State Water Resources Control Board
Temporary Urgency Change Order (6/14/2021)

Russian River Hydrologic Report
June 25, 2021 - July 1, 2021

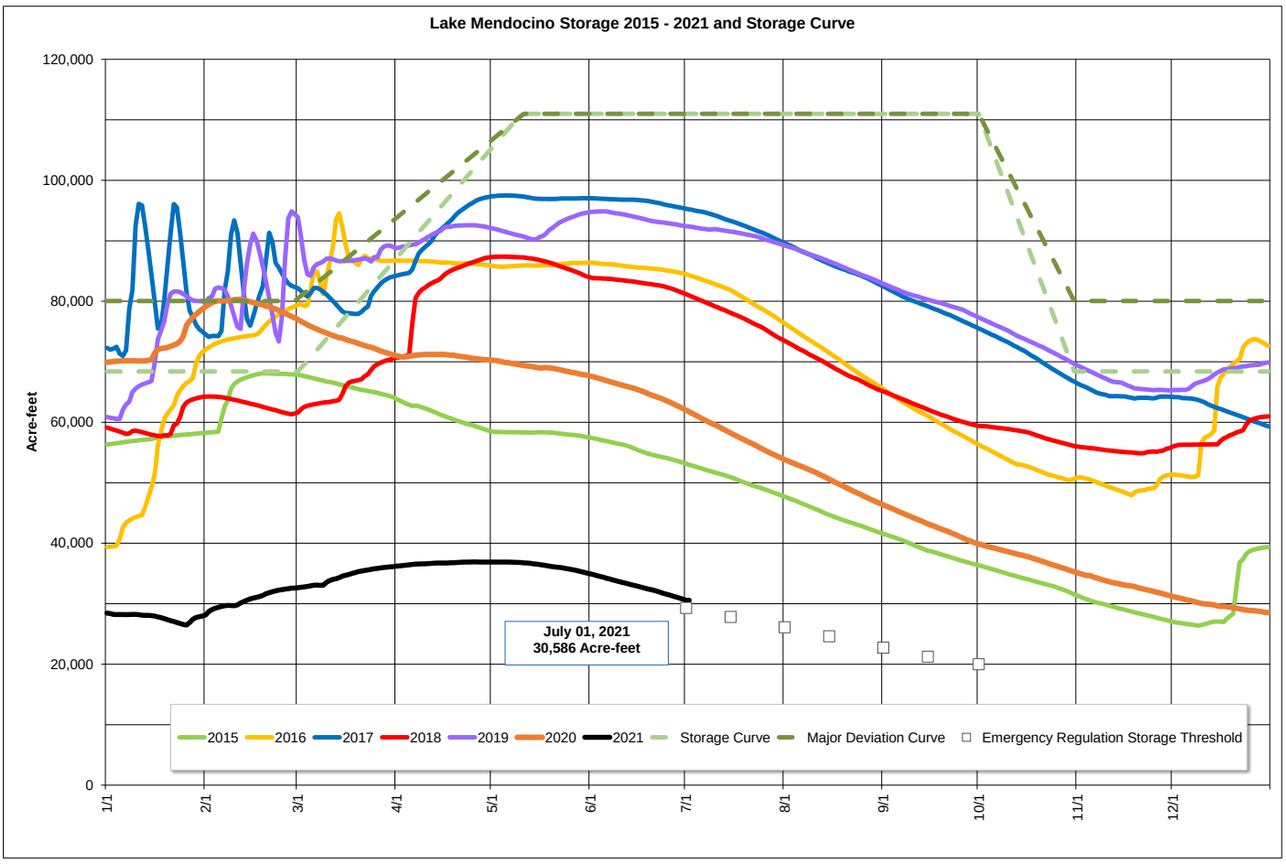
Prepared as a requirement of the Order approving Sonoma Water's Petition for Temporary Urgency Change in Permits 12947A, 12949, 12950, and 16596 (Applications 12919A, 15736, 15737, and 19351).

Instream Flow Requirements as of July 1, 2021

Basis	Reach	Instantaneous (cfs)	5-day Average (cfs)
Modified Per Order: Critical Condition	Upper Russian River	**15**	**25**
D-1610: Dry Condition	Dry Creek	**25**	**-**
Modified Per Order: Critical Condition	Lower Russian River	**25**	**35**

Upper Russian River and Lower Russian River based on criteria as established in the Order issued 6/14/2021.

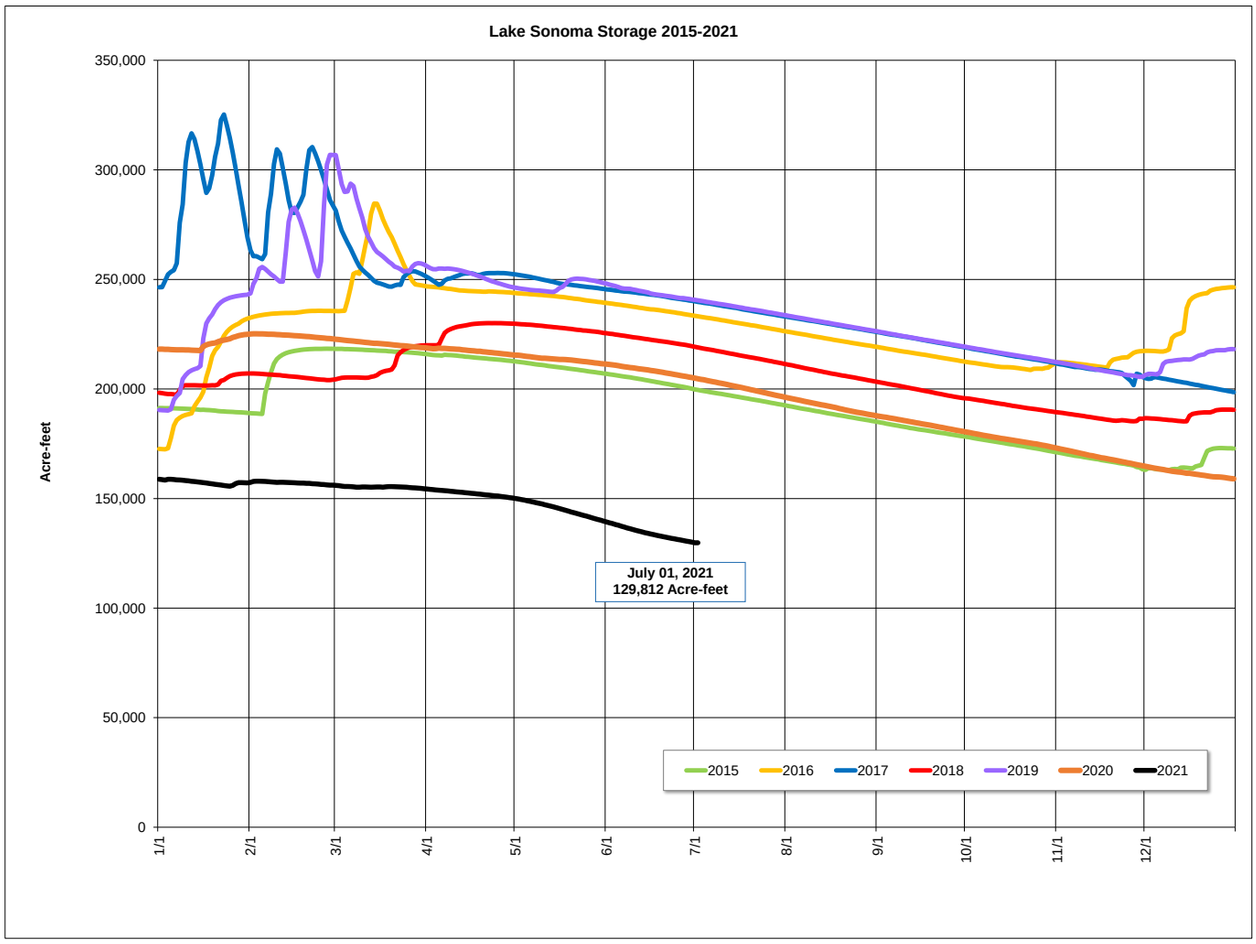
Lake Mendocino



Storage (acre-feet)	July 1, 2021	**30,586**	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	**-4,337**	**-145**
	Last 7 days	**-1,112**	**-159**
Daily Inflow (cfs)	Last 7 days	Min	**7**
		Max	**24**
		Mean	**15**
Release (cfs)	Last 7 days	Min	**82**
		Max	**84**
		Mean	**83**

