

Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 12, Dec 2023 TUCO)

Report Date: 5/24/2024

Units are cfs unless noted otherwise

	5/17/2024	5/18/2024	5/19/2024	5/20/2024	5/21/2024	5/22/2024	5/23/2024
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	130.0	130.0	130.0	130.0	130.0	130.0	113.0
PVID Requested Delivery	5.0	5.0	5.0	5.0	5.0	5.0	7.0
PVID Canals Actual Delivery	9.6	9.6	9.7	9.9	9.9	10.0	10.1
East Fork Release	120.0	120.0	120.0	120.0	120.0	120.0	103.0
PVID E Fork Diversions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PVID Water Use - PG&E Contract	9.6	9.6	9.7	9.9	9.9	10.0	10.1
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)	120.0	120.0	120.0	120.0	120.0	120.0	103.0
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	162.6	162.4	163.3	159.6	153.8	150.1	143.4
Net Reach Loss(-)/Gain(+)	+32.6	+32.4	+33.3	+29.6	+23.8	+20.1	+30.4
Unimpaired Natural Flow @ Calpella (est.)	13.3	13.0	12.3	11.9	10.4	10.1	8.2
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0

II. Lake Mendocino

Reservoir Operations							
Calculated Inflow (ac-ft)	337	313	312	330	314	266	271
(cfs)	170	158	157	167	158	134	137
Natural Flow	45	33	32	42	33	9	31
Import	125	125	125	125	125	125	106
Storage Change (ac-ft)	+0.0	-35.0	-36.0	-18.0	-36.0	-89.0	-107.0
(cfs)	+0	-18	-18	-9	-18	-45	-54
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)	25.9	27.0	27.0	27.0	29.0	28.0	27.0
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	157	162	162	162	162	165	177
Storage (Project Water)	0	4	5	0	4	31	40
Natural Flow	38	33	32	42	33	9	31
Import Water	118	125	125	125	125	125	106
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage	Rvr mi.						
CVD Release	99.9	157	162	162	162	165	177
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	157	158	157	167	158	134	137
Project Water Release Required	No	No	No	No	No	No	No

III. Upper Russian River Reach

Minimum Instream Flow Requirement		185	185	185	185	185	185
Controlling Compliance Gage							
Min Gage Flow		185	189	187	185	184	193
Controlling Gage		Forks	Forks	Forks	Forks	Forks	Forks
All Compliance Gages		Rvr mi.					
Forks	(CVD + USGS 11461000)	99.0	185	189	187	185	184
Talmage	(USGS 11462080)	96.1	192	197	195	193	191
Hopland	(USGS 11462500)	84.8	243	250	247	244	237
Cloverdale	(USGS 11463000)	70.9	310	313	310	304	294
Geyserville	(USGS 11463500)	54.4	353	347	347	337	329
Jimtown	(USGS 11463682)	48.5	408	401	396	388	379
Digger Bend	(USGS 11463980)	38.2	>400 cfs	>400 cfs	>400 cfs	391	382
Healdsburg	(USGS 11464000)	35.6	420	412	409	399	391
Net Reach Loss(-)/Gain(+)							
Forks - Talmage		+8	+8	+7	+7	+7	+14
Talmage - Hopland		+52	+53	+52	+50	+46	+46
Hopland - Cloverdale		+66	+65	+62	+60	+54	+53
Cloverdale - Jimtown		+94	+92	+82	+80	+78	+76
Jimtown - Digger Bend		n/d	n/d	n/d	+2	+2	+2
Digger Bend - Healdsburg	*when Digger Bend > 400 cfs, next u/s gage (Jimtown) used	+10	+8	+11	+6	+7	+9
Upper Russian Net Reach Loss/Gain		+230	+226	+214	+205	+194	+199
CVD Project Water Release to Meet Min Flow Requirement							
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		157	158	157	167	158	134
Project Water Release Required		No	No	Yes	No	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).

