

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

Report Date: 9/29/2023

Units are cfs unless noted otherwise

	9/22/2023	9/23/2023	9/24/2023	9/25/2023	9/26/2023	9/27/2023	9/28/2023
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	69.0	67.0	70.0	74.0	68.0	65.0	65.0
PVID Requested Delivery	30.0	27.0	29.3	34.0	27.6	24.0	24.0
PVID Canals Actual Delivery	17.1	17.1	17.4	16.1	14.5	14.1	14.2
East Fork Release	52.0	50.0	53.0	58.0	54.0	51.0	51.0
PVID E Fork Diversions	12.9	9.9	11.8	17.9	13.1	9.9	9.9
PVID Water Use - PG&E Contract	30.0	27.0	29.3	34.0	27.6	24.0	24.0
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)	39.1	40.1	41.2	40.1	40.9	41.1	41.2
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	62.7	56.5	58.6	57.4	62.4	56.2	54.8
Net Reach Loss(-)/Gain(+)	-6.3	-10.5	-11.4	-16.6	-5.6	-8.8	-10.2
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)	139	121	135	140	113	124	116
(cfs)	70	61	68	71	57	62	59
Natural Flow	31	21	28	31	16	21	18
Import	39	40	41	40	40	41	41
Storage Change (ac-ft)	-258.0	-275.0	-258.0	-240.0	-257.0	-241.0	-240.0
(cfs)	-130	-139	-130	-121	-130	-122	-121
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)	22.3	21.1	18.6	9.9	18.6	19.8	21.0
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	189	189	189	187	177	174	169
Storage (Project Water)	119	128	121	116	120	112	110
Natural Flow	31	21	28	31	16	21	18
Import Water	39	40	41	40	40	41	41
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage	<i>Rvr mi.</i>						
CVD Release	99.9	189	189	189	187	177	174
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	70	61	68	71	57	62	59
Project Water Release Required	No	No	No	No	No	No	No
III. Upper Russian River Reach							
Minimum Instream Flow Requirement	110	110	110	110	110	110	110
Controlling Compliance Gage							
Min Gage Flow	137	138	143	145	149	148	144
Controlling Gage	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Talmage	Talmage
All Compliance Gages							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	189	189	189	187	177	174
Talmage (USGS 11462080)	96.1	155	155	156	157	152	148
Hopland (USGS 11462500)	84.8	166	166	167	169	167	162
Cloverdale (USGS 11463000)	70.9	154	157	158	158	156	153
Geyserville (USGS 11463500)	54.4	152	155	156	158	160	166
Jimtown (USGS 11463682)	48.5	151	153	154	156	158	157
Digger Bend (USGS 11463980)	38.2	144	145	149	150	154	153
Healdsburg (USGS 11464000)	35.6	137	138	143	145	149	150
Net Reach Loss(-)/Gain(+)							
Forks - Talmage	-34	-34	-33	-32	-26	-27	-25
Talmage - Hopland	+11	+11	+11	+12	+13	+13	+15
Hopland - Cloverdale	-11	-10	-9	-9	-12	-11	-10
Cloverdale - Jimtown	-3	-3	-2	-2	-1	+2	+1
Jimtown - Digger Bend	-7	-7	-6	-5	-3	-4	-5
Digger Bend - Healdsburg <i>*when Digger Bend > 400 cfs, next u/s gage (Jimtown) used</i>	-6	-6	-5	-5	-4	-4	-4
Upper Russian Net Reach Loss/Gain	-49	-48	-44	-40	-32	-32	-28
CVD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-49	-48	-44	-40	-32	-27	-25
Storage (Project Water)	-49	-48	-44	-40	-32	-27	-25
Pass-through Water (Nat. + Imp.) + Natural	0	0	0	0	0	0	0
Total Pass-through Water	70	61	68	71	57	62	59
Project Water Release Required	Yes	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)	-230.0	-281.0	-229.0	-255.0	-229.0	-229.0	-255.0
(cfs)	-116	-142	-115	-129	-115	-115	-129
Evaporation (ac-ft)	20.2	14.7	14.7	12.8	20.2	22.0	25.6
Inflow (Natural Flow)	4	0	3	0	6	6	0
WSD Release Gage	110	110	111	111	111	110	110
Storage (Project Water)	106	110	108	111	105	104	110
Natural Flow	4	0	3	0	6	6	0

