

# Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Terms 12 & 13 June 2021 TUCO)

Report Date: 12/3/2021

Units are cfs unless noted otherwise

	<u>11/26/2021</u>	<u>11/27/2021</u>	<u>11/28/2021</u>	<u>11/29/2021</u>	<u>11/30/2021</u>	<u>12/1/2021</u>	<u>12/2/2021</u>
<b>I. Upper East Fork Reach</b>							
<b>Potter Valley Project</b>							
Tunnel Diversion	45.0	46.0	46.0	45.0	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	2.9	2.9	2.9	2.9	3.0	3.0	3.0
East Fork Release	42.0	43.0	43.0	42.0	42.0	43.0	43.0
PVID E Fork Diversions	2.1	2.1	2.1	2.1	2.1	2.1	2.0
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)	39.9	40.9	40.9	39.9	40.0	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	51.1	55.4	53.5	53.0	52.9	51.5	50.8
Net Reach Loss(-)/Gain(+)	+6.1	+9.4	+7.5	+8.0	+6.9	+5.5	+4.8
Unimpaired Natural Flow @ Calpella (est.)	11.1	14.4	12.5	13.0	11.9	10.5	9.8
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)	103	112	103	112	112	114	107
(cfs)	52	56	52	56	56	58	54
Natural Flow	12	15	13	16	16	17	13
Import	40	41	39	40	40	41	41
Storage Change (ac-ft)	+41.0	+50.0	+41.0	+50.0	+50.0	+50.0	+42.0
(cfs)	+21	+25	+21	+25	+25	+25	+21
Stored Natural Flow (cfs)	10	13	10	13	13	13	11
Stored Import Water (cfs)	10	13	10	13	13	13	11
Evaporation (ac-ft)	4.7	4.0	4.0	4.0	4.1	4.6	3.9
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	29	29	29	29	29	30	31
Storage (Project Water)	0	0	0	0	0	0	0
Natural Flow	2	3	2	4	4	4	3
Import Water	30	28	29	27	27	28	30
<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	29	29	29	29	30	31
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Total Pass-through Water	31	31	31	31	31	32	33
Project Water Release Required	No	No	No	No	No	No	No

## III. Upper Russian River Reach

### Minimum Instream Flow Requirement

	25	25	25	25	25	25	25
<b>Controlling Compliance Gage</b>							
Min Gage Flow	45	45	44	44	43	43	42
Controlling Gage	Forks	Forks	Forks	Forks	Forks	Forks	Forks
<b>All Compliance Gages</b>							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	45	45	44	44	43	42
Talmage (USGS 11462080)	96.1	64	63	62	61	60	58
Hopland (USGS 11462500)	84.8	65	63	61	59	57	54
Cloverdale (USGS 11463000)	70.9	94	91	87	84	81	77
Geyserville (USGS 11463500)	54.4	143	136	132	129	123	112
Jimtown (USGS 11463682)	48.5	158	150	143	137	132	121
Digger Bend (USGS 11463980)	38.2	178	169	161	154	148	137
Healdsburg (USGS 11464000)	35.6	207	196	185	175	167	150
<b>Net Reach Loss(-)/Gain(+)</b>							
Forks - Talmage	+19	+18	+18	+17	+17	+16	+16
Talmage - Hopland	+0	-1	-2	-2	-3	-4	-4
Hopland - Cloverdale	+29	+27	+26	+24	+23	+23	+22
Cloverdale - Jimtown	+61	+57	+53	+51	+49	+45	+43
Jimtown - Digger Bend	+18	+18	+17	+16	+15	+14	+15
Digger Bend - Healdsburg	+28	+26	+24	+21	+19	+17	+13
Upper Russian Net Reach Loss/Gain	+155	+145	+135	+127	+120	+112	+104
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
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	31	31	31	31	31	32	33
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).

