Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 12, Dec 2021 TUCO)

Report Date: 2/11/2022

Units are cfs unless noted otherwise

			2/4/2022	2/5/2022	2/6/2022	2/7/2022	2/8/2022	2/9/2022	2/10/2022
I. Upper East Fork Reach									
Potter Valley Project									
Tunnel Diversion			46.0	46.0	46.0	46.0	46.0	46.0	46.0
PVID Requested Delivery			5.0	5.0	5.0	5.0	5.0	5.0	5.0
PVID Canals Actual Delivery			2.0	2.0	2.0	2.0	2.0	2.0	2.0
East Fork Release			44.0	44.0	44.0	44.0	44.0	44.0	44.0
PVID E Fork Diversions			3.0	3.0	3.0	3.0	3.0	3.0	3.0
PVID Water Use - PG&E Contract			5.0	5.0	5.0	5.0	5.0	5.0	5.0
PVID Water Use - License 5264			0.0	0.0	0.0	0.0	0.0	0.0	0.0
East Fork Downstream of PVID (Import)			41.0	41.0	41.0	41.0	41.0	41.0	41.0
PVID Canal Net Return Flow (assumed)			0.0	0.0	0.0	0.0	0.0	0.0	0.0
East Fork / Potter Valley Reach Analysis									
USGS E Fork @ Calpella			65.4	63.0	64.0	63.5	63.8	63.2	62.6
Net Reach Loss(-)/Gain(+)			+19.4	+17.0	+18.0	+17.5	+17.8	+17.2	+16.6
Unimpaired Natural Flow @ Calpella (est.)			24.4	22.0	23.0	22.5	22.8	22.2	21.6
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)			112	140	140	120	119	143	153
(cfs)			57	71	70	61	60	72	77
Natural Flow			24	30	29	23	23	31	36
Import			32	41	41	38	37	41	41
Storage Change (ac-ft)			-28.0	+0.0	+0.0	-14.0	+0.0	+28.0	+14.0
(cfs)			-14	+0	+0	-7	+0	+14	+7
Stored Natural Flow (cfs)			0	0	0	0	0	14	7
Stored Import Water (cfs)			0	0	0	0	0	0	0
Evaporation (ac-ft)			7.4	7.4	6.6	7.4	7.4	8.2	8.2
RVCWD Diversion (ac-ft)			0	0	0	0	0	0	0
CVD Release Gage			67	67	67	64	56	54	66
Storage (Project Water)			10	0	0	3	0	0	0
Natural Flow			24	28	28	23	21	15	27
Import Water			32	39	39	38	35	39	39
East Fork Min Instream Flow Requirement			25	25	25	25	25	25	25
Compliance Gage		*Rvr mi.*							
CVD Release		*99.9*	67	67	67	64	56	54	66
CVD Project Water Release to Meet Min Flow Requirement									
Total Pass-through Water			57	67	67	61	56	54	66
Project Water Release Required			No	No	No	No	No	No	No
III. Upper Russian River Reach									
Minimum Instream Flow Requirement			75	75	75	75	75	75	75
Controlling Compliance Gage									
Min Gage Flow			96	95	94	91	81	78	89
Controlling Gage			Forks	Forks	Forks	Forks	Forks	Forks	Forks
All Compliance Gages		*Rvr mi.*							
Forks	(CVD + USGS 11461000)	*99.0*	96	95	94	91	81	78	89
Talmage	(USGS 11462080)	*96.1*	123	119	118	115	103	101	98
Hopland	(USGS 11462500)	*84.8*	154	150	147	144	131	125	120
Cloverdale	(USGS 11463000)	*70.9*	217	210	205	201	192	184	177
Geyserville	(USGS 11463500)	*54.4*	262	248	241	234	228	216	210
Jimtown	(USGS 11463682)	*48.5*	292	273	261	251	241	228	217
Digger Bend	(USGS 11463980)	*38.2*	348	319	302	288	275	261	248
Healdsburg	(USGS 11464000)	*35.6*	326	301	286	274	262	250	235
Net Reach Loss(-)/Gain(+)									
Forks - Talmage			+27	+24	+24	+22	+22	+21	+9
Talmage - Hopland			+30	+30	+29	+28	+25	+23	+22
Hopland - Cloverdale			+62	+59	+57	+56	+57	+56	+55
Cloverdale - Jimtown			+69	+58	+53	+48	+43	+41	+36
Jimtown - Digger Bend			+51	+43	+38	+35	+32	+30	+28
Digger Bend - Healdsburg			*-30*	*-22*	*-18*	*-17*	*-14*	*-14*	*-15*
Upper Russian Net Reach Loss/Gain			+208	+193	+183	+171	+164	+157	+136
CVD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss(-)/Gain(+) to Controlling Gage			+0	+0	+0	+0	+0	+0	+0
Storage (Project Water)			0	0	0	0	0	0	0
Pass-through Water (Nat. + Imp.) + Natural			0	0	0	0	0	0	0
Total Pass-through Water			57	67	67	61	56	54	66
Project Water Release Required			No	No	No	No	No	No	No