V. Lower Dry Creek Reach

Minimum Instream Flow Requirement	80	80	80	80	80	80	80
Controlling Compliance Gage							
Min Gage Flow	93	94	94	94	97	95	94
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	110	110	111	111	110	110
Yoakim (USGS 11465200)	11.1	108	109	109	109	108	108
Lambert (USGS 11465240)	6.8	111	112	112	113	112	113
Dry Crk Mouth (USGS 11465350)	0.1	93	94	94	94	95	94
WSD to Russian River Confluence Reach Analysis							
Total Pass-through Water	4	0	3	0	6	6	0
Net Reach Loss(-)/Gain(+)							
WSD - Yoakim	-2	-2	-2	-2	-2	-2	-2
Yoakim - Lambert	+3	+4	+4	+4	+4	+4	+5
Lambert - Dry Crk Mouth	-18	-18	-18	-18	-16	-17	-18
WSD - Dry Crk Mouth	-17	-16	-17	-16	-14	-15	-16
WSD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss/Gain to Controlling Gage	-17	-16	-17	-16	-14	-15	-16
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	137	138	143	145	149	150	147
Natural Flow	0	0	0	0	0	0	0
Dry Creek Flow (Mouth Gage)							
L. Sonoma Project Water	106	110	108	111	105	104	110
Natural Flow	0	0	0	0	0	0	0
Russian River d/s of Confluence Flow	230	233	237	240	246	245	241
L. Mendocino Project Water + Import Water	137	138	143	145	149	150	147
L. Sonoma Project Water	106	110	108	111	105	104	110
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
Controlling Compliance Gage							
Min Gage Flow	178	181	185	189	195	193	187
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
All Compliance Gages	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	258	259	263	265	268	266
Hacienda (USGS 11467000)	21.8	178	181	185	189	193	187
Confluence to Windsor Reach Analysis							
Net Reach Loss/Gain to Windsor Gage	+27	+27	+27	+26	+24	+22	+23
L. Mendocino Project Water + Import Water	137	138	143	145	149	150	147
L. Sonoma Project Water	101	106	104	107	101	100	105
Natural Flow	27	27	27	26	24	22	23
Confluence to SCWA Wohler Production Facility Reach Analysis							
Approx. Flow u/s of Wohler	256	261	264	267	271	285	254
Net Reach Loss(-)/Gain(+)	+25	+28	+27	+28	+25	+40	+13
L. Mendocino Project Water + Import Water	137	138	143	145	149	150	147
L. Sonoma Project Water	101	106	104	107	101	100	105
Natural Flow	25	28	27	28	25	40	13
Confluence to Hacienda (Guerneville) Reach Analysis							
Net Reach Loss(-)/Gain(+)	-53	-52	-52	-51	-51	-52	-53
L. Mendocino Project Water + Import Water	137	138	143	145	149	150	147
L. Sonoma Project Water	23	26	26	28	26	8	39
Natural Flow	25	28	27	28	25	40	13

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

Lower Russian River							
Sonoma Water Total	155.3	159.6	155.9	156.1	149.9	182.1	131.1
Wohler	56.4	67.5	69.9	68.7	64.9	67.7	43.3
Mirabel	98.9	92.1	86.0	87.4	85.0	114.4	87.8
Town of Windsor River Wellfield	8.9	8.1	7.8	8.0	7.6	8.2	10.0
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