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<b>IV. Lake Sonoma</b>							
<b>Lake Sonoma</b>							
Storage Change (ac-ft)	-98.0	-99.0	-99.0	-99.0	-115.0	-98.0	-115.0
(cfs)	-49	-50	-50	-50	-58	-49	-58
Evaporation (ac-ft)	5.3	5.3	5.3	5.3	5.3	5.1	5.1
Inflow (Natural Flow)	28	28	28	28	20	28	19
WSD Release Gage	75	75	75	75	75	75	75
Storage (Project Water)	47	47	47	47	55	47	55
Natural Flow	28	28	28	28	20	28	19

#### 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		75	75	75	75	75	75	75
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	75	75	75	75	75	75	75
Yoakim (USGS 11465200)	11.1	81	80	80	79	79	78	78
Lambert (USGS 11465240)	6.8	100	100	98	98	97	97	96
Dry Crk Mouth (USGS 11465350)	0.1	89	88	87	86	86	85	84
<b>WSD to Russian River Confluence Reach Analysis</b>								
Total Pass-through Water		28	28	28	28	20	28	19
<b>Net Reach Loss(-)/Gain(+)</b>								
WSD - Yoakim		+6	+5	+4	+4	+4	+3	+3
Yoakim - Lambert		+19	+19	+19	+18	+18	+18	+18
Lambert - Dry Crk Mouth		+1	-0	-1	-1	-0	-1	-2
WSD - Dry Crk Mouth		+26	+24	+22	+22	+21	+20	+19
<b>WSD Project Water Release to Meet Min Flow Requirement</b>								
Net Reach Loss/Gain to Controlling Gage		+6	+5	+4	+4	+4	+3	+3
Project Water Release Required		Yes	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		30	28	29	27	27	28	30
Natural Flow		156	148	137	130	123	116	107
<b>Dry Creek Flow (Mouth Gage)</b>								
L. Sonoma Project Water		47	47	47	47	55	47	55
Natural Flow		54	52	50	50	41	49	38
<b>Russian River d/s of Confluence Flow</b>								
L. Mendocino Project Water + Import Water		30	28	29	27	27	28	30
L. Sonoma Project Water		47	47	47	47	55	47	55
Natural Flow		210	200	187	180	165	164	145

#### VII. Lower Russian River Reach

<b>Minimum Instream Flow Requirement</b>		35	35	35	35	35	35	35
<b>Controlling Compliance Gage</b>								
Min Gage Flow		343	325	308	295	285	274	264
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>	<i>n/d</i>
Hacienda (USGS 11467000)	21.8	343	325	308	295	285	274	264
<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		413	387	371	357	332	336	324
Net Reach Loss(-)/Gain(+)		+117	+103	+99	+96	+80	+92	+91
L. Mendocino Project Water + Import Water		30	28	29	27	27	28	30
L. Sonoma Project Water		44	45	45	44	52	45	53
Natural Flow		327	303	286	276	244	256	236
<b>Confluence to Hacienda (Guerneville) Reach Analysis</b>								
Net Reach Loss(-)/Gain(+)		+47	+41	+36	+34	+32	+30	+31
L. Mendocino Project Water + Import Water		30	28	29	27	27	28	30
L. Sonoma Project Water		0	0	0	0	5	0	0
Natural Flow		301	286	268	258	244	239	229