Notes:

- Water Accounting for the Upper Russian River is an analysis that approximates the current conditions based on methodology in Term 11 (2/11/21 Order) report and modified by Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

			2/4/2022	2/5/2022	2/6/2022	2/7/2022	2/8/2022	2/9/2022	2/10/2022
IV. Lake Sonoma									
Lake Sonoma									
Storage Change (ac-ft)			-114.0	-58.0	-95.0	-96.0	-76.0	-76.0	-96.0
(cfs)			-57	-29	-48	-48	-38	-38	-48
Evaporation (ac-ft)			6.7	6.7	6.6	6.6	8.9	10.0	8.9
Inflow (Natural Flow)			23	51	32	32	44	44	34
WSD Release Gage			77	77	77	77	77	77	78
Storage (Project Water)			54	26	45	45	34	33	44
Natural Flow			23	51	32	32	44	44	34
V. Lower Dry Creek Reach									
Minimum Instream Flow Requirement			75	75	75	75	75	75	75
Controlling Compliance Gage									
Min Gage Flow			77	77	77	77	77	77	78
Controlling Gage			WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release
All Compliance Gages		*Crk mi.*							
WSD Release		*14.3*	77	77	77	77	77	77	78
Yoakim	(USGS 11465200)	*11.1*	101	102	101	100	100	99	98
Lambert	(USGS 11465240)	*6.8*	105	105	104	103	104	102	101
Dry Crk Mouth	(USGS 11465350)	*0.1*	105	105	104	103	102	101	98
WSD to Russian River Confluence Reach Analysis									
Total Pass-through Water			23	51	32	32	44	44	34
Net Reach Loss(-)/Gain(+)									
WSD - Yoakim			+24	+25	+24	+24	+23	+22	+21
Yoakim - Lambert			+4	+2	+2	+2	+3	+4	+3
Lambert - Dry Crk Mouth			+0	+0	-0	+0	-1	-2	-2
WSD - Dry Crk Mouth			+28	+28	+27	+26	+25	+24	+22
WSD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss/Gain to Controlling Gage			+0	+0	+0	+0	+0	+0	+0
Project Water Release Required			Yes	Yes	Yes	Yes	Yes	Yes	Yes
VI. Russian River - Dry Creek Confluence									
Upper Russian River Flow (Healdsburg Gage)									
L. Mendocino Project Water + Import Water			43	39	39	42	35	39	39
Natural Flow			233	221	211	194	184	172	163
Dry Creek Flow (Mouth Gage)									
L. Sonoma Project Water			54	26	45	45	34	33	44
Natural Flow			51	79	59	58	69	68	56
Russian River d/s of Confluence Flow			431	406	390	377	364	351	334
L. Mendocino Project Water + Import Water			43	39	39	42	35	39	39
L. Sonoma Project Water			54	26	45	45	34	33	44
Natural Flow			284	300	270	252	253	240	219
VII. Lower Russian River Reach									
Minimum Instream Flow Requirement			-	-	-	-	-	-	-
Controlling Compliance Gage									
Min Gage Flow			524	500	484	468	452	439	422
Controlling Gage			Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
All Compliance Gages		*Rvr mi.*							
Windsor	(USGS 11465390)	*26.6*	*n/d*	*n/d*	*n/d*	*n/d*	*n/d*	*n/d*	*n/d*
Hacienda	(USGS 11467000)	*21.8*	524	500	484	468	452	439	422
Confluence to Windsor Reach Analysis									
Net Reach Loss/Gain to Windsor Gage			-	-	-	-	-	-	-
L. Mendocino Project Water + Import Water			-	-	-	-	-	-	-
L. Sonoma Project Water			-	-	-	-	-	-	-
Natural Flow			-	-	-	-	-	-	-
Confluence to SCWA Wohler Production Facility Reach Analysis									
Approx. Flow u/s of Wohler			597	546	540	531	516	502	471
Net Reach Loss(-)/Gain(+)			+166	+140	+150	+154	+152	+151	+137
L. Mendocino Project Water + Import Water			43	39	39	42	35	39	39
L. Sonoma Project Water			52	23	42	43	31	31	41
Natural Flow			450	440	420	406	405	391	356
Confluence to Hacienda (Guerneville) Reach Analysis									
Net Reach Loss(-)/Gain(+)			+93	+94	+94	+91	+88	+88	+88
L. Mendocino Project Water + Import Water			43	39	39	42	35	39	39
L. Sonoma Project Water			0	0	0	0	0	0	0
Natural Flow			429	417	407	386	372	359	348
VIII. Water Production under Sonoma Water Water Rights (ac-ft)									
Lower Russian River									
Sonoma Water Total			144.7	92.1	110.6	124.3	127.9	125.0	97.4
Wohler			81.8	45.9	64.7	76.2	62.9	83.3	50.9
Mirabel			62.9	46.2	45.8	48.1	65.0	41.7	46.5
Town of Windsor River Wellfield			4.4	5.0	4.6	4.3	5.4	4.3	5.4
Camp Meeker & Occidental			0.0	0.0	0.0	0.0	0.0	0.0	0.0
Upper Russian River									
City of Healdsburg									
Gauntlett & Fitch Mtn			0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dry Creek									
City of Healdsburg									
Dry Creek Wellfield			0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes:

