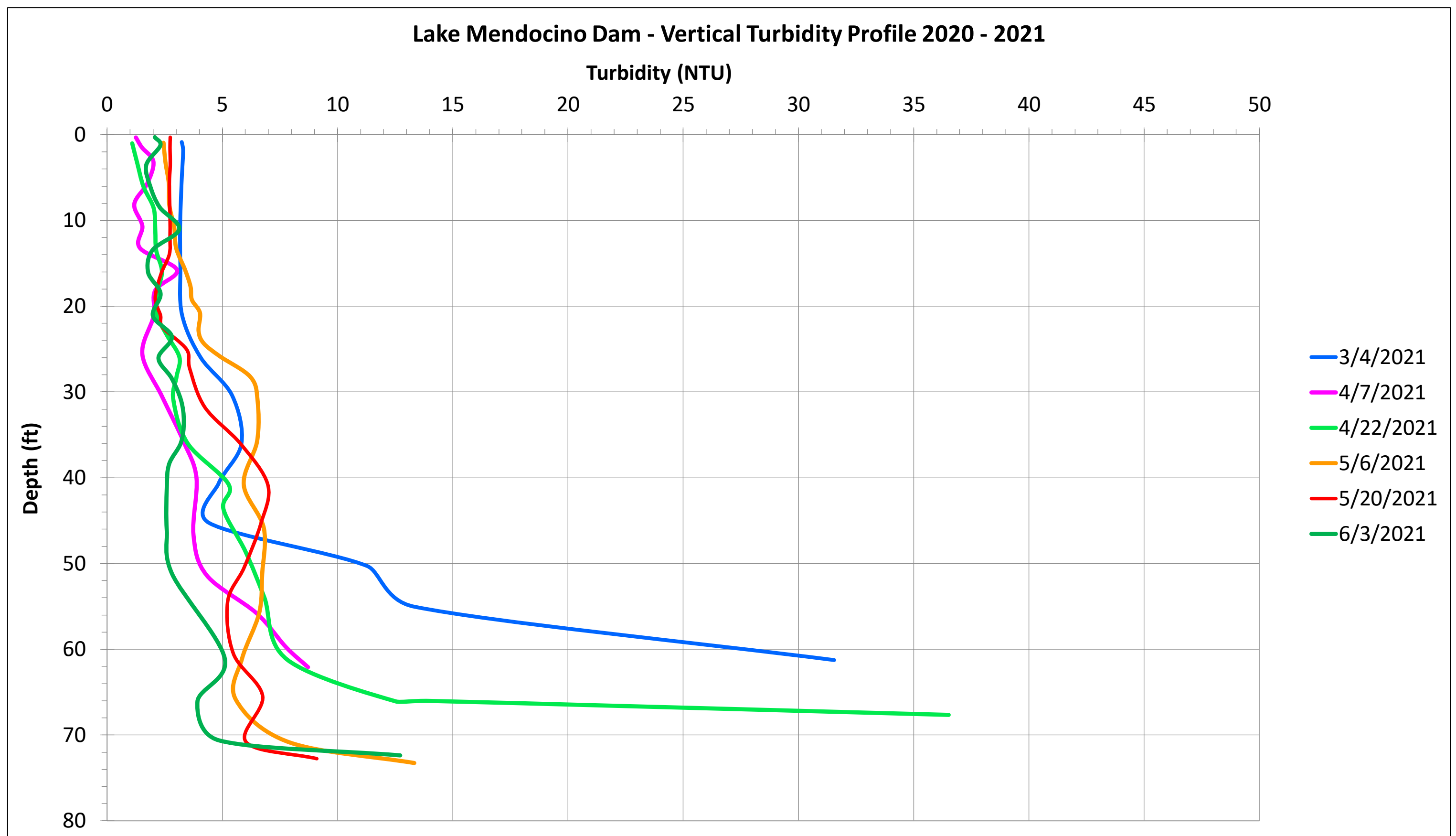
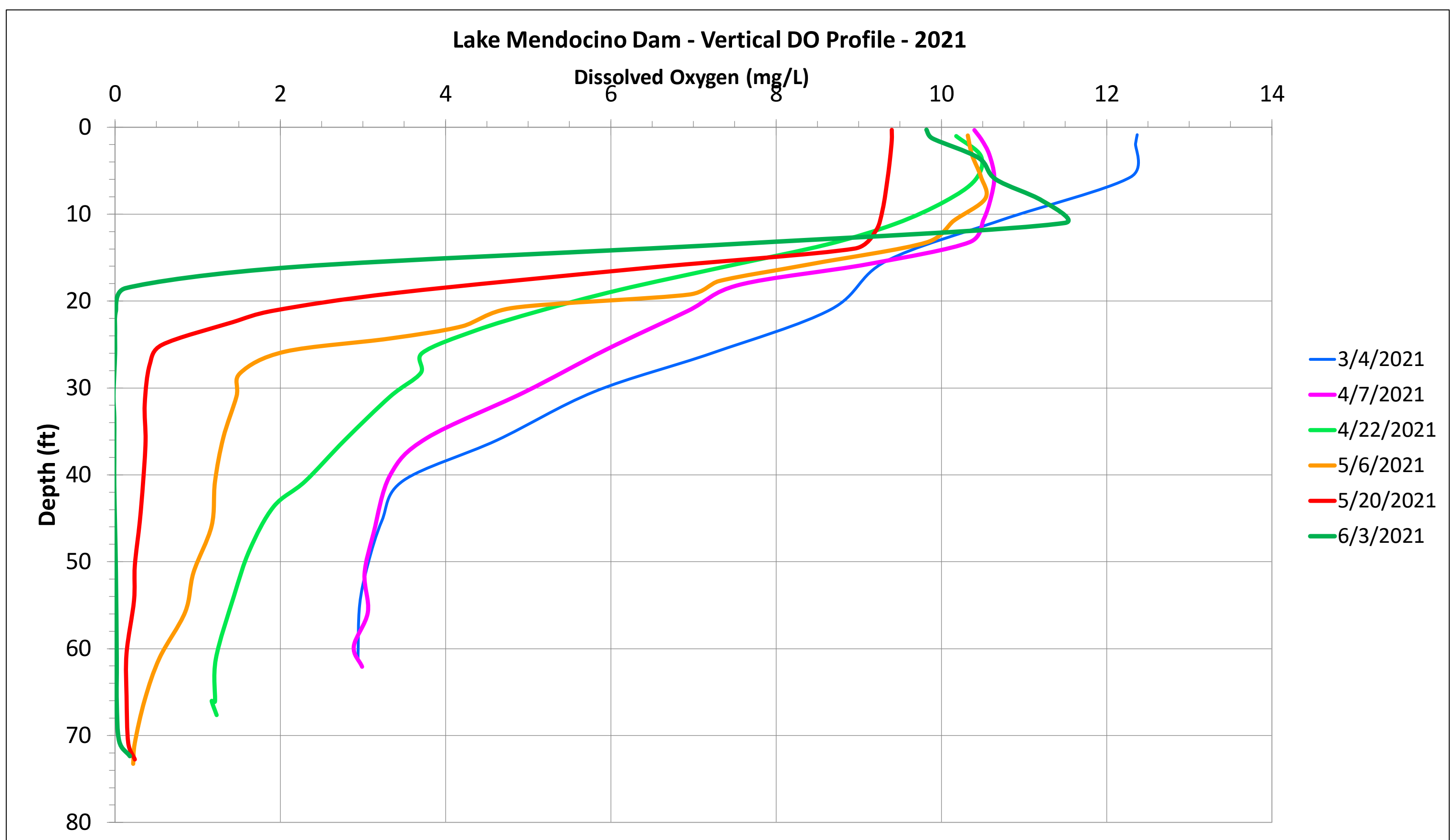
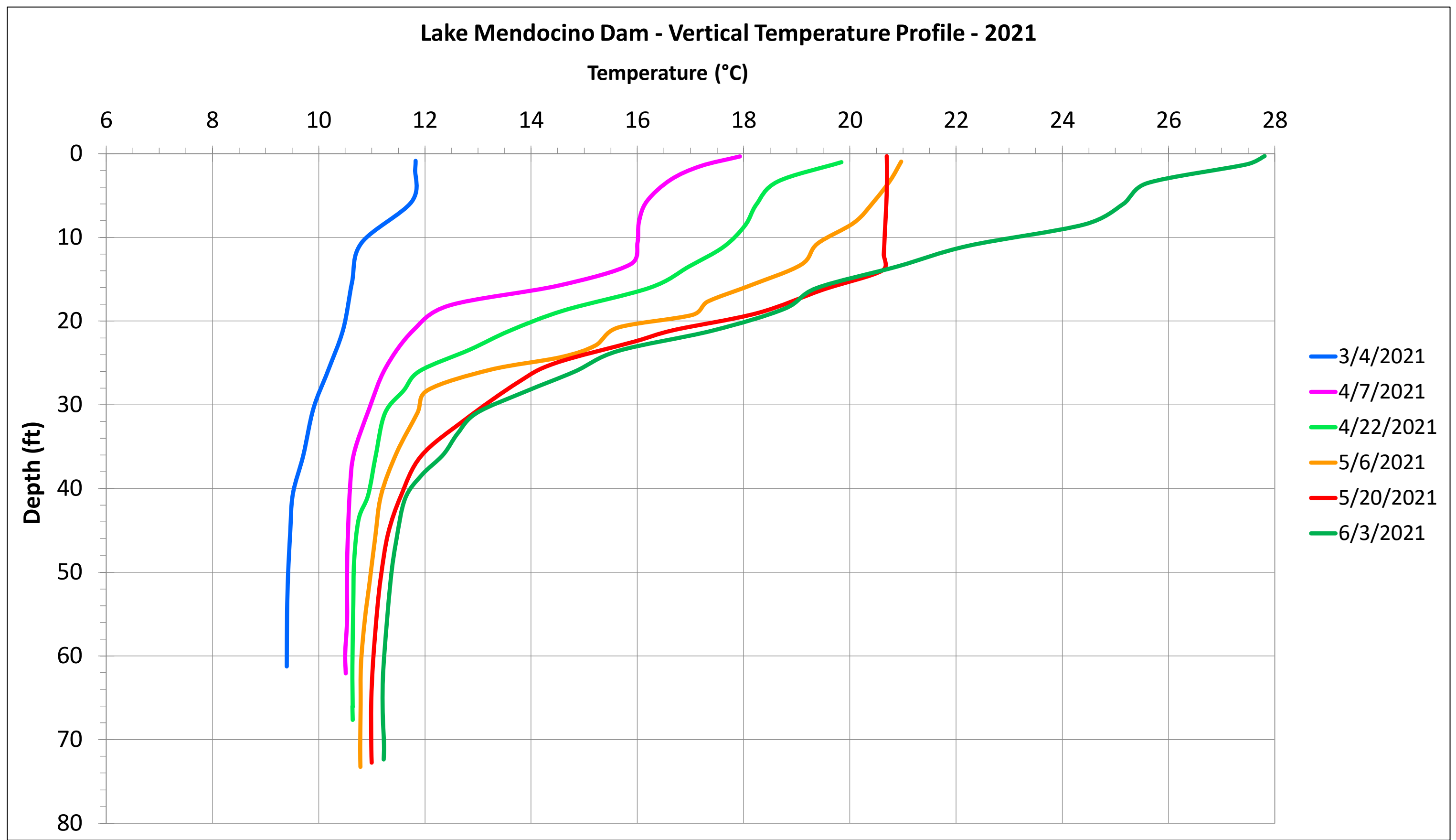
### Russian River Flows (June 4 - June 10, 2021)