		5/17/2024	5/18/2024	5/19/2024	5/20/2024	5/21/2024	5/22/2024	5/23/2024
IV. Lake Sonoma								
Lake Sonoma								
Storage Change (ac-ft)		-138.0	-138.0	-138.0	-138.0	-221.0	-165.0	-248.0
(cfs)		-70	-70	-70	-70	-111	-83	-125
Evaporation (ac-ft)		32.1	28.8	41.6	41.6	46.4	44.8	44.8
Inflow (Natural Flow)		46	43	49	49	10	35	0
WSD Release Gage		99	98	98	98	98	96	97
Storage (Project Water)		53	55	49	49	88	61	97
Natural Flow		46	43	49	49	10	35	0
V. Lower Dry Creek Reach								
Minimum Instream Flow Requirement		80	80	80	80	80	80	80
Controlling Compliance Gage								
Min Gage Flow		88	88	87	87	87	96	97
Controlling Gage		Yoakim	Yoakim	Yoakim	Yoakim	Yoakim	WSD Release	WSD Release
All Compliance Gages		<i>Crk mi.</i>						
WSD Release	<i>14.3</i>	99	98	98	98	98	96	97
Yoakim (USGS 11465200)	<i>11.1</i>	88	88	87	87	87	99	113
Lambert (USGS 11465240)	<i>6.8</i>	127	127	126	125	124	123	123
Dry Crk Mouth (USGS 11465350)	<i>0.1</i>	157	157	157	157	157	157	157
WSD to Russian River Confluence Reach Analysis								
Total Pass-through Water		46	43	49	49	10	35	0
Net Reach Loss(-)/Gain(+)								
WSD - Yoakim		-13	-13	-14	-14	-14	-2	+12
Yoakim - Lambert		+38	+38	+38	+38	+38	+26	+10
Lambert - Dry Crk Mouth		+30	+30	+31	+32	+33	+34	+34
WSD - Dry Crk Mouth		+56	+56	+56	+56	+56	+58	+56
WSD Project Water Release to Meet Min Flow Requirement								
Net Reach Loss/Gain to Controlling Gage		-13	-13	-14	-14	-14	+0	+0
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		118	129	130	125	129	156	145
Natural Flow		268	259	247	246	228	208	228
Dry Creek Flow (Mouth Gage)								
L. Sonoma Project Water		53	55	49	49	88	61	97
Natural Flow		104	102	108	108	69	96	60
Russian River d/s of Confluence Flow		577	569	566	556	548	538	530
L. Mendocino Project Water + Import Water		118	129	130	125	129	156	145
L. Sonoma Project Water		53	55	49	49	88	61	97
Natural Flow		372	361	355	355	297	304	288
VII. Lower Russian River Reach								
Minimum Instream Flow Requirement		125	125	125	125	125	125	125
Controlling Compliance Gage								
Min Gage Flow		586	571	561	548	535	520	502
Controlling Gage		Windsor	Windsor	Windsor	Windsor	Windsor	Windsor	Hacienda
All Compliance Gages		<i>Rvr mi.</i>						
Windsor (USGS 11465390)	<i>26.6</i>	586	571	561	548	535	520	505
Hacienda (USGS 11467000)	<i>21.8</i>	599	582	568	552	538	521	502
Confluence to Windsor Reach Analysis								
Net Reach Loss/Gain to Windsor Gage		+9	+2	-6	-10	-14	-20	-26
L. Mendocino Project Water + Import Water		118	129	130	125	129	156	145
L. Sonoma Project Water		49	51	44	44	84	56	92
Natural Flow		381	363	349	345	283	284	262
Confluence to SCWA Wohler Production Facility Reach Analysis								
Approx. Flow u/s of Wohler		662	641	635	611	602	586	566
Net Reach Loss(-)/Gain(+)		+85	+73	+70	+54	+55	+49	+36
L. Mendocino Project Water + Import Water		118	129	130	125	129	156	145
L. Sonoma Project Water		49	51	44	44	84	56	92
Natural Flow		457	433	425	409	351	353	324
Confluence to Hacienda (Guerneville) Reach Analysis								
Net Reach Loss(-)/Gain(+)		+22	+14	+2	-4	-9	-17	-28
L. Mendocino Project Water + Import Water		118	129	130	125	129	156	145
L. Sonoma Project Water		0	0	0	0	20	0	28
Natural Flow		443	425	401	395	351	343	324
VIII. Water Production under Sonoma Water Water Rights (ac-ft)								
Lower Russian River								
Sonoma Water Total		124.4	116.6	134.8	116.4	127.0	129.7	127.6
Wohler		51.8	68.0	82.3	67.7	64.9	66.8	81.1
Mirabel		72.5	48.6	52.6	48.7	62.1	63.0	46.5
Town of Windsor River Wellfield		8.4	8.2	8.2	8.7	8.2	9.2	9.3
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