- Water Accounting for the Lower Russian River and Dry Creek is an analysis that approximates the current conditions based on the methodology in Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

Lake Mendocino and Lake Sonoma Water Accounting Weekly Schematic

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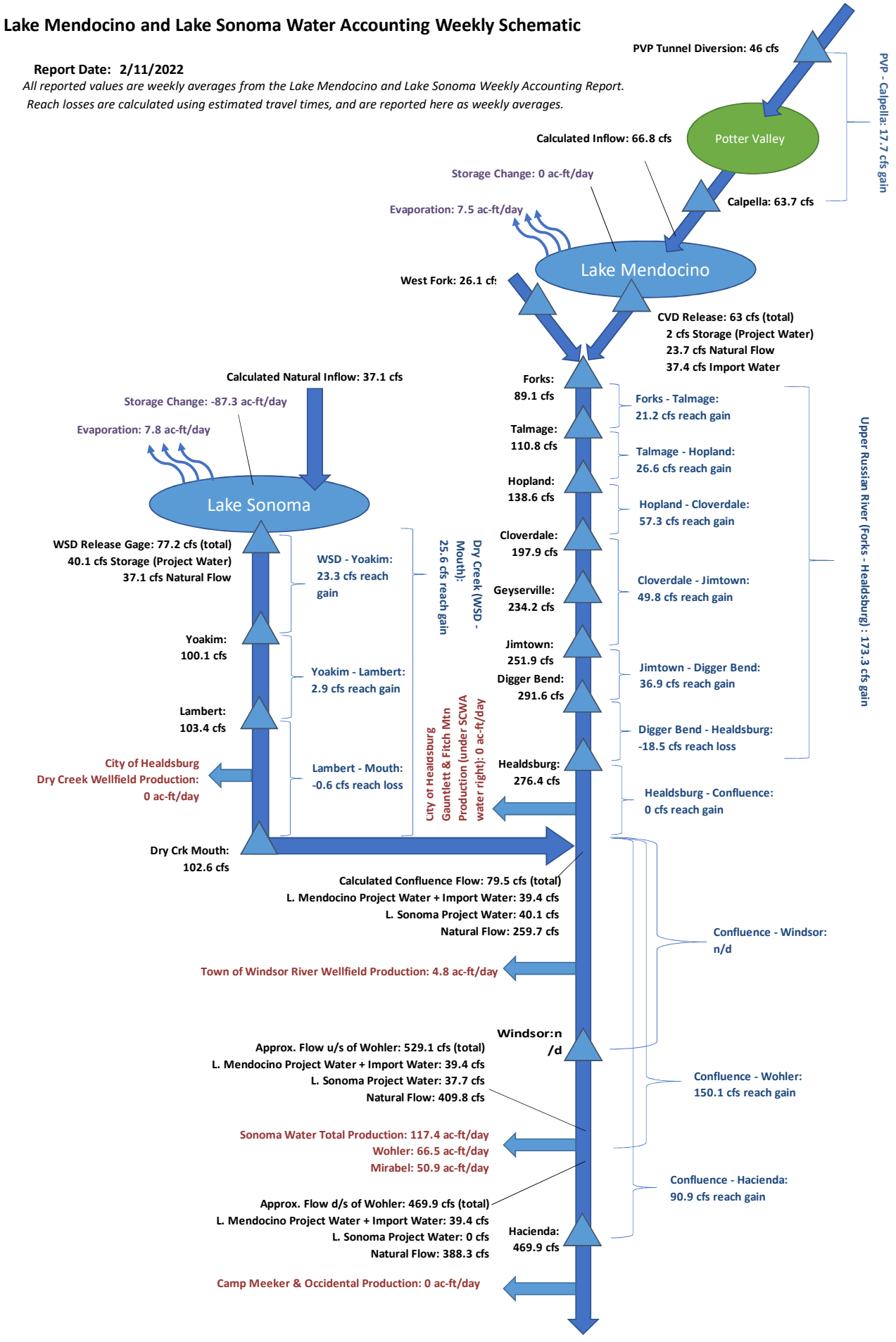
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



