

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

Report Date: 1/28/2022

*Units are cfs unless noted otherwise*

	1/21/2022	1/22/2022	1/23/2022	1/24/2022	1/25/2022	1/26/2022	1/27/2022
<b>I. Upper East Fork Reach</b>							
<b>Potter Valley Project</b>							
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
<b>East Fork / Potter Valley Reach Analysis</b>							
USGS E Fork @ Calpella	81.7	78.6	76.5	75.6	74.6	73.0	71.4
Net Reach Loss(-)/Gain(+)	+35.7	+32.6	+30.5	+29.6	+28.6	+27.0	+25.4
Unimpaired Natural Flow @ Calpella (est.)	40.7	37.6	35.5	34.6	33.6	32.0	30.4
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

### Reservoir Operations

Calculated Inflow (ac-ft)	136	192	140	123	177	148	133
(cfs)	68	97	70	62	89	75	67
Natural Flow	41	56	36	35	48	34	30
Import	28	41	35	28	41	41	37
Storage Change (ac-ft)	-115.0	-72.0	-128.0	-143.0	-100.0	-128.0	-142.0
(cfs)	-58	-36	-65	-72	-50	-65	-72
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)	4.8	5.7	7.6	7.6	12.3	7.6	6.6
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	124	130	131	130	134	135	135
Storage (Project Water)	56	33	61	68	44	61	68
Natural Flow	41	56	36	35	48	34	30
Import Water	28	41	35	28	41	41	37
<b>East Fork Min Instream Flow Requirement</b>	25	25	25	25	25	25	25
<b>Compliance Gage</b>	<i>Rvr mi.</i>						
CVD Release	99.9	124	130	131	130	134	135
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Total Pass-through Water	68	97	70	62	89	75	67
Project Water Release Required	No	No	No	No	No	No	No

## III. Upper Russian River Reach

### Minimum Instream Flow Requirement

Controlling Compliance Gage	150	150	150	150	150	150	150
Min Gage Flow	151	153	153	151	153	153	152
Controlling Gage	Forks	Forks	Forks	Forks	Forks	Forks	Forks

### All Compliance Gages

	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	151	153	153	151	153	152
Talmage (USGS 11462080)	96.1	230	230	225	218	214	207
Hopland (USGS 11462500)	84.8	268	265	262	255	251	244
Cloverdale (USGS 11463000)	70.9	439	424	421	409	403	388
Geyserville (USGS 11463500)	54.4	463	447	435	421	412	390
Jimtown (USGS 11463682)	48.5	491	473	458	444	431	409
Digger Bend (USGS 11463980)	38.2	>400 cfs	>400 cfs	>400 cfs	>400 cfs	>400 cfs	>400 cfs
Healdsburg (USGS 11464000)	35.6	564	534	510	491	474	439

### Net Reach Loss(-)/Gain(+)

Forks - Talmage	+78	+77	+72	+67	+62	+57	+55
Talmage - Hopland	+36	+37	+34	+35	+36	+36	+36
Hopland - Cloverdale	+167	+162	+155	+153	+151	+147	+144
Cloverdale - Jimtown	+50	+41	+35	+29	+25	+20	+16
Jimtown - Digger Bend	n/d	n/d	n/d	n/d	n/d	n/d	n/d
Digger Bend - Healdsburg *when Digger Bend > 400 cfs, next u/s gage (Jimtown) used	+69	+58	+50	+45	+41	+35	+29
Upper Russian Net Reach Loss/Gain	+400	+374	+346	+330	+315	+295	+279

### 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	68	97	70	62	89	75	67
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 (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).

#### IV. Lake Sonoma

	1/21/2022	1/22/2022	1/23/2022	1/24/2022	1/25/2022	1/26/2022	1/27/2022
<b>Lake Sonoma</b>							
Storage Change (ac-ft)	+0.0	-19.0	-20.0	-19.0	-19.0	-58.0	-57.0
(cfs)	+0	-10	-10	-10	-10	-29	-29
Evaporation (ac-ft)	7.6	10.1	6.3	6.3	6.3	5.1	6.3
Inflow (Natural Flow)	77	72	68	69	69	48	50
WSD Release Gage	73	76	75	75	75	75	76
Storage (Project Water)	0	4	7	6	6	27	26
Natural Flow	73	72	68	69	69	48	50

