

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

Report Date: 11/12/2021

Units are cfs unless noted otherwise

	11/5/2021	11/6/2021	11/7/2021	11/8/2021	11/9/2021	11/10/2021	11/11/2021
<b>I. Upper East Fork Reach</b>							
<b>Potter Valley Project</b>							
Tunnel Diversion	45.0	45.0	45.0	45.0	45.0	45.0	45.0
PVID Requested Delivery	5.0	5.0	5.0	5.0	5.0	5.0	5.0
PVID Canals Actual Delivery	0.2	0.2	0.2	0.2	0.3	0.3	1.2
East Fork Release	45.0	45.0	45.0	45.0	45.0	45.0	44.0
PVID E Fork Diversions	4.8	4.8	4.8	4.8	4.7	4.7	3.8
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)	40.2	40.2	40.2	40.2	40.3	40.3	40.2
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	51.6	47.2	44.2	44.6	499.3	136.9	80.2
Net Reach Loss(-)/Gain(+)	+6.6	+2.2	-0.8	-0.4	+454.3	+91.9	+35.2
Unimpaired Natural Flow @ Calpella (est.)	11.6	7.2	4.2	4.6	459.3	96.9	40.2
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)	140	125	121	173	925	337	211
(cfs)	70	63	61	87	466	170	106
Natural Flow	30	23	21	47	426	130	66
Import	40	40	40	40	40	40	40
Storage Change (ac-ft)	+75.0	+61.0	+60.0	+114.0	+866.0	+276.0	+152.0
(cfs)	+38	+31	+30	+57	+437	+139	+77
Stored Natural Flow (cfs)	19	15	15	29	397	99	38
Stored Import Water (cfs)	19	15	15	29	40	40	38
Evaporation (ac-ft)	4.9	6.1	3.7	2.5	3.2	5.2	3.2
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	30	29	29	28	28	28	28
Storage (Project Water)	0	0	0	0	0	0	0
Natural Flow	11	7	6	18	30	31	28
Import Water	21	25	25	11	0	0	2
<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	30	29	29	28	28	28
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Total Pass-through Water	33	32	31	30	30	31	30
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	125	102	90	85	572	351	207
Controlling Gage	Talmage	Talmage	Talmage	Talmage	Jimtown	Forks	Talmage
<b>All Compliance Gages</b>							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	167	142	127	752	351	225
Talmage (USGS 11462080)	96.1	125	102	90	752	367	207
Hopland (USGS 11462500)	84.8	160	130	111	695	478	277
Cloverdale (USGS 11463000)	70.9	249	227	198	812	868	486
Geyserville (USGS 11463500)	54.4	405	375	329	810	1,380	812
Jimtown (USGS 11463682)	48.5	388	367	332	572	1,110	732
Digger Bend (USGS 11463980)	38.2	>400 cfs	>400 cfs	>400 cfs	>400 cfs	>400 cfs	>400 cfs
Healdsburg (USGS 11464000)	35.6	515	481	440	1,060	1,400	1,070
<b>Net Reach Loss(-)/Gain(+)</b>							
Forks - Talmage	-50	-44	-40	-35	+68	-29	-31
Talmage - Hopland	+28	+26	+19	+15	+60	+30	+51
Hopland - Cloverdale	+89	+88	+81	+80	+378	+211	+170
Cloverdale - Jimtown	+150	+125	+123	+113	+186	+26	+144
Jimtown - Digger Bend	<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>
Digger Bend - Healdsburg * shift to next u/s gage (Jimtown) when >400 cfs @ Digger Bend	+122	+110	+103	+99	+582	+300	+296
Upper Russian Net Reach Loss/Gain	+341	+305	+286	+273	+1,274	+539	+630
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-50	-44	-40	-35	+692	+0	-31
Storage (Project Water)	0	0	0	0	0	0	0
Pass-through Water (Nat. + Imp.) + Natural	-50	-44	-40	-35	692	0	-31
Total Pass-through Water	0	0	0	0	722	31	0
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).