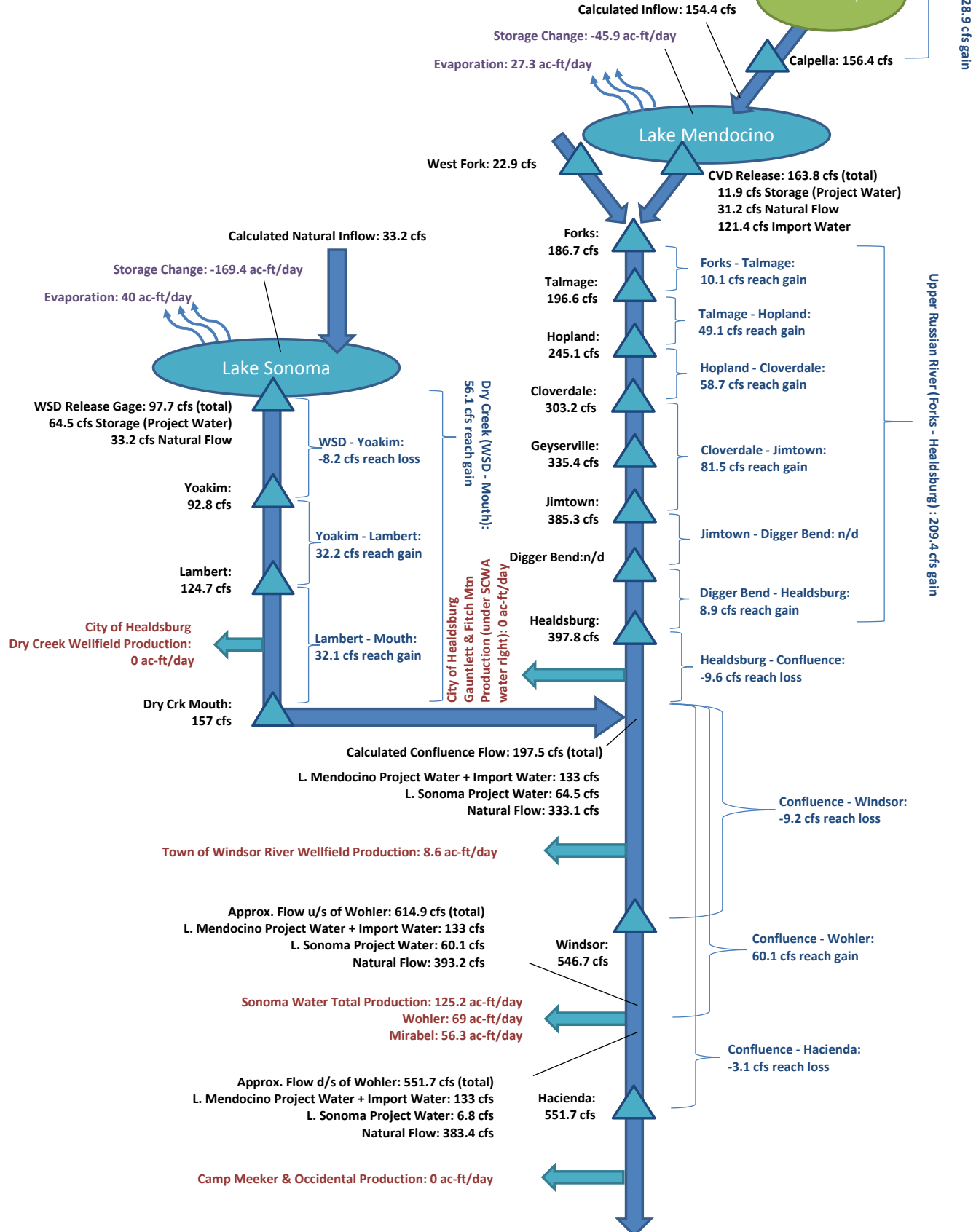
Notes:

- 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 12, December 2023 TUCO)