#### V. Lower Dry Creek Reach

<b>Minimum Instream Flow Requirement</b>	75	75	75	75	75	75	75
<b>Controlling Compliance Gage</b>							
Min Gage Flow	73	76	75	75	75	75	76
Controlling Gage	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release
<b>All Compliance Gages</b>							
	<i>Crk mi.</i>						
WSD Release	14.3	73	76	75	75	75	76
Yoakim (USGS 11465200)	11.1	79	83	81	80	79	76
Lambert (USGS 11465240)	6.8	124	124	121	120	119	115
Dry Crk Mouth (USGS 11465350)	0.1	140	136	131	129	124	119
<b>WSD to Russian River Confluence Reach Analysis</b>							
Total Pass-through Water	73	72	68	69	69	48	50
<b>Net Reach Loss(-)/Gain(+)</b>							
WSD - Yoakim	+5	+7	+6	+5	+4	+3	+0
Yoakim - Lambert	+42	+39	+38	+38	+37	+38	+38
Lambert - Dry Crk Mouth	+17	+14	+10	+10	+9	+6	+4
WSD - Dry Crk Mouth	+65	+60	+54	+53	+50	+47	+43
<b>WSD Project Water Release to Meet Min Flow Requirement</b>							
Net Reach Loss/Gain to Controlling Gage	+5	+7	+6	+5	+4	+3	+0
Project Water Release Required	No	Yes	Yes	Yes	Yes	Yes	Yes

#### VI. Russian River - Dry Creek Confluence

<b>Upper Russian River Flow (Healdsburg Gage)</b>							
L. Mendocino Project Water + Import Water	83	74	96	96	85	102	105
Natural Flow	441	430	381	365	364	329	310
<b>Dry Creek Flow (Mouth Gage)</b>							
L. Sonoma Project Water	0	4	7	6	6	27	26
Natural Flow	140	132	124	123	119	95	93
<b>Russian River d/s of Confluence Flow</b>							
L. Mendocino Project Water + Import Water	83	74	96	96	85	102	105
L. Sonoma Project Water	0	4	7	6	6	27	26
Natural Flow	581	562	506	487	483	424	403

#### VII. Lower Russian River Reach

<b>Minimum Instream Flow Requirement</b>							
<b>Controlling Compliance Gage</b>							
Min Gage Flow	843	805	767	738	713	689	664
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
<b>All Compliance Gages</b>							
	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>
Hacienda (USGS 11467000)	21.8	843	805	767	738	713	689
<b>Confluence to Windsor Reach Analysis</b>							
Net Reach Loss/Gain to Windsor Gage	-	-	-	-	-	-	-
L. Mendocino Project Water + Import Water	-	-	-	-	-	-	-
L. Sonoma Project Water	-	-	-	-	-	-	-
Natural Flow	-	-	-	-	-	-	-
<b>Confluence to SCWA Wohler Production Facility Reach Analysis</b>							
Approx. Flow u/s of Wohler	875	845	814	785	751	734	728
Net Reach Loss(-)/Gain(+)	+171	+175	+173	+164	+153	+155	+170
L. Mendocino Project Water + Import Water	83	74	96	96	85	102	105
L. Sonoma Project Water	0	2	5	4	4	24	23
Natural Flow	752	736	679	652	636	579	573
<b>Confluence to Hacienda (Guerneville) Reach Analysis</b>							
Net Reach Loss(-)/Gain(+)	+139	+135	+126	+118	+115	+111	+106
L. Mendocino Project Water + Import Water	83	74	96	96	85	102	105
L. Sonoma Project Water	0	0	0	0	0	0	0
Natural Flow	720	699	637	609	602	559	532

#### VIII. Water Production under Sonoma Water Water Rights (ac-ft)

<b>Lower Russian River</b>							
Sonoma Water Total	63.4	78.4	92.4	92.5	74.7	88.5	127.6
Wohler	45.3	45.3	45.5	45.5	45.3	71.7	74.4
Mirabel	18.1	33.1	46.9	46.9	29.4	16.8	53.2
Town of Windsor River Wellfield	4.5	4.1	4.3	4.4	4.9	4.6	4.7
Camp Meeker & Occidental	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>Upper Russian River</b>							
<b>City of Healdsburg</b>							
Gauntlett & Fitch Mtn	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Dry Creek</b>							
<b>City of Healdsburg</b>							
Dry Creek Wellfield	0.0	0.0	0.0	0.0	0.0	0.0	0.0