	11/5/2021	11/6/2021	11/7/2021	11/8/2021	11/9/2021	11/10/2021	11/11/2021
<b>IV. Lake Sonoma</b>							
<b>Lake Sonoma</b>							
Storage Change (ac-ft)	+0.0	-33.0	-49.0	+16.0	+1,263.0	+445.0	+231.0
(cfs)	+0	-17	-25	+8	+637	+224	+116
Evaporation (ac-ft)	6.5	5.2	6.5	6.5	5.3	5.3	6.6
Inflow (Natural Flow)	78	61	54	86	717	304	196
WSD Release Gage	75	75	75	75	77	77	76
Storage (Project Water)	0	14	21	0	0	0	0
Natural Flow	75	61	54	75	77	77	76

#### 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	77	77	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	75	75	75	77	77	76
Yoakim (USGS 11465200)	11.1	98	95	92	172	144	126
Lambert (USGS 11465240)	6.8	107	104	101	109	176	145
Dry Crk Mouth (USGS 11465350)	0.1	128	125	123	124	309	160
<b>WSD to Russian River Confluence Reach Analysis</b>							
Total Pass-through Water	75	61	54	75	77	77	76
<b>Net Reach Loss(-)/Gain(+)</b>							
WSD - Yoakim	+19	+16	+13	+13	+93	+68	+49
Yoakim - Lambert	+21	+21	+21	+22	+9	+14	+18
Lambert - Dry Crk Mouth	+12	+13	+13	+16	+146	+82	+14
WSD - Dry Crk Mouth	+52	+50	+47	+50	+249	+164	+81
<b>WSD Project Water Release to Meet Min Flow Requirement</b>							
Net Reach Loss/Gain to Controlling Gage	+19	+16	+13	+13	+93	+68	+49
Project Water Release Required	No	Yes	Yes	No	No	No	No

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

<b>Upper Russian River Flow (Healdsburg Gage)</b>							
L. Mendocino Project Water + Import Water	21	25	25	11	-244	0	2
Natural Flow	352	312	292	291	1,304	570	658
<b>Dry Creek Flow (Mouth Gage)</b>							
L. Sonoma Project Water	0	14	21	0	0	0	0
Natural Flow	128	111	102	124	309	248	160
<b>Russian River d/s of Confluence Flow</b>							
L. Mendocino Project Water + Import Water	21	25	25	11	-244	0	2
L. Sonoma Project Water	0	14	21	0	0	0	0
Natural Flow	480	423	394	415	1,613	818	818

#### 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	853	769	694	629	2,480	2,880	2,280
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	853	769	694	629	2,480	2,280
<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	919	812	735	692	2,538	2,921	2,325
Net Reach Loss(-)/Gain(+)	+276	+206	+172	+166	+1,169	+1,273	+1,095
L. Mendocino Project Water + Import Water	21	25	25	11	-244	0	2
L. Sonoma Project Water	0	12	19	0	0	0	0
Natural Flow	757	629	566	581	2,782	2,091	1,913
<b>Confluence to Hacienda (Guerneville) Reach Analysis</b>							
Net Reach Loss(-)/Gain(+)	+210	+163	+131	+103	+1,111	+1,232	+1,050
L. Mendocino Project Water + Import Water	21	25	25	11	-244	0	2
L. Sonoma Project Water	0	0	0	0	0	0	0
Natural Flow	690	598	544	518	2,724	2,050	1,868

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

<b>Lower Russian River</b>							
Sonoma Water Total	131.8	84.6	81.3	124.7	116.0	81.3	88.8
Wohler	52.4	36.6	37.6	51.6	39.2	37.7	38.2
Mirabel	79.5	47.9	43.6	73.0	76.8	43.6	50.6
Town of Windsor River Wellfield	4.3	4.0	4.2	4.4	4.2	4.3	4.5
Camp Meeker & Occidental	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<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