Lake Sonoma

Nathan Baskett, March 3, 2021



Storage (acre-feet)	July 1, 2021	**129,812**	
		Total	Average Daily Rate
Change in Storage (acre-feet)	Last 30 days	**-9,484**	**-316**
	Last 7 days	**-1,781**	**-254**
Daily Inflow (cfs)	Last 7 days	Min	**0**
		Max	**0**
		Mean	**0**
Release (cfs)	Last 7 days	Min	**101**
		Max	**107**
		Mean	**105**

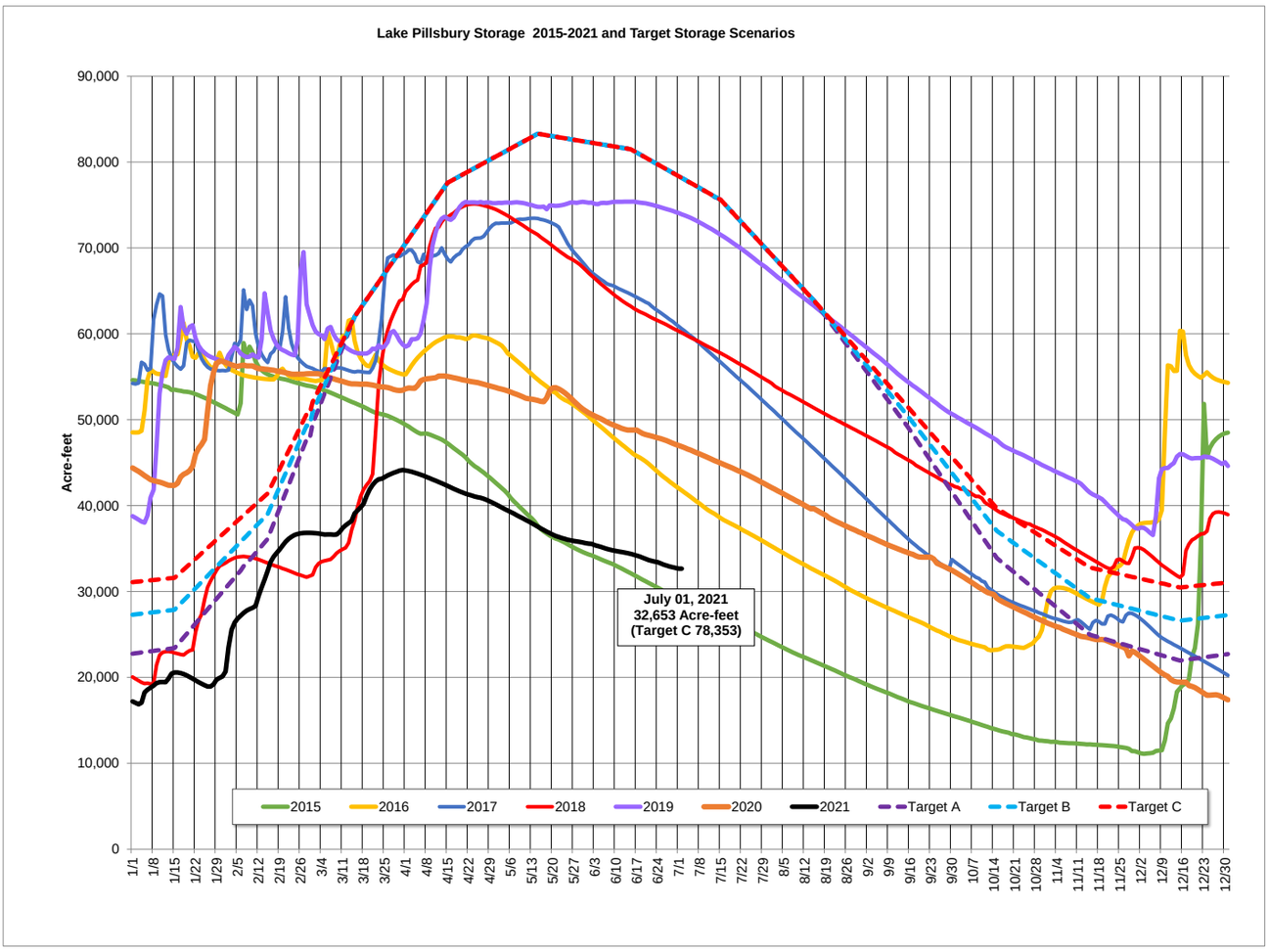
Potter Valley Project

PVP Diversion (cfs)	July 1, 2021	**30**

Lake Pillsbury

Parameter	Date Range	Cumulative	Daily Average
Inflow* (acre-feet)	October 1, 2020 - July 1, 2021	**87,593**	**321**
	Last 7 days	**200**	**29**

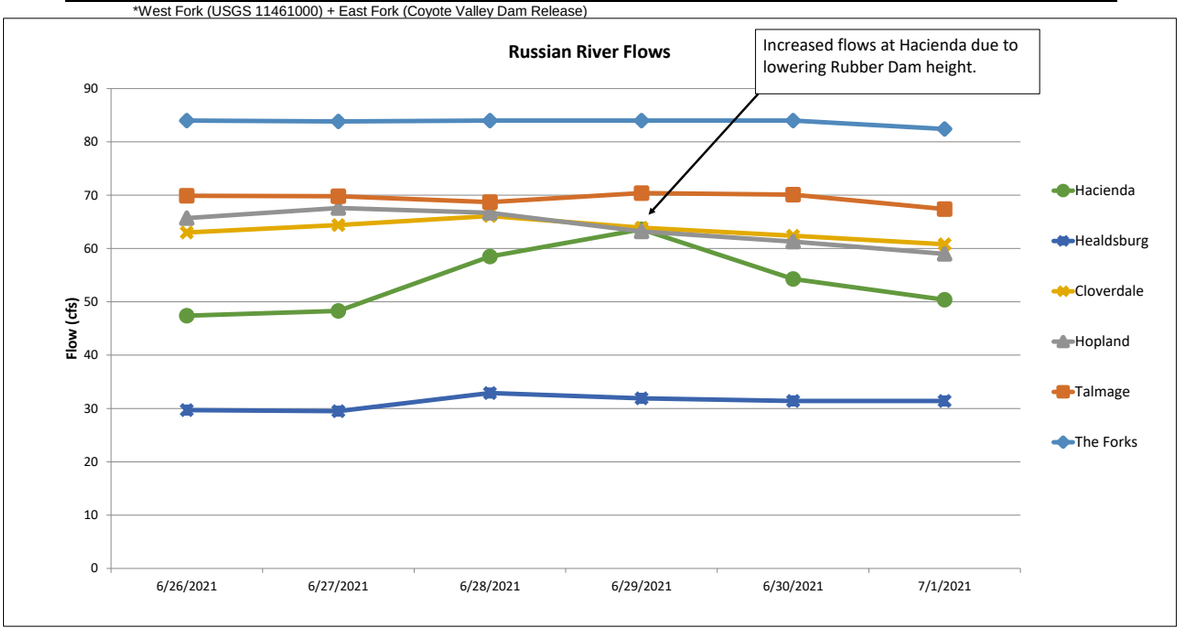
*Inflow calculation based on criteria established in D1610