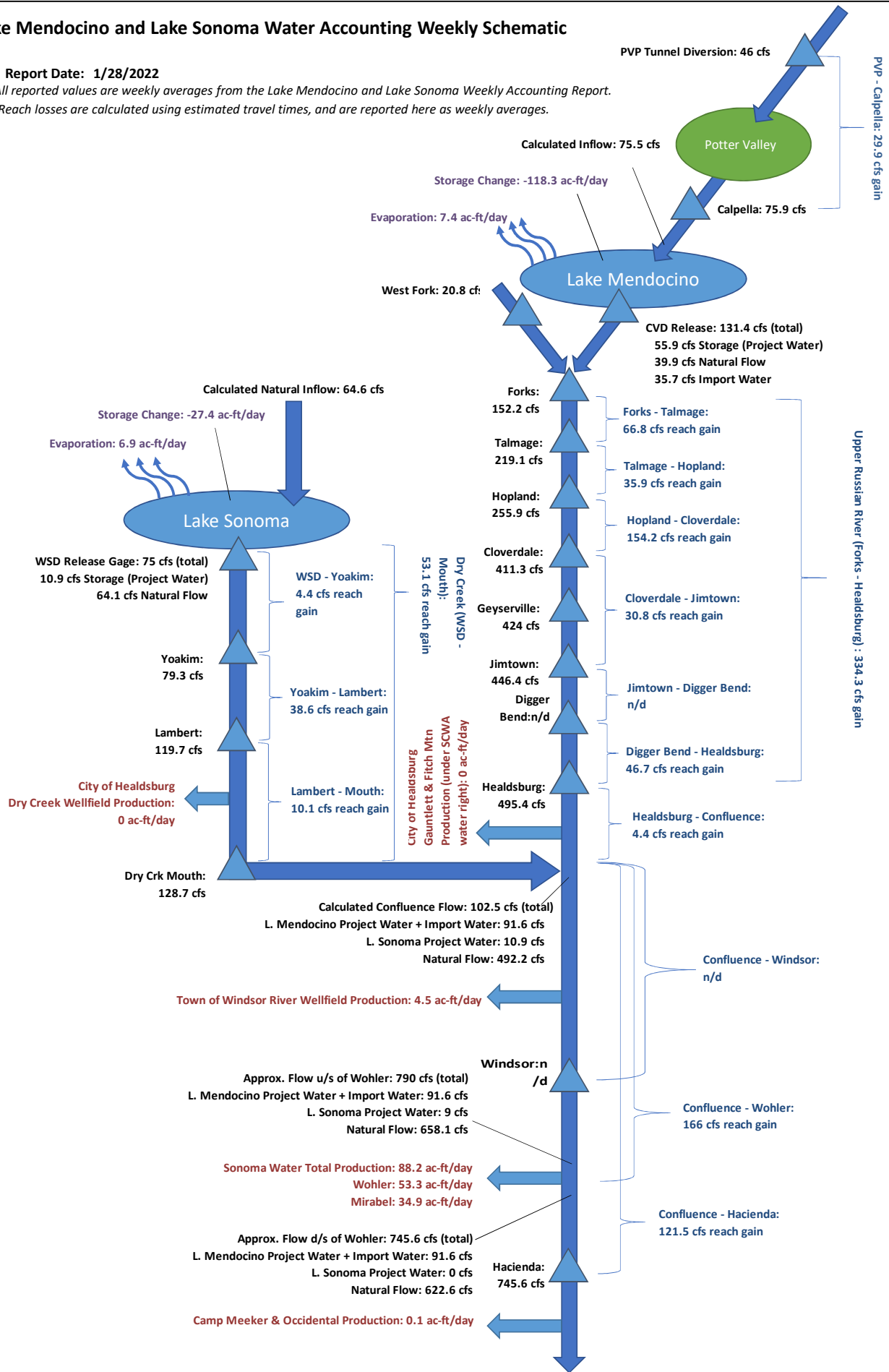
**Notes:**

- 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).

