

# Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 7, December 2022 TUCO)

Report Date: 6/2/2023

Units are cfs unless noted otherwise

	<u>5/26/2023</u>	<u>5/27/2023</u>	<u>5/28/2023</u>	<u>5/29/2023</u>	<u>5/30/2023</u>	<u>5/31/2023</u>	<u>6/1/2023</u>
<b>I. Upper East Fork Reach</b>							
<b>Potter Valley Project</b>							
Tunnel Diversion	130.0	130.0	130.0	130.0	130.0	130.0	130.0
PVID Requested Delivery	50.0	50.0	50.0	50.0	50.0	50.0	50.0
PVID Canals Actual Delivery	11.3	13.5	13.6	13.6	13.6	8.8	10.9
East Fork Release	119.0	116.0	116.0	116.0	116.0	121.0	119.0
PVID E Fork Diversions	38.7	36.5	36.4	36.4	36.4	41.2	39.1
PVID Water Use - PG&E Contract	50.0	50.0	50.0	50.0	50.0	50.0	50.0
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)	80.3	79.5	79.6	79.6	79.6	79.8	79.9
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	137.1	135.2	136.6	141.0	134.2	144.0	141.2
Net Reach Loss(-)/Gain(+)	+7.1	+5.2	+6.6	+11.0	+4.2	+14.0	+11.2
Unimpaired Natural Flow @ Calpella (est.)	6.4	6.4	6.4	6.8	6.4	10.1	10.1
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>II. Lake Mendocino</b>							
<b>Reservoir Operations</b>							
Calculated Inflow (ac-ft)	242	297	274	294	240	261	318
(cfs)	122	150	138	148	121	132	160
Natural Flow	42	70	58	68	41	52	80
Import	80	80	80	80	80	80	80
Storage Change (ac-ft)	+0.0	+54.0	+35.0	+54.0	+0.0	+18.0	+71.0
(cfs)	+0	+27	+18	+27	+0	+9	+36
Stored Natural Flow (cfs)	0	27	18	27	0	9	36
Stored Import Water (cfs)	0	0	0	0	0	0	0
Evaporation (ac-ft)	23.8	24.9	20.7	21.8	21.8	24.9	28.9
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	110	110	110	110	110	110	110
Storage (Project Water)	0	0	0	0	0	0	0
Natural Flow	36	36	35	35	35	36	37
Import Water	74	74	75	75	75	74	73
<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	<i>99.9</i>	110	110	110	110	110	110
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Total Pass-through Water	110	110	110	110	110	110	110
Project Water Release Required	No	No	No	No	No	No	No
<b>III. Upper Russian River Reach</b>							
<b>Minimum Instream Flow Requirement</b>	110	110	110	110	110	110	110
<b>Controlling Compliance Gage</b>							
Min Gage Flow	120	120	119	121	124	129	128
Controlling Gage	Forks	Forks	Forks	Forks	Forks	Forks	Forks
<b>All Compliance Gages</b>							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	<i>99.0</i>	120	120	119	121	129	128
Talmage (USGS 11462080)	<i>96.1</i>	144	141	140	141	138	133
Hopland (USGS 11462500)	<i>84.8</i>	159	152	150	152	147	144
Cloverdale (USGS 11463000)	<i>70.9</i>	215	207	204	204	198	195
Geyserville (USGS 11463500)	<i>54.4</i>	290	283	275	272	265	259
Jimtown (USGS 11463682)	<i>48.5</i>	299	289	280	276	264	258
Digger Bend (USGS 11463980)	<i>38.2</i>	332	325	317	311	303	296
Healdsburg (USGS 11464000)	<i>35.6</i>	363	355	344	336	324	317
<b>Net Reach Loss(-)/Gain(+)</b>							
Forks - Talmage		+23	+21	+21	+21	+17	+5
Talmage - Hopland		+11	+11	+10	+11	+10	+9
Hopland - Cloverdale		+51	+54	+53	+53	+51	+50
Cloverdale - Jimtown		+79	+78	+74	+72	+68	+61
Jimtown - Digger Bend		+32	+34	+36	+35	+37	+37
Digger Bend - Healdsburg <i>*when Digger Bend &gt; 400 cfs, next u/s gage (Jimtown) used</i>		+29	+28	+26	+24	+21	+19
Upper Russian Net Reach Loss/Gain		+226	+227	+220	+215	+204	+181
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Net Reach Loss(-)/Gain(+) to Controlling Gage		+0	+0	+0	+0	+0	+0
Storage (Project Water)		0	0	0	0	0	0
Pass-through Water (Nat. + Imp.) + Natural		0	0	0	0	0	0
Total Pass-through Water		110	110	110	110	110	110
