

# Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 11, May 2023 TUCO)

Report Date: 8/4/2023

Units are cfs unless noted otherwise

	<u>7/28/2023</u>	<u>7/29/2023</u>	<u>7/30/2023</u>	<u>7/31/2023</u>	<u>8/1/2023</u>	<u>8/2/2023</u>	<u>8/3/2023</u>
<b>I. Upper East Fork Reach</b>							
<b>Potter Valley Project</b>							
Tunnel Diversion	103.0	67.0	105.0	105.0	105.0	105.0	105.0
PVID Requested Delivery	23.3	25.0	25.0	25.0	25.0	25.0	25.0
PVID Canals Actual Delivery	20.4	9.5	19.8	23.0	24.5	24.5	24.5
East Fork Release	83.0	58.0	85.0	82.0	81.0	80.0	80.0
PVID E Fork Diversions	3.0	15.5	5.2	2.0	0.5	0.5	0.5
PVID Water Use - PG&E Contract	23.3	25.0	25.0	25.0	25.0	25.0	25.0
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)	80.0	42.5	79.8	80.0	80.5	79.5	79.5
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	83.5	68.4	83.7	83.8	81.7	79.5	82.1
Net Reach Loss(-)/Gain(+)	-19.5	+1.4	-21.3	-21.2	-23.3	-25.5	-22.9
Unimpaired Natural Flow @ Calpella (est.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-PVID East Fork Net Reach Losses (est.)	0.0	0.0	0.0	0.0	0.0	-0.5	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	-0.5	0.0

## II. Lake Mendocino

### Reservoir Operations

Calculated Inflow (ac-ft)	155	120	128	178	158	139	154
(cfs)	78	60	65	90	80	70	78
Natural Flow	0	18	0	10	0	0	0
Import	78	42	65	80	80	70	78
Storage Change (ac-ft)	-212.0	-264.0	-264.0	-212.0	-229.0	-246.0	-229.0
(cfs)	-107	-133	-133	-107	-115	-124	-115
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)	32.3	33.3	33.3	33.3	36.0	33.5	32.3
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	169	177	181	180	177	177	177
Storage (Project Water)	91	116	116	90	97	107	99
Natural Flow	0	18	0	10	0	0	0
Import Water	78	42	65	80	80	70	78
<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>	169	177	181	180	177	177
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Total Pass-through Water	78	60	65	90	80	70	78
Project Water Release Required	No	No	No	No	No	No	No

## III. Upper Russian River Reach

### Minimum Instream Flow Requirement

Minimum Instream Flow Requirement	110	110	110	110	110	110	110
<b>Controlling Compliance Gage</b>							
Min Gage Flow	124	120	122	135	135	133	129
Controlling Gage	Healdsburg	Healdsburg	Healdsburg	Digger Bend	Digger Bend	Jimtown	Jimtown
<b>All Compliance Gages</b>							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	<i>99.0</i>	171	178	181	178	177	177
Talmage (USGS 11462080)	<i>96.1</i>	147	158	166	164	157	159
Hopland (USGS 11462500)	<i>84.8</i>	147	150	160	158	152	149
Cloverdale (USGS 11463000)	<i>70.9</i>	137	137	150	152	146	141
Geyserville (USGS 11463500)	<i>54.4</i>	132	133	139	147	143	134
Jimtown (USGS 11463682)	<i>48.5</i>	129	129	132	138	133	129
Digger Bend (USGS 11463980)	<i>38.2</i>	130	129	130	135	135	130
Healdsburg (USGS 11464000)	<i>35.6</i>	124	120	122	136	139	130
<b>Net Reach Loss(-)/Gain(+)</b>							
Forks - Talmage		-24	-18	-16	-18	-21	-18
Talmage - Hopland		+2	-3	-5	-8	-6	-10
Hopland - Cloverdale		-9	-10	-7	-9	-8	-7
Cloverdale - Jimtown		-7	-8	-7	-14	-13	-13
Jimtown - Digger Bend		-0	+0	-0	-2	-4	+0
Digger Bend - Healdsburg <i>*when Digger Bend &gt; 400 cfs, next u/s gage (Jimtown) used</i>		-8	-9	-7	+2	+3	-1
Upper Russian Net Reach Loss/Gain		-46	-48	-43	-47	-48	-48
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Net Reach Loss(-)/Gain(+) to Controlling Gage		-46	-48	-43	-49	-52	-47
Storage (Project Water)		-46	-48	-43	-49	-52	-47
Pass-through Water (Nat. + Imp.) + Natural		0	0	0	0	0	0
Total Pass-through Water		78	60	65	90	80	78
Project Water Release Required		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**