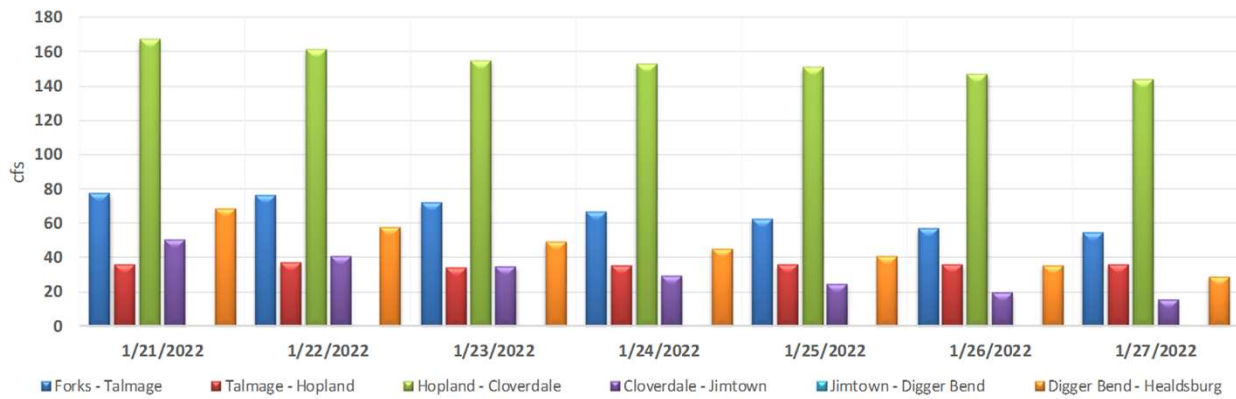
# Lake Mendocino and Lake Sonoma Water Accounting Weekly Schematic