Project Water Release Required		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)	-138.0	-165.0	-137.0	-193.0	-138.0	-137.0	-193.0
(cfs)	-70	-83	-69	-97	-70	-69	-97
Evaporation (ac-ft)	24.0	28.7	31.9	11.2	30.3	35.1	39.6
Inflow (Natural Flow)	38	26	42	4	42	44	19
WSD Release Gage	95	95	95	96	96	96	96
Storage (Project Water)	57	69	53	92	54	51	77
Natural Flow	38	26	42	4	42	44	19
<b>V. Lower Dry Creek Reach</b>							
<b>Minimum Instream Flow Requirement</b>	80	80	80	80	80	80	80
<b>Controlling Compliance Gage</b>							
Min Gage Flow	95	95	95	96	96	96	96
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	95	95	95	96	96	96
Yoakim (USGS 11465200)	11.1	115	115	115	114	110	104
Lambert (USGS 11465240)	6.8	112	112	112	112	111	109
Dry Crk Mouth (USGS 11465350)	0.1	132	129	127	126	124	120
<b>WSD to Russian River Confluence Reach Analysis</b>							
Total Pass-through Water	38	26	42	4	42	44	19
<b>Net Reach Loss(-)/Gain(+)</b>							
WSD - Yoakim	+20	+20	+19	+18	+14	+9	+8
Yoakim - Lambert	-2	-3	-3	-3	-0	+5	+5
Lambert - Dry Crk Mouth	+20	+17	+15	+14	+13	+12	+11
WSD - Dry Crk Mouth	+37	+34	+32	+30	+27	+26	+24
<b>WSD Project Water Release to Meet Min Flow Requirement</b>							
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
<b>VI. Russian River - Dry Creek Confluence</b>							
<b>Upper Russian River Flow (Healdsburg Gage)</b>							
L. Mendocino Project Water + Import Water	67	58	53	50	55	62	62
Natural Flow	296	298	292	286	277	262	255
<b>Dry Creek Flow (Mouth Gage)</b>							
L. Sonoma Project Water	57	69	53	92	54	51	77
Natural Flow	75	60	74	34	70	71	42
<b>Russian River d/s of Confluence Flow</b>							
L. Mendocino Project Water + Import Water	67	58	53	50	55	62	62
L. Sonoma Project Water	57	69	53	92	54	51	77
Natural Flow	371	358	366	320	347	332	298
<b>VII. Lower Russian River Reach</b>							
<b>Minimum Instream Flow Requirement</b>	60	60	60	60	60	60	60
<b>Controlling Compliance Gage</b>							
Min Gage Flow	458	453	445	430	427	418	404
Controlling Gage	Windsor	Windsor	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
<b>All Compliance Gages</b>							
	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	458	453	446	440	438	424
Hacienda (USGS 11467000)	21.8	460	457	445	430	427	404
<b>Confluence to Windsor Reach Analysis</b>							
Net Reach Loss/Gain to Windsor Gage	-37	-31	-29	-23	-21	-17	-15
L. Mendocino Project Water + Import Water	67	58	53	50	55	62	62
L. Sonoma Project Water	54	65	50	88	50	47	74
Natural Flow	334	326	337	297	326	315	283
<b>Confluence to SCWA Wohler Production Facility Reach Analysis</b>							
Approx. Flow u/s of Wohler	522	519	514	494	494	481	476
Net Reach Loss(-)/Gain(+)	+28	+35	+43	+33	+38	+35	+39
L. Mendocino Project Water + Import Water	67	58	53	50	55	62	62
L. Sonoma Project Water	54	65	50	88	50	47	74
Natural Flow	398	393	409	353	385	367	337
<b>Confluence to Hacienda (Guerneville) Reach Analysis</b>							
Net Reach Loss(-)/Gain(+)	-35	-27	-27	-31	-29	-28	-32
L. Mendocino Project Water + Import Water	67	58	53	50	55	62	62
L. Sonoma Project Water	0	3	0	24	0	0	2
Natural Flow	390	393	389	353	368	351	337
<b>VIII. Water Production under Sonoma Water Rights (ac-ft)</b>							
<b>Lower Russian River</b>							
Sonoma Water Total	123.8	123.5	137.8	126.6	133.5	124.8	142.4
Wohler	49.8	66.9	73.6	70.1	69.7	62.6	57.2
Mirabel	74.0	56.6	64.2	56.6	63.8	62.2	85.2
Town of Windsor River Wellfield	7.1	7.1	6.4	7.4	8.3	9.2	7.5
Camp Meeker & Occidental	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<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