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

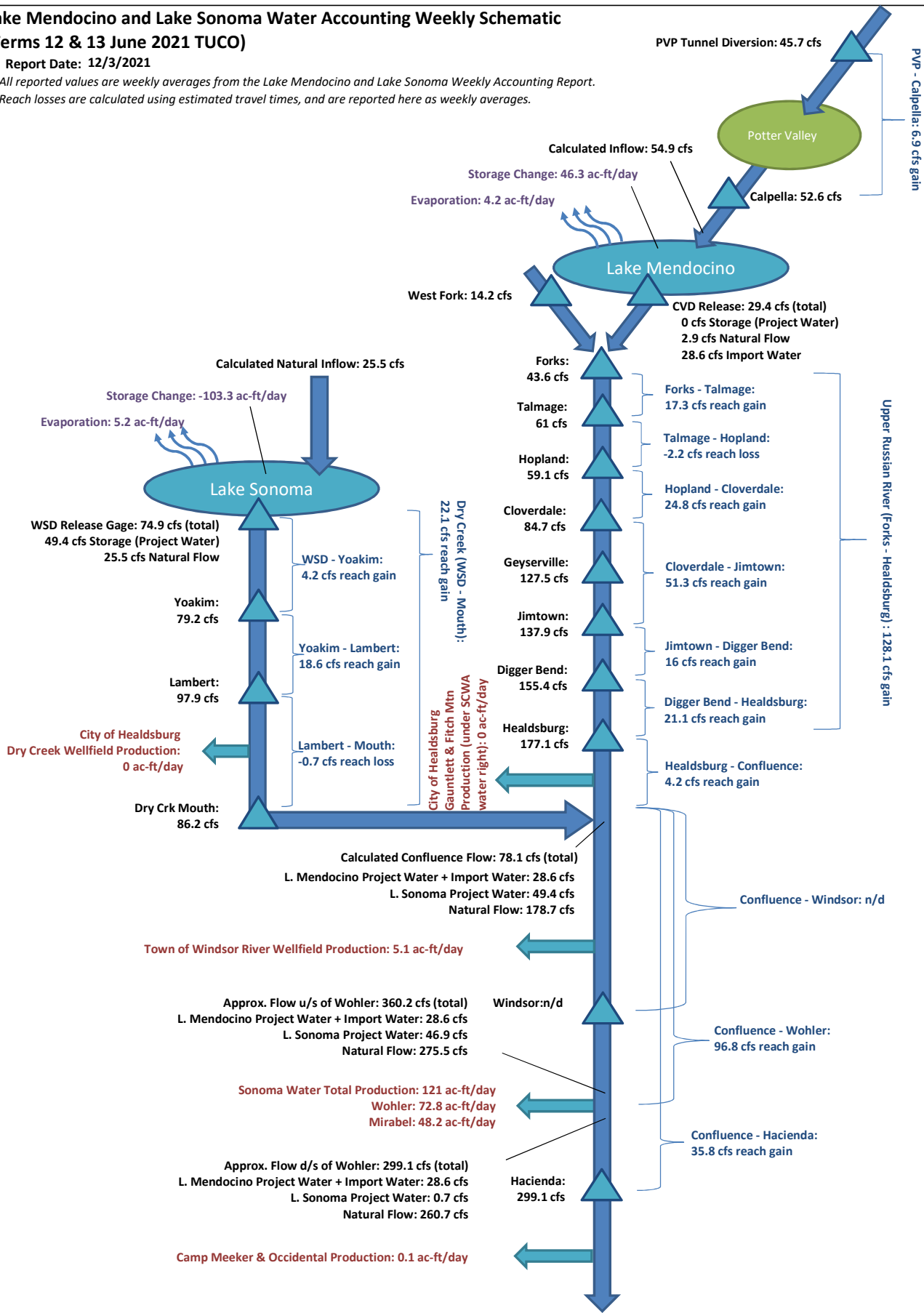
<b>Lower Russian River</b>								
Sonoma Water Total		139.8	123.2	124.7	123.2	94.2	122.1	120.0
Wohler		82.6	80.2	83.8	80.6	52.5	64.6	65.1
Mirabel		57.2	42.9	40.9	42.6	41.6	57.6	54.9
Town of Windsor River Wellfield		5.1	5.2	5.2	5.6	6.1	4.2	4.2
Camp Meeker & Occidental		<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>
<b>Upper Russian River</b>								
City of Healdsburg								
Gauntlett & Fitch Mtn		0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Dry Creek</b>								
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 (Terms 12 & 13 June 2021 TUCO)