**Lake Sonoma**

Storage Change (ac-ft)	-266.0	-265.0	-293.0	-265.0	-265.0	-265.0	-265.0
(cfs)	-134	-134	-148	-134	-134	-134	-134
Evaporation (ac-ft)	43.6	41.9	41.8	41.8	41.5	41.4	41.4
Inflow (Natural Flow)	0	0	0	0	0	0	0
WSD Release Gage	105	105	106	105	105	106	106
Storage (Project Water)	105	105	106	105	105	106	106
Natural Flow	0	0	0	0	0	0	0

**V. Lower Dry Creek Reach**

<b>Minimum Instream Flow Requirement</b>	80	80	80	80	80	80	80
<b>Controlling Compliance Gage</b>							
Min Gage Flow	96	96	97	97	98	96	96
Controlling Gage	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth
<b>All Compliance Gages</b>	<i>Crk mi.</i>						
WSD Release	14.3	105	105	106	105	105	106
Yoakim (USGS 11465200)	11.1	110	110	110	110	110	110
Lambert (USGS 11465240)	6.8	108	108	109	108	106	106
Dry Crk Mouth (USGS 11465350)	0.1	96	96	97	97	98	96
<b>WSD to Russian River Confluence Reach Analysis</b>							
Total Pass-through Water	0	0	0	0	0	0	0
<b>Net Reach Loss(-)/Gain(+)</b>							
WSD - Yoakim	+5	+5	+5	+5	+4	+4	+5
Yoakim - Lambert	-2	-2	-2	-3	-3	-3	-4
Lambert - Dry Crk Mouth	-11	-11	-11	-11	-9	-10	-11
WSD - Dry Crk Mouth	-9	-8	-8	-9	-8	-9	-10
<b>WSD Project Water Release to Meet Min Flow Requirement</b>							
Net Reach Loss/Gain to Controlling Gage	-9	-8	-8	-9	-8	-9	-10
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	124	120	122	136	139	136	130
Natural Flow	0	0	0	0	0	0	0
<b>Dry Creek Flow (Mouth Gage)</b>							
L. Sonoma Project Water	105	105	106	105	105	106	106
Natural Flow	0	0	0	0	0	0	0
<b>Russian River d/s of Confluence Flow</b>	220	216	220	233	237	232	226
L. Mendocino Project Water + Import Water	124	120	122	136	139	136	130
L. Sonoma Project Water	105	105	106	105	105	106	106
Natural Flow	0	0	0	0	0	0	0

**VII. Lower Russian River Reach**

<b>Minimum Instream Flow Requirement</b>	60	60	60	60	60	60	60
<b>Controlling Compliance Gage</b>							
Min Gage Flow	160	155	153	160	158	156	156
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
<b>All Compliance Gages</b>	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	277	275	275	279	277	275
Hacienda (USGS 11467000)	21.8	160	155	153	160	158	156
<b>Confluence to Windsor Reach Analysis</b>							
Net Reach Loss/Gain to Windsor Gage	+57	+59	+58	+50	+42	+44	+46
L. Mendocino Project Water + Import Water	124	120	122	136	139	136	130
L. Sonoma Project Water	100	100	101	100	100	100	100
Natural Flow	57	59	58	50	42	44	46
<b>Confluence to SCWA Wohler Production Facility Reach Analysis</b>							
<b>Approx. Flow u/s of Wohler</b>	243	248	246	247	247	242	238
Net Reach Loss(-)/Gain(+)	+23	+32	+26	+14	+11	+9	+12
L. Mendocino Project Water + Import Water	124	120	122	136	139	136	130
L. Sonoma Project Water	100	100	101	100	100	100	100
Natural Flow	23	32	26	14	11	9	12
<b>Confluence to Hacienda (Guerneville) Reach Analysis</b>							
Net Reach Loss(-)/Gain(+)	-60	-62	-67	-73	-78	-76	-70
L. Mendocino Project Water + Import Water	124	120	122	136	139	136	130
L. Sonoma Project Water	17	7	8	13	11	15	18
Natural Flow	23	32	26	14	11	9	12

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

<b>Lower Russian River</b>							
Sonoma Water Total	164.0	185.1	183.8	171.7	176.7	169.4	162.8
Wohler	72.1	78.0	77.1	70.9	76.5	80.1	77.6
Mirabel	91.9	107.1	106.7	100.8	100.2	89.3	85.2
Town of Windsor River Wellfield	10.3	9.3	9.7	11.4	10.1	10.4	10.2
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