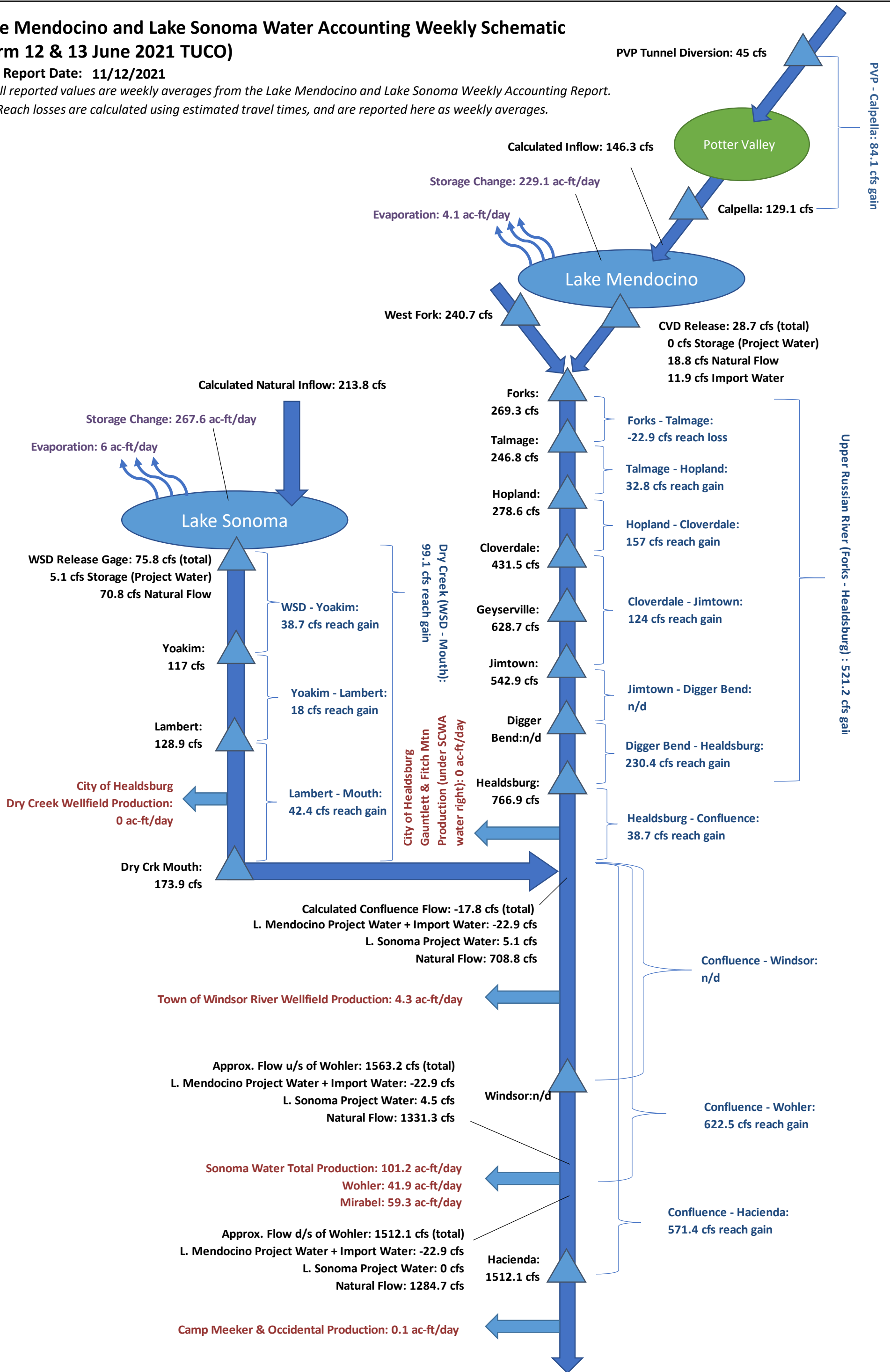
Notes:  
- Water Accounting for the Lower Russian River and Dry Creek is an analysis that approximates the current conditions based on the methodology in Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

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

Report Date: 11/12/2021

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.