**Report Date: 1/28/2022**

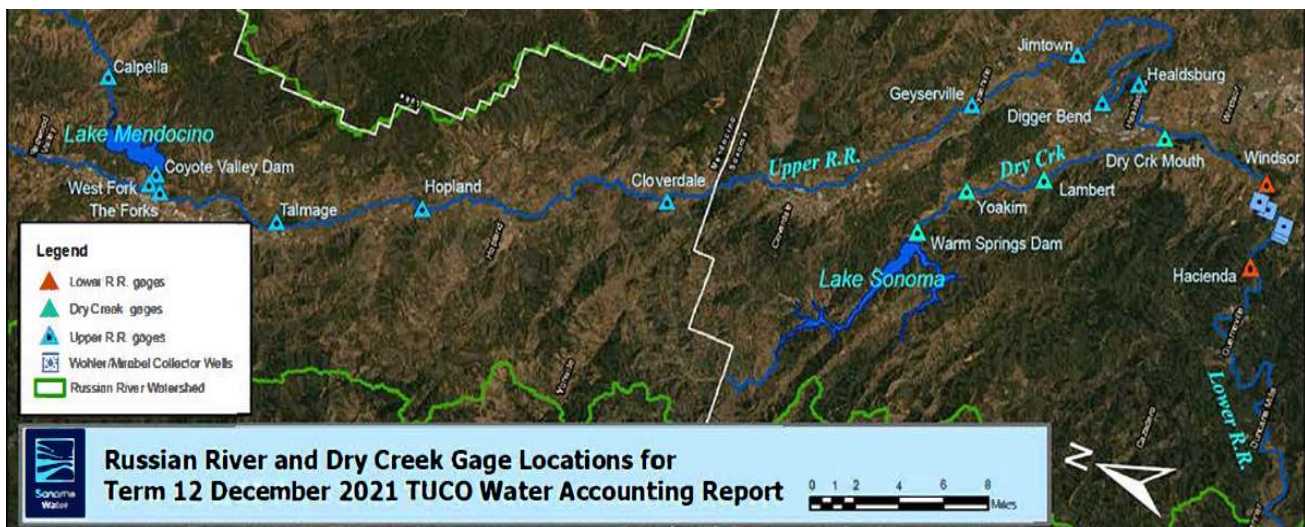
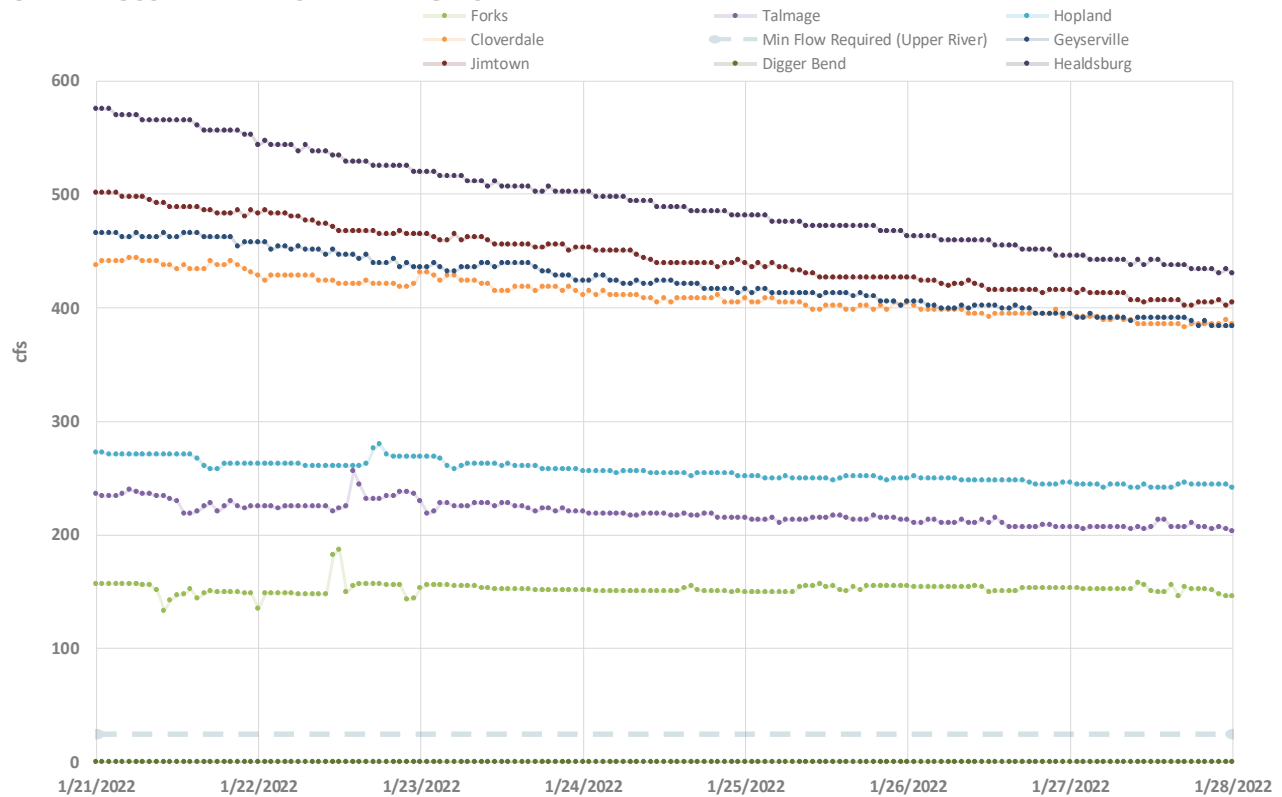
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.  
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