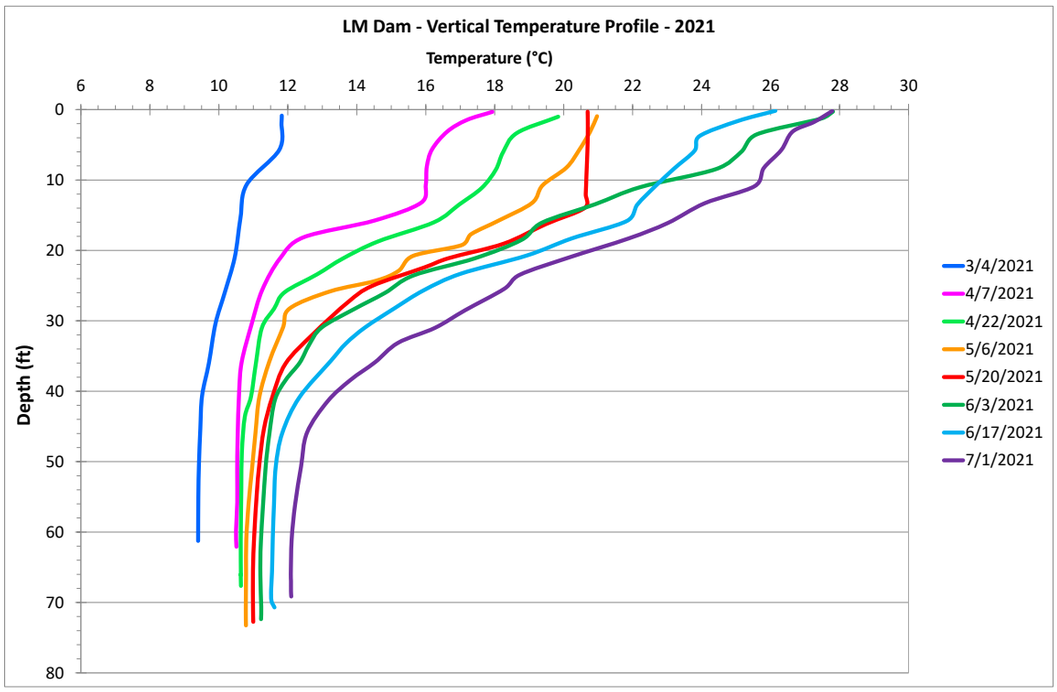
Russian River Flows (June 25 - July 1, 2021)

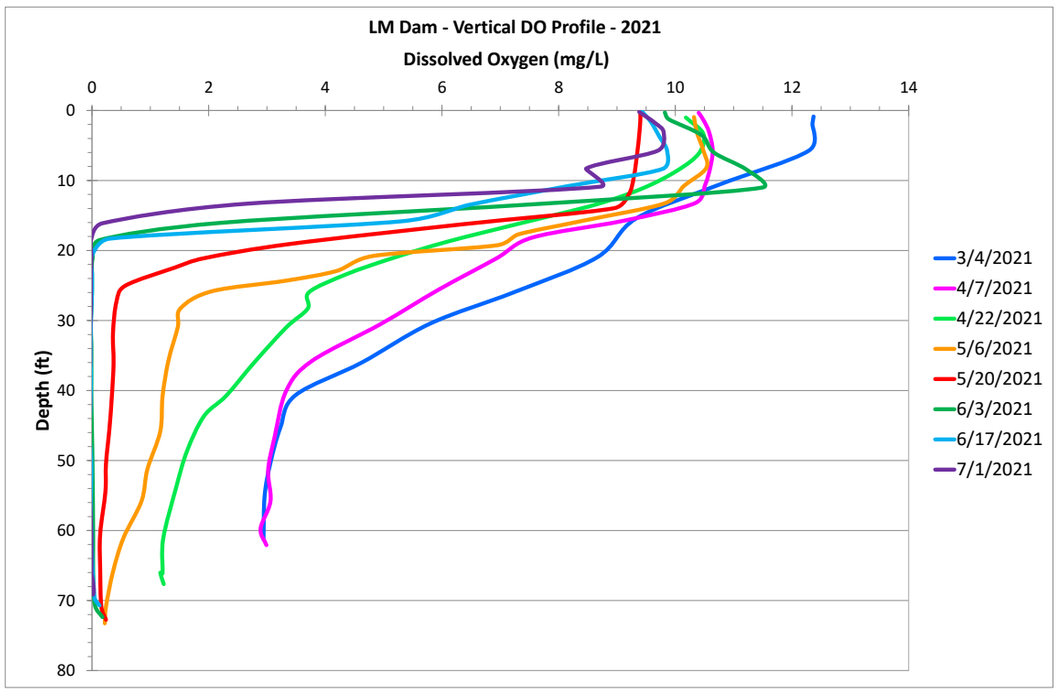
Gage	24-hr Average Flow (cfs)						
	Jun 25, 2021	Jun 26, 2021	Jun 27, 2021	Jun 28, 2021	Jun 29, 2021	Jun 30, 2021	Jul 1, 2021
The Forks*	84	84	84	84	84	84	82
Talmage USGS 11462080	70	70	70	69	70	70	67
Hopland USGS 11462500	64	66	68	67	63	61	59
Cloverdale USGS 11463000	62	63	64	66	64	62	61
Healdsburg USGS 11464000	30	30	30	33	32	31	31
Hacienda USGS 11467000	46	47	48	59	64	54	50

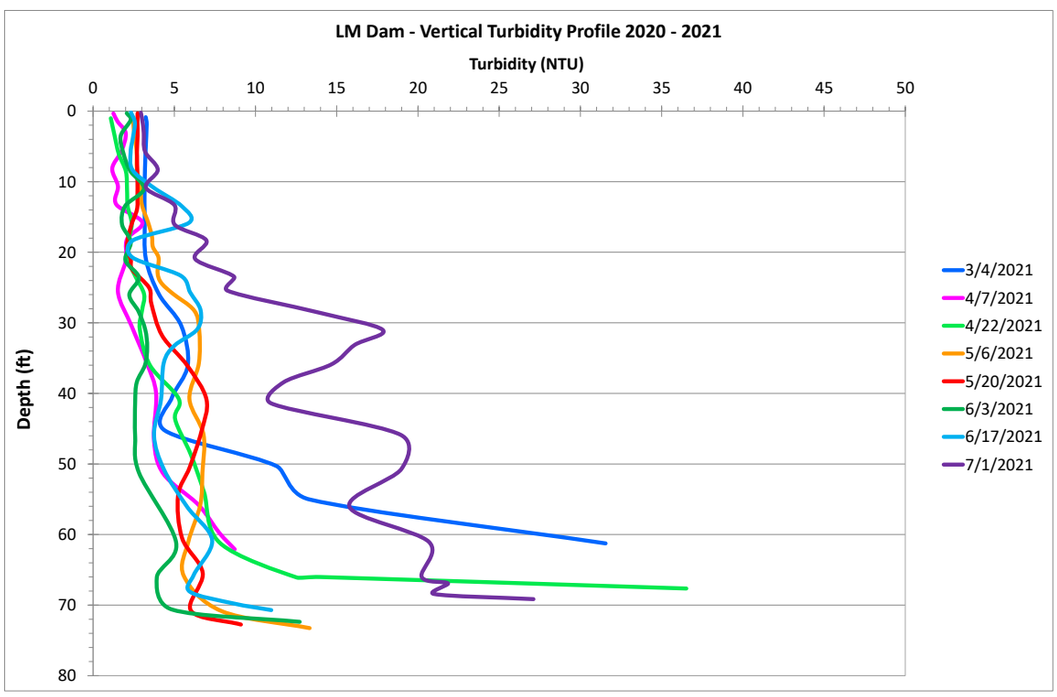
*West Fork (USGS 11461000) + East Fork (Coyote Valley Dam Release)



Lake Mendocino Water Quality Vertical Profiles (June 25 - July 1, 2021)