Gage	24-hr Average Flow (cfs)						
	Jun 4, 2021	Jun 5, 2021	Jun 6, 2021	Jun 7, 2021	Jun 8, 2021	Jun 9, 2021	Jun 10, 2021
The Forks*	72	71	73	72	72	74	74
Talmage USGS 11462080	62	62	62	62	61	62	62
Hopland USGS 11462500	58	57	57	58	54	52	56
Cloverdale USGS 11463000	53	52	51	51	53	50	49
Healdsburg USGS 11464000	34	34	34	34	34	35	35
Hacienda USGS 11467000	84	85	86	118	111	100	96

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



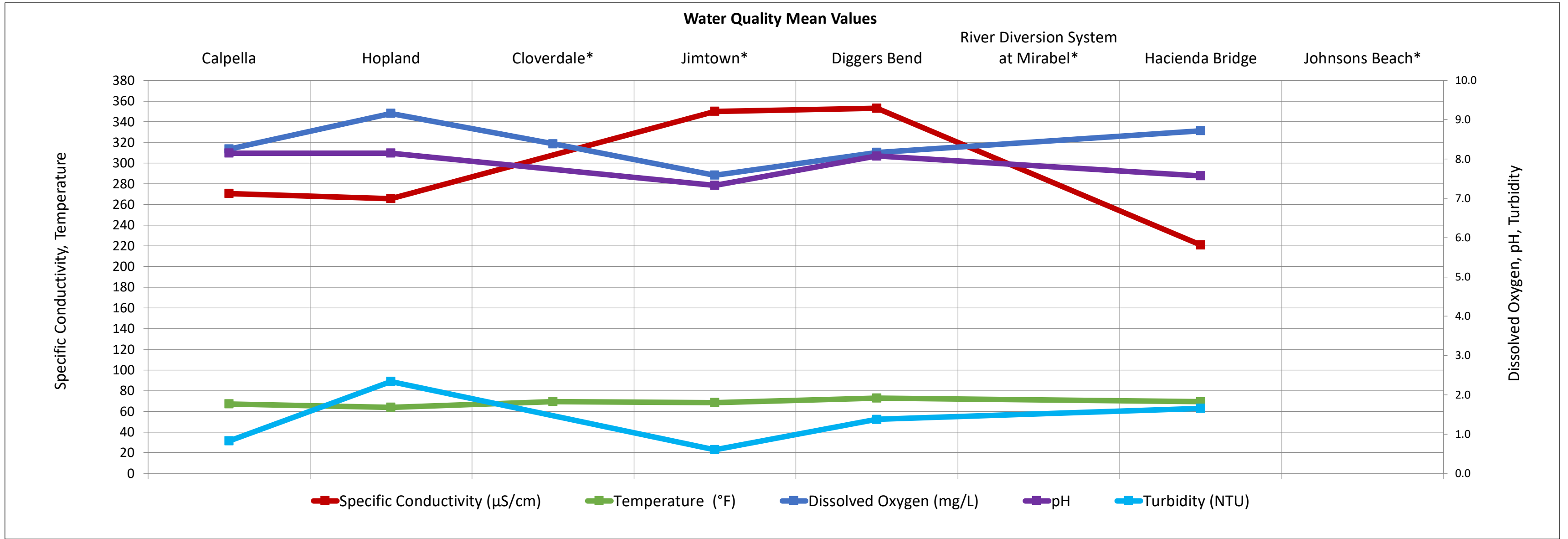
Lake Mendocino Water Quality Vertical Profiles (June 4 - June 10, 2021)