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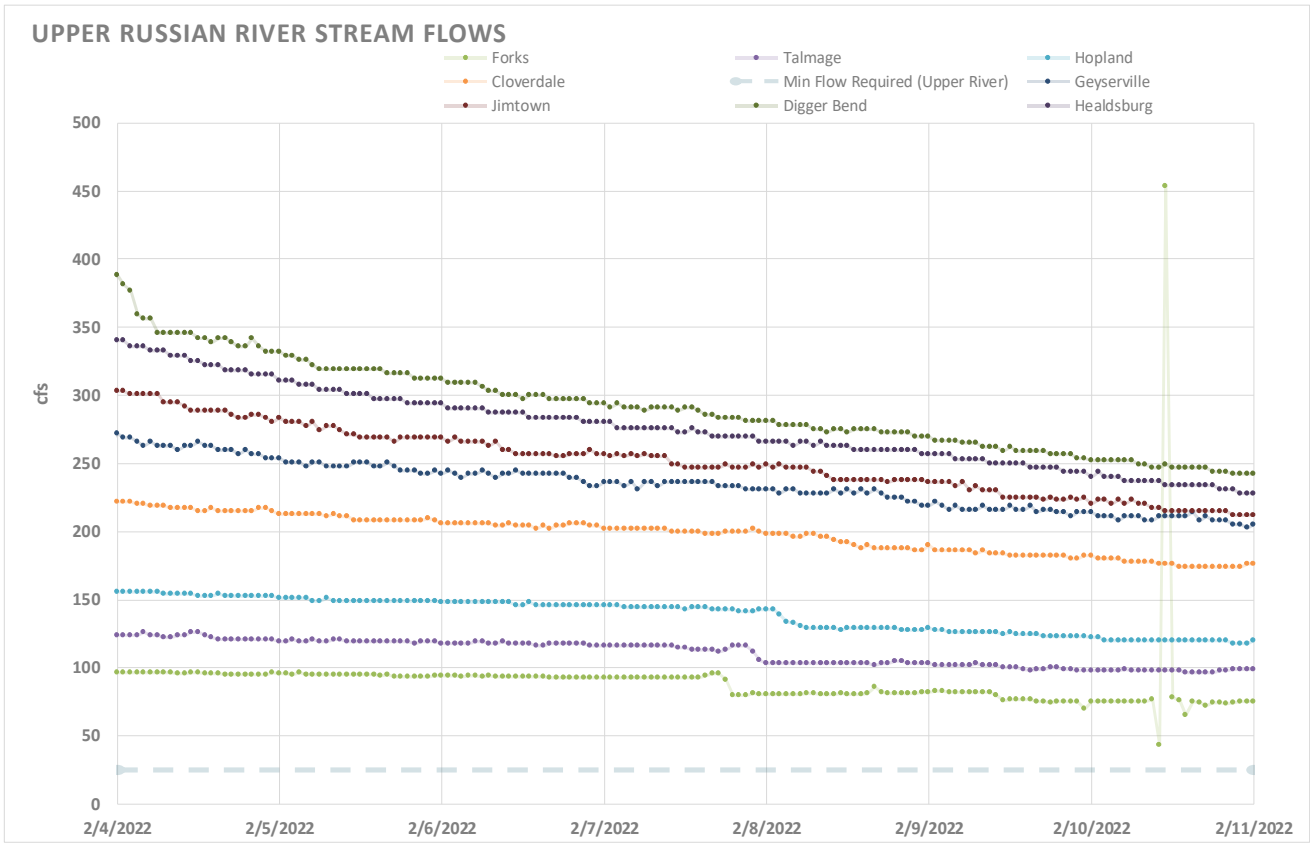
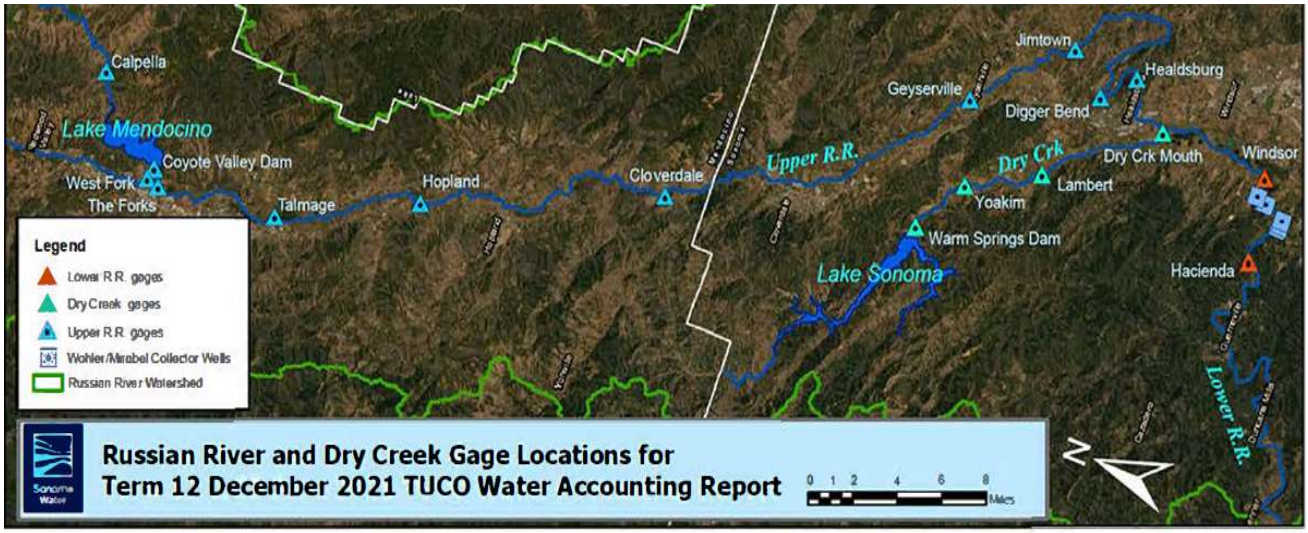