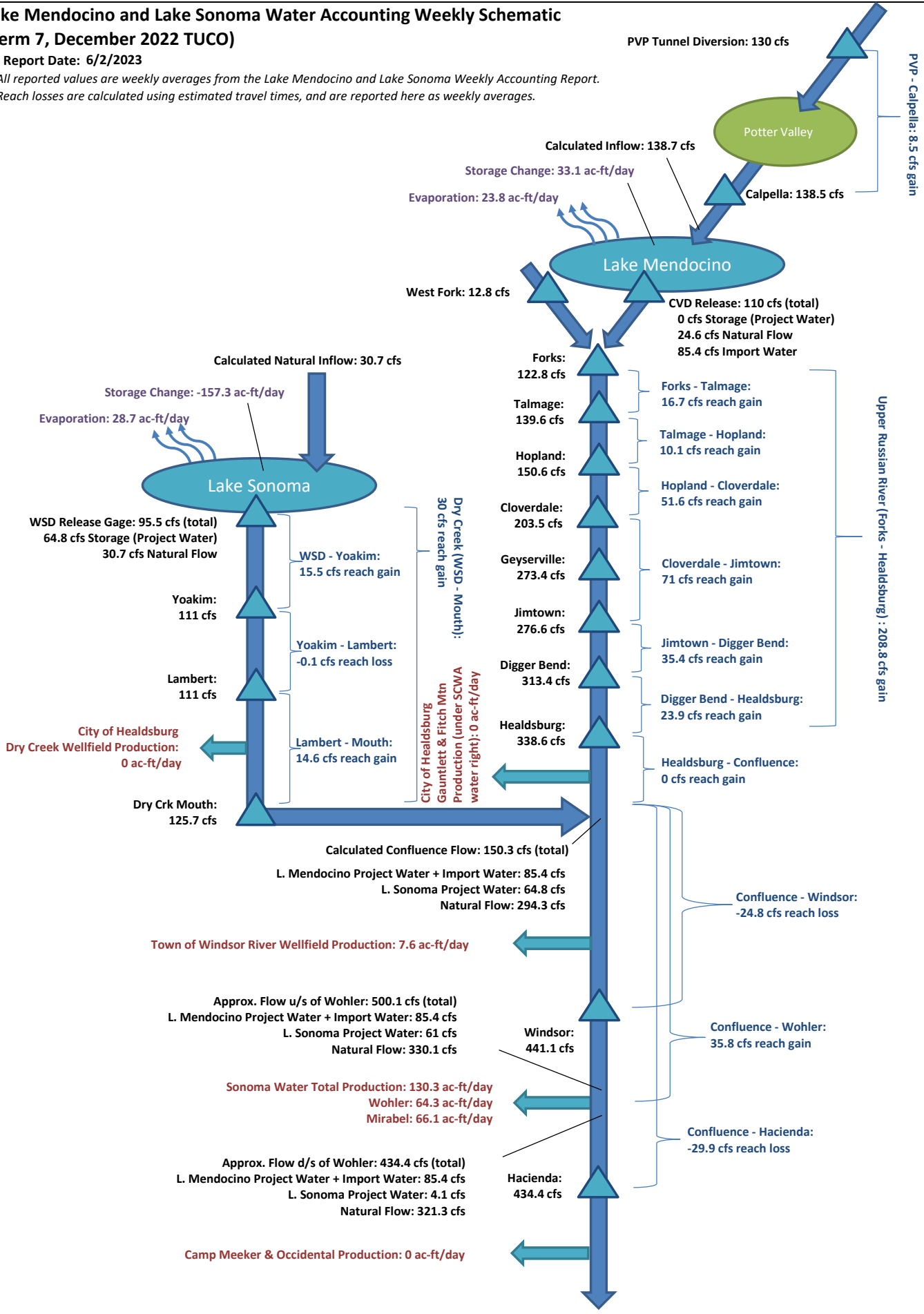
Notes:

- 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 7, December 2022 TUCO)

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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.