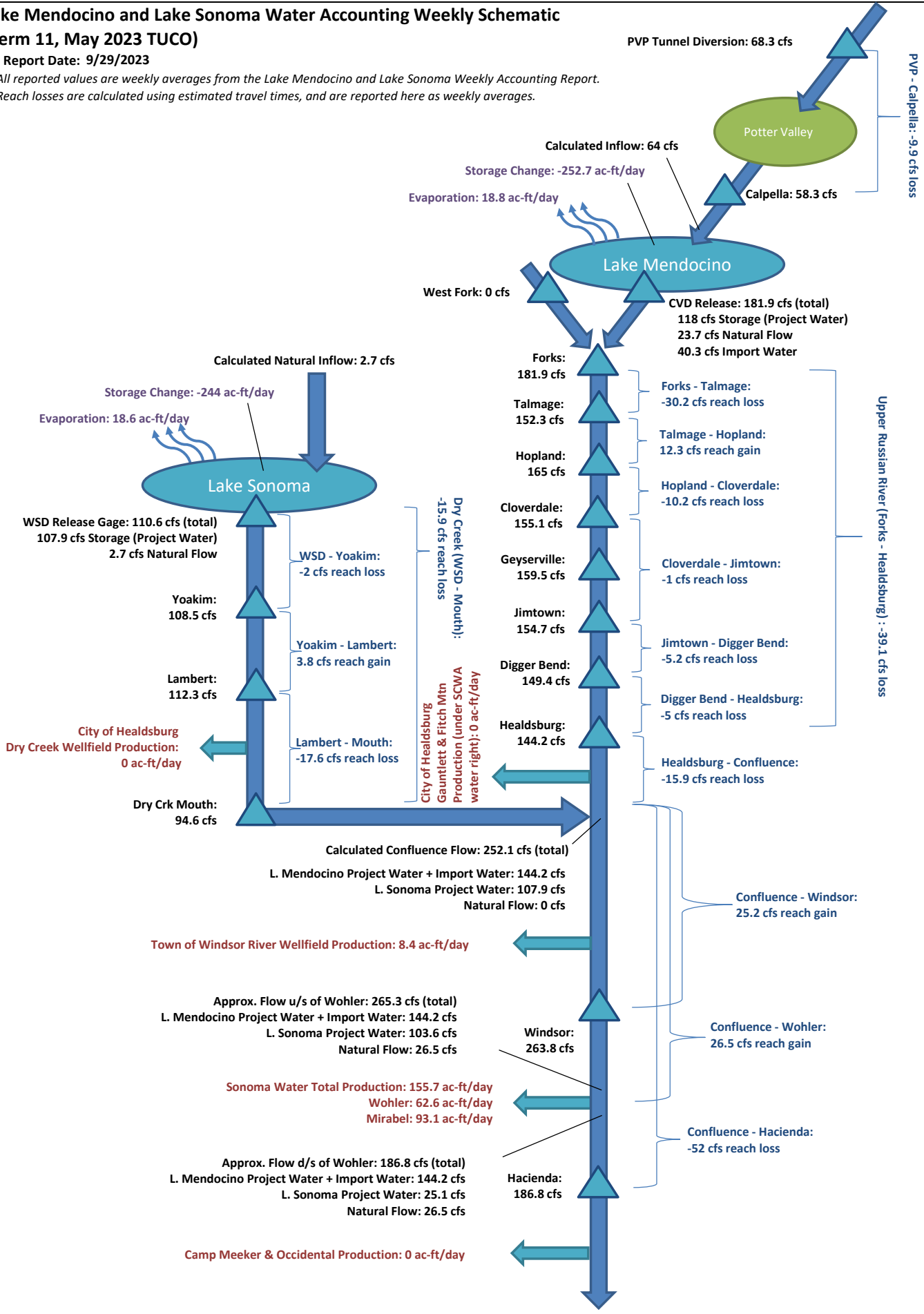
Notes:

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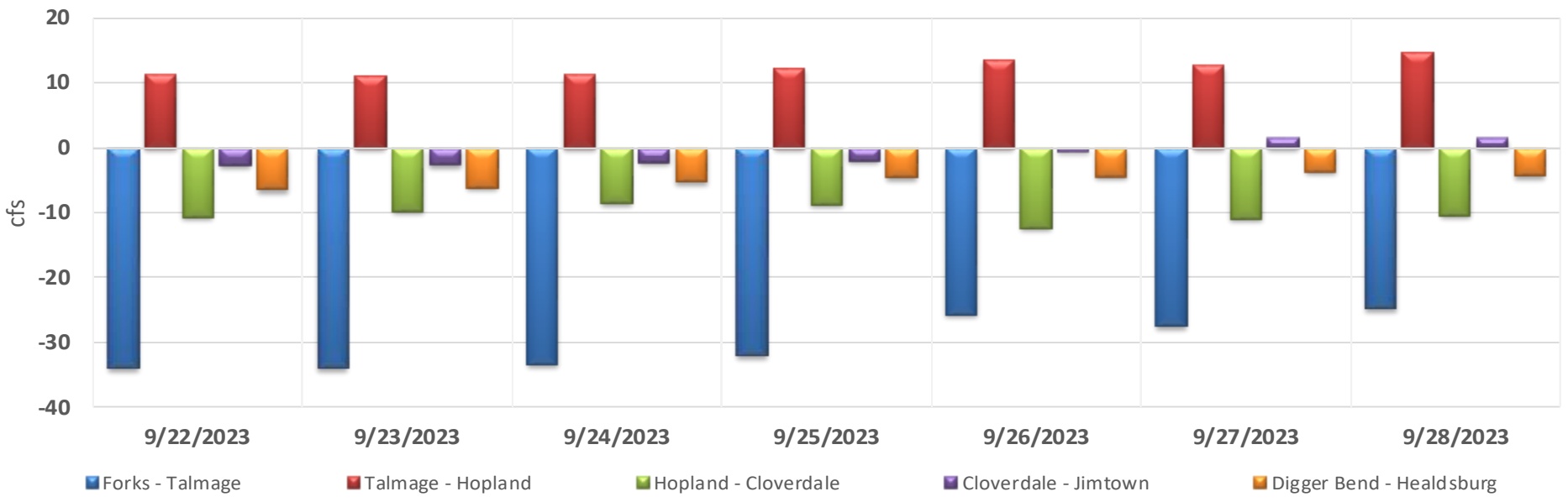
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