### Russian River Water Quality (June 4 - June 10, 2021)

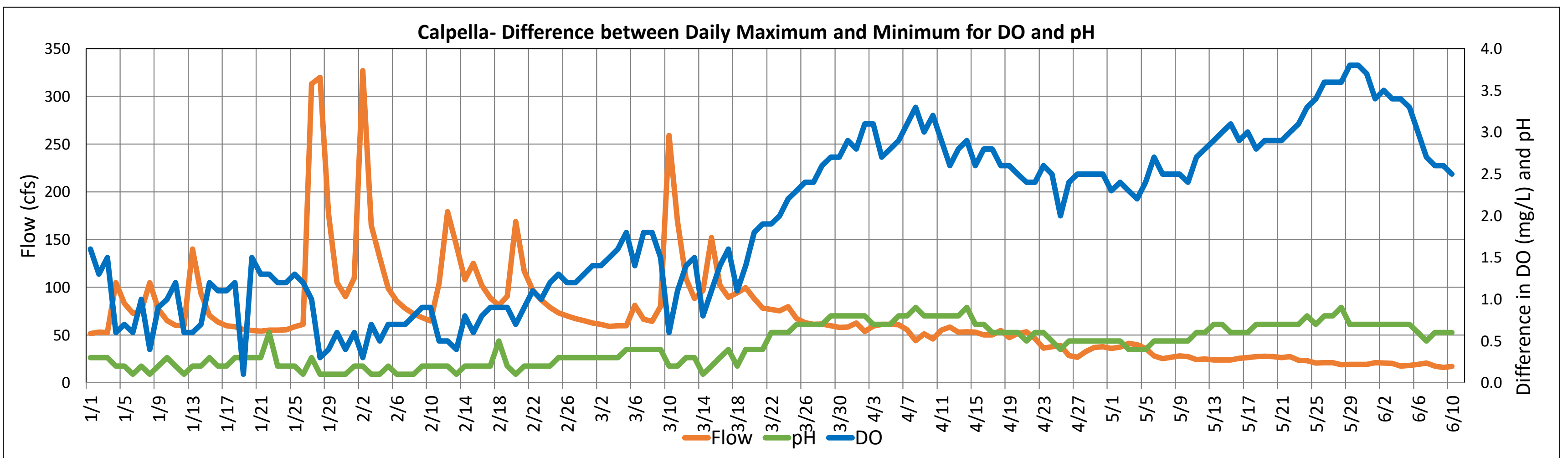
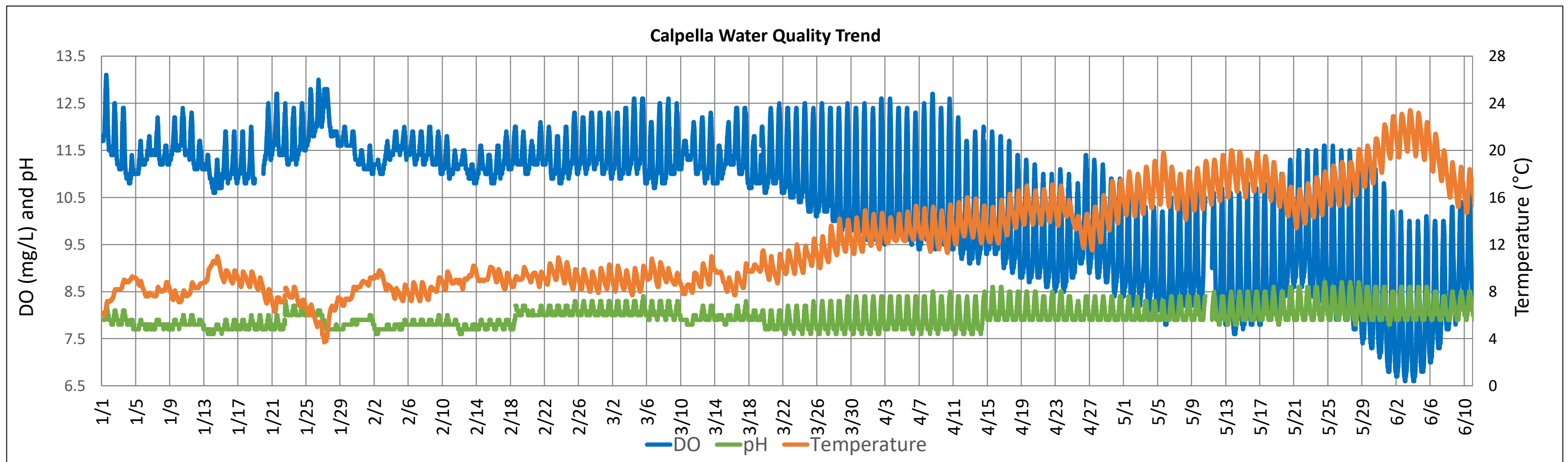
Parameter		Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min	59.4	57.2	62.6	62.2	65.7		63.5	
	Max	74.1	68.9	76.3	74.8	79.9		73.0	
	Mean	67.1	63.8	69.4	68.4	72.8		69.3	
Specific Conductivity (µS/cm)	Min	258	262		346	347		216	
	Max	282	269		356	360		226	
	Mean	271	266		350	353		221	
Dissolved Oxygen (mg/L)	Min	6.6	6.7	7.1	5.0	5.9		7.4	
	Max	10.4	12.9	9.9	10.9	10.8		10.0	
	Mean	8.3	9.2	8.4	7.6	8.2		8.7	
Dissolved Oxygen (% Saturation)	Min	65	65	73	51	62		77	
	Max	121	142	118	127	133		114	
	Mean	89	95	92	83	93		96	
pH	Min	7.9	7.7		7.2	7.8		7.3	
	Max	8.6	8.7		7.5	8.4		7.8	
	Mean	8.1	8.1		7.3	8.1		7.6	
Turbidity (NTU)	Min	0.5	1.4		0.2	0.2		0.9	
	Max	10.3	6.0		1.8	3.5		3.7	
	Mean	0.8	2.3		0.6	1.4		1.7	