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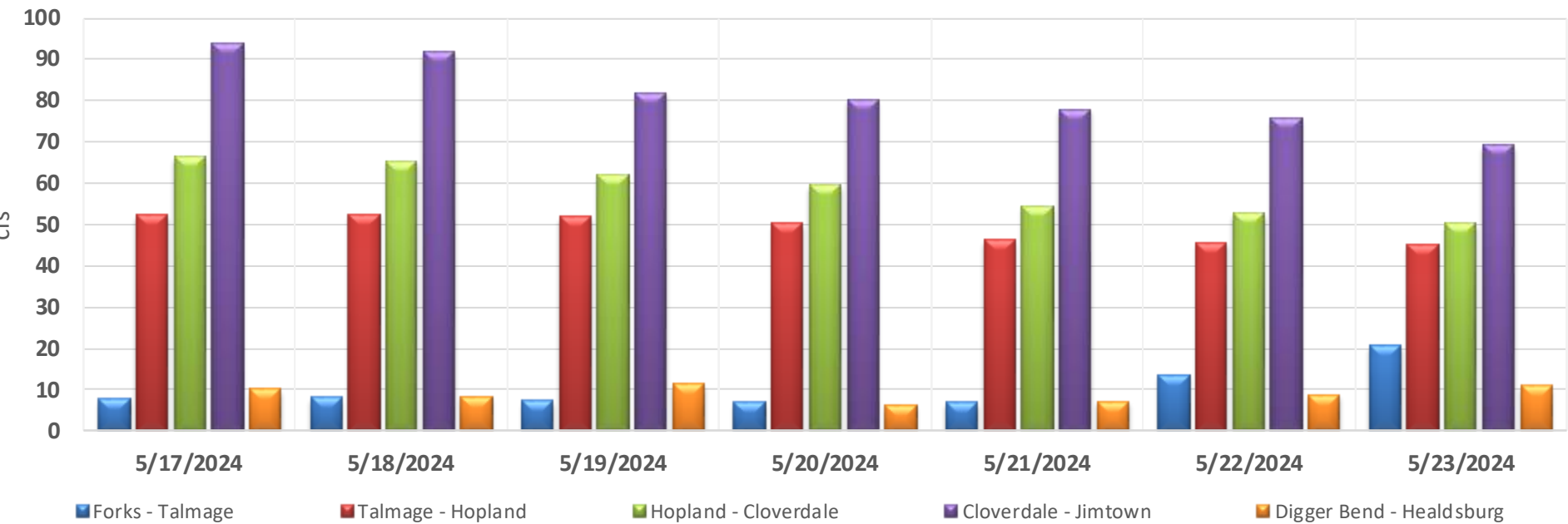
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