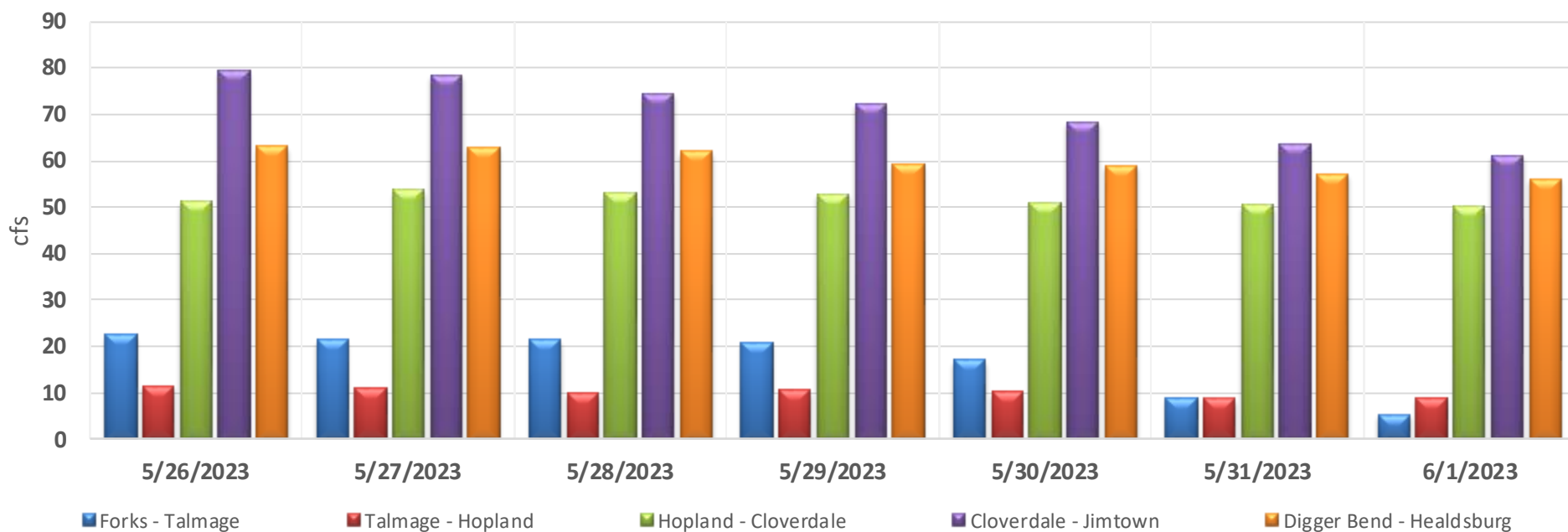




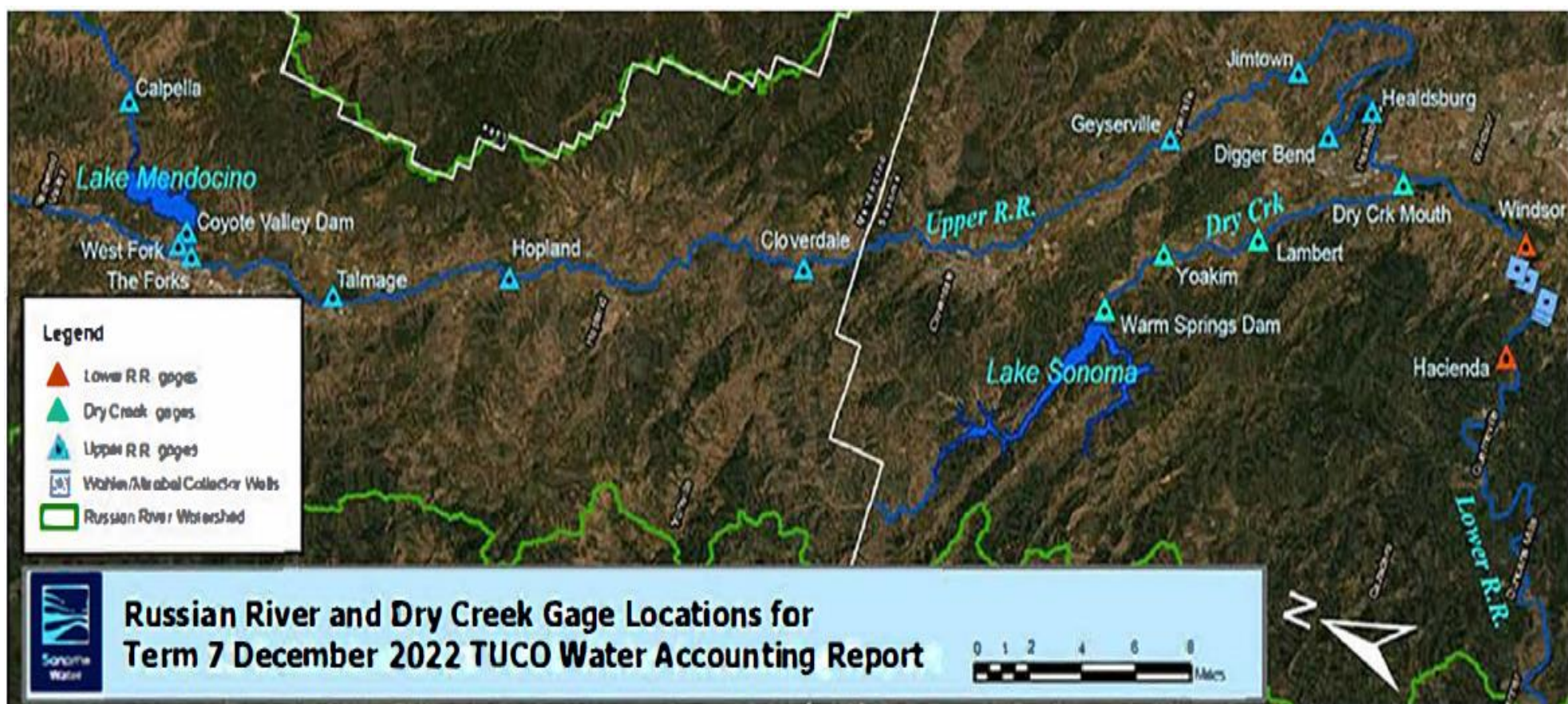
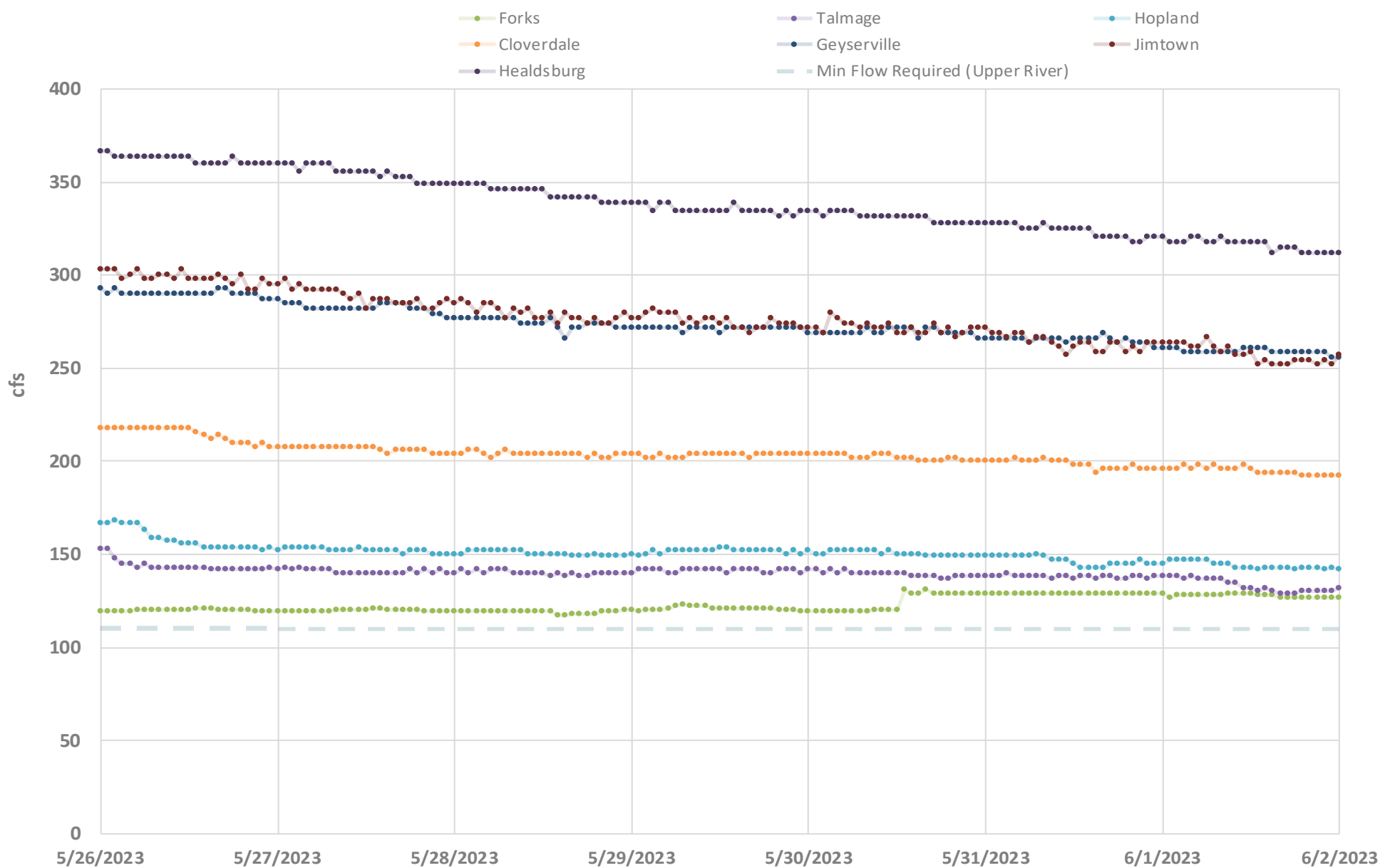
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## UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