Report Date: 12/3/2021

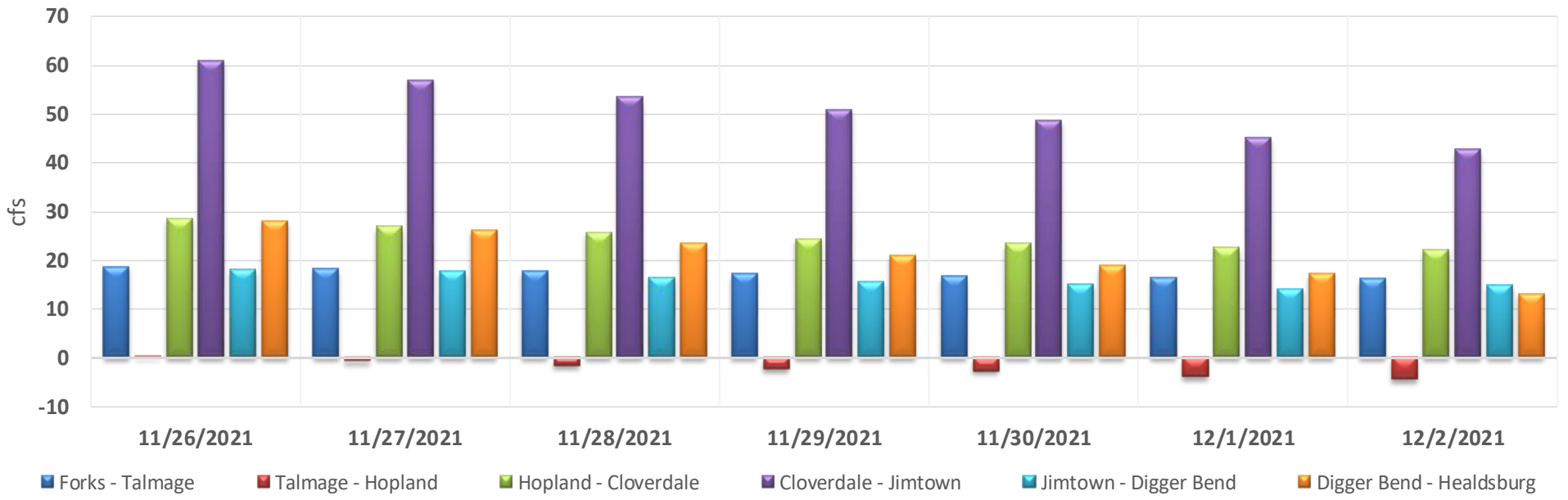
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.  
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