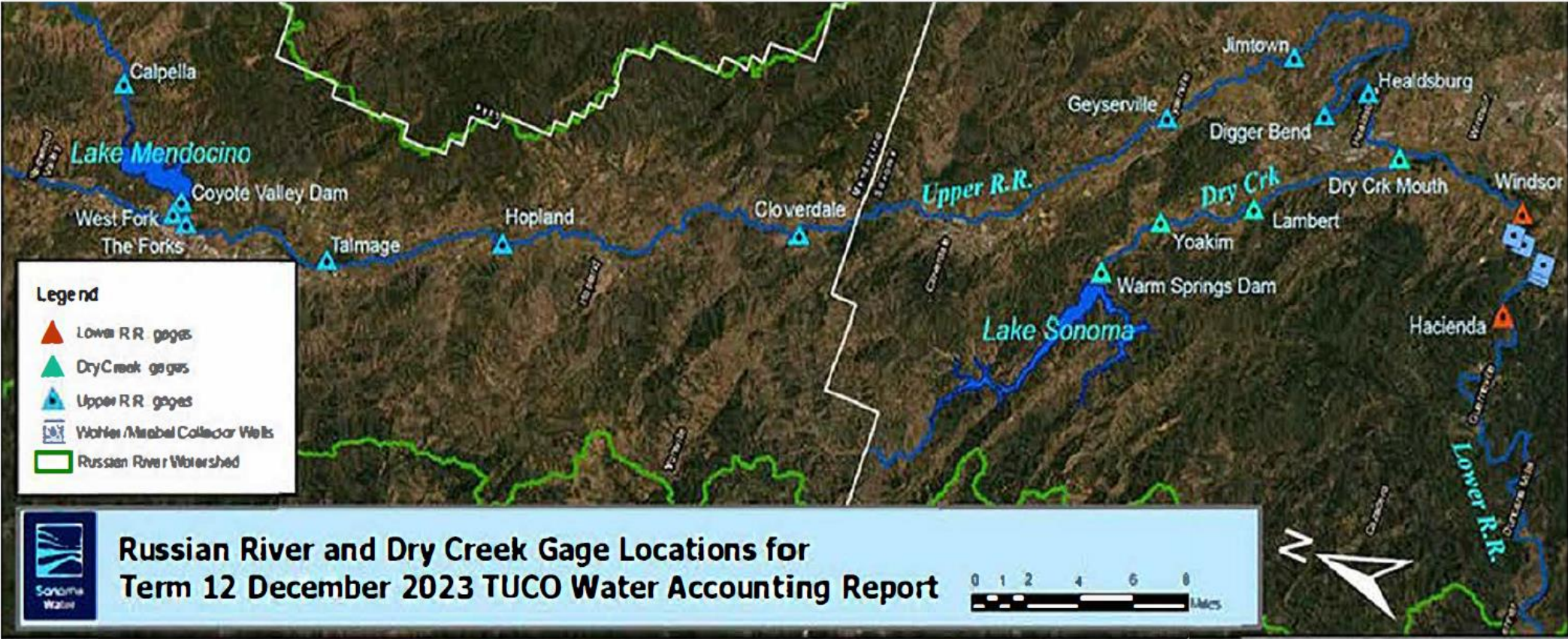
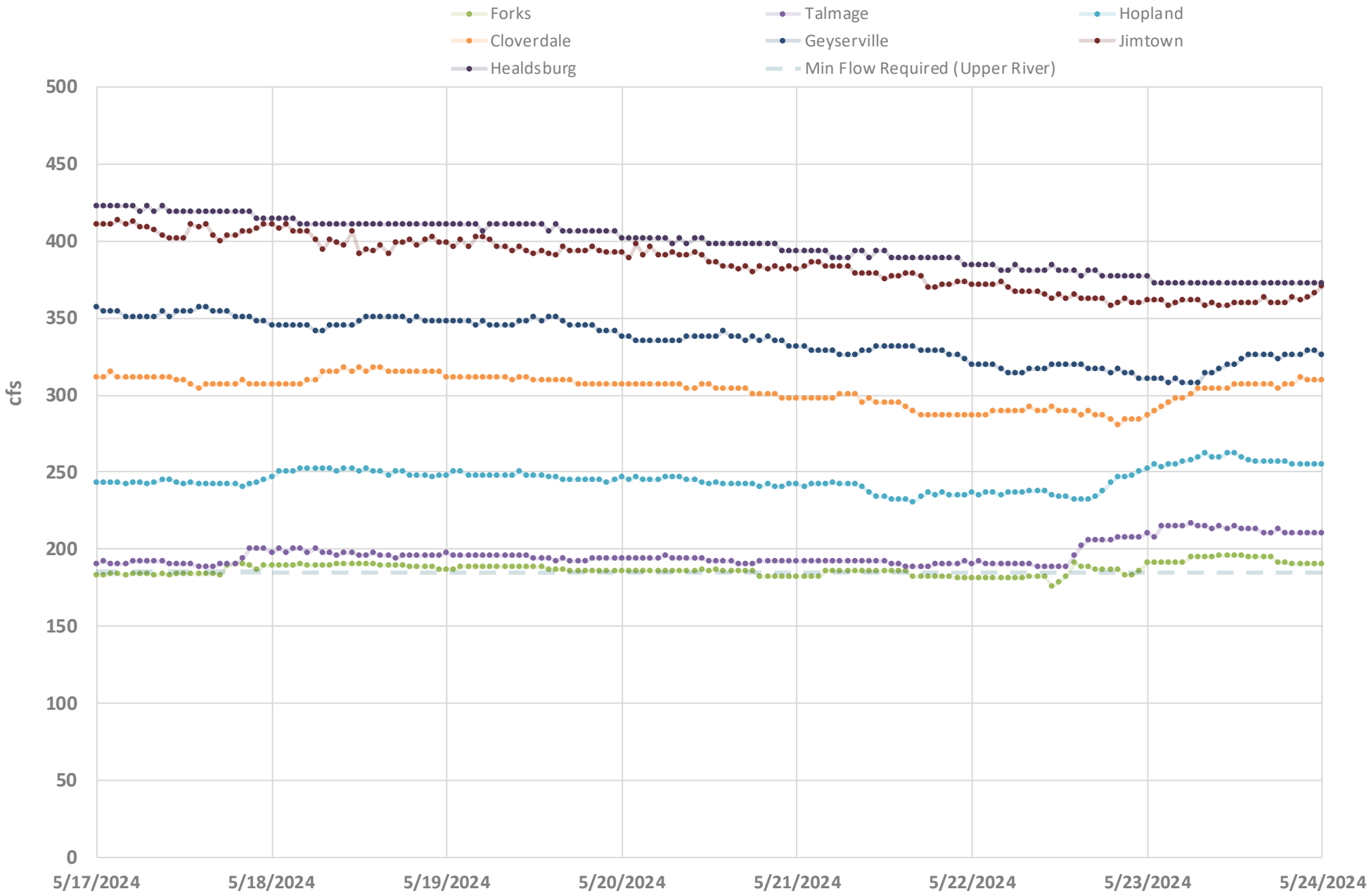
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UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