## UPPER RUSSIAN RIVER STREAM FLOWS

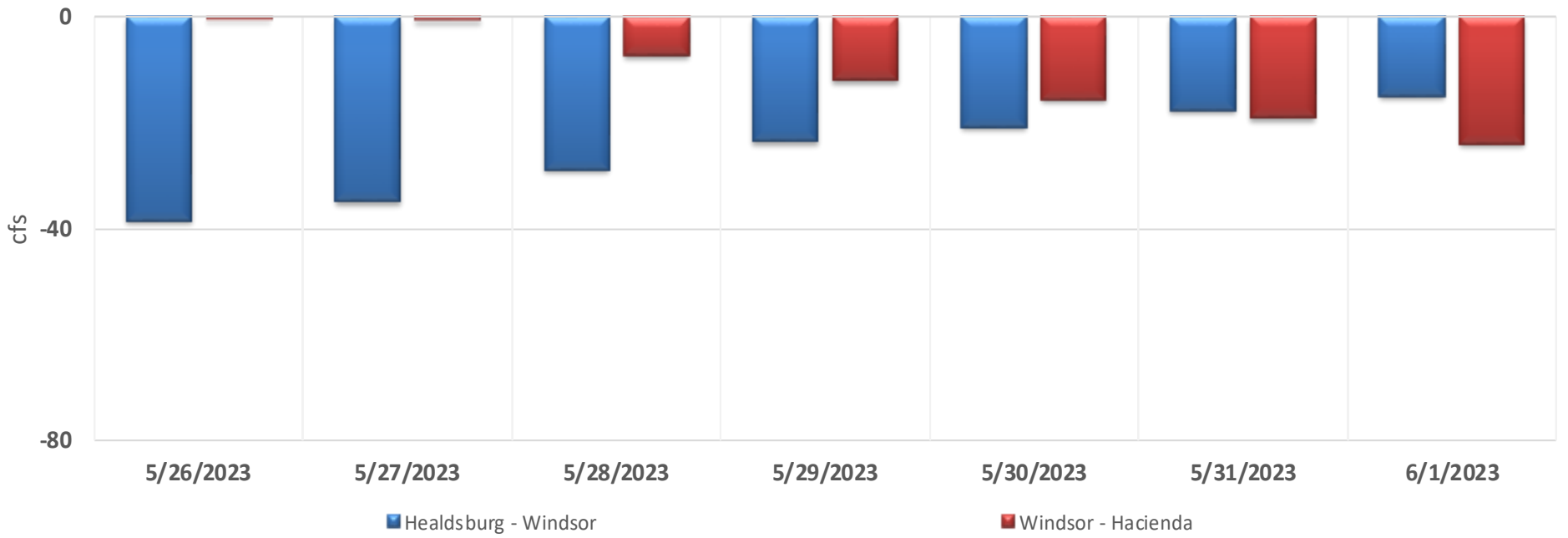




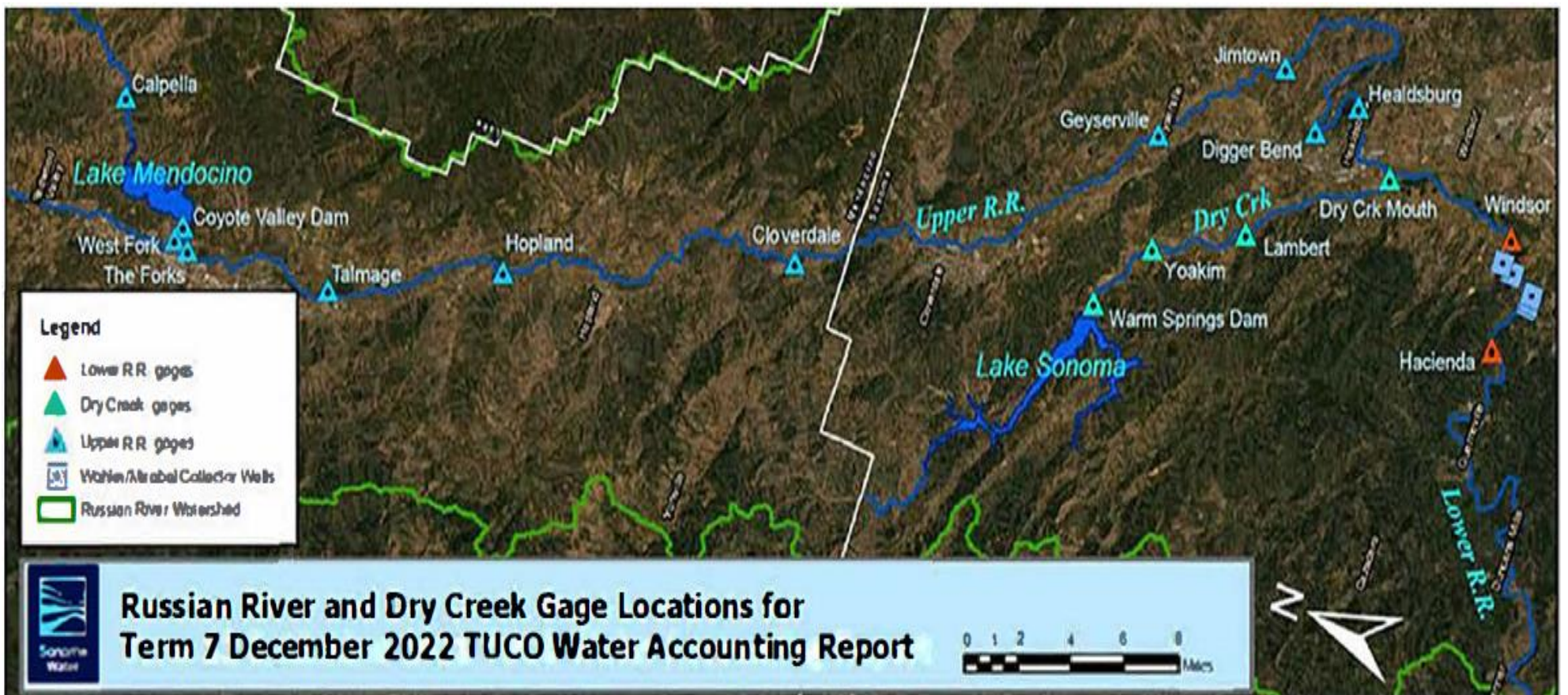