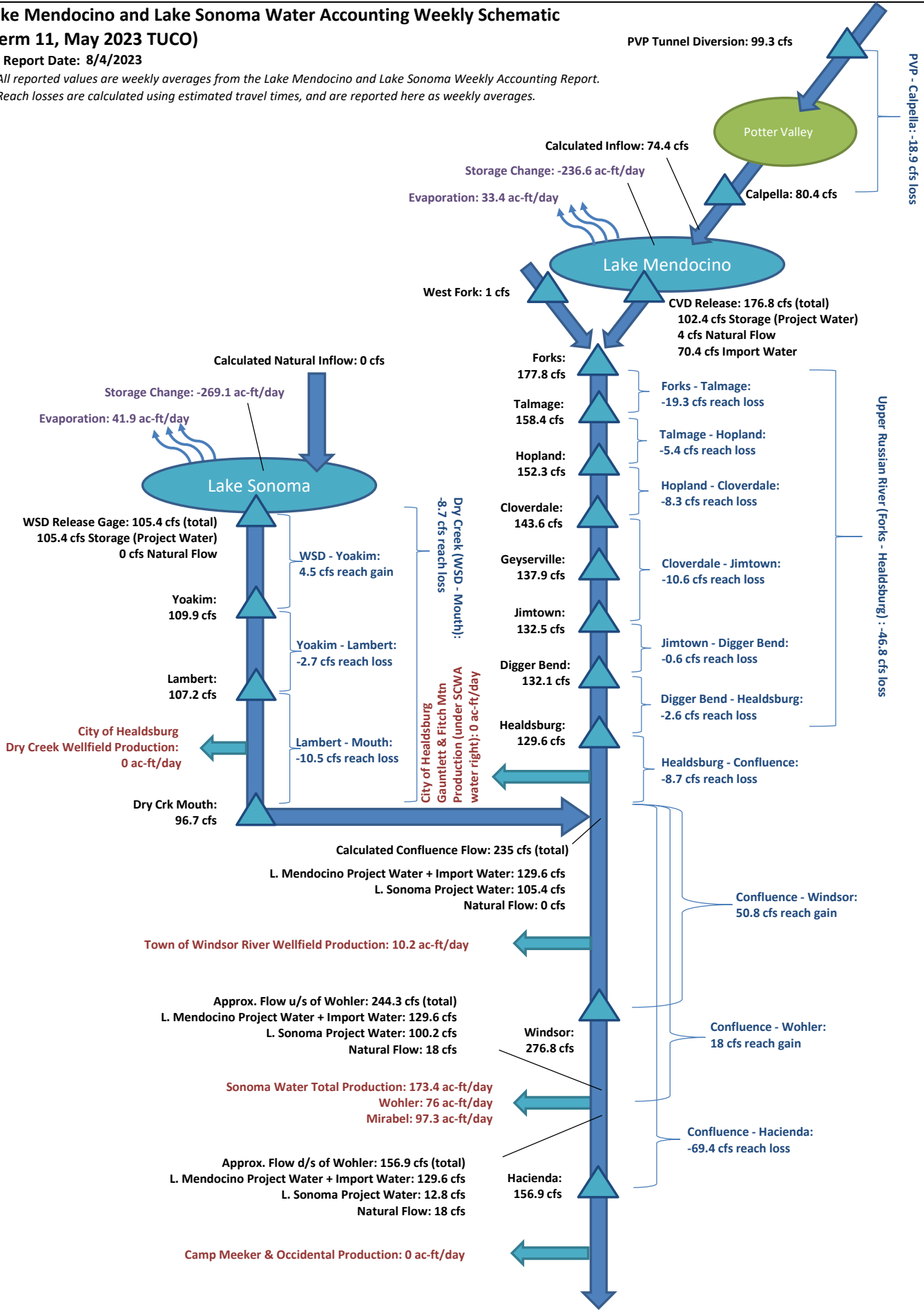
Notes:

- 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 11, May 2023 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.