\*Station operated seasonally



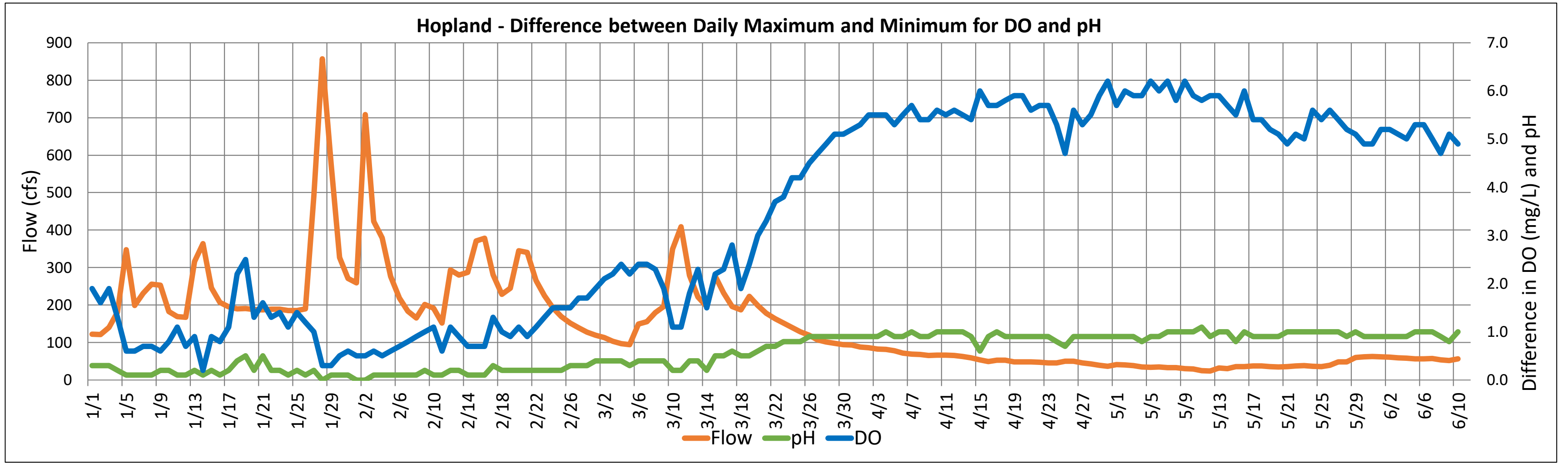
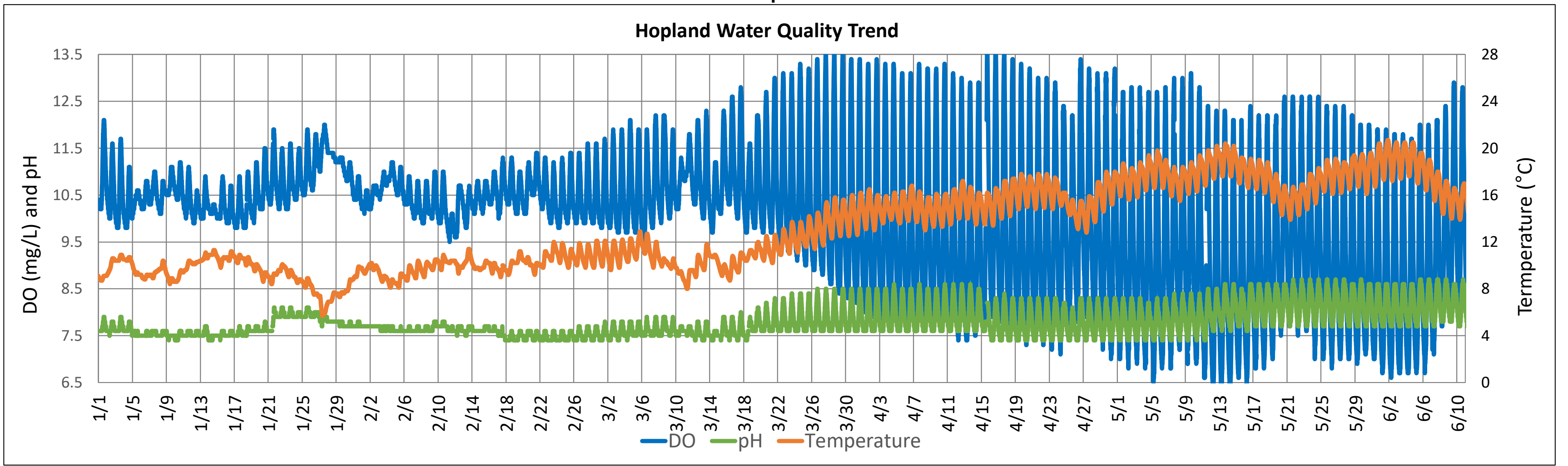
### Russian River Water Quality (January 1 - June 10, 2021)

#### Calpella (East Fork Russian River)

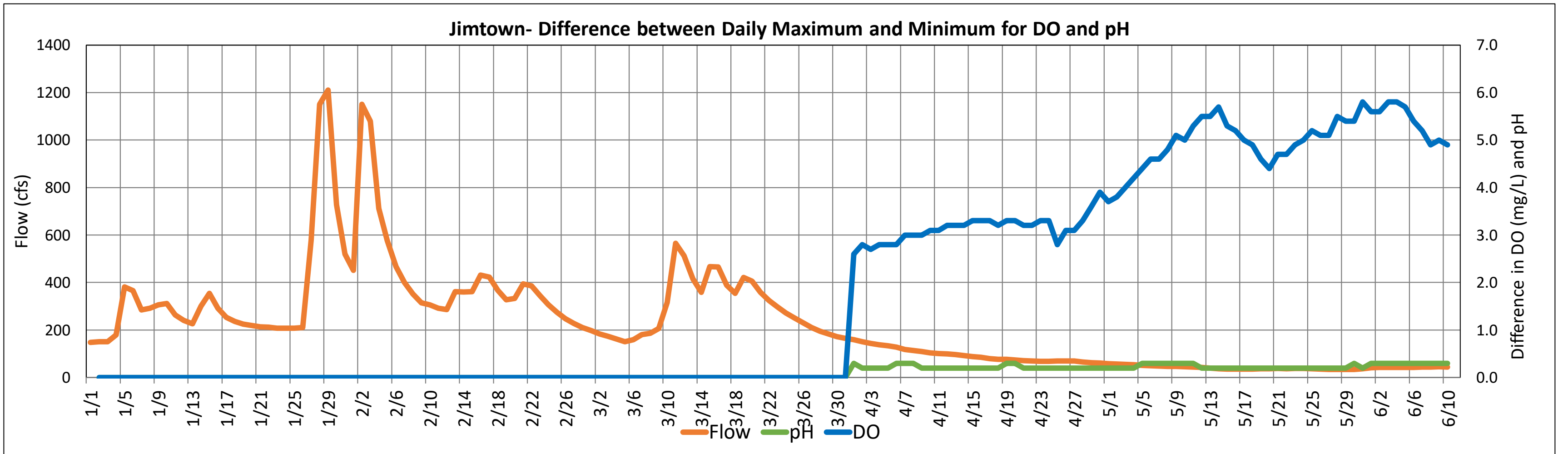
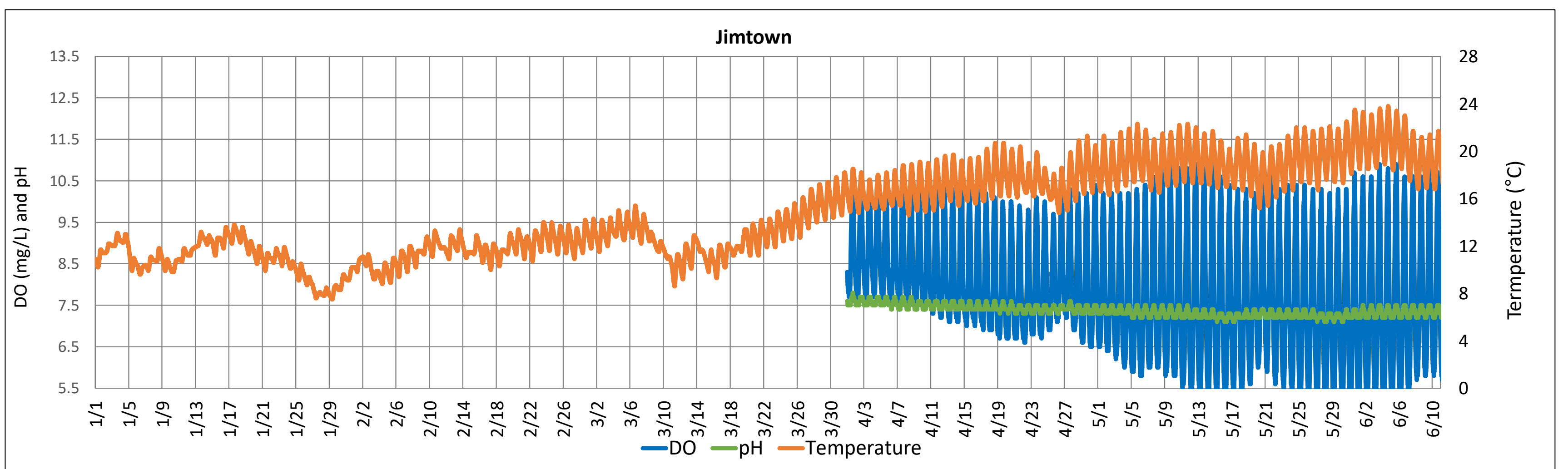