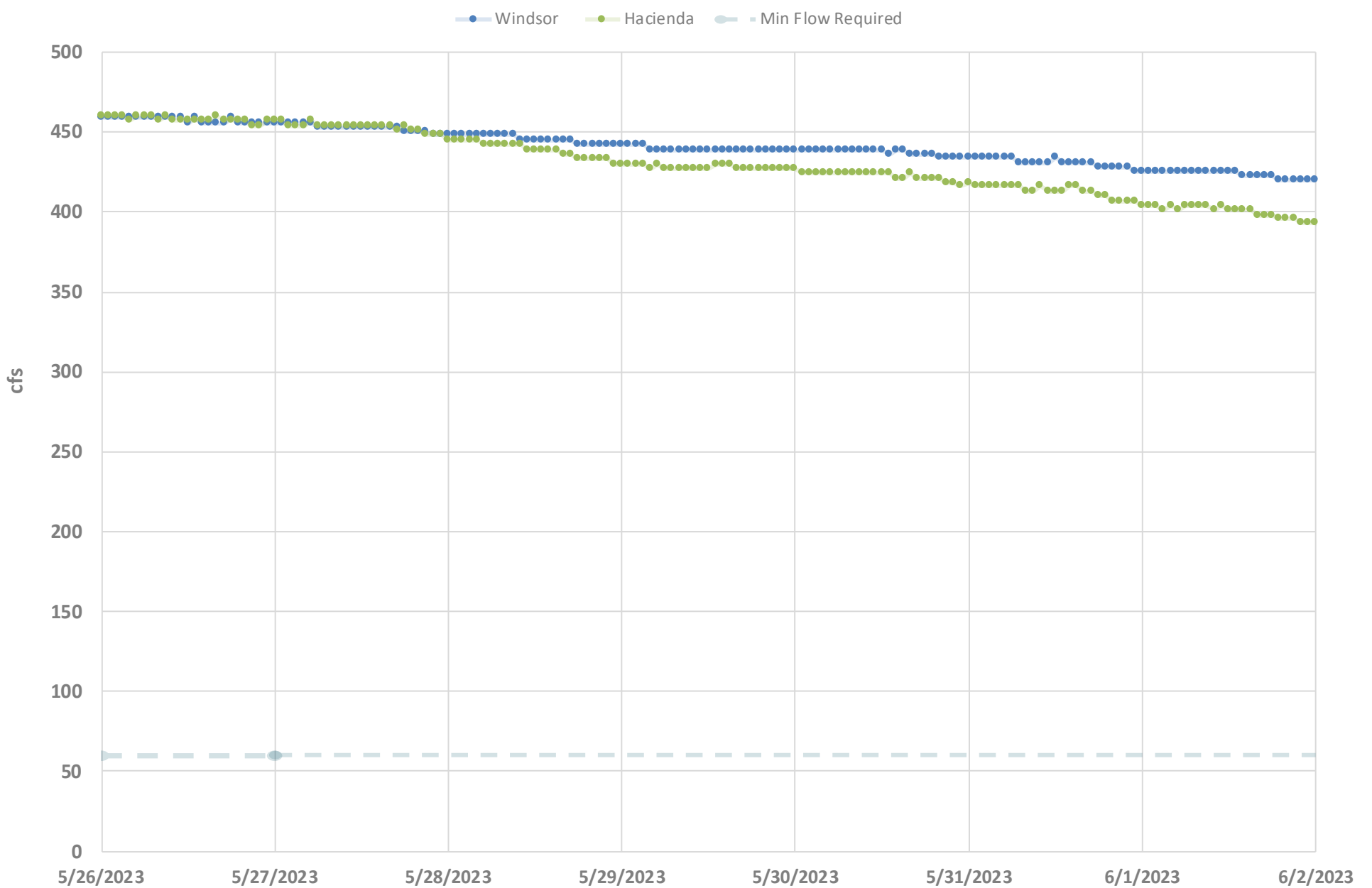
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## LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