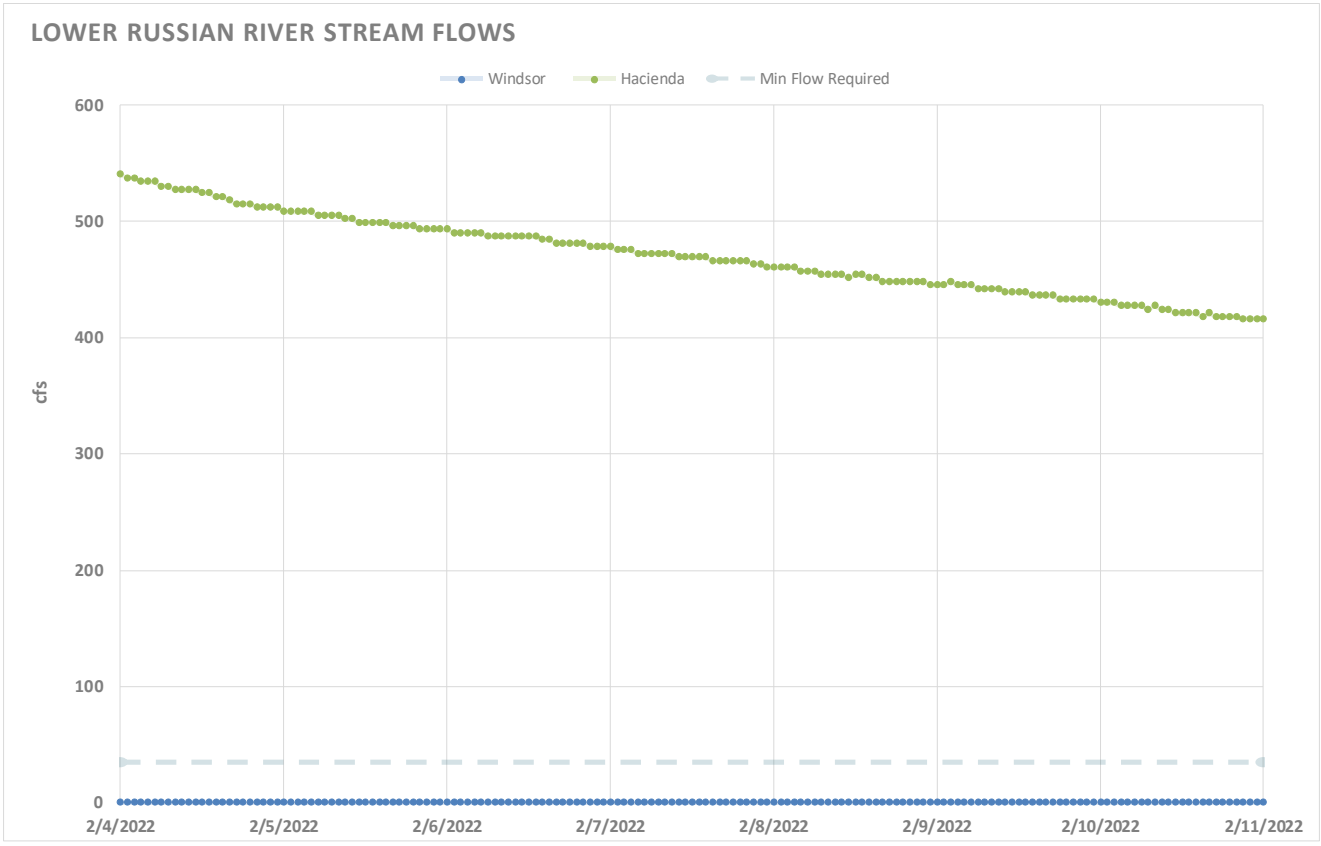
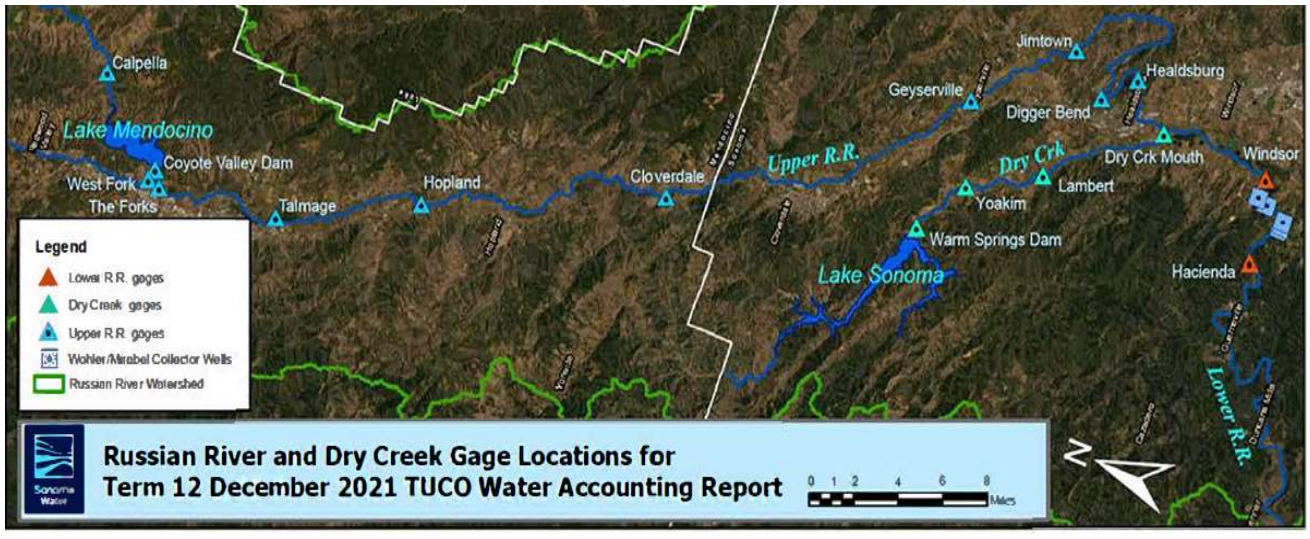




Note: Windsor gage is a seasonal gage and not operational. Reach gains for Windsor – Hacienda reach calculated with Healdsburg gages as upstream gages





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