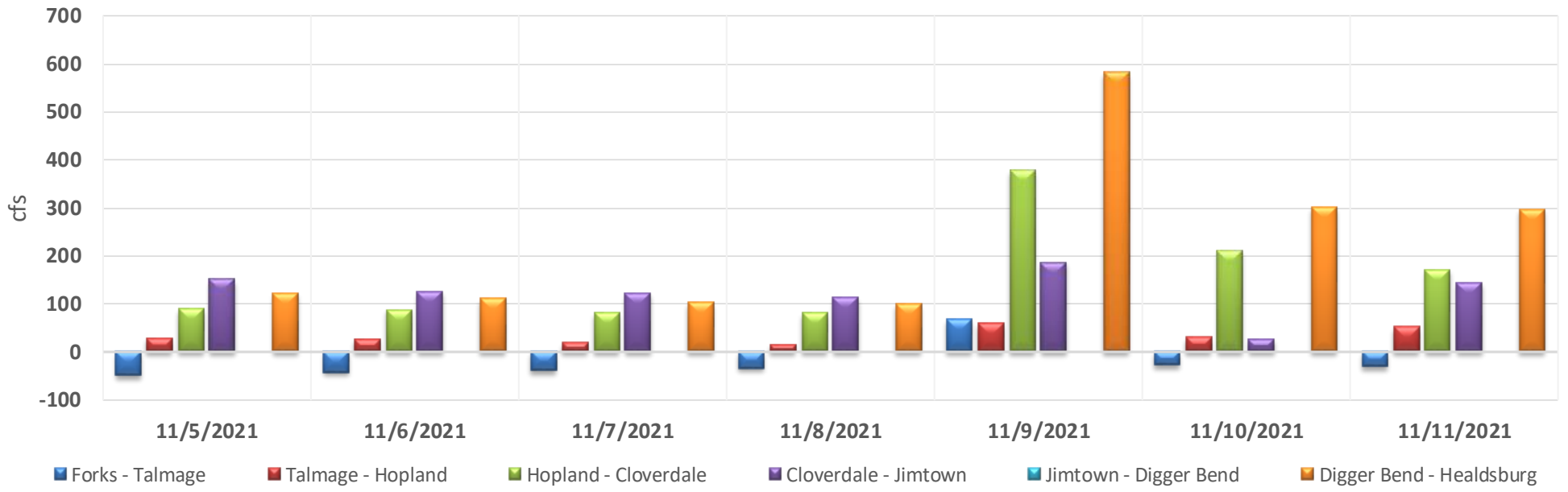




**Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 12 June 2021 TUCO)**

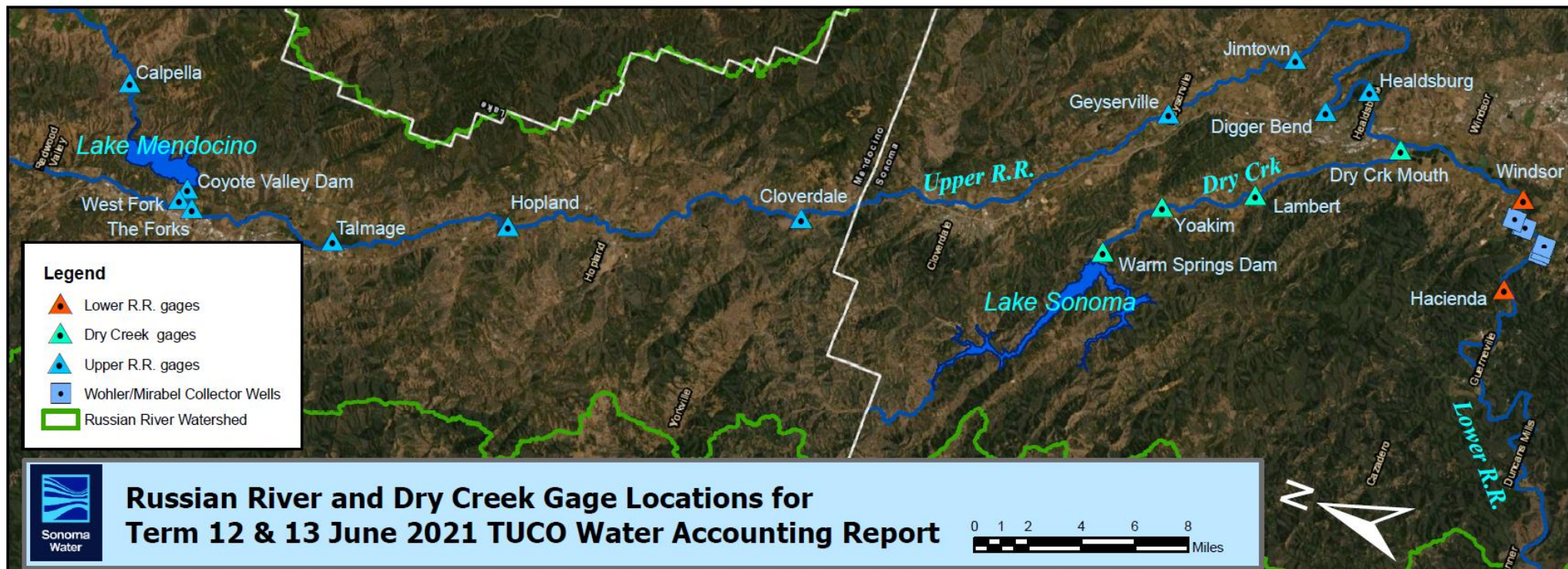
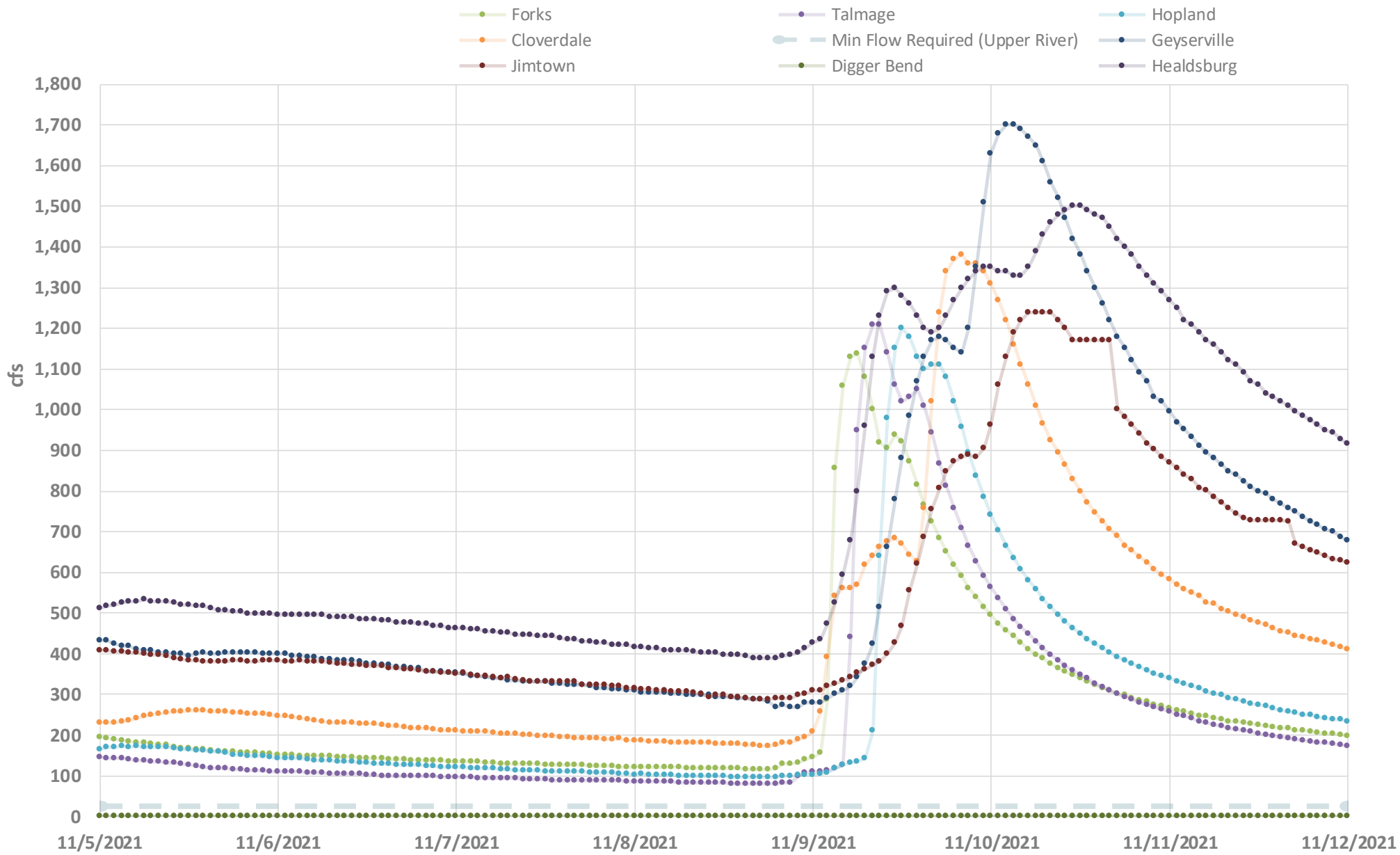
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**UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)**



Note: Digger Bend gage flows exceeded maximum rating of 400 cfs. Reach gains for Digger Bend – Healdsburg reach calculated with Jimtown as upstream gage.