# Russian River Water Quality (January 1 - June 10, 2021)

## Hopland

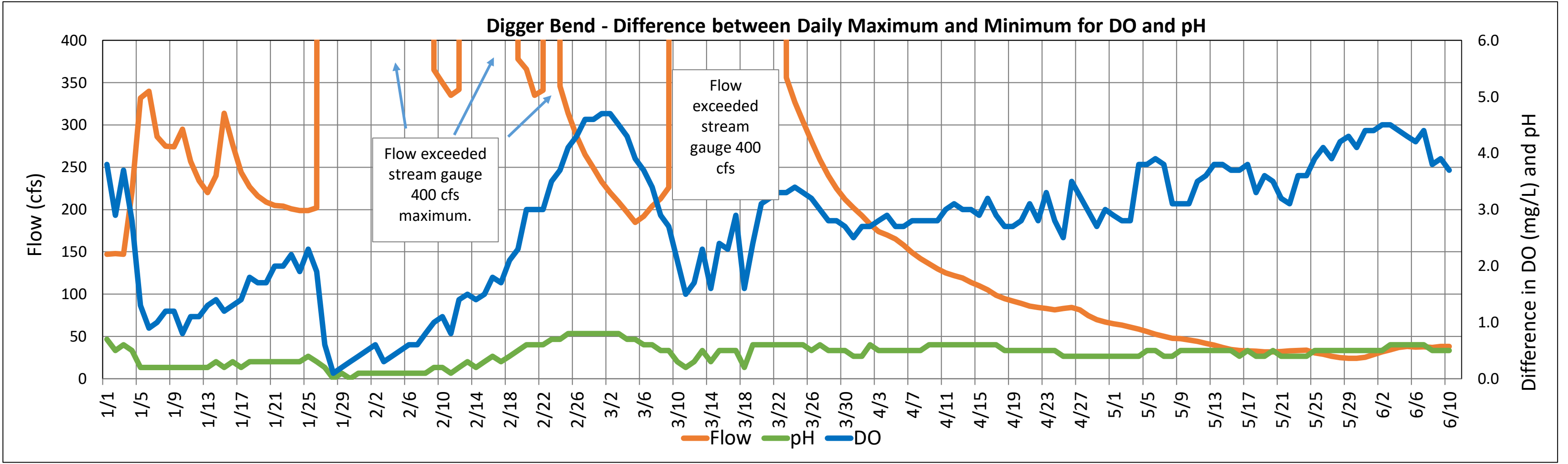
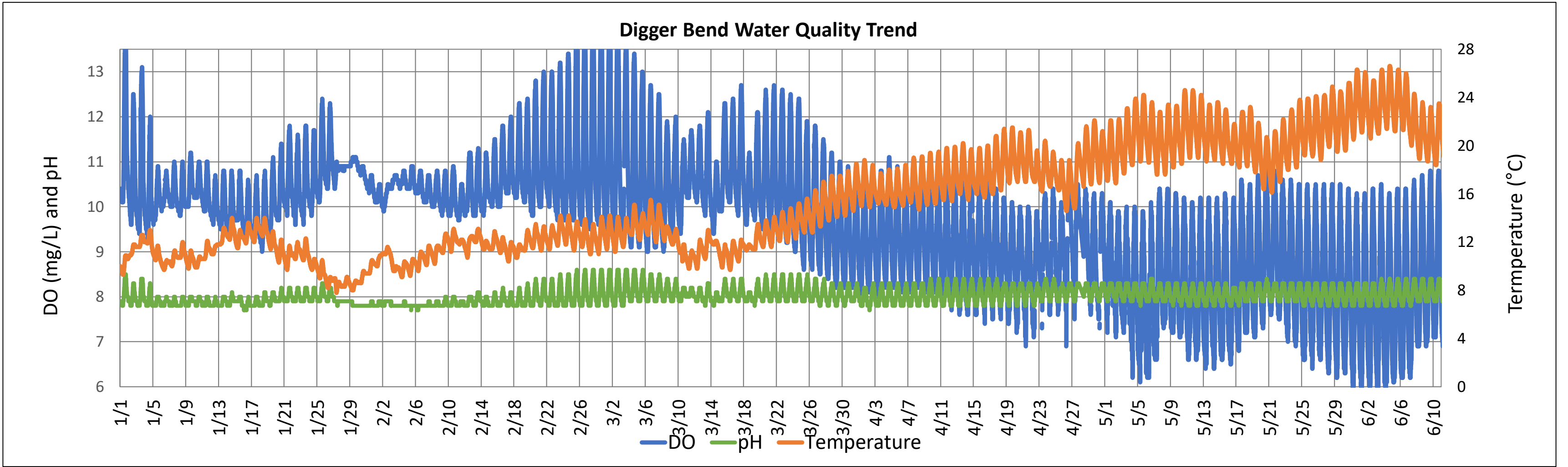