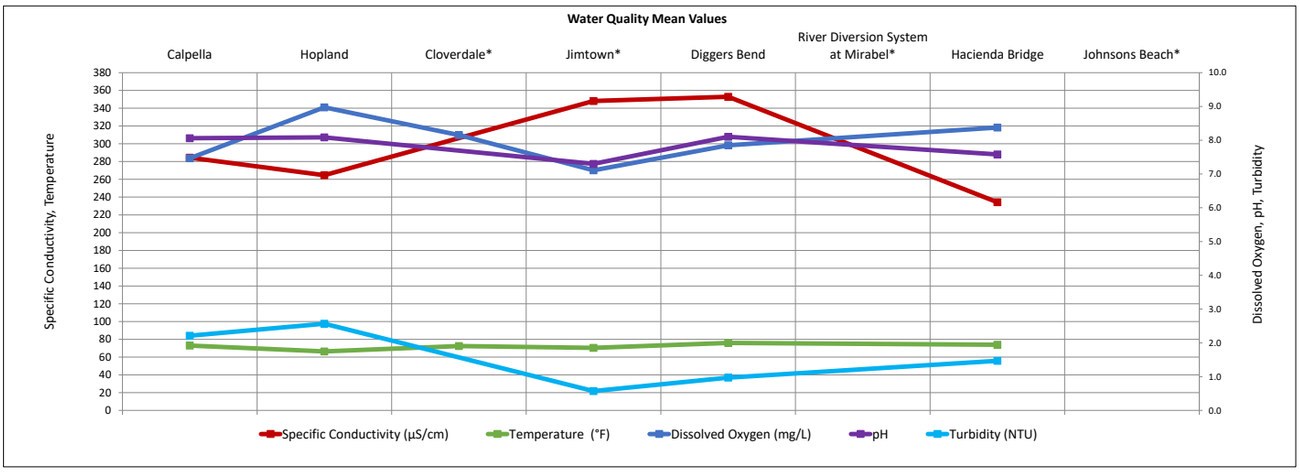




Russian River Water Quality (June 25 - July 1, 2021)
Provisional Data Subject to Revision

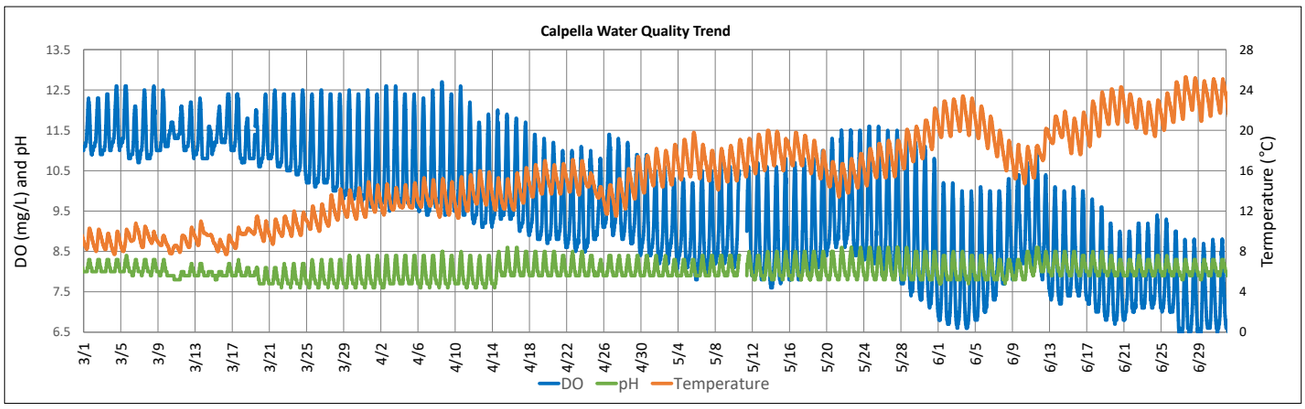
Parameter		East Fork Below Lake Mendocino	Calpella	Hopland	Cloverdale*	Jimtown*	Diggers Bend	River Diversion System at Mirabel*	Hacienda Bridge	Johnsons Beach*
		SCWA	USGS 11461500	USGS 11462500	USGS 11463200	USGS 11463682	USGS 11463980	SCWA	USGS 11467000	SCWA
Temperature (°F)	Min		66.9	61.3	67.6	65.7	70.9		70.7	
	Max		77.5	70.5	78.1	75.9	81.9		76.5	
	Mean		72.9	66.3	72.4	70.4	75.9		73.9	
Specific Conductivity (µS/cm)	Min		277	260	#N/A	344	349		229	
	Max		294	267	#N/A	353	356		238	
	Mean		284	265	#N/A	348	353		234	
Dissolved Oxygen (mg/L)	Min		6.4	6.9	7.0	4.7	5.3		7.5	
	Max		9.4	11.9	9.8	10.2	11.1		10.4	
	Mean		7.5	9.0	8.2	7.1	7.9		8.4	
Dissolved Oxygen (% Saturation)	Min		69	70	75	50	59		84	
	Max		114	133	119	121	139		124	
	Mean		85	97	93	80	93		98	
pH	Min		7.8	7.6	#N/A	7.2	7.8		7.4	
	Max		8.4	8.7	#N/A	7.5	8.5		8.1	
	Mean		8.1	8.1	#N/A	7.3	8.1		7.6	
Turbidity (NTU)	Min		1.2	1.6	#N/A	0.2	0.3		0.8	
	Max		42.7	20.0	#N/A	1.2	2.2		2.5	
	Mean		2.2	2.6	#N/A	0.6	1.0		1.5	

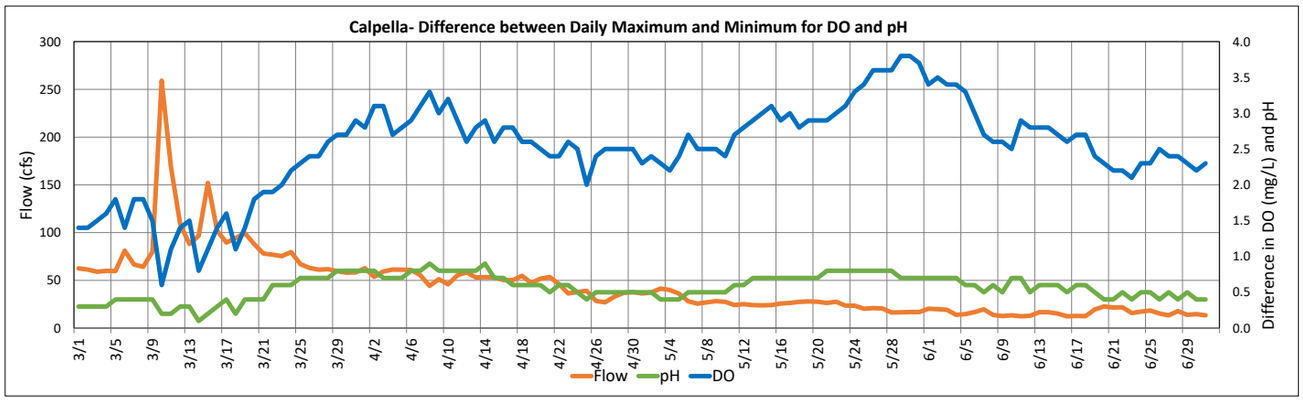
*Station operated seasonally



Russian River Water Quality (March 1 - July 1, 2021)
Provisional Data Subject to Revision

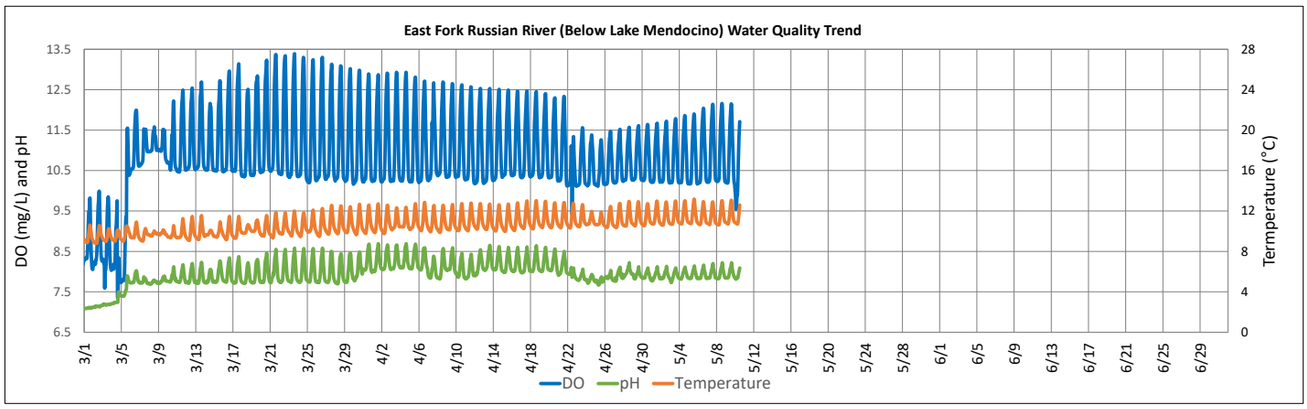
Calpella (East Fork Russian River)