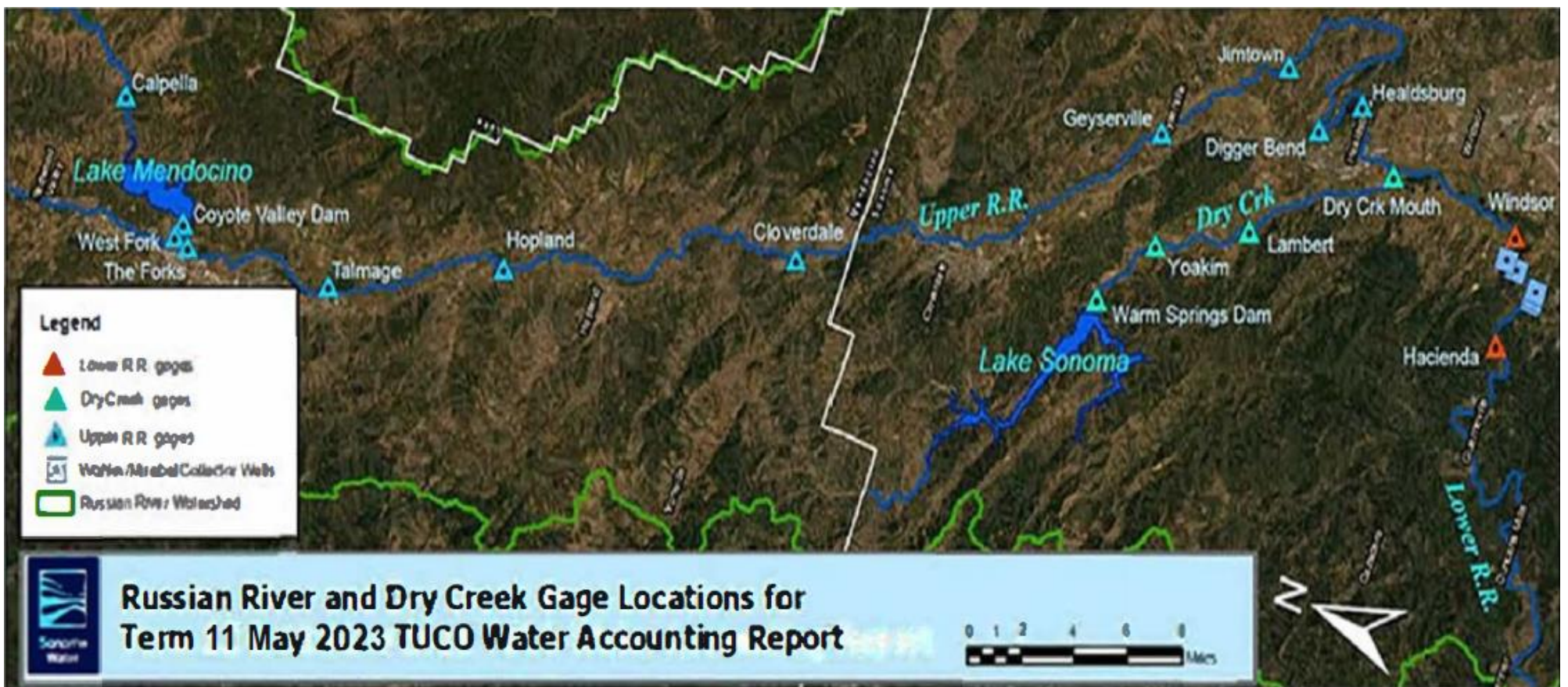
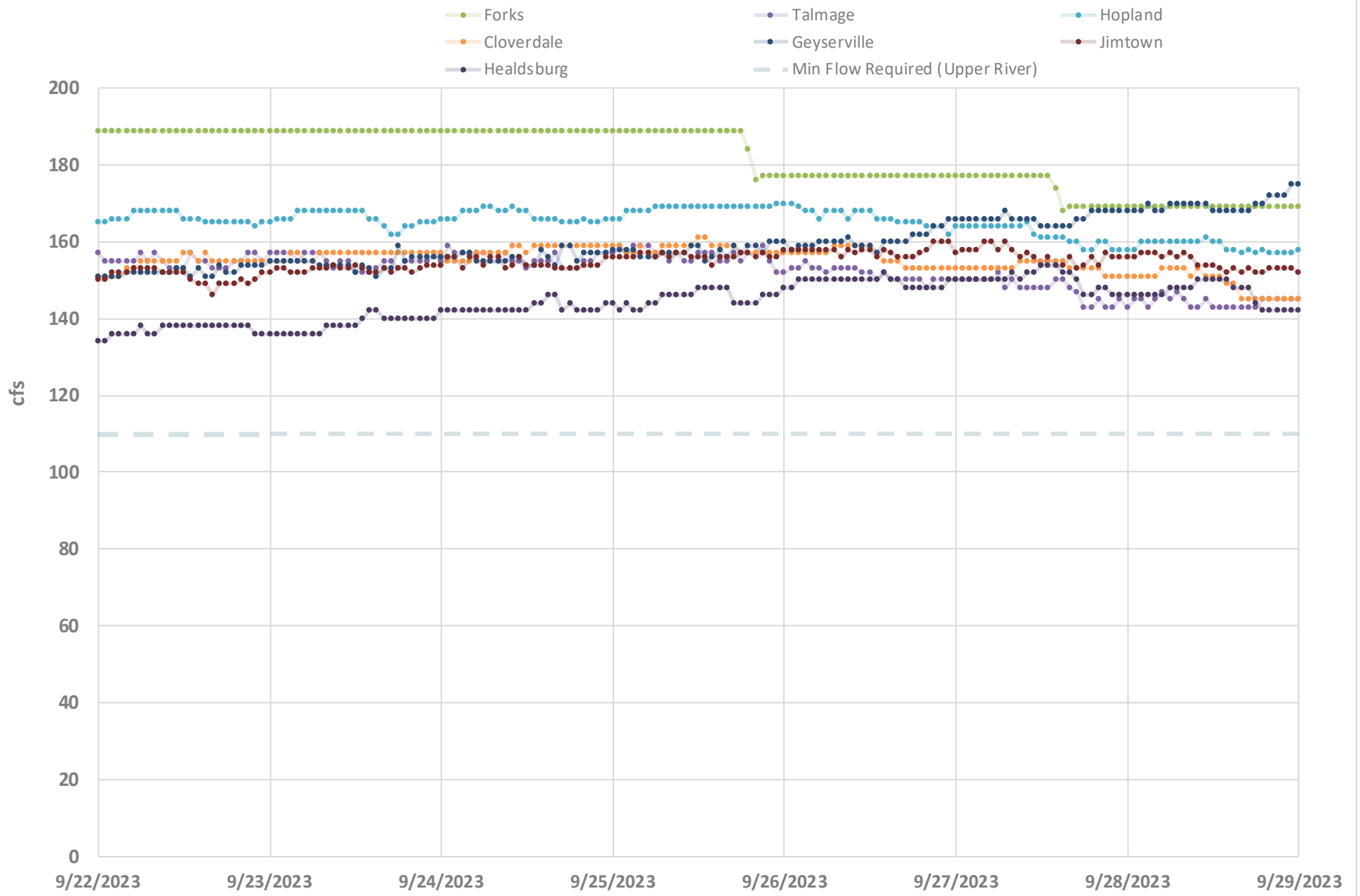
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UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