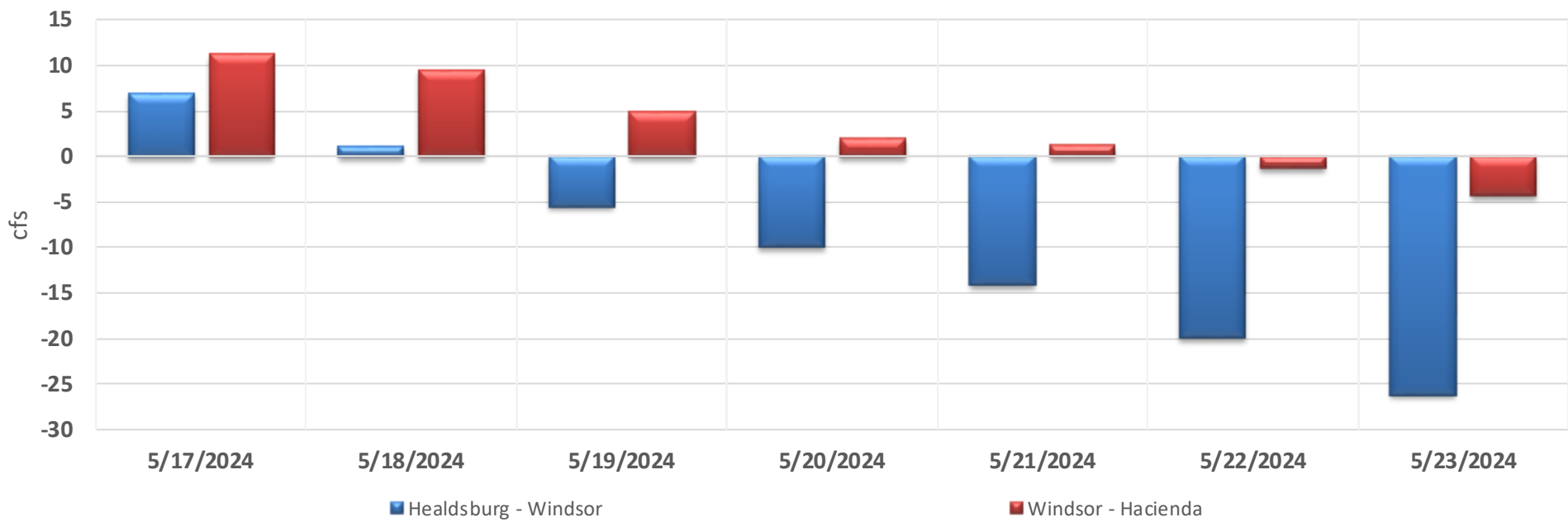
UPPER RUSSIAN RIVER STREAM FLOWS



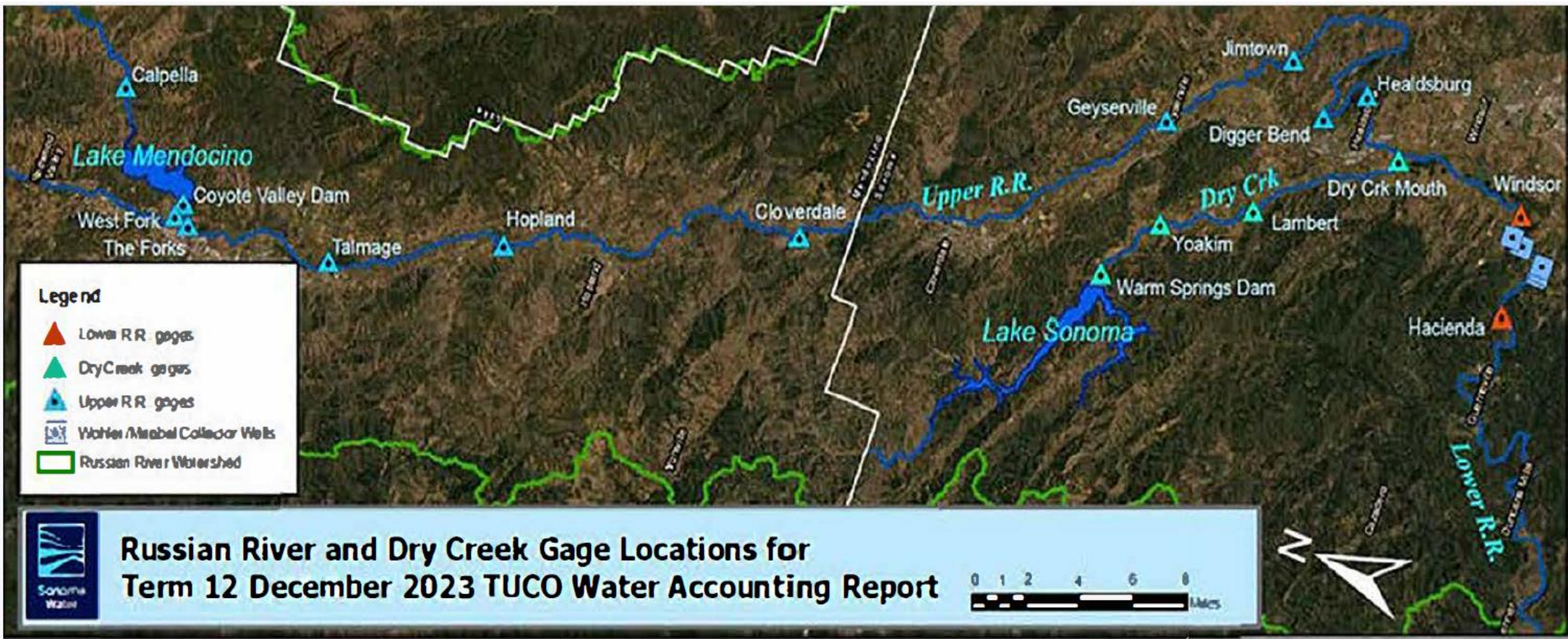