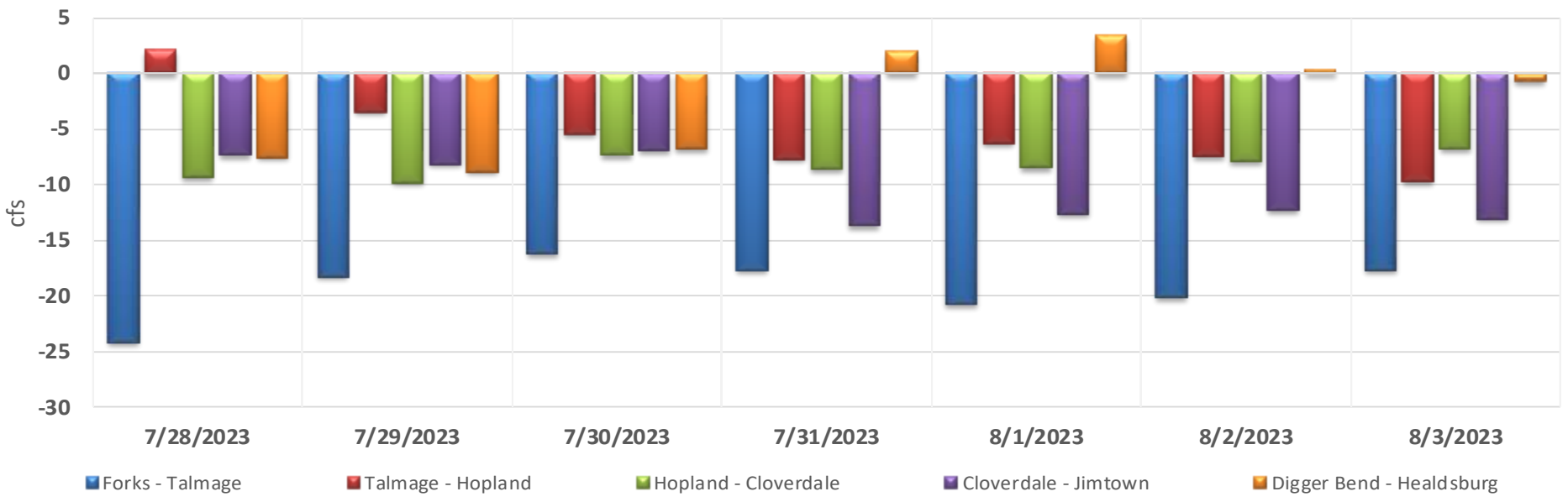




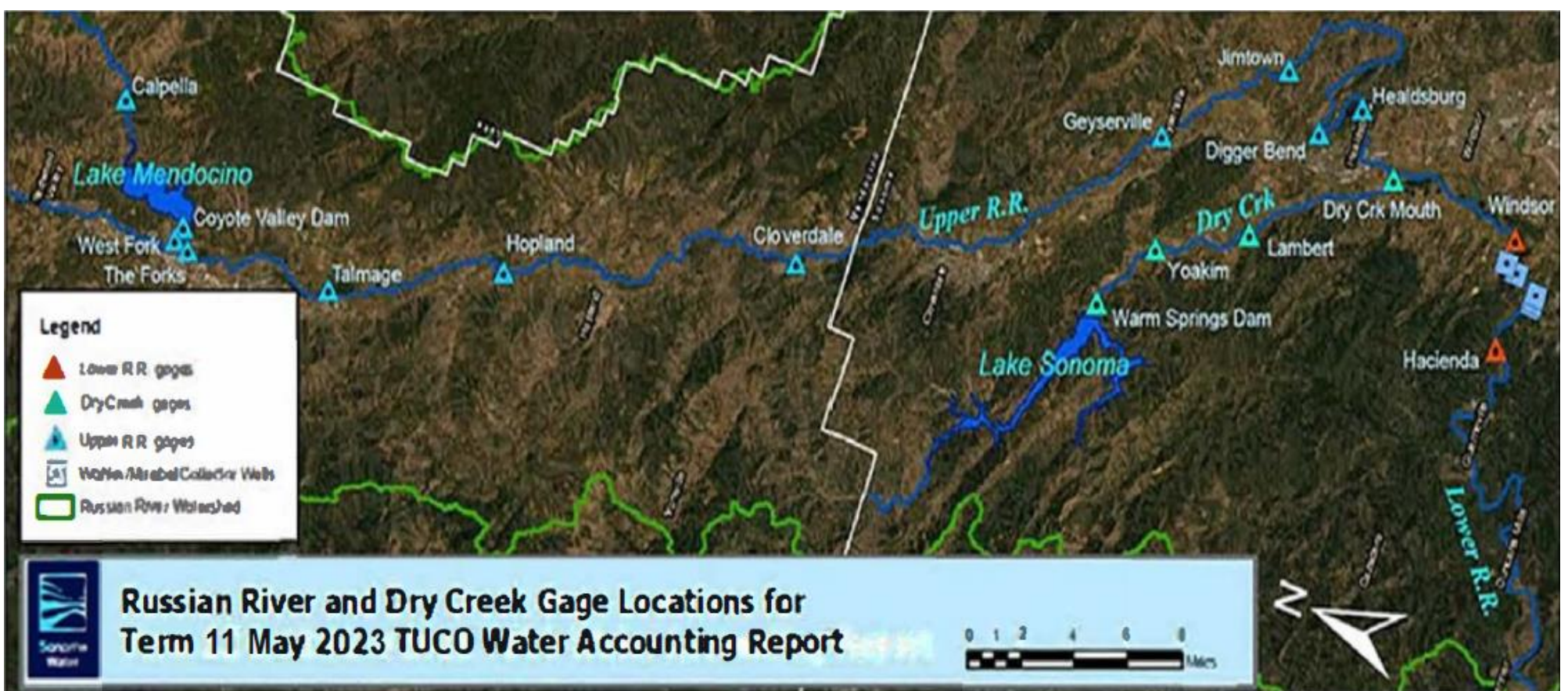
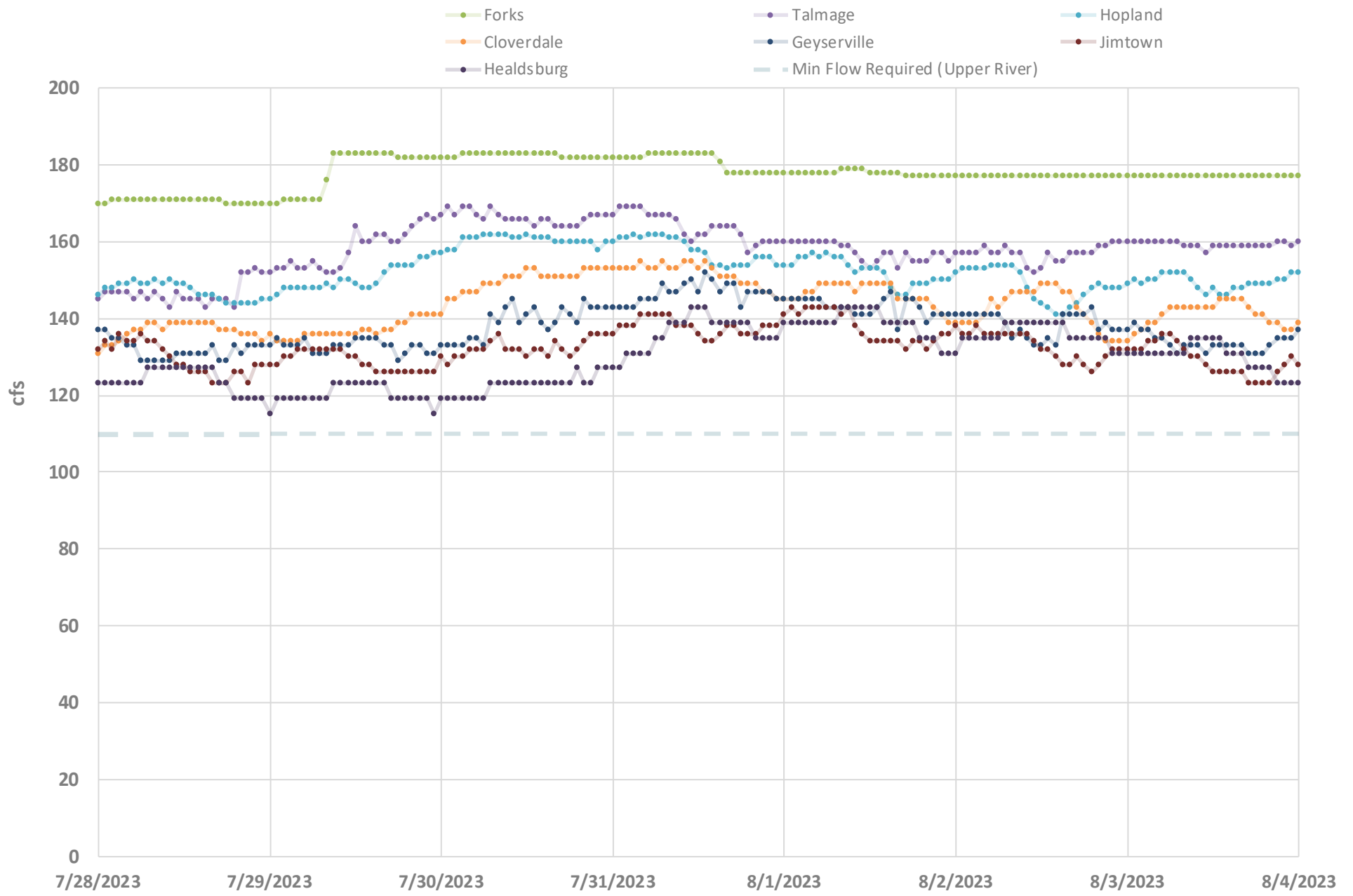
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## UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