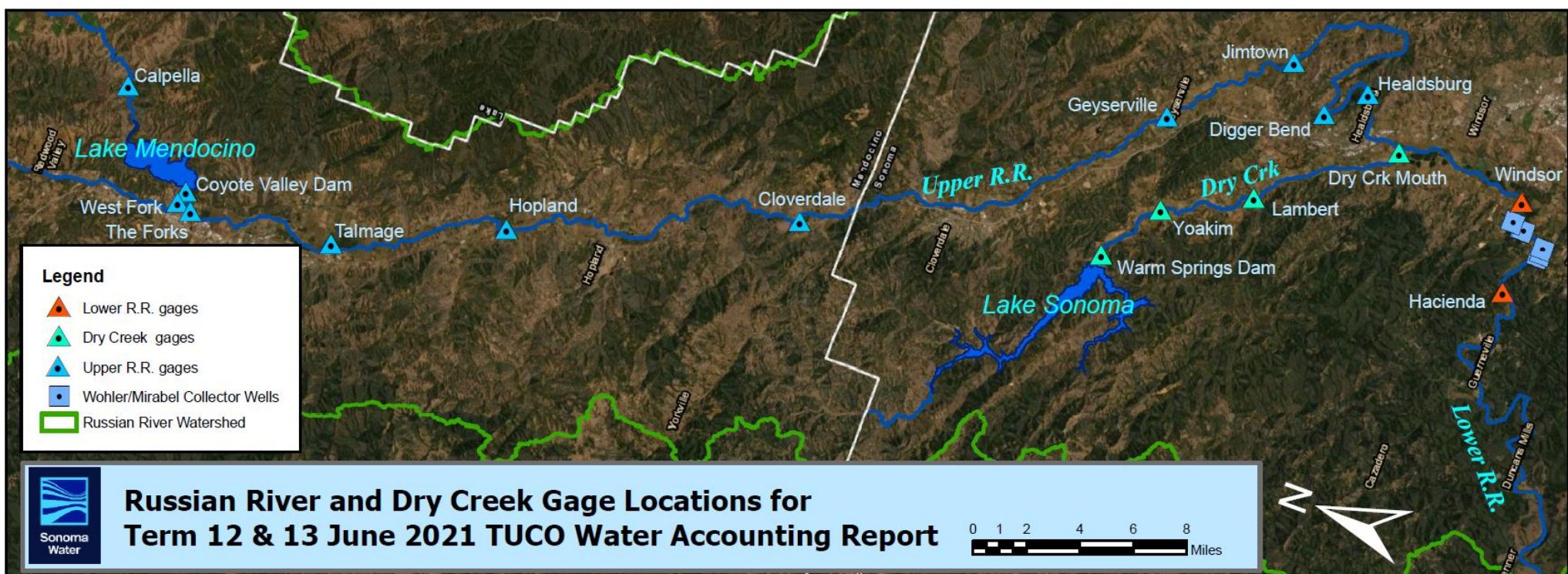
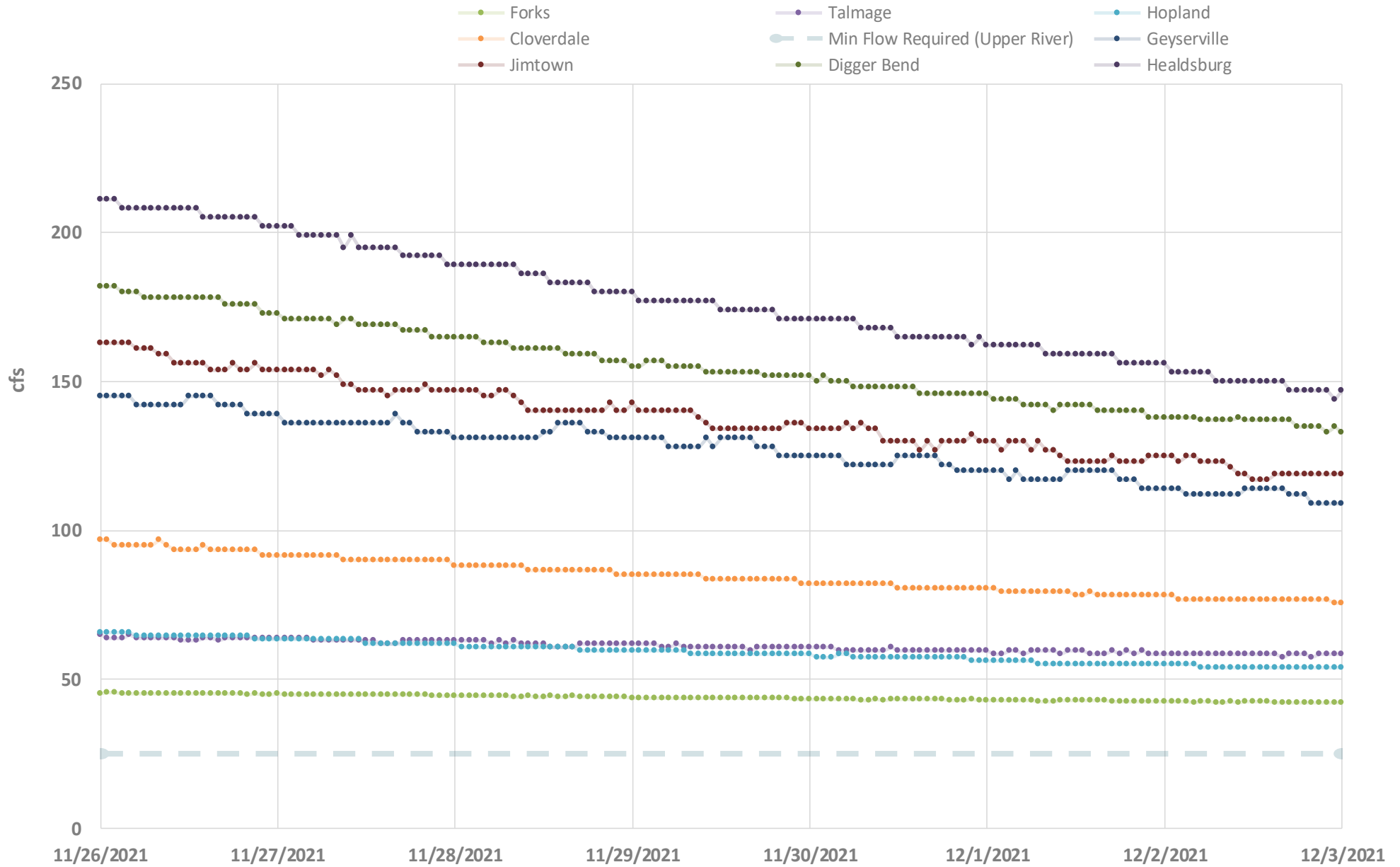
# Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 12 June 2021 TUCO)