## Jimtown Water Quality

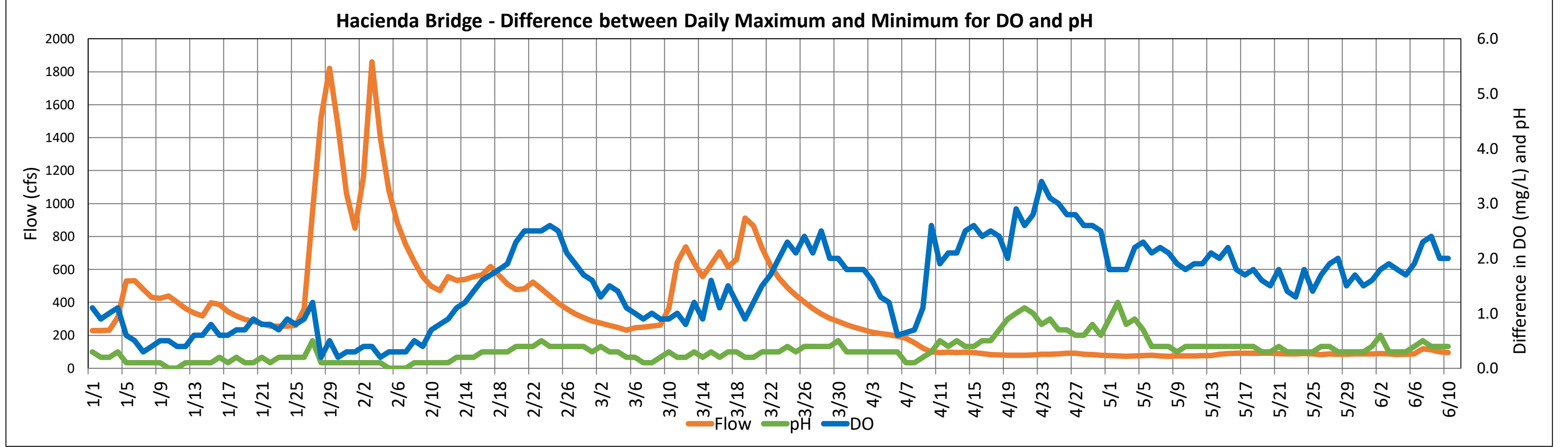
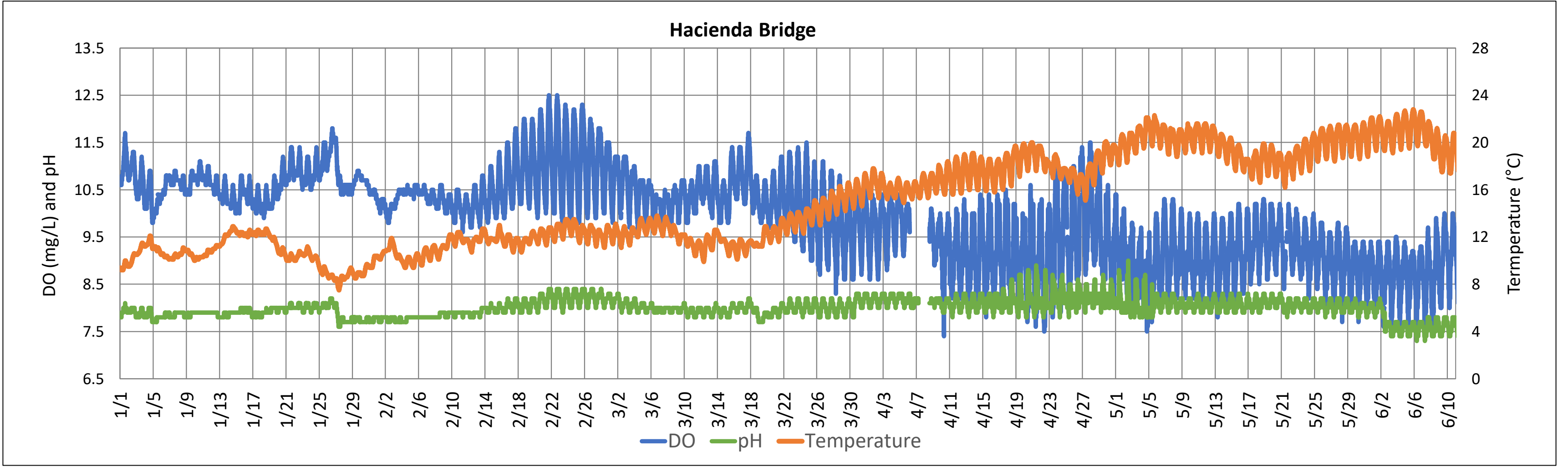