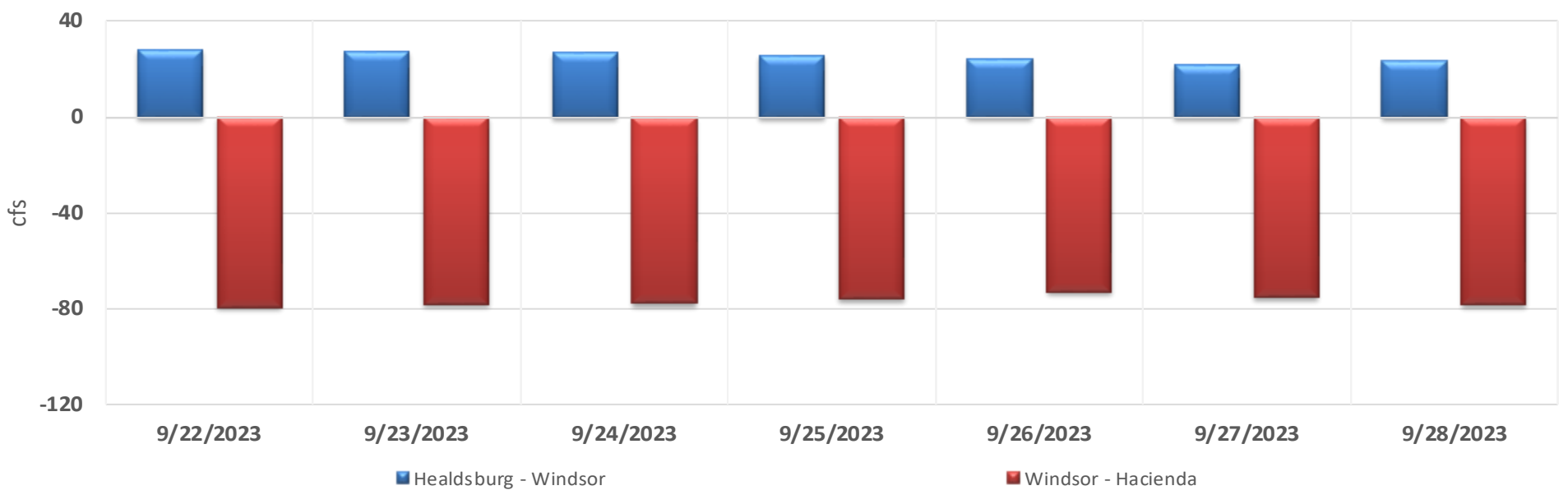
UPPER RUSSIAN RIVER STREAM FLOWS