Report Date: 12/3/2021

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



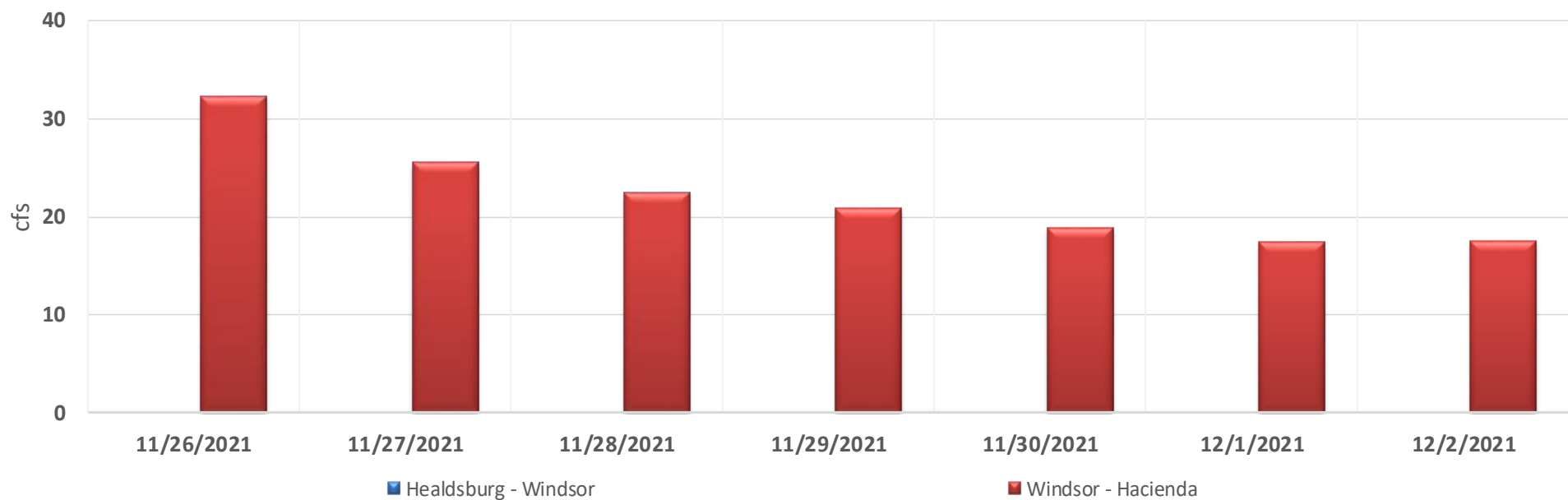
## UPPER RUSSIAN RIVER STREAM FLOWS



**Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Terms 12 & 13 June 2021 TUCO)**

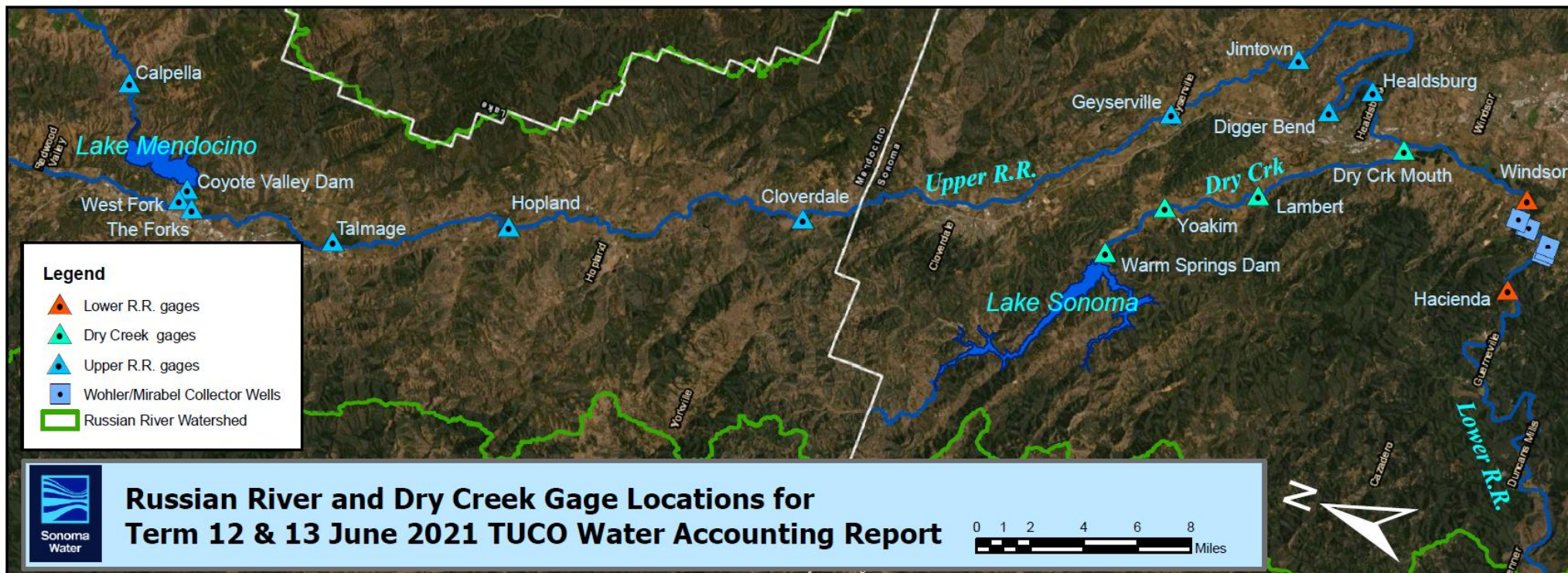
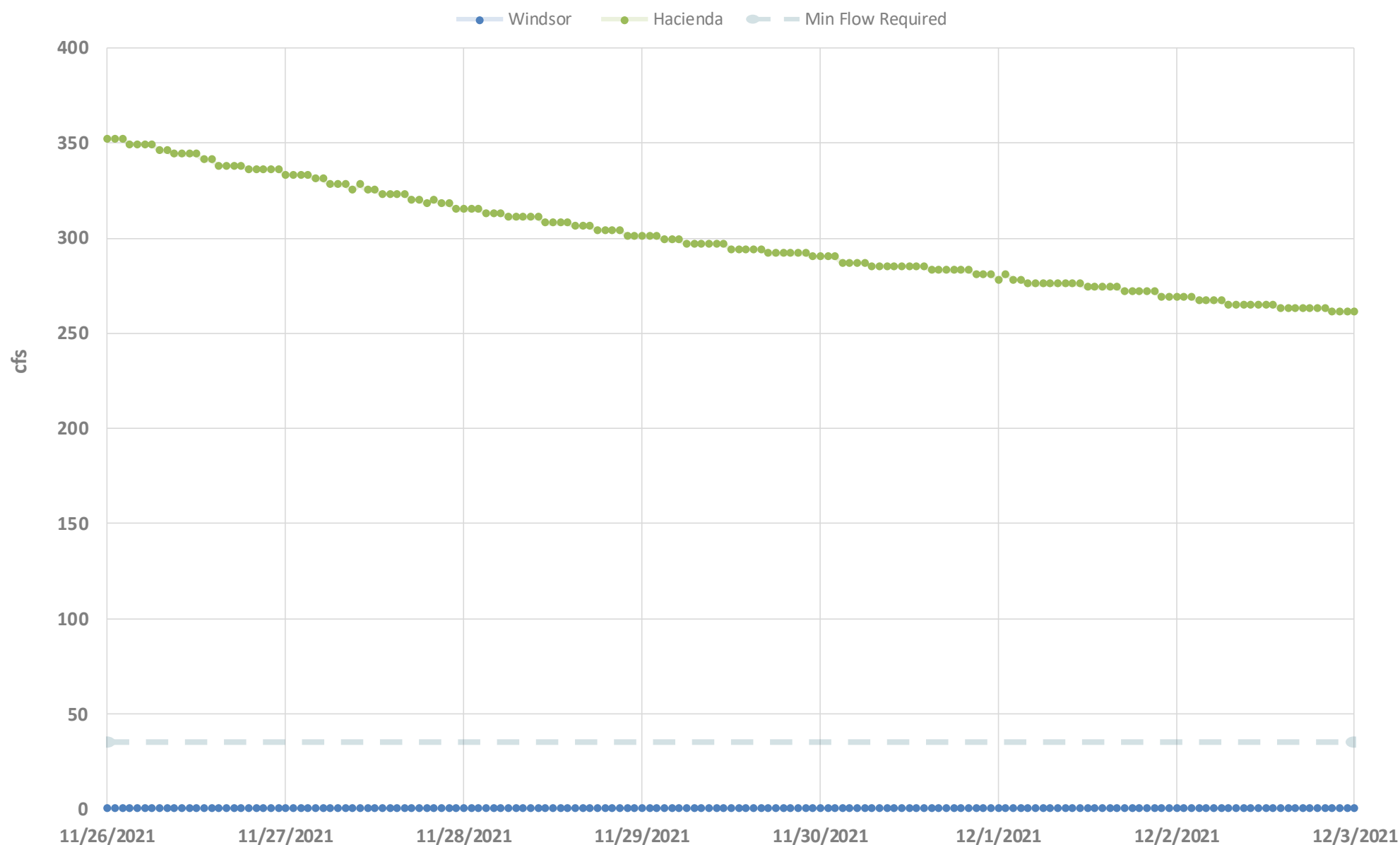
Report Date: 12/3/2021