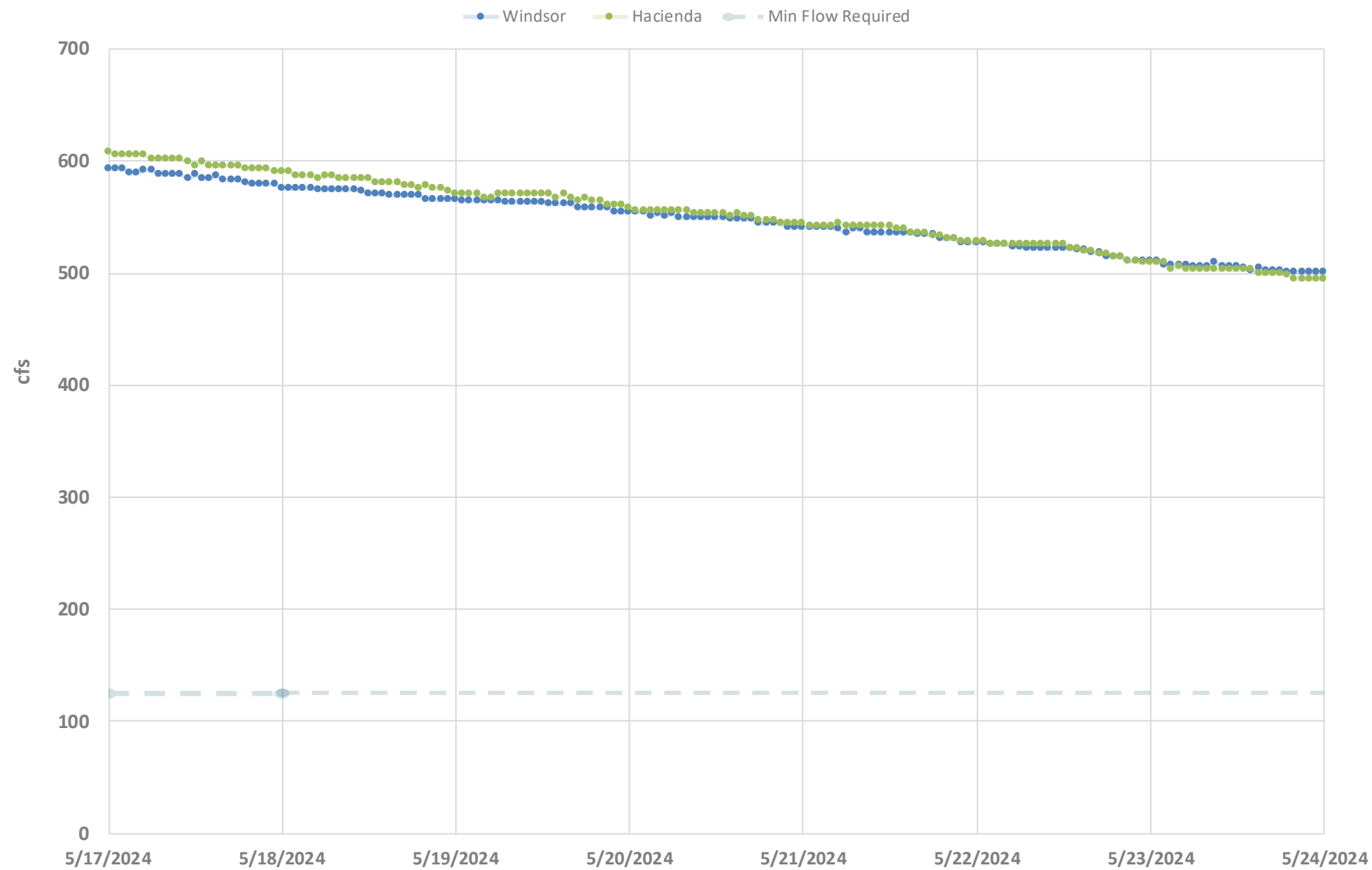
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LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