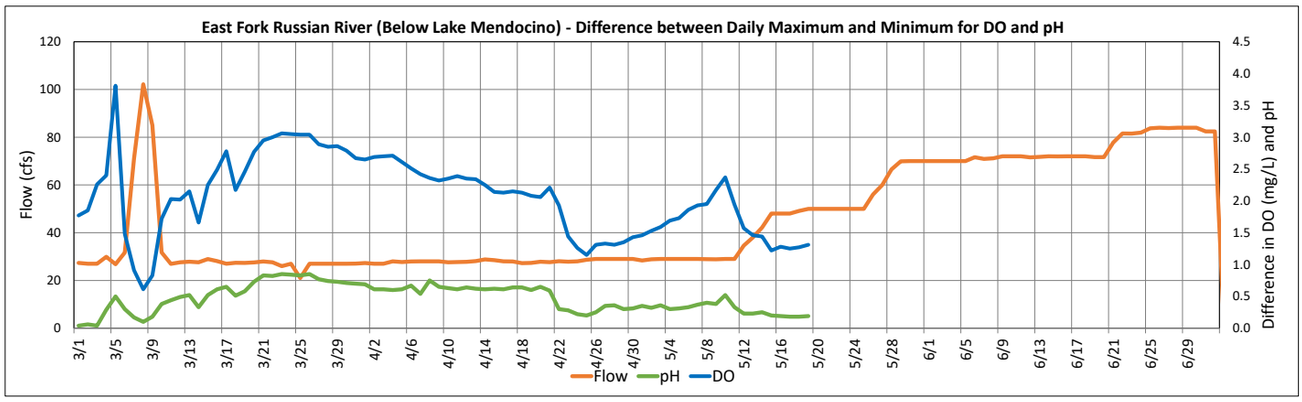




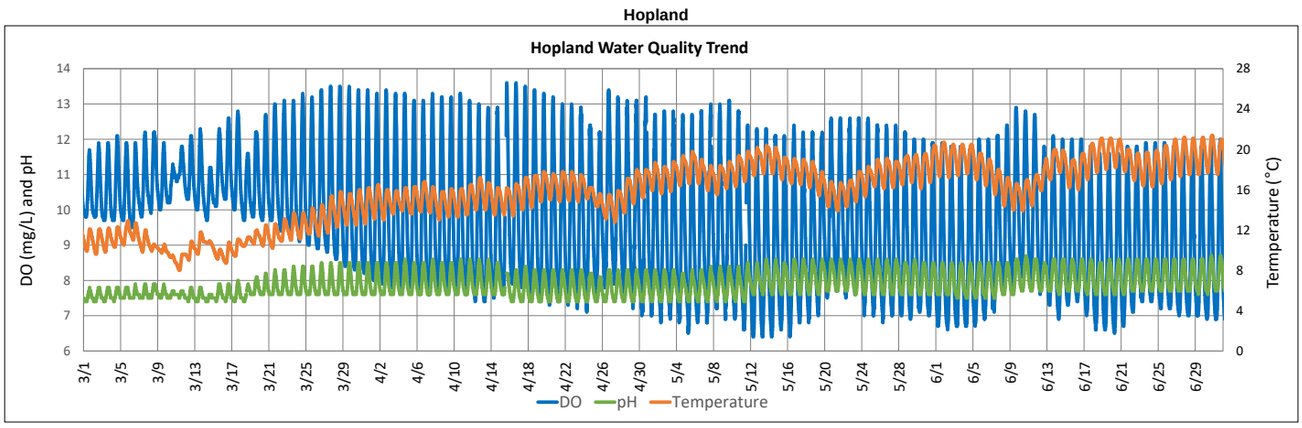
Russian River Water Quality (March 1 - July 1, 2021)
Provisional Data Subject to Revision

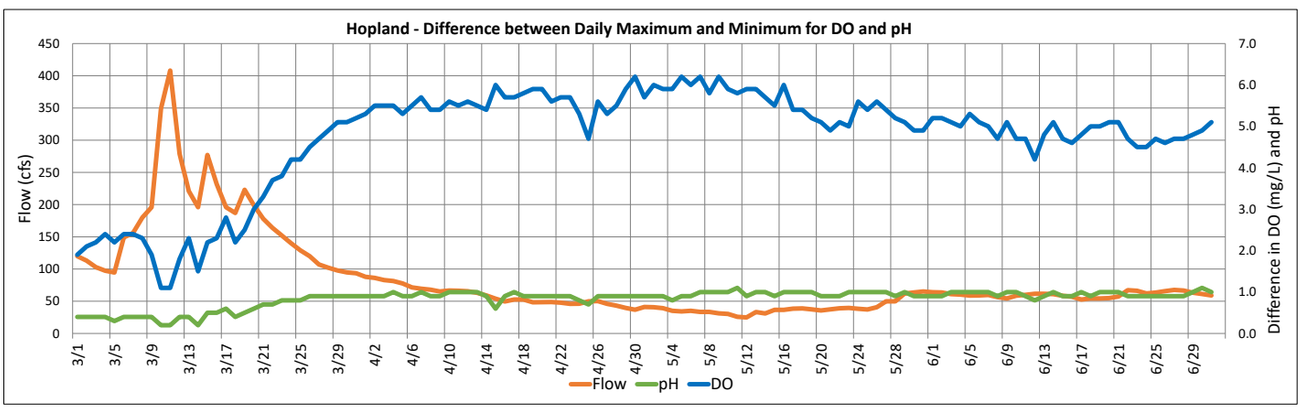
East Fork Russian River (Below Lake Mendocino)