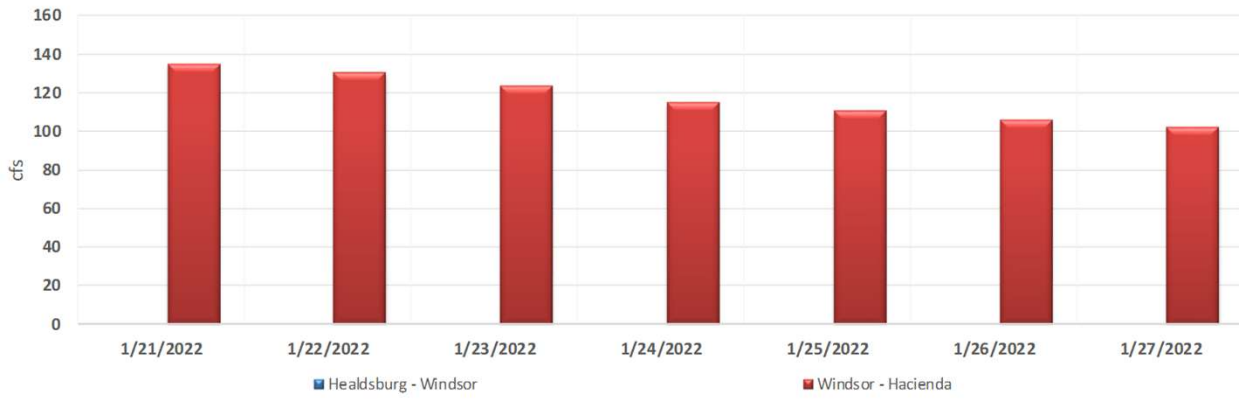
### UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



### UPPER RUSSIAN RIVER STREAM FLOWS

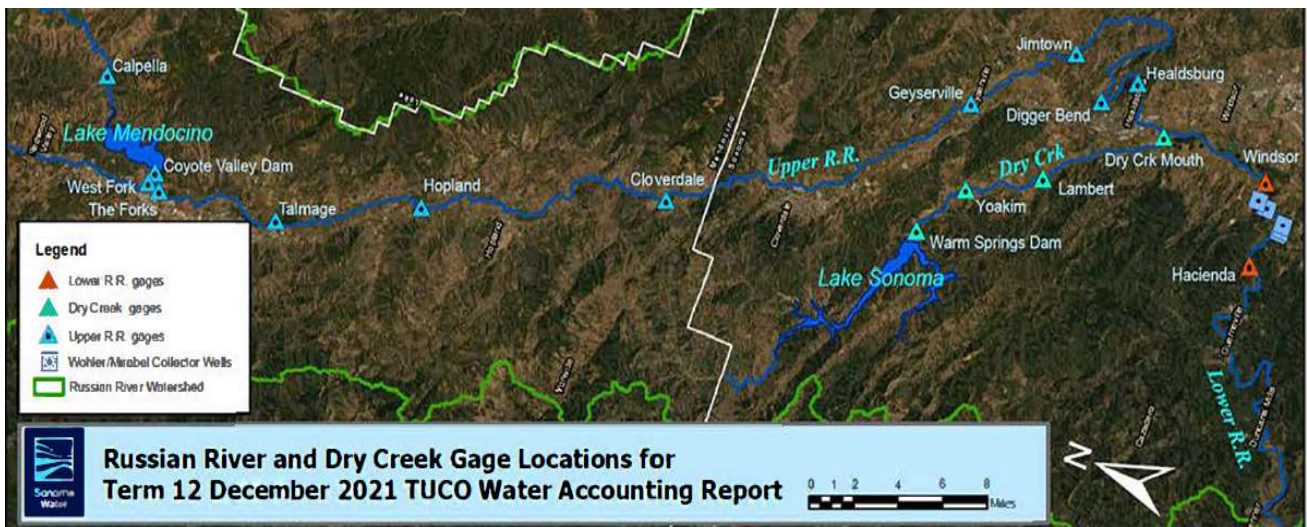
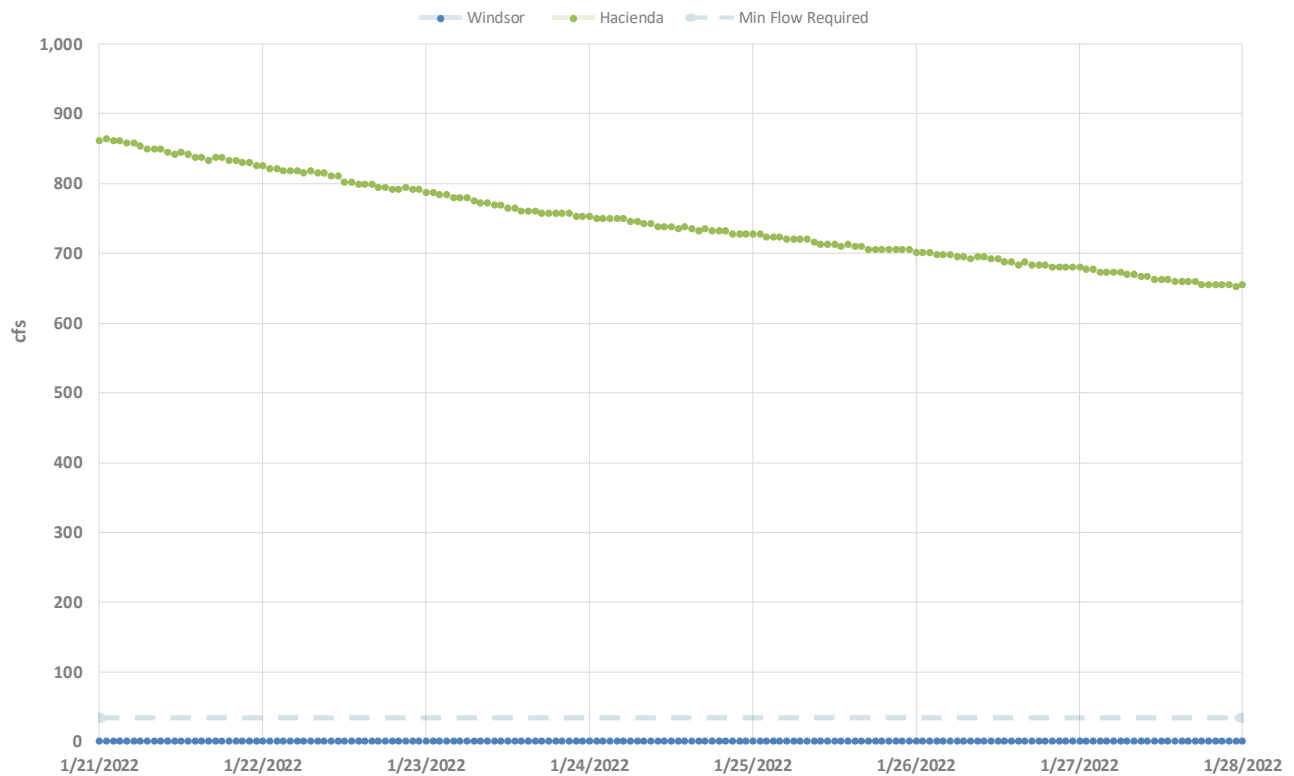


LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)

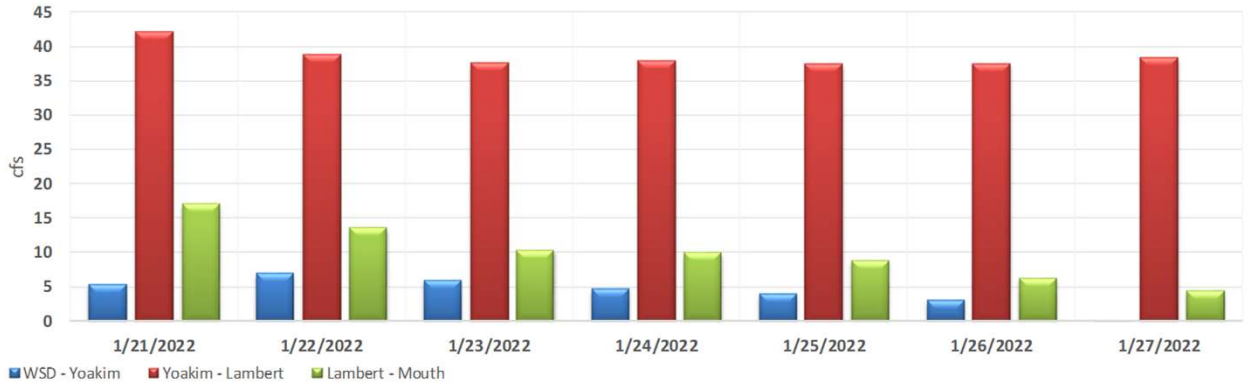


Note: Windsor gage is a seasonal gage and not operational. Reach gains for Windsor – Hacienda reach calculated with Healdsburg gages as upstream gages

LOWER RUSSIAN RIVER STREAM FLOWS



DRY CREEK NET REACH GAINS (+) / LOSSES (-)



DRY CREEK STREAM FLOWS