# Russian River Water Quality (January 1 - June 10, 2021)

## Digger Bend



## Hacienda Bridge Water Quality

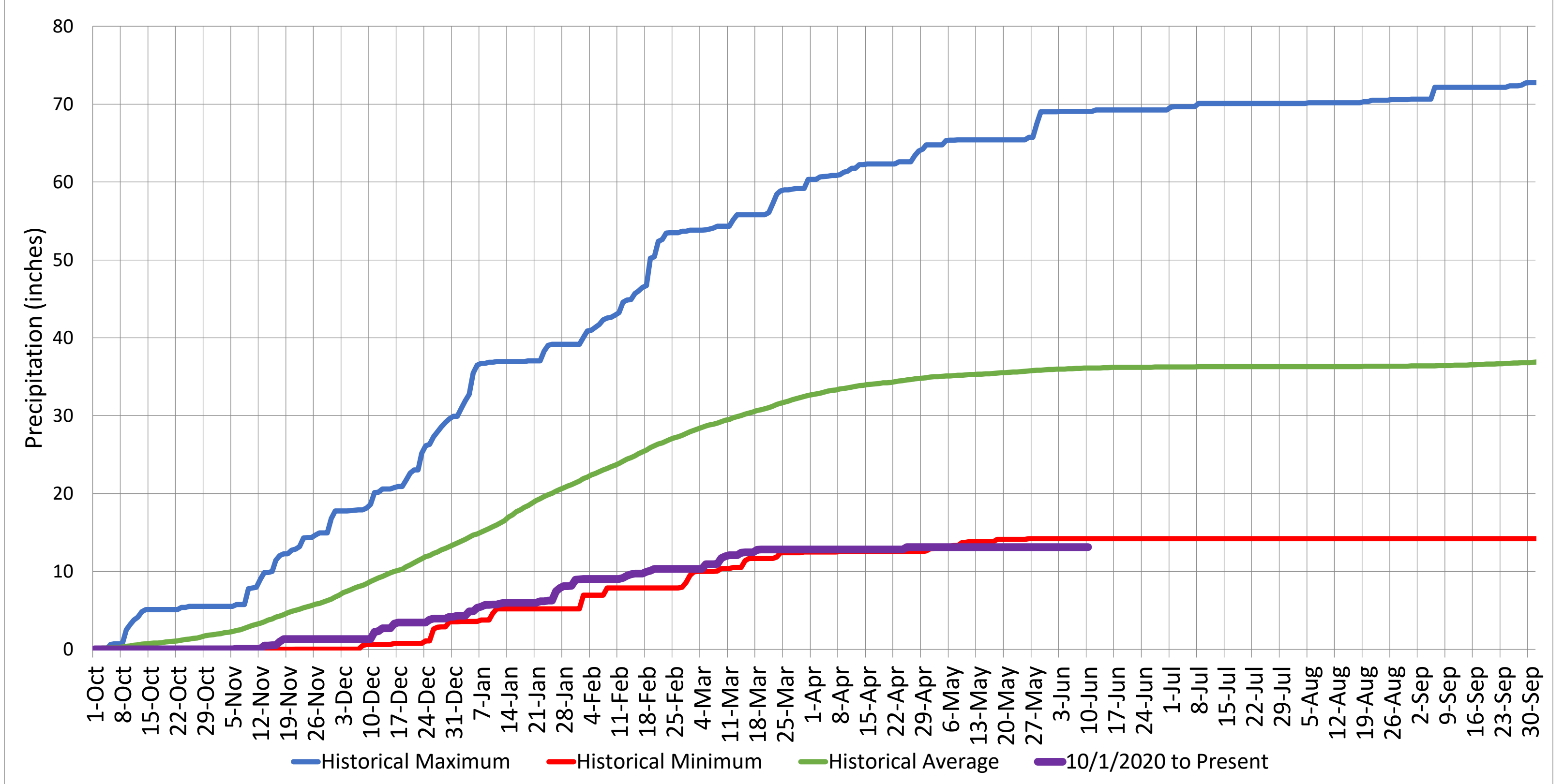




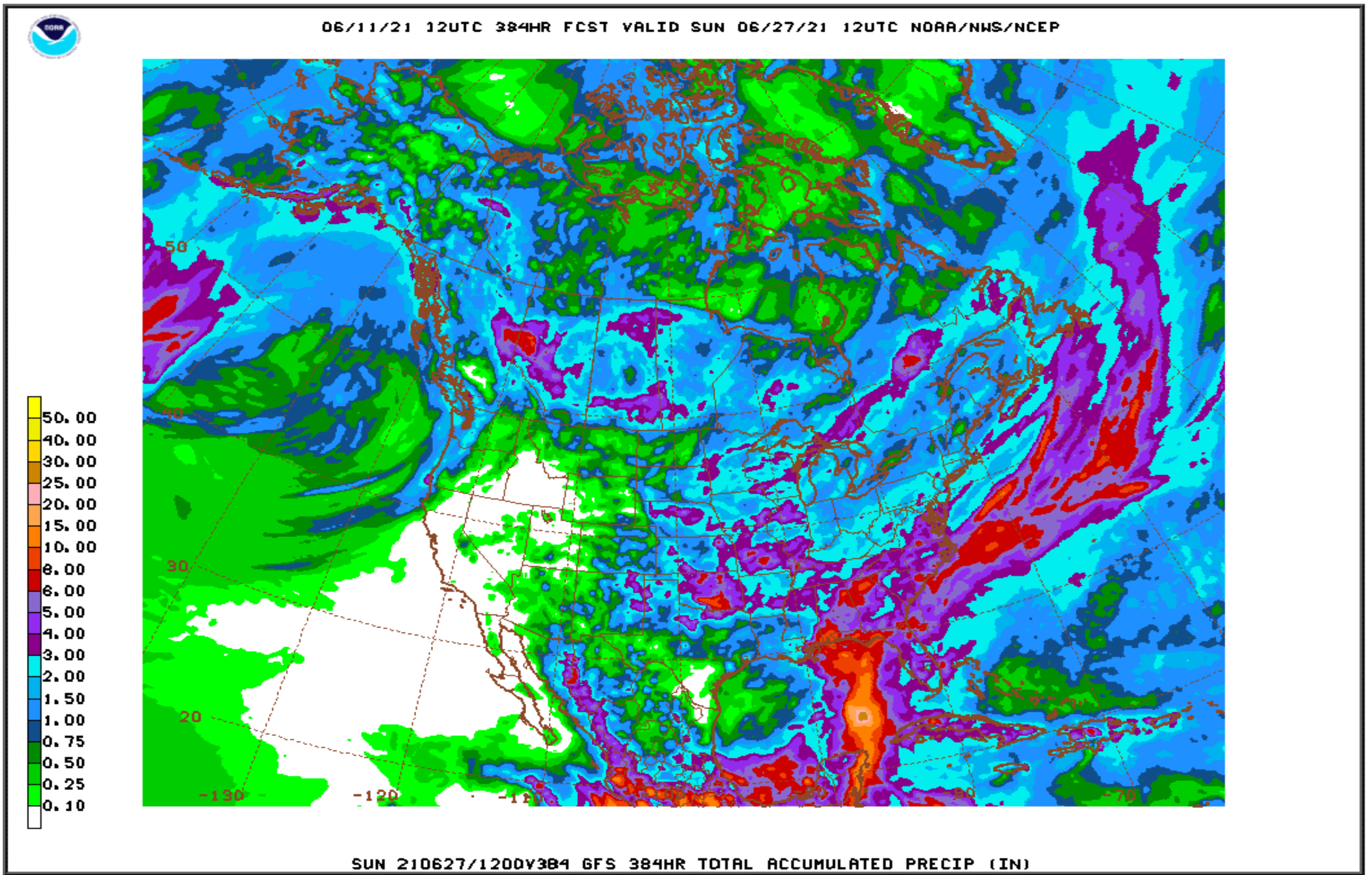
### Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))	
Date Range	Cumulative (inches)
Oct 1, 2020 - Jun 10, 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



SUN 210627/1200V384 GFS 384HR TOTAL ACCUMULATED PRECIP (IN)

Date Range	Forecasted Cumulative (inches)
Jun 11 - Jun 26, 2021	0.0

# Lake Mendocino Water Accounting Weekly Report (Term 11)

Report Date: 6/11/2021

*Units are cfs unless noted otherwise*

	<u>6/4/2021</u>	<u>6/5/2021</u>	<u>6/6/2021</u>	<u>6/7/2021</u>	<u>6/8/2021</u>	<u>6/9/2021</u>	<u>6/10/2021</u>
<b>I. Upper East Fork Reach</b>							
<b><u>Potter Valley Project</u></b>							
Tunnel Diversion	39.0	40.0	37.0	32.0	30.0	30.0	31.0
PVID Canals Delivery Requested	35.0	35.0	31.0	26.4	25.0	25.0	26.3
PVID Canals Delivery Actual	16.4	17.8	17.3	17.0	17.4	17.4	17.1
East Fork Release	22.6	22.2	19.8	15.0	12.6	12.6	13.9
PVID Canal Return Flow (assumed)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PVID Canal Diversions	16.4	17.8	17.3	17.0	17.4	17.4	17.1
PVID E Fork Diversions (est.)	27.4	27.4	27.4	27.4	27.4	27.4	27.4
PVID Water Use under PG&E Contract (est.)	16.4	17.8	17.3	17.0	17.4	17.4	17.1
PVID Water Use under Water Right (est.)	27.4	27.4	27.4	27.4	27.4	27.4	27.4
<b><u>East Fork / Potter Valley Reach Analysis</u></b>							
USGS E Fork @ Calpella	18.8	17.5	18.7	20.4	19.2	16.7	16.3
Net Reach Loss(-)/Gain(+)	-20.2	-22.6	-18.3	-11.6	-10.8	-13.3	-14.7
Unimpaired Natural Flow @ Calpella (est.)	3.7	3.6	3.6	3.6	3.6	3.7	3.7
Non-PVID East Fork Estimated Reach Losses	-19.9	-19.0	-22.8	-29.2	-30.4	-27.8	-26.0
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
<b>II. Lake Mendocino</b>							
<b><u>Reservoir Operations</u></b>							
Calculated Inflow (ac-ft)	24.4	36.5	-12.8	33.7	9.2	10.3	24.5
(cfs)	12	18	-6	17	5	5	12
Natural Flow	17	24	1	29	19	20	26
Import	-5	-5	-8	-12	-15	-15	-13
Storage Change (ac-ft)	-139.0	-126.0	-177.0	-126.0	-151.0	-150.0	-138.0
(cfs)	-70	-64	-89	-64	-76	-76	-70
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)	24.5	23.7	22.1	19.0	19.0	17.4	19.7
RVCWD Diversion (ac-ft) (assum.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CVD Release Gage	70	70	72	71	71	72	72
Storage (Project Water)	70	64	72	64	71	72	70
Natural Flow	0	6	0	7	0	0	2
Import Water	0	0	0	0	0	0	0
<b><u>East Fork Min Instream Flow Requirement</u></b>	25	25	25	25	25	25	25
<b><u>Compliance Gage</u></b>	<i>Rvr mi.</i>						
CVD Release	99.9	70	70	72	71	71	72
<b><u>CVD Project Water Release to Meet Min Flow Requirement</u></b>							
Total Pass-through Water	0	6	0	7	0	0	2
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>III. Upper Russian River Reach</b>							
<b><u>Minimum Instream Flow Requirement</u></b>	25	25	25	25	25	25	25
<b><u>Controlling Compliance Gage</u></b>							
Min Gage Flow	34	34	34	34	34	35	35
Controlling Gage	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg
<b><u>All Compliance Gages</u></b>							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	72	71	73	72	72	74
Talmage (USGS 11462080)	96.1	62	62	62	62	61	62
Hopland (USGS 11462500)	84.8	58	57	57	58	54	56
Cloverdale (USGS 11463000)	70.9	53	52	51	51	53	50
Geyserville (USGS 11463500)	54.4	48	49	45	46	49	47
Jimtown (USGS 11463682)	48.5	43	42	43	43	44	45
Digger Bend (USGS 11463980)	38.2	37	38	37	38	37	38
Healdsburg (USGS 11464000)	35.6	34	34	34	34	34	35
<b><u>Net Reach Loss(-)/Gain(+)</u></b>							
Forks - Talmage	-10	-8	-12	-11	-11	-12	-12
Talmage - Hopland	-4	-5	-5	-4	-7	-10	-6
Hopland - Cloverdale	-6	-6	-5	-6	-5	-4	-4
Cloverdale - Jimtown	-10	-9	-8	-8	-9	-4	-4
Jimtown - Digger Bend	-6	-5	-5	-5	-6	-6	-7
Digger Bend - Healdsburg	-2	-4	-4	-3	-3	-3	-4
<b><u>CVD Project Water Release to Meet Min Flow Requirement</u></b>							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-39	-37	-39	-37	-41	-39	-37
Storage (Project Water)	+39	+37	+39	+37	+41	+39	+37
Pass-through Water (Natural + Import)	-77	-73	-78	-74	-82	-78	-74
Total Pass-through Water	-77	-67	-78	-66	-82	-78	-72
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes