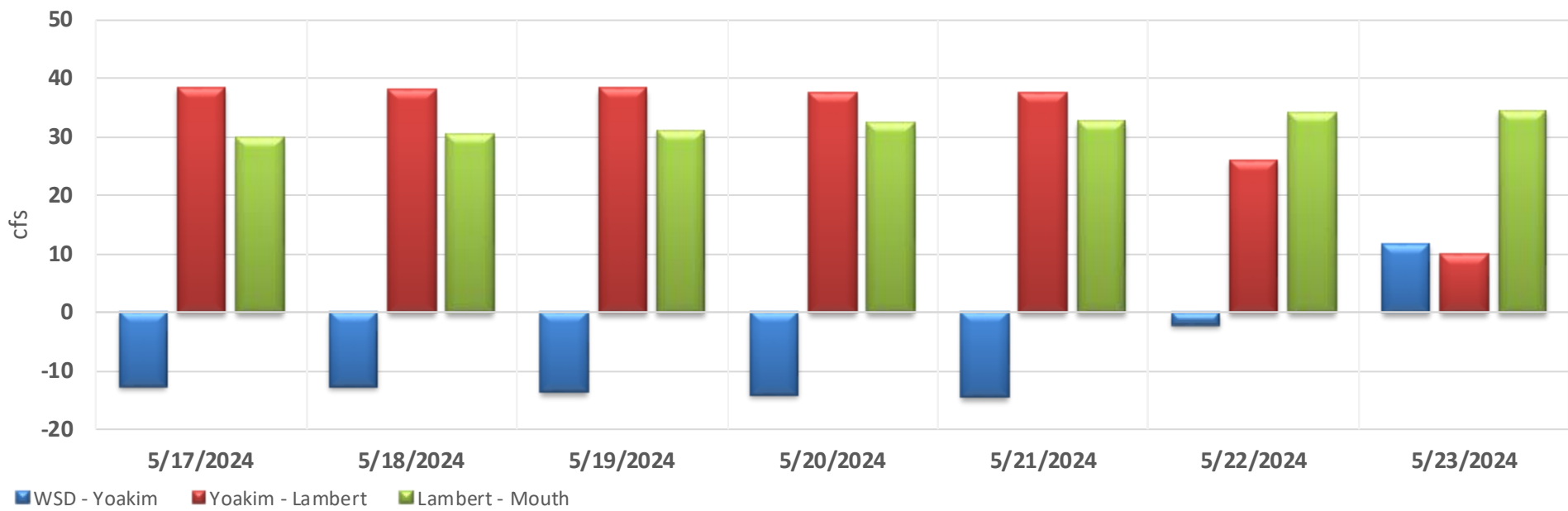
LOWER RUSSIAN RIVER STREAM FLOWS



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



DRY CREEK STREAM FLOWS