**UPPER RUSSIAN RIVER STREAM FLOWS**

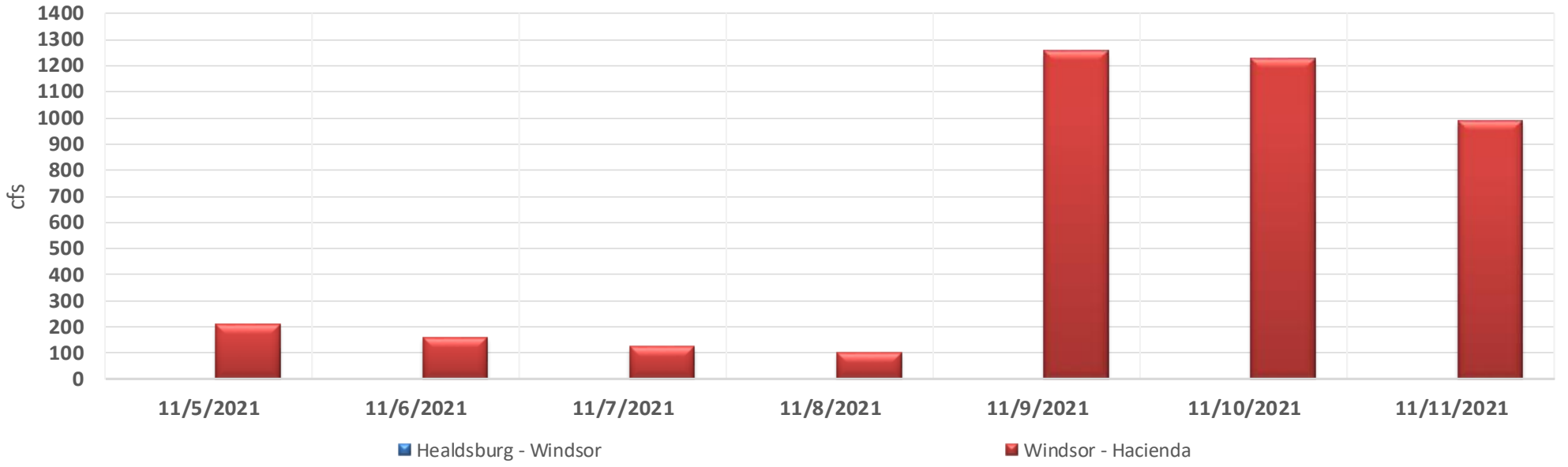




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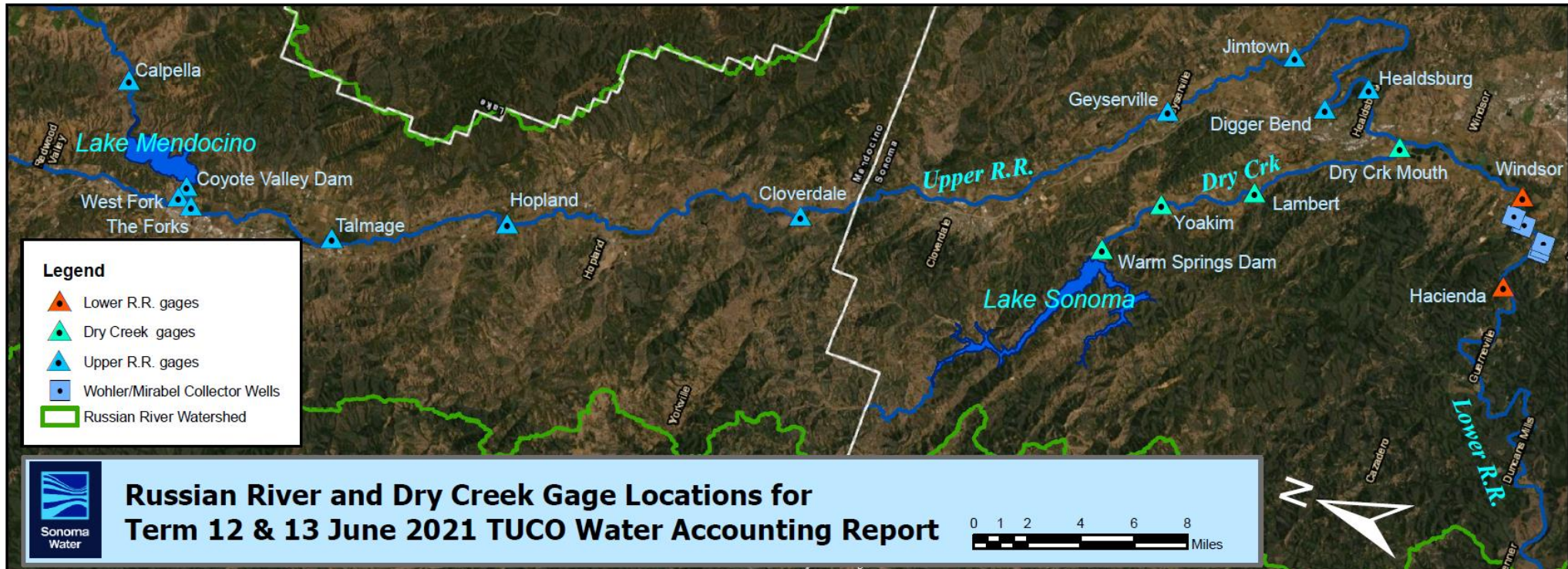