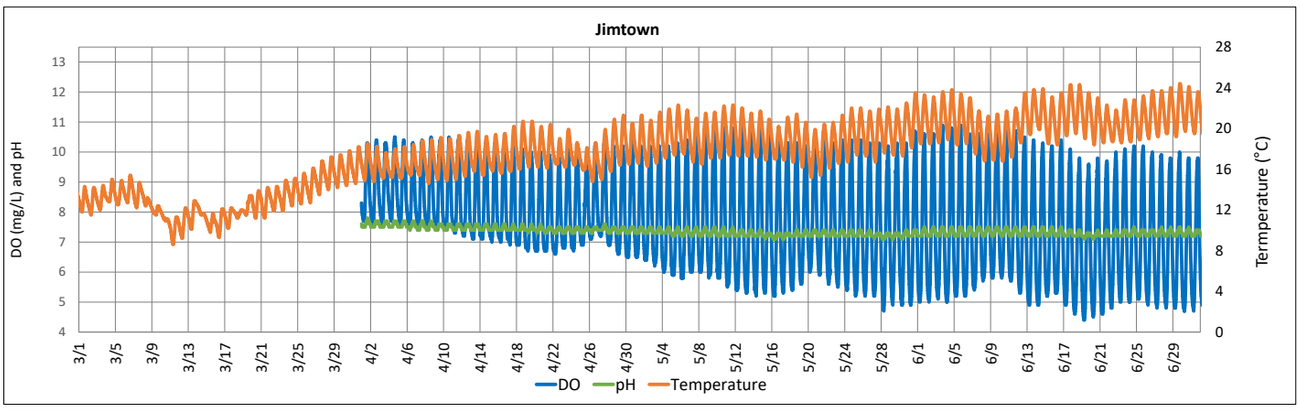
Hopland

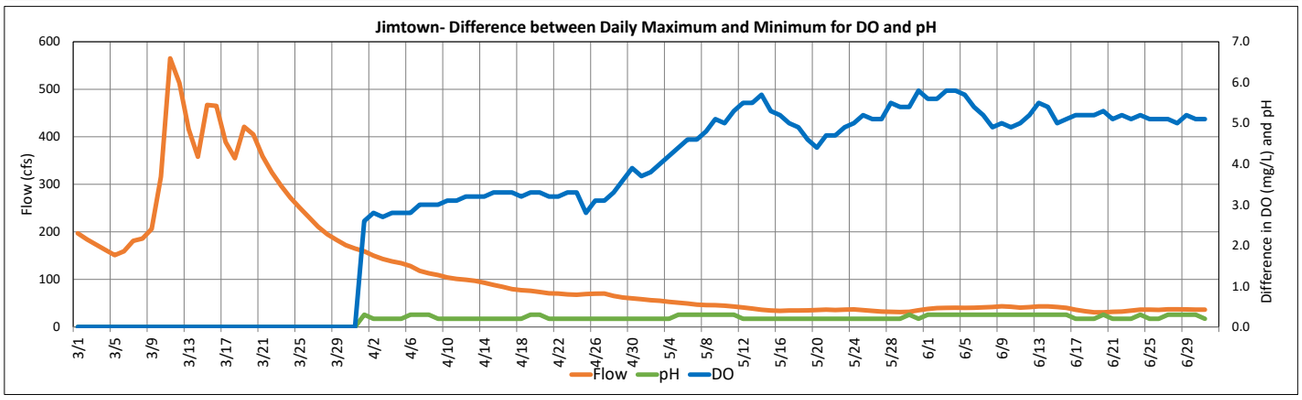




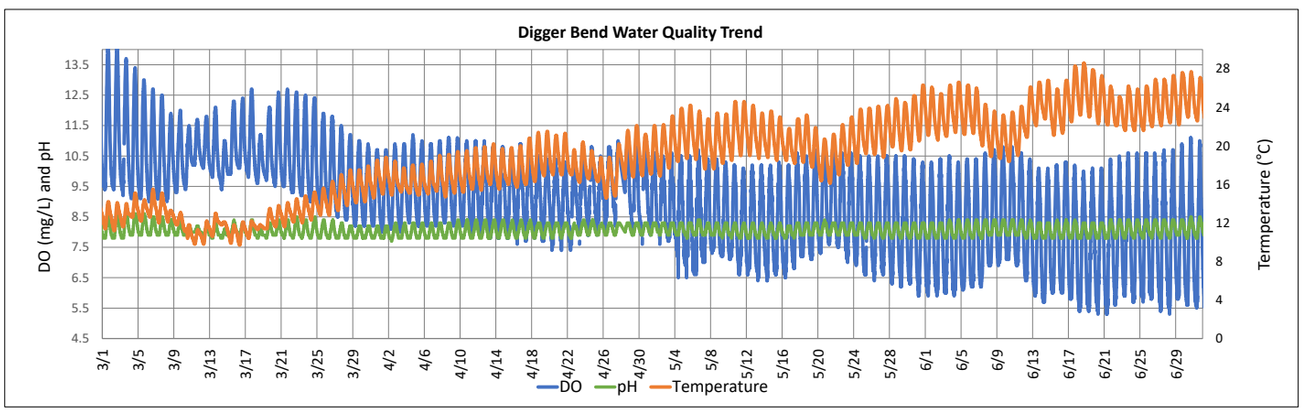
Russian River Water Quality (March 1 - July 1, 2021)
Provisional Data Subject to Revision

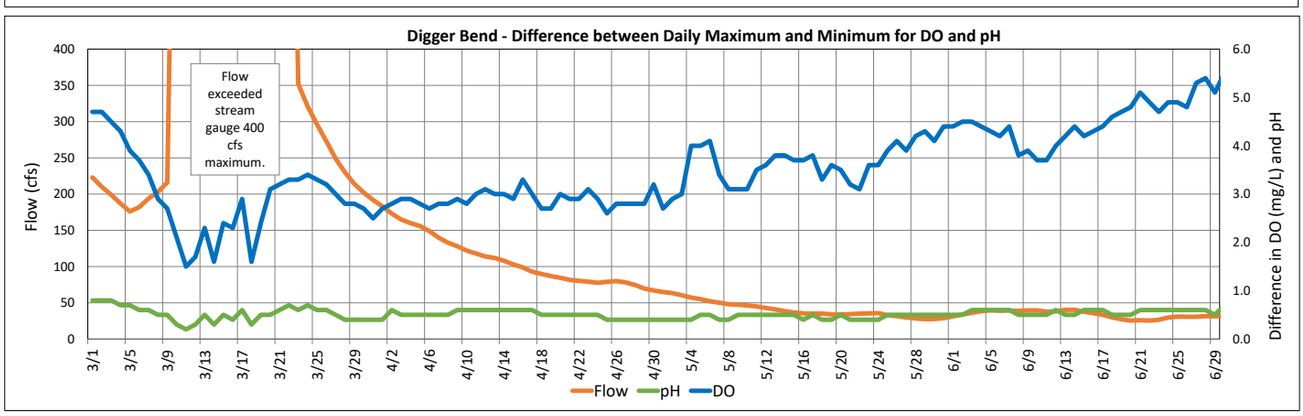
Jimtown Water Quality





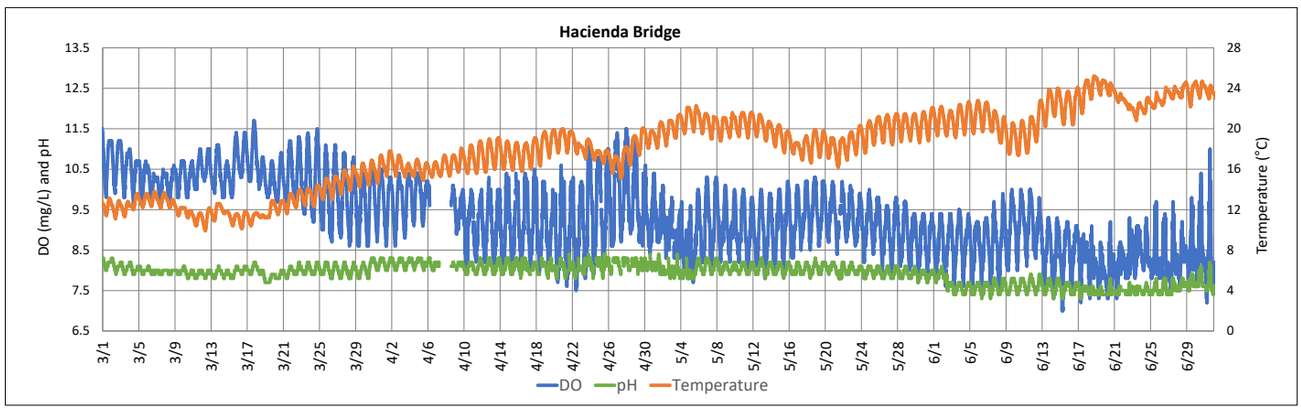
Digger Bend

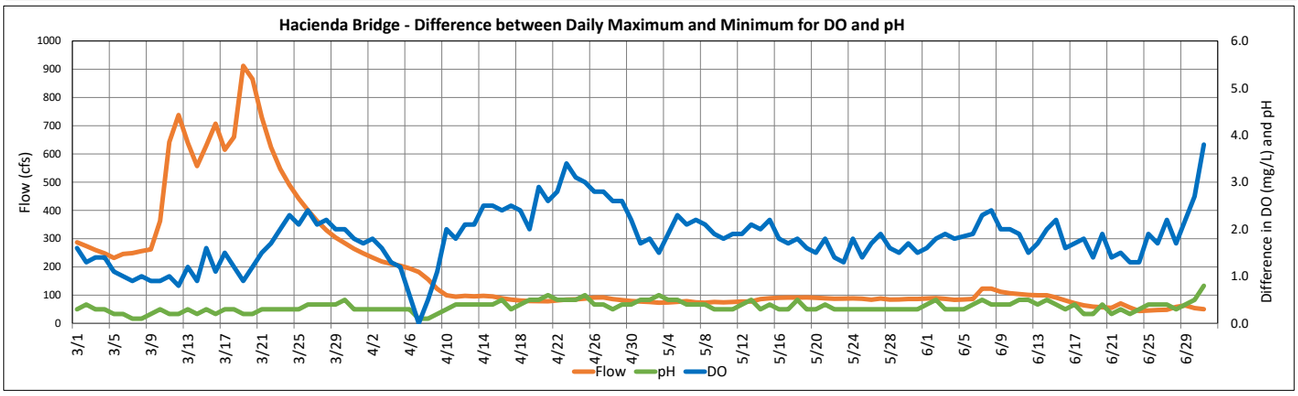




Russian River Water Quality (March 1 - July 1, 2021)
Provisional Data Subject to Revision