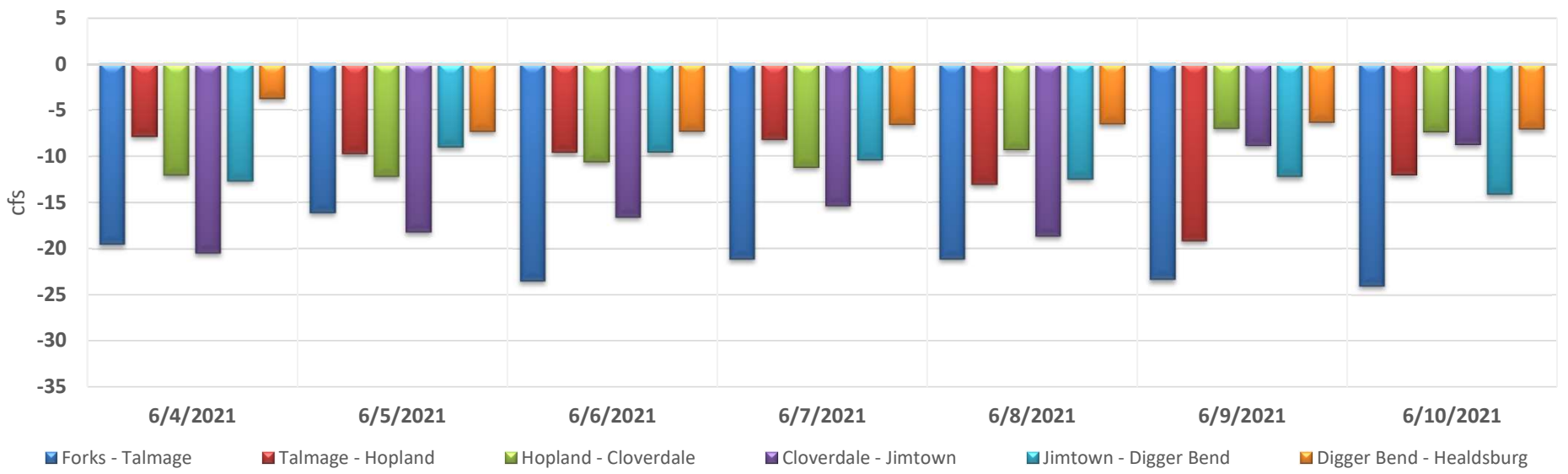
**Notes:**

- 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.

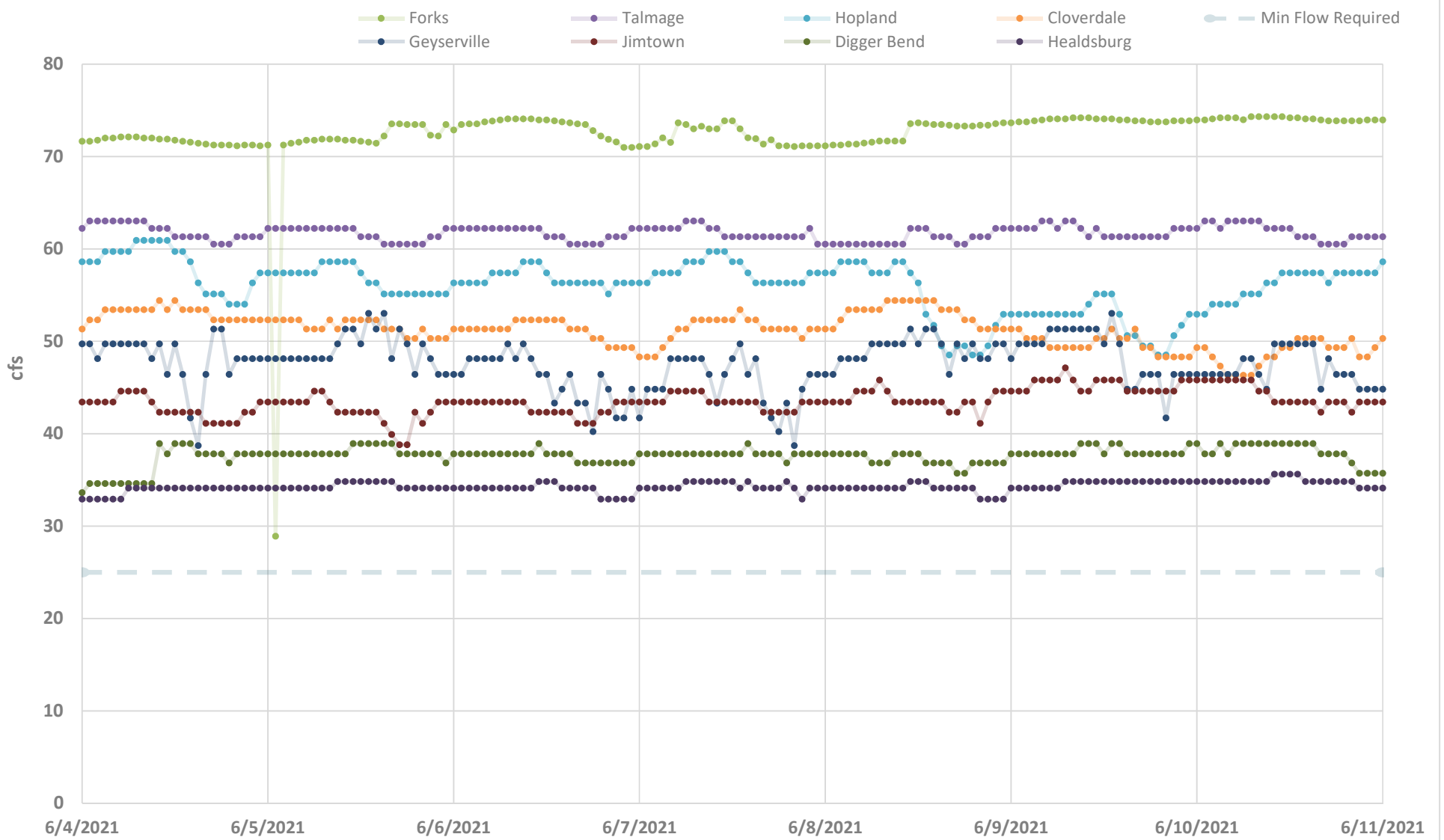
# Lake Mendocino Water Accounting Weekly Report (Term 11)

Report Date: 6/11/2021

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



## UPPER RUSSIAN RIVER STREAM FLOWS



## MAP OF UPPER RUSSIAN RIVER and STREAM GAGES