## UPPER RUSSIAN RIVER STREAM FLOWS

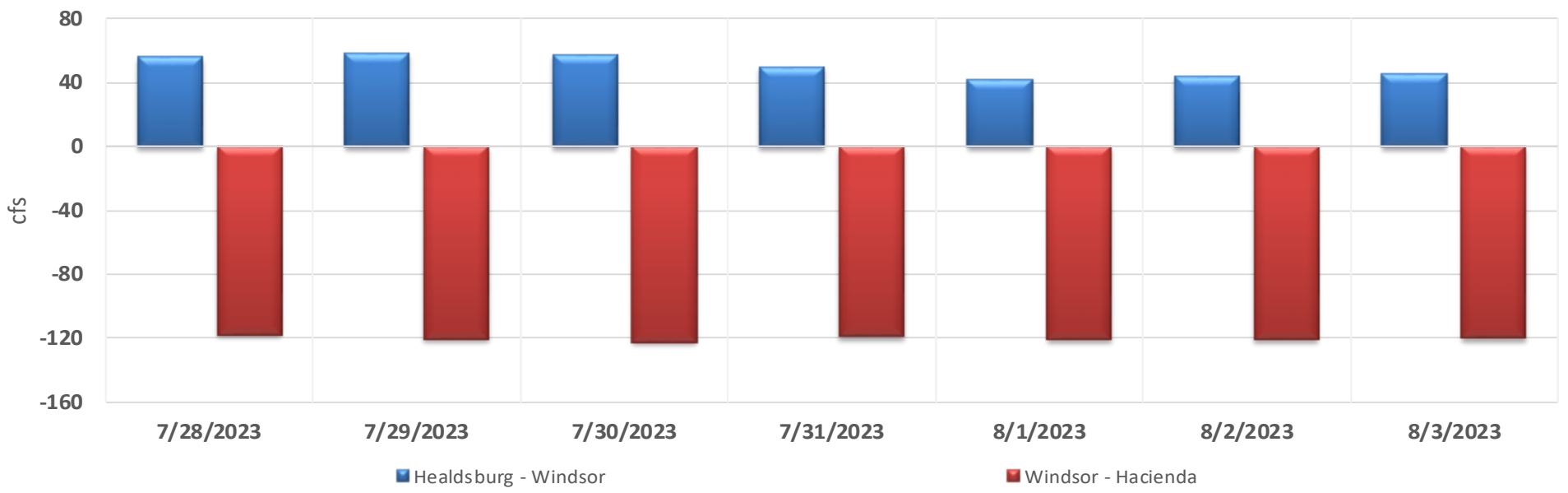




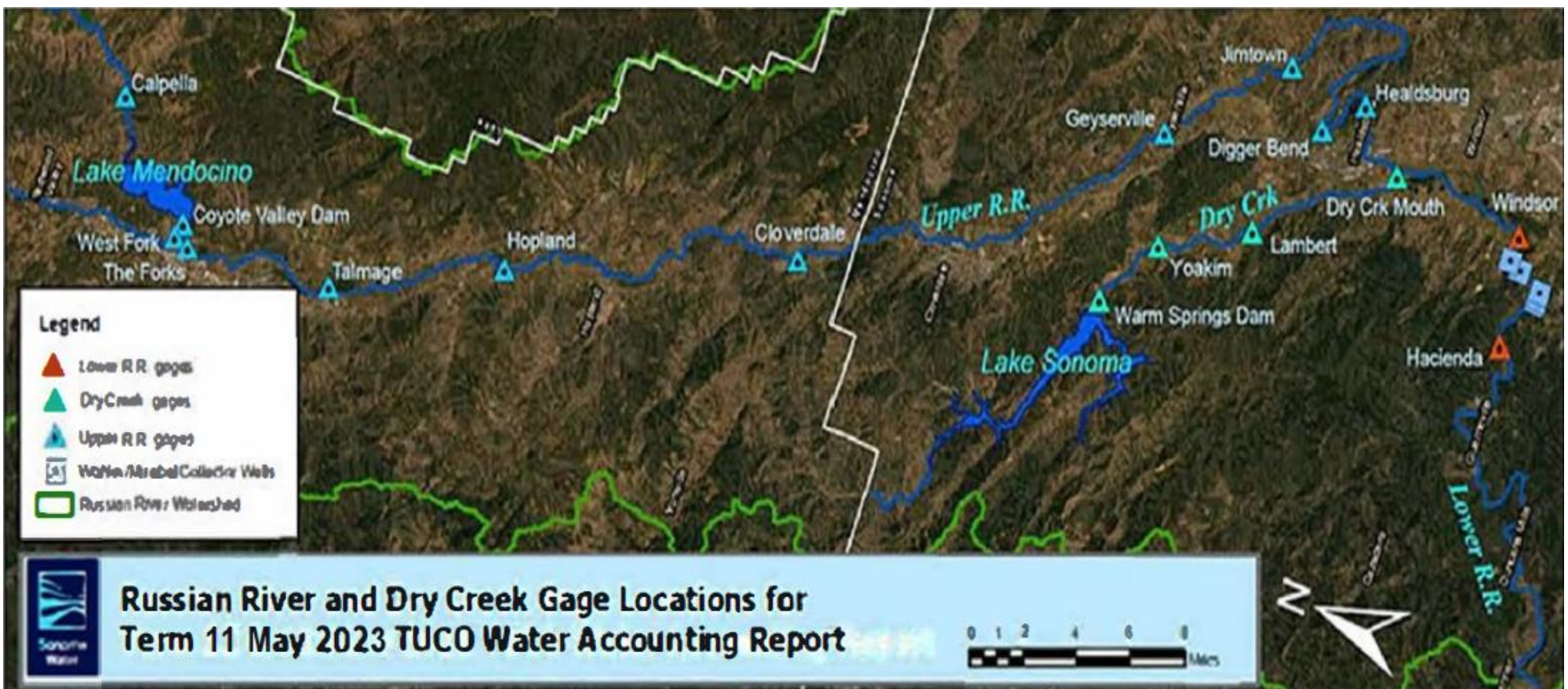