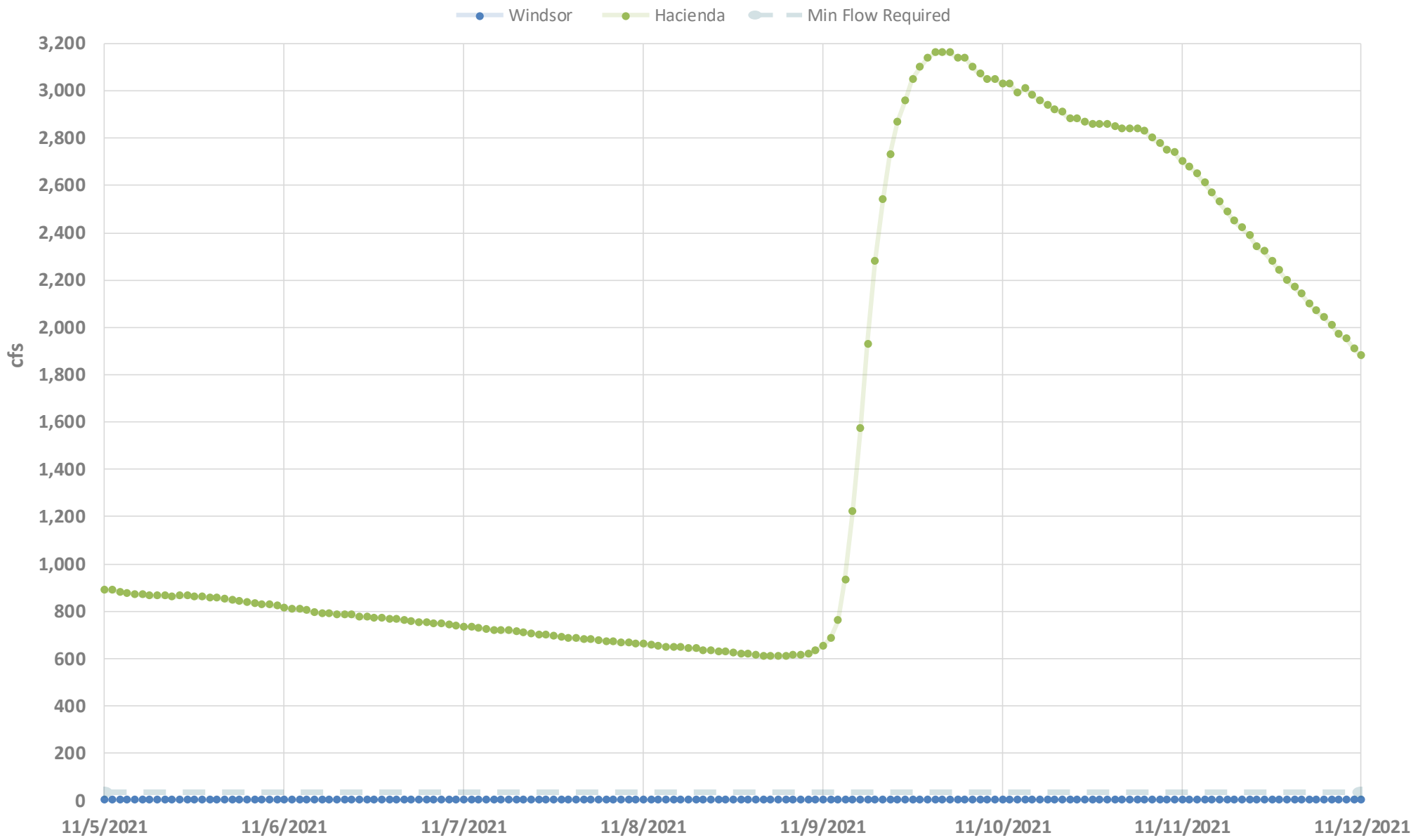
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**LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)**