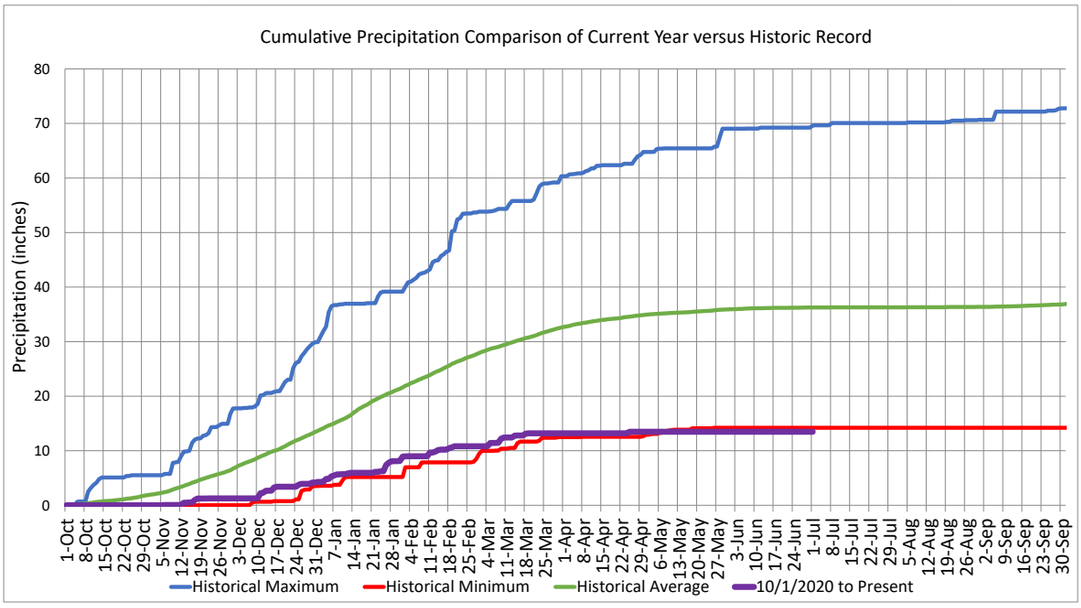
Hacienda Bridge Water Quality



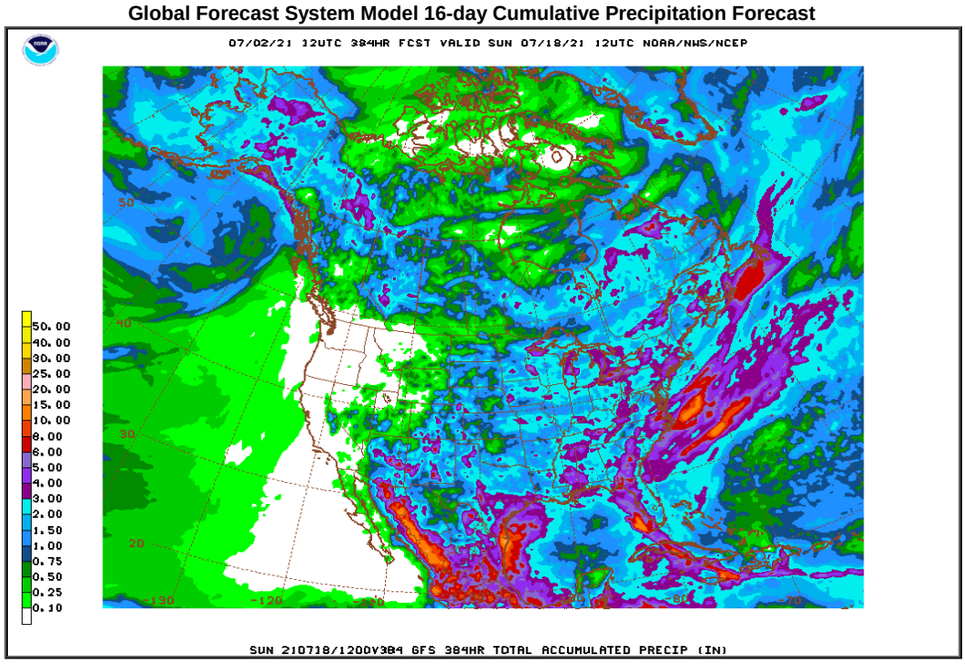


Precipitation

Ukiah Municipal Airport (WBAN: 72590523275 (KUKI))	
Date Range	Cumulative (inches)
Oct 1, 2020 - Jul 1, 2021	**13.48**
Last 7 Days*	**0.00**



Global Forecast System Model 16-day Cumulative Precipitation Forecast



Date Range	Forecasted Cumulative (inches)
Jul 2 - Jul 17, 2021	**0.0**

Lake Mendocino Water Accounting Weekly Report (Term 11 Feb 2021 TUCO)

Report Date: 7/2/2021

Units are cfs unless noted otherwise

			6/25/2021	6/26/2021	6/27/2021	6/28/2021	6/29/2021	6/30/2021	7/1/2021
I. Upper East Fork Reach									
Potter Valley Project									
Tunnel Diversion			43.0	43.0	43.0	34.0	30.0	31.0	30.0
PVID Requested Delivery			38.0	38.0	38.0	29.9	25.0	25.0	25.0
PVID Canals Actual Delivery			24.4	24.6	20.8	12.4	10.2	6.3	6.3
East Fork Release			18.6	18.4	22.2	21.6	19.8	24.7	23.8
PVID E Fork Diversions			13.6	13.4	17.2	17.5	14.8	18.7	18.8
PVID Water Use - PG&E Contract			38.0	38.0	38.0	29.9	25.0	25.0	25.0
PVID Water Use - License 5264			0.0	0.0	0.0	0.0	0.0	0.0	0.0
East Fork Downstream of PVID			5.0	5.0	5.0	4.1	5.0	6.0	5.0
PVID Canal Net Return Flow (assumed)			12.9	13.0	8.2	11.9	10.3	8.5	9.2
East Fork / Potter Valley Reach Analysis									
USGS E Fork @ Calpella			17.9	18.0	13.2	16.1	15.3	14.5	14.2
Net Reach Loss(-)/Gain(+)			-25.1	-25.0	-29.8	-17.9	-14.7	-16.5	-15.8
Unimpaired Natural Flow @ Calpella (est.)			0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-PVID East Fork Net Reach Losses (est.)			0.0	0.0	0.0	0.0	0.0	0.0	0.0
Natural Flow			0.0	0.0	0.0	0.0	0.0	0.0	0.0
Import (neg. value is return flow)			0.0	0.0	0.0	0.0	0.0	0.0	0.0
II. Lake Mendocino									
Resrvoir Operations									
Calculated Inflow (ac-ft)			43.7	47.4	23.0	35.8	22.9	24.5	23.6
(cfs)			22	24	12	18	12	12	12
Natural Flow			0	0	0	0	0	0	0
Import			22	24	12	18	12	12	12
Storage Change (ac-ft)			-146.0	-145.0	-169.0	-155.0	-167.0	-166.0	-164.0
(cfs)			-74	-73	-85	-78	-84	-84	-83
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)			23.6	25.8	25.7	24.1	23.3	23.9	24.2
RVCWD Diversion (ac-ft) (assum.)			0	0	0	0	0	0	0
CVD Release Gage			84	84	84	84	84	84	82
Storage (Project Water)			74	73	84	78	84	84	82
Natural Flow			0	0	0	0	0	0	0
Import Water			10	11	0	6	0	0	0
East Fork Min Instream Flow Requirement			25	25	25	25	25	25	25
Compliance Gage		*Rvr mi.*							
CVD Release		*99.9*	84	84	84	84	84	84	82
CVD Project Water Release to Meet Min Flow Requirement									
Total Pass-through Water			10	11	0	6	0	0	0
Project Water Release Required			Yes	Yes	Yes	Yes	Yes	Yes	Yes
III. Upper Russian River Reach									
Minimum Instream Flow Requirement			15	15	15	15	15	15	15
Controlling Compliance Gage									
Min Gage Flow			30	30	30	33	31	31	31
Controlling Gage			Healdsburg	Healdsburg	Healdsburg	Healdsburg	Digger Bend	Healdsburg	Healdsburg
All Compliance Gages		*Rvr mi.*							
Forks	(CVD + USGS 11461000)	*99.0*	84	84	84	84	84	84	82
Talmage	(USGS 11462080)	*96.1*	70	70	70	69	70	70	67
Hopland	(USGS 11462500)	*84.8*	64	66	68	67	63	61	59
Cloverdale	(USGS 11463000)	*70.9*	62	63	64	66	64	62	61
Geyserville	(USGS 11463500)	*54.4*	46	46	47	49	49	48	47
Jimtown	(USGS 11463682)	*48.5*	37	37	38	38	37	36	36
Digger Bend	(USGS 11463980)	*38.2*	35	35	35	37	31	32	32
Healdsburg	(USGS 11464000)	*35.6*	30	30	30	33	32	31	31
Net Reach Loss(-)/Gain(+)									
Forks - Talmage			-9	-10	-10	-11	-13	-14	-16
Talmage - Hopland			-10	-8	-7	-6	-8	-10	-10
Hopland - Cloverdale			-0	-1	-2	-1	-2	-0	+0
Cloverdale - Jimtown			-26	-26	-26	-27	-29	-27	-26
Jimtown - Digger Bend			-6	-5	-5	-6	-6	-5	-4
Digger Bend - Healdsburg			+0	-0	+0	+0	-0	-1	-0
CVD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss(-)/Gain(+) to Controlling Gage			-51	-51	-50	-52	-53	-56	-56
Storage (Project Water)			+51	+51	+50	+52	+53	+56	+56
Pass-through Water (Natural + Import)			+0	+0	+0	+0	+0	+0	+0
Total Pass-through Water			10	11	0	6	0	0	0
Project Water Release Required			Yes	Yes	Yes	Yes	Yes	Yes	Yes