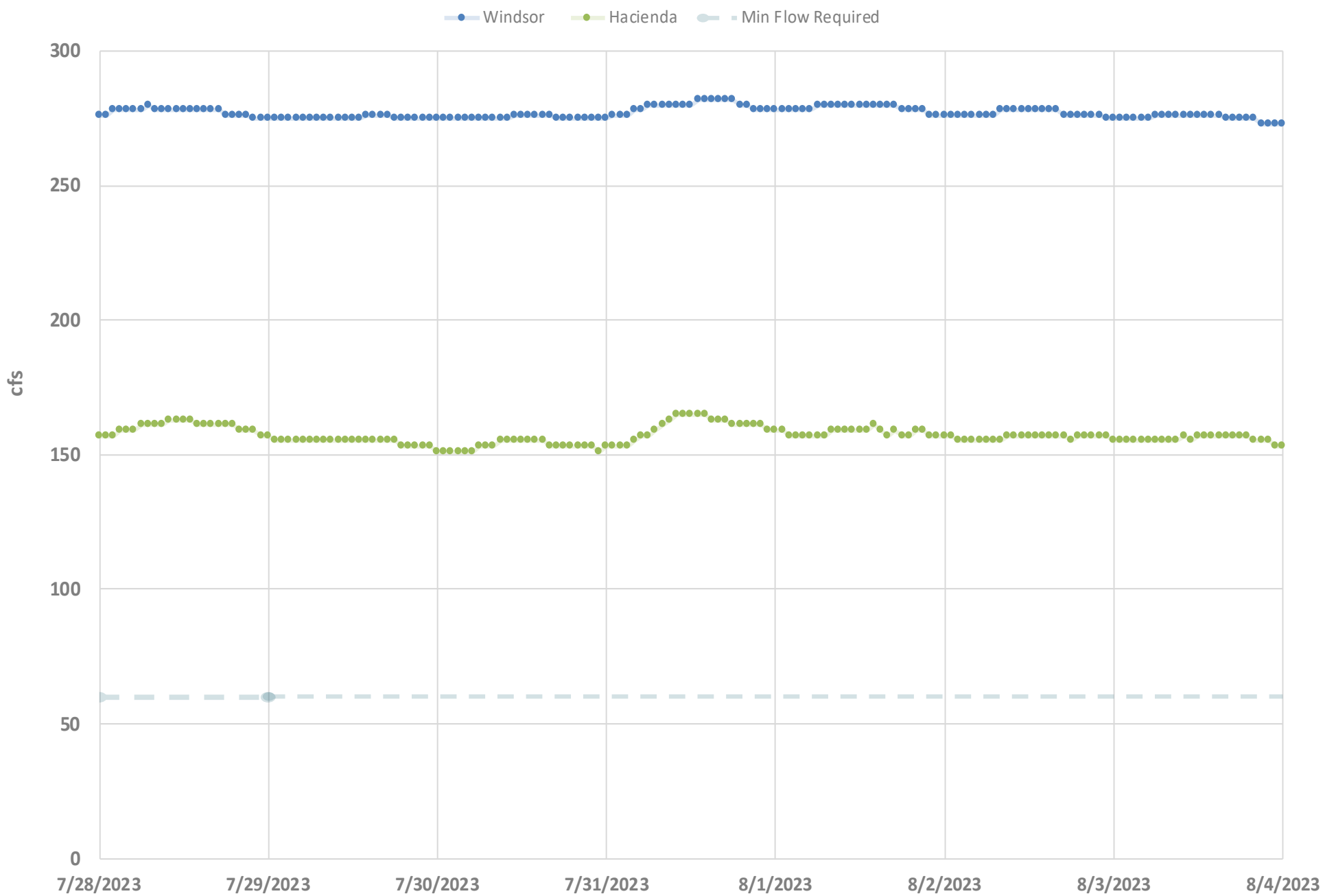
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## LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