## LOWER RUSSIAN RIVER STREAM FLOWS

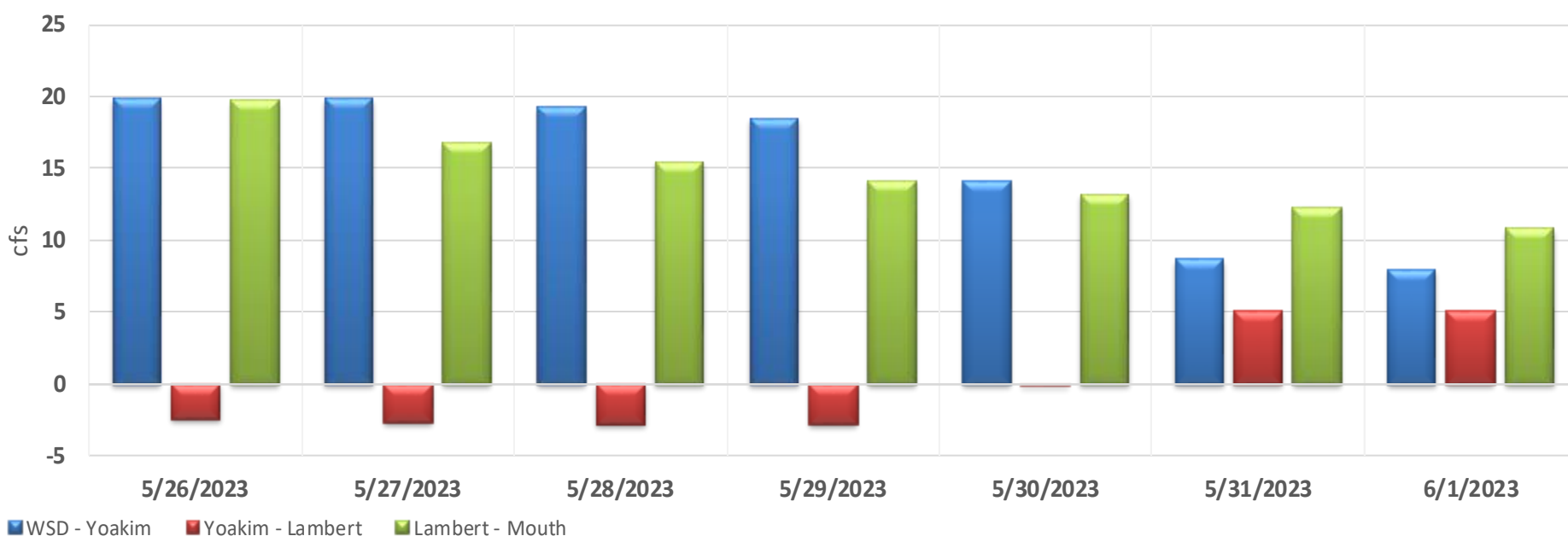




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## DRY CREEK NET REACH GAINS (+) / LOSSES (-)



## DRY CREEK STREAM FLOWS