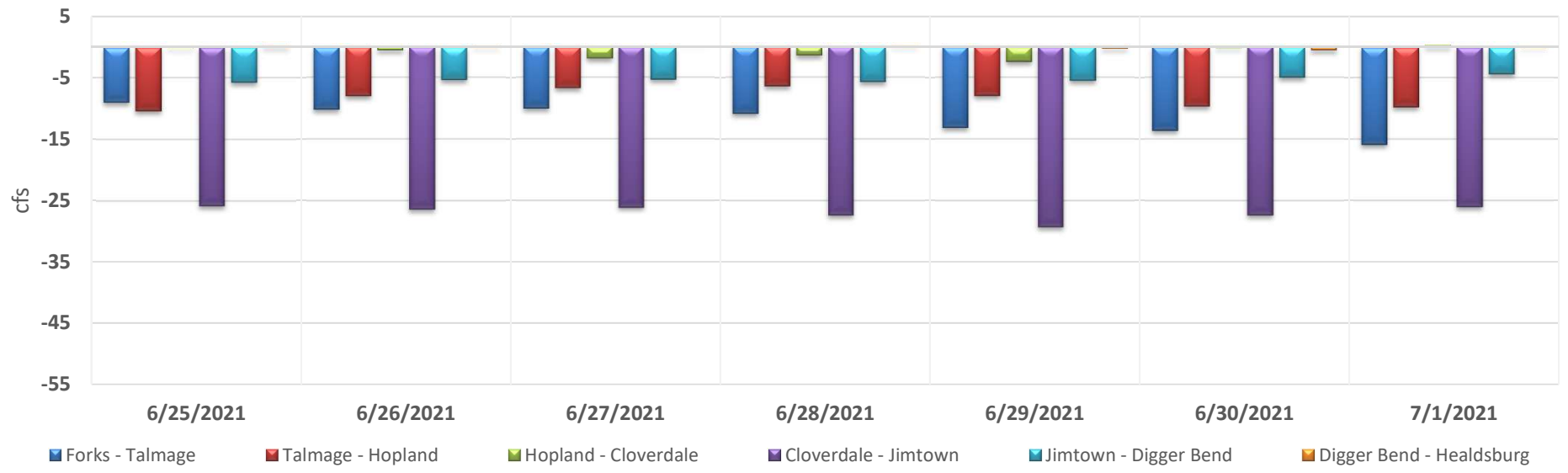
Notes:

- 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.

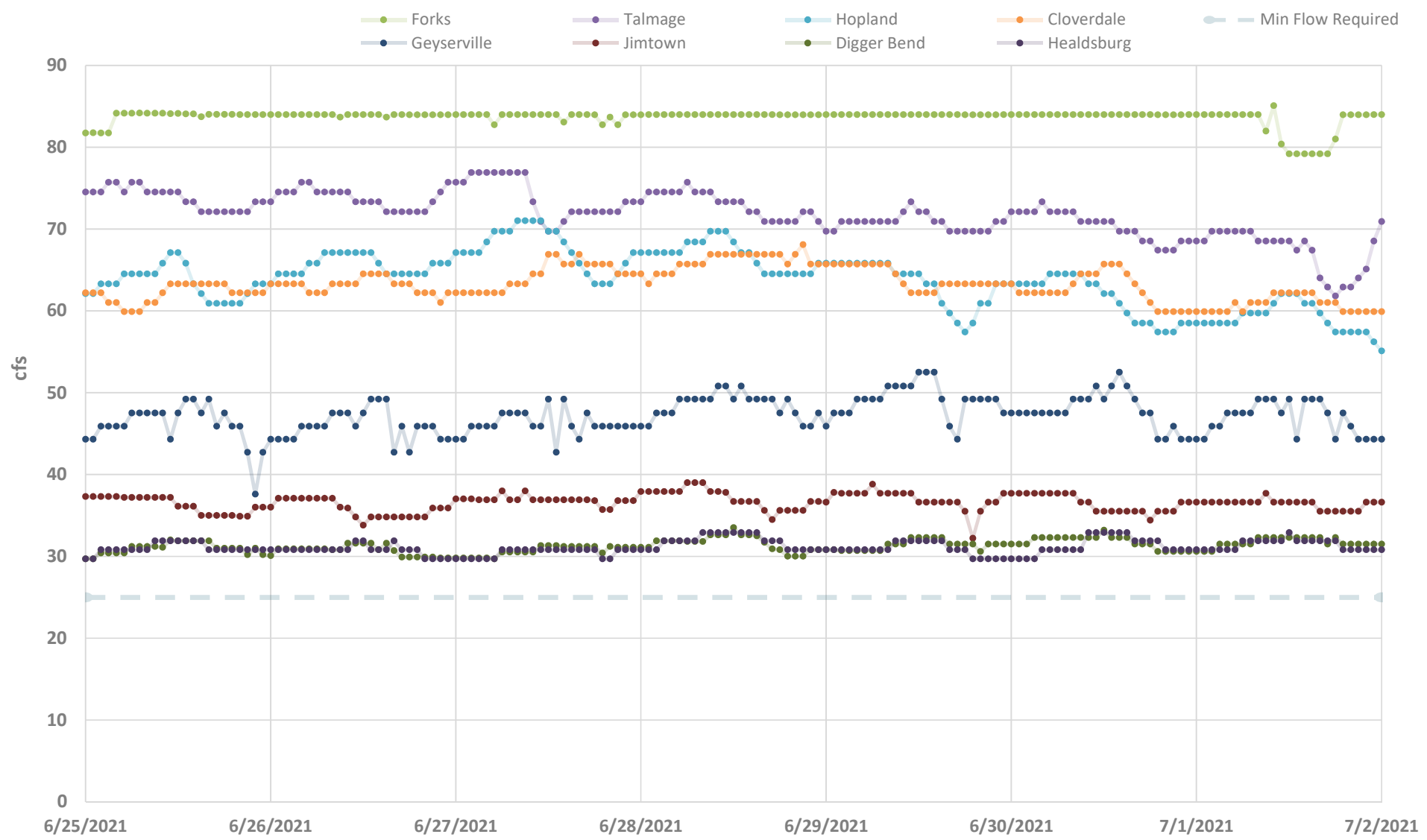
Lake Mendocino Water Accounting Weekly Report (Term 11 Feb 2021 TUCO)

Report Date: 7/2/2021

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



UPPER RUSSIAN RIVER STREAM FLOWS



MAP OF UPPER RUSSIAN RIVER and STREAM GAGES