

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

Report Date: 8/18/2023

Units are cfs unless noted otherwise

	8/11/2023	8/12/2023	8/13/2023	8/14/2023	8/15/2023	8/16/2023	8/17/2023
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	105.0	105.0	105.0	105.0	106.0	105.0	107.0
PVID Requested Delivery	25.0	25.0	25.0	25.0	25.0	25.0	26.8
PVID Canals Actual Delivery	24.6	24.6	24.7	24.9	24.8	24.7	25.1
East Fork Release	80.0	80.0	80.0	80.0	80.0	80.0	82.0
PVID E Fork Diversions	0.4	0.4	0.3	0.1	0.2	0.3	1.7
PVID Water Use - PG&E Contract	25.0	25.0	25.0	25.0	25.0	25.0	26.8
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)	79.6	79.6	79.7	79.9	79.8	79.7	80.3
PVID Canal Net Return Flow (assumed)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
East Fork / Potter Valley Reach Analysis							
USGS E Fork @ Calpella	88.0	82.7	80.5	84.4	82.4	83.6	81.5
Net Reach Loss(-)/Gain(+)	-17.0	-22.3	-24.5	-20.6	-23.6	-21.4	-25.5
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	0.0	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

II. Lake Mendocino

Reservoir Operations

Calculated Inflow (ac-ft)	159	192	176	176	156	192	157
(cfs)	80	97	89	89	79	97	79
Natural Flow	0	17	9	9	0	17	0
Import	80	80	80	80	79	80	79
Storage Change (ac-ft)	-281.0	-245.0	-263.0	-246.0	-280.0	-245.0	-280.0
(cfs)	-142	-124	-133	-124	-141	-124	-141
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)	33.4	33.4	35.8	21.5	35.8	38.1	38.1
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	205	203	203	202	202	201	201
Storage (Project Water)	125	107	115	113	123	104	122
Natural Flow	0	17	9	9	0	17	0
Import Water	80	80	80	80	79	80	79
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage	<i>Rvr mi.</i>						
CVD Release	99.9	205	203	203	202	202	201
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	80	97	89	89	79	97	79
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
Controlling Compliance Gage							
Min Gage Flow	128	131	134	137	141	134	133
Controlling Gage	Healdsburg	Digger Bend	Digger Bend	Digger Bend	Jimtown	Digger Bend	Digger Bend
All Compliance Gages							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	205	203	203	202	201	201
Talmage (USGS 11462080)	96.1	173	173	176	175	173	170
Hopland (USGS 11462500)	84.8	163	163	165	164	163	162
Cloverdale (USGS 11463000)	70.9	153	154	157	158	156	157
Geyserville (USGS 11463500)	54.4	140	143	146	148	145	145
Jimtown (USGS 11463682)	48.5	130	135	139	142	138	139
Digger Bend (USGS 11463980)	38.2	128	131	134	137	134	133
Healdsburg (USGS 11464000)	35.6	128	136	143	153	150	147
Net Reach Loss(-)/Gain(+)							
Forks - Talmage		-32	-31	-28	-28	-27	-31
Talmage - Hopland		-10	-10	-10	-11	-10	-9
Hopland - Cloverdale		-7	-9	-7	-7	-8	-6
Cloverdale - Jimtown		-19	-19	-16	-15	-17	-18
Jimtown - Digger Bend		-1	-2	-5	-5	-4	-5
Digger Bend - Healdsburg *when Digger Bend > 400 cfs, next u/s gage (Jimtown) used		+0	+5	+11	+17	+14	+14
Upper Russian Net Reach Loss/Gain		-68	-65	-55	-49	-53	-55
CVD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss(-)/Gain(+) to Controlling Gage		-68	-70	-65	-65	-62	-69
Storage (Project Water)		-68	-70	-65	-65	-68	-69
Pass-through Water (Nat. + Imp.) + Natural		0	0	0	0	0	0
Total Pass-through Water		80	97	89	89	97	79
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)	-264.0	-263.0	-236.0	-263.0	-236.0	-263.0	-262.0
(cfs)	-133	-133	-119	-133	-119	-133	-132
Evaporation (ac-ft)	37.6	41.1	42.9	21.4	42.8	41.0	39.2
Inflow (Natural Flow)	0	0	10	0	10	0	0
WSD Release Gage	107	107	107	107	107	107	107
Storage (Project Water)	107	107	97	107	97	107	107
Natural Flow	0	0	10	0	10	0	0

V. Lower Dry Creek Reach

Minimum Instream Flow Requirement	80	80	80	80	80	80	80
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Controlling Compliance Gage

Min Gage Flow	95	94	95	96	93	92	93
Controlling Gage	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth

All Compliance Gages

	<i>Crk mi.</i>						
WSD Release	14.3	107	107	107	107	107	107
Yoakim (USGS 11465200)	11.1	109	109	109	108	107	107
Lambert (USGS 11465240)	6.8	107	107	108	107	106	106
Dry Crk Mouth (USGS 11465350)	0.1	95	94	95	96	93	93

WSD to Russian River Confluence Reach Analysis

Total Pass-through Water	0	0	10	0	10	0	0
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Net Reach Loss(-)/Gain(+)

WSD - Yoakim	+2	+2	+2	+1	+0	+0	-0
Yoakim - Lambert	-1	-1	-1	-1	-2	-1	-1
Lambert - Dry Crk Mouth	-13	-13	-12	-12	-13	-14	-14
WSD - Dry Crk Mouth	-13	-13	-11	-12	-15	-15	-14

WSD Project Water Release to Meet Min Flow Requirement

Net Reach Loss/Gain to Controlling Gage	-13	-13	-11	-12	-15	-15	-14
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes

VI. Russian River - Dry Creek Confluence

Upper Russian River Flow (Healdsburg Gage)

L. Mendocino Project Water + Import Water	128	136	143	153	156	150	147
Natural Flow	0	0	0	0	0	0	0

Dry Creek Flow (Mouth Gage)

L. Sonoma Project Water	107	107	97	107	97	107	107
Natural Flow	0	0	0	0	0	0	0

Russian River d/s of Confluence Flow

L. Mendocino Project Water + Import Water	128	136	143	153	156	150	147
L. Sonoma Project Water	107	107	97	107	97	107	107
Natural Flow	0	0	0	0	0	0	0

VII. Lower Russian River Reach

Minimum Instream Flow Requirement	60	60	60	60	60	60	60
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Controlling Compliance Gage

Min Gage Flow	142	148	151	153	151	148	145
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda

All Compliance Gages

	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	269	272	274	275	273	273
Hacienda (USGS 11467000)	21.8	142	148	151	153	148	145

Confluence to Windsor Reach Analysis

Net Reach Loss/Gain to Windsor Gage	+47	+42	+39	+29	+26	+29	+33
L. Mendocino Project Water + Import Water	128	136	143	153	156	150	147
L. Sonoma Project Water	102	102	92	102	92	102	102
Natural Flow	47	42	39	29	26	29	33

Confluence to SCWA Wohler Production Facility Reach Analysis

Approx. Flow u/s of Wohler	227	235	234	252	243	239	234
Net Reach Loss(-)/Gain(+)	+5	+5	-4	+4	-6	-3	-6
L. Mendocino Project Water + Import Water	128	136	143	153	156	150	147
L. Sonoma Project Water	102	102	92	102	92	102	102
Natural Flow	5	5	0	4	0	0	0

Confluence to Hacienda (Guerneville) Reach Analysis

Net Reach Loss(-)/Gain(+)	-80	-82	-88	-95	-98	-94	-95
L. Mendocino Project Water + Import Water	128	136	143	153	156	150	147
L. Sonoma Project Water	17	15	9	3	0	11	13
Natural Flow	5	5	0	4	0	0	0

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

Lower Russian River

Sonoma Water Total	169.5	173.3	165.0	195.6	183.0	180.2	175.5
Wohler	69.0	70.0	78.6	78.8	76.3	78.8	74.3
Mirabel	100.4	103.3	86.4	116.8	106.7	101.4	101.2
Town of Windsor River Wellfield	10.0	10.0	9.8	10.1	10.1	10.9	10.4
Camp Meeker & Occidental	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Upper Russian River

City of Healdsburg							
Gauntlett & Fitch Mtn	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Dry Creek

City of Healdsburg							
Dry Creek Wellfield	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes:

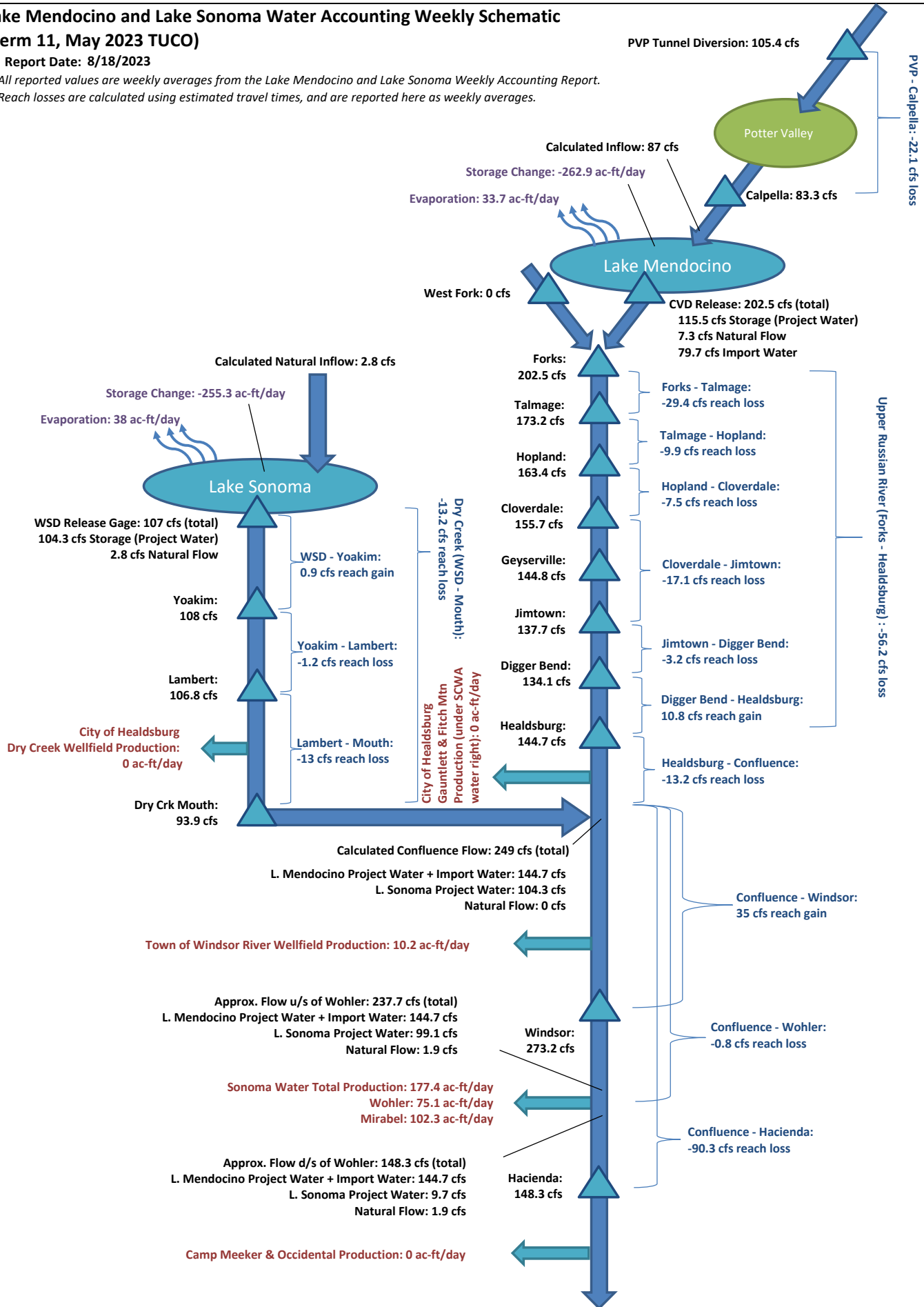
- Water Accounting for the Lower Russian River and Dry Creek is an analysis that approximates the current conditions based on the methodology in Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

Lake Mendocino and Lake Sonoma Water Accounting Weekly Schematic

(Term 11, May 2023 TUCO)

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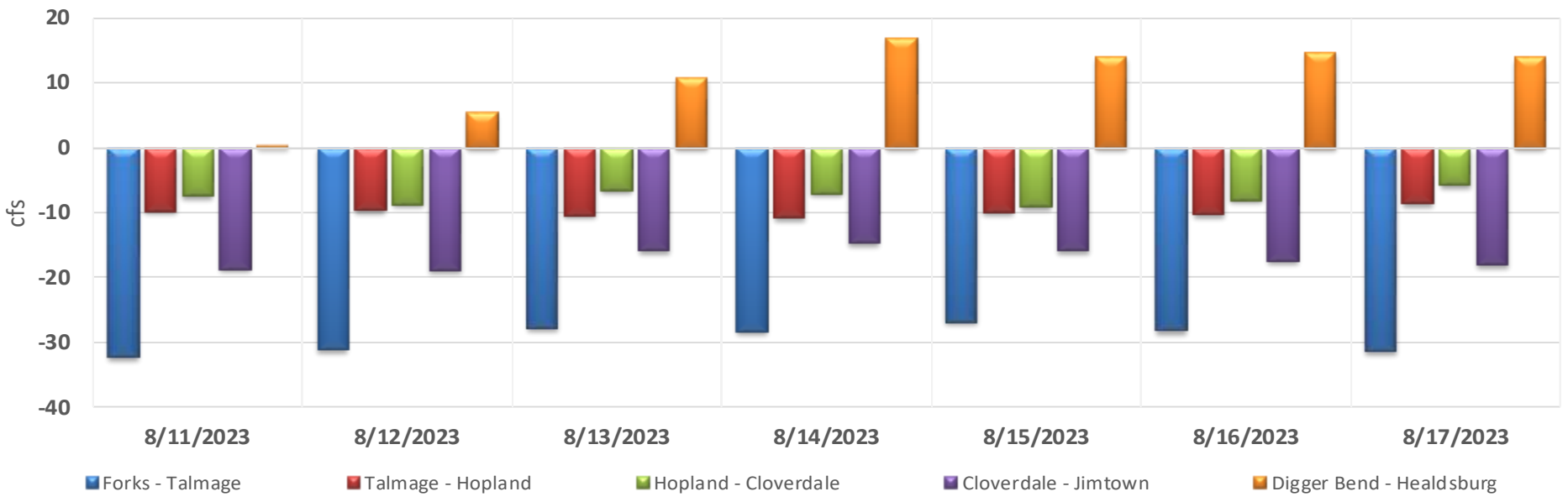
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



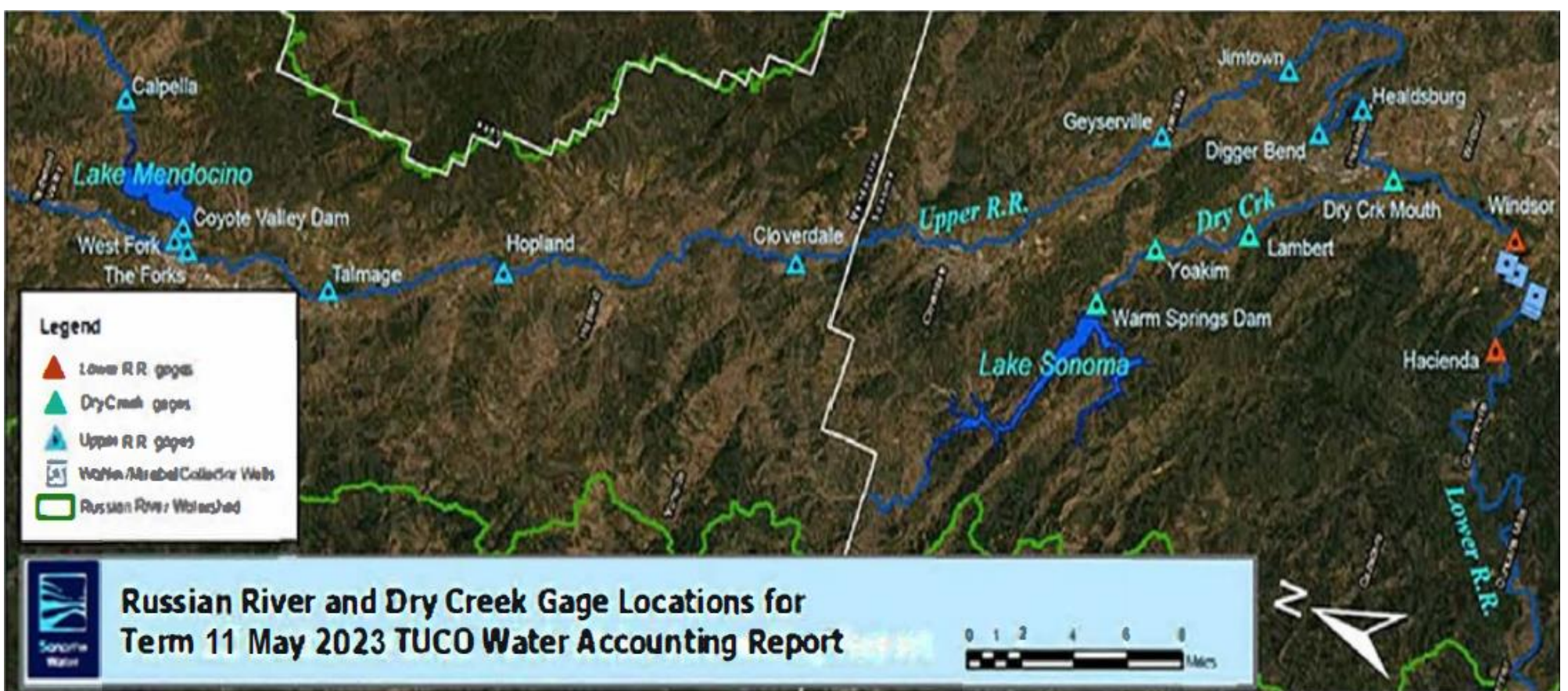
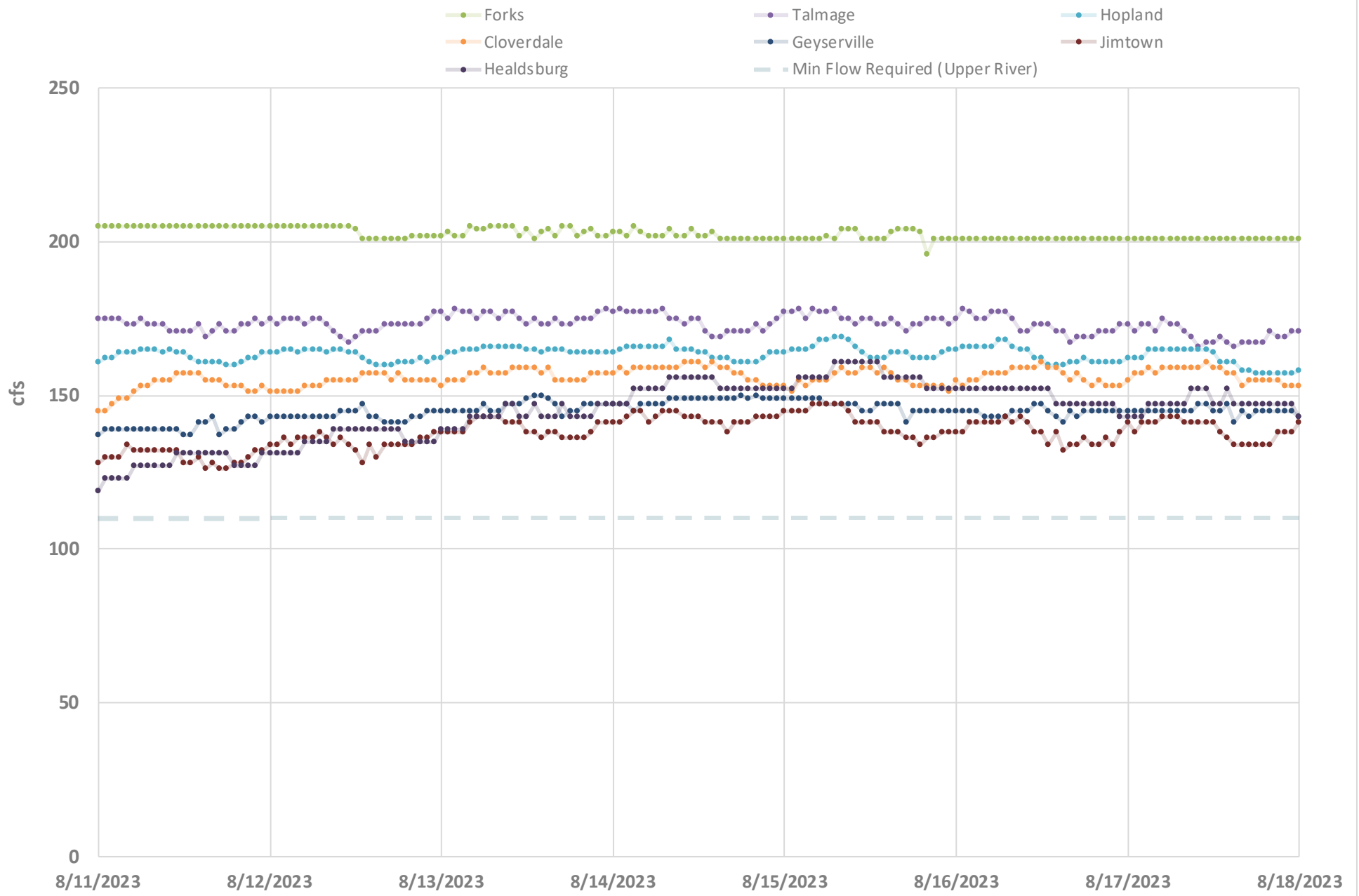
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UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



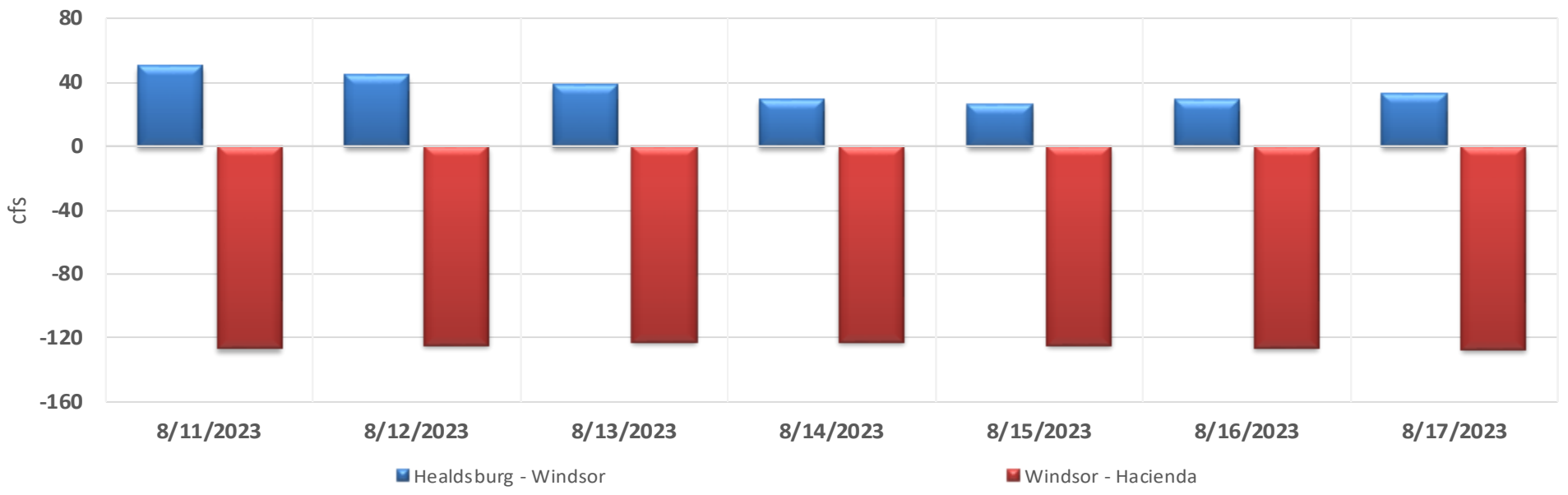
UPPER RUSSIAN RIVER STREAM FLOWS



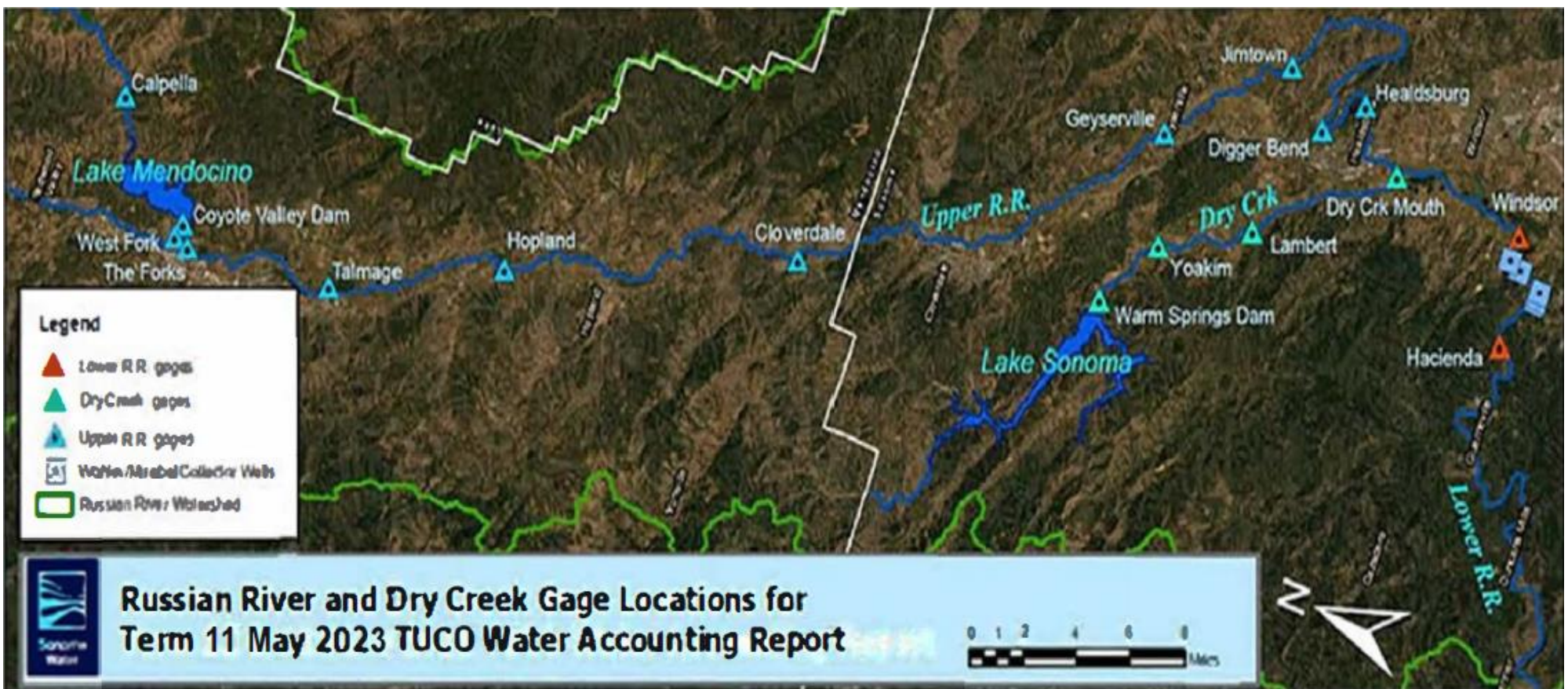
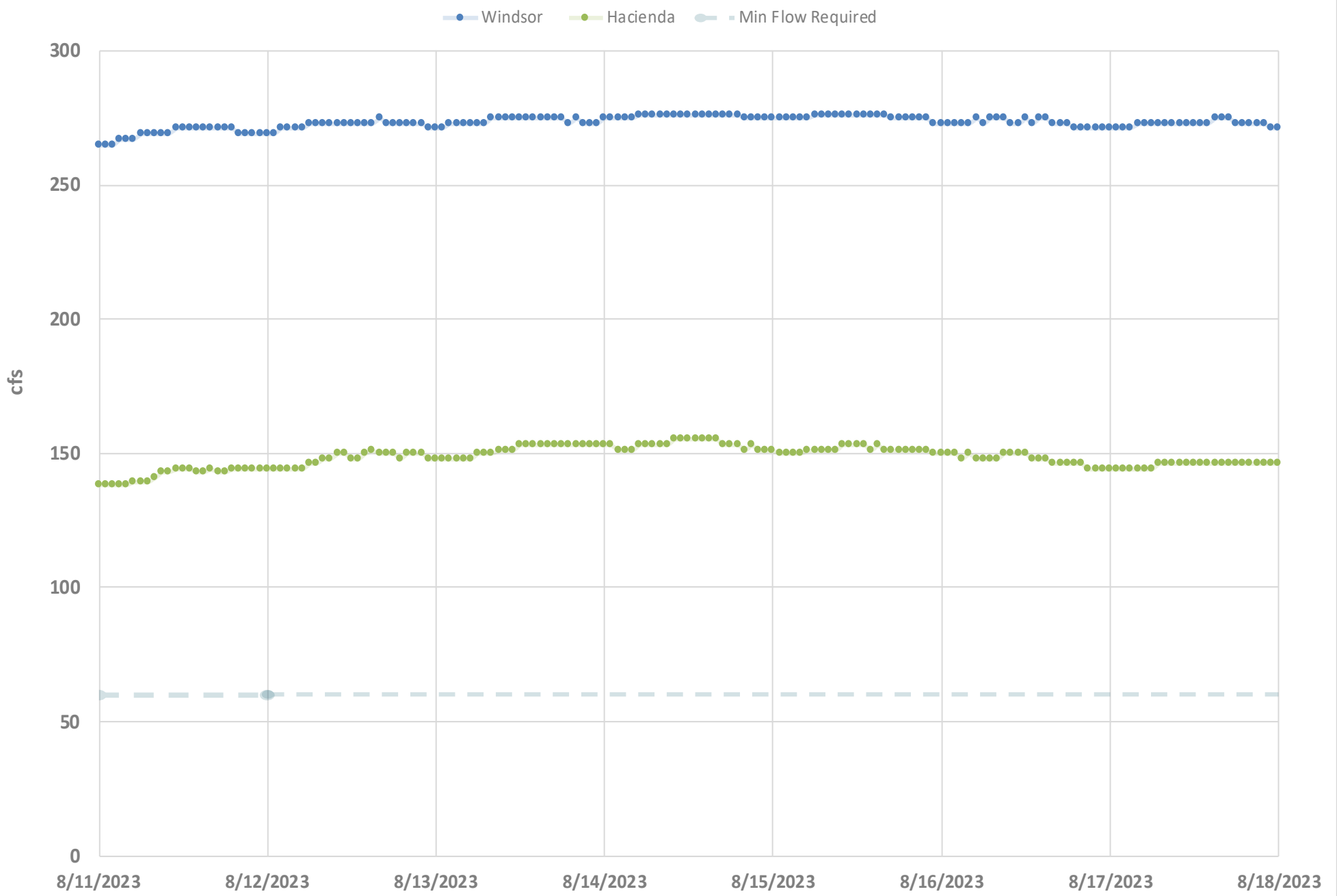
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LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



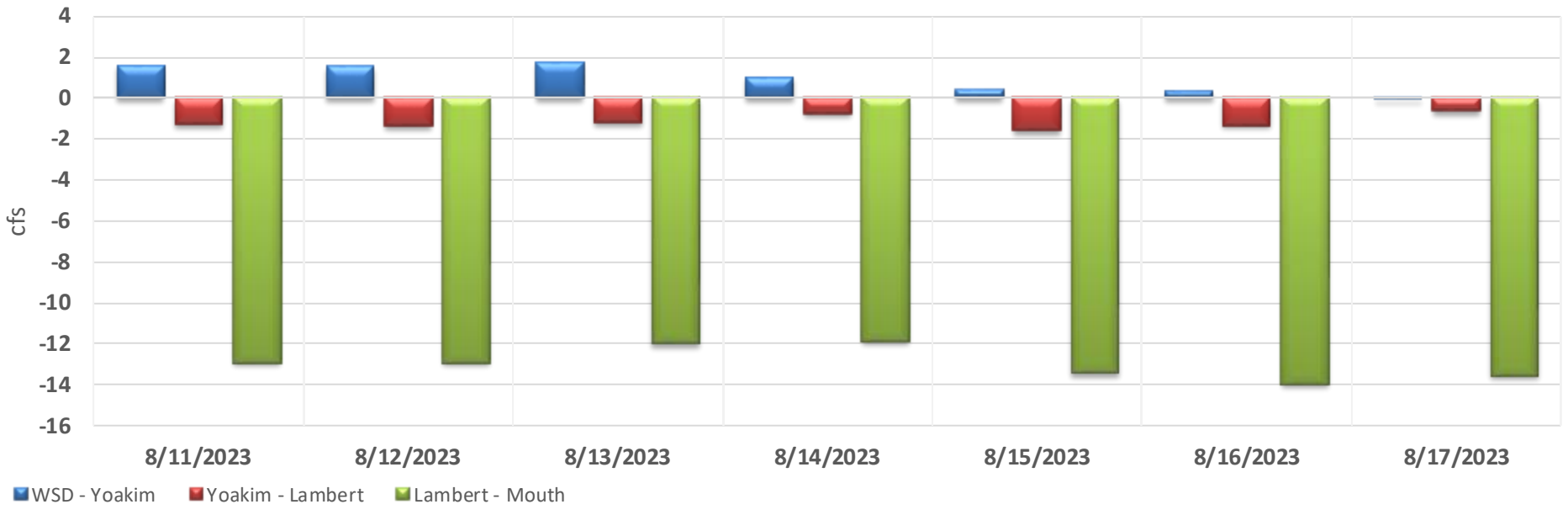
LOWER RUSSIAN RIVER STREAM FLOWS



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



DRY CREEK STREAM FLOWS