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

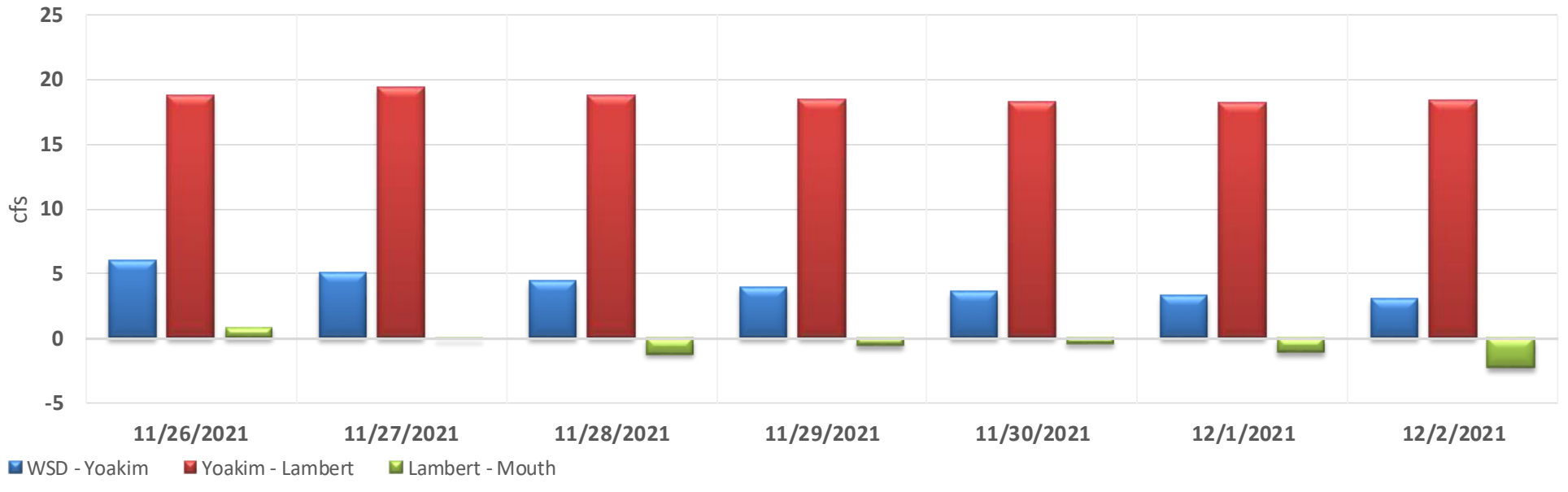


Note: Windsor gage is a seasonal gage and not operational. Reach gains for Windsor – Hacienda reach calculated with Healdsburg gages as upstream gages

**LOWER RUSSIAN RIVER STREAM FLOWS**



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



**DRY CREEK STREAM FLOWS**