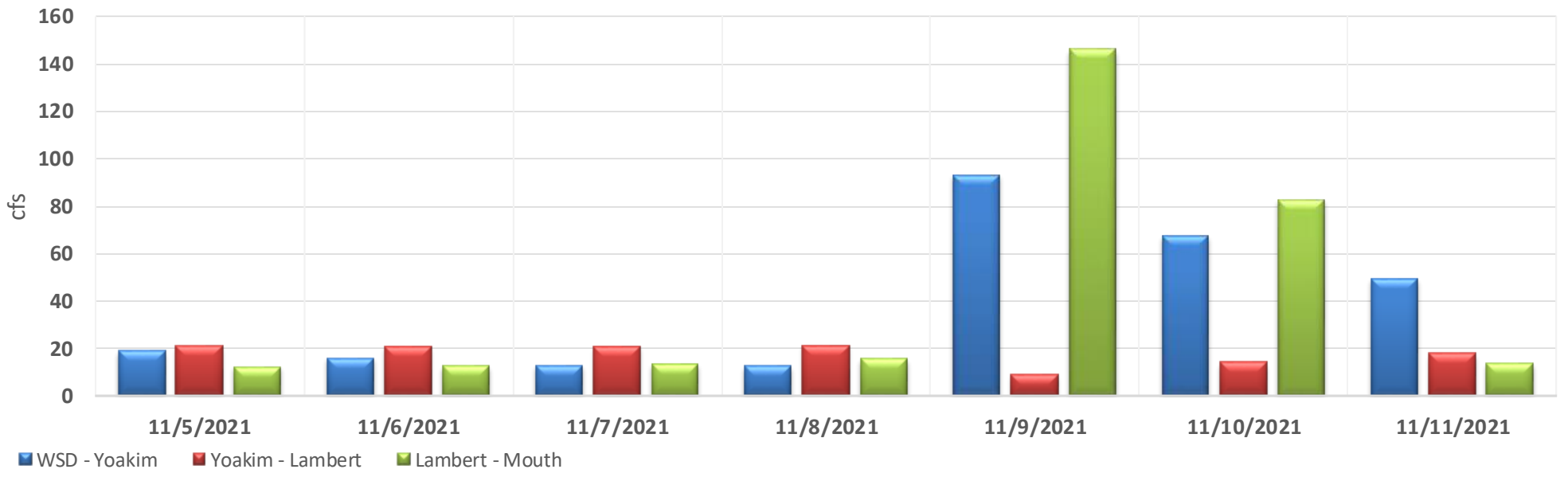
Note: Windsor gage is a seasonal gage and not operational. Reach gains for Windsor – Hacienda reach calculated with Healdsburg gages as upstream gages

**LOWER RUSSIAN RIVER STREAM FLOWS**





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



**DRY CREEK STREAM FLOWS**