## LOWER RUSSIAN RIVER STREAM FLOWS

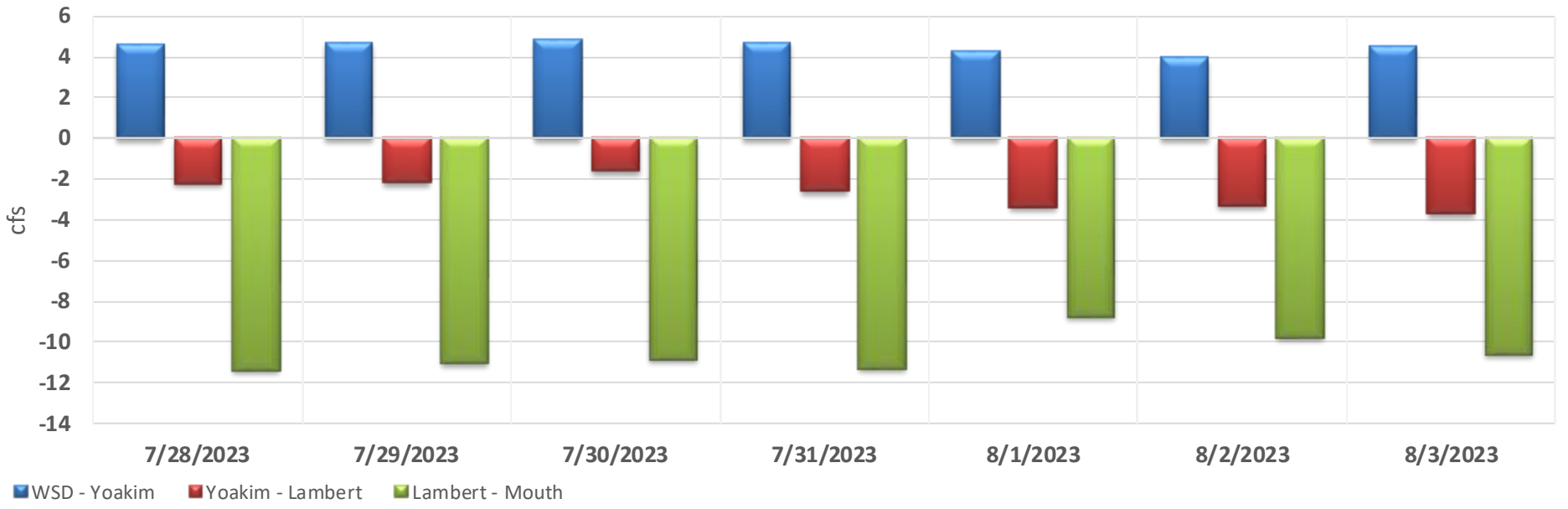




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## DRY CREEK NET REACH GAINS (+) / LOSSES (-)



## DRY CREEK STREAM FLOWS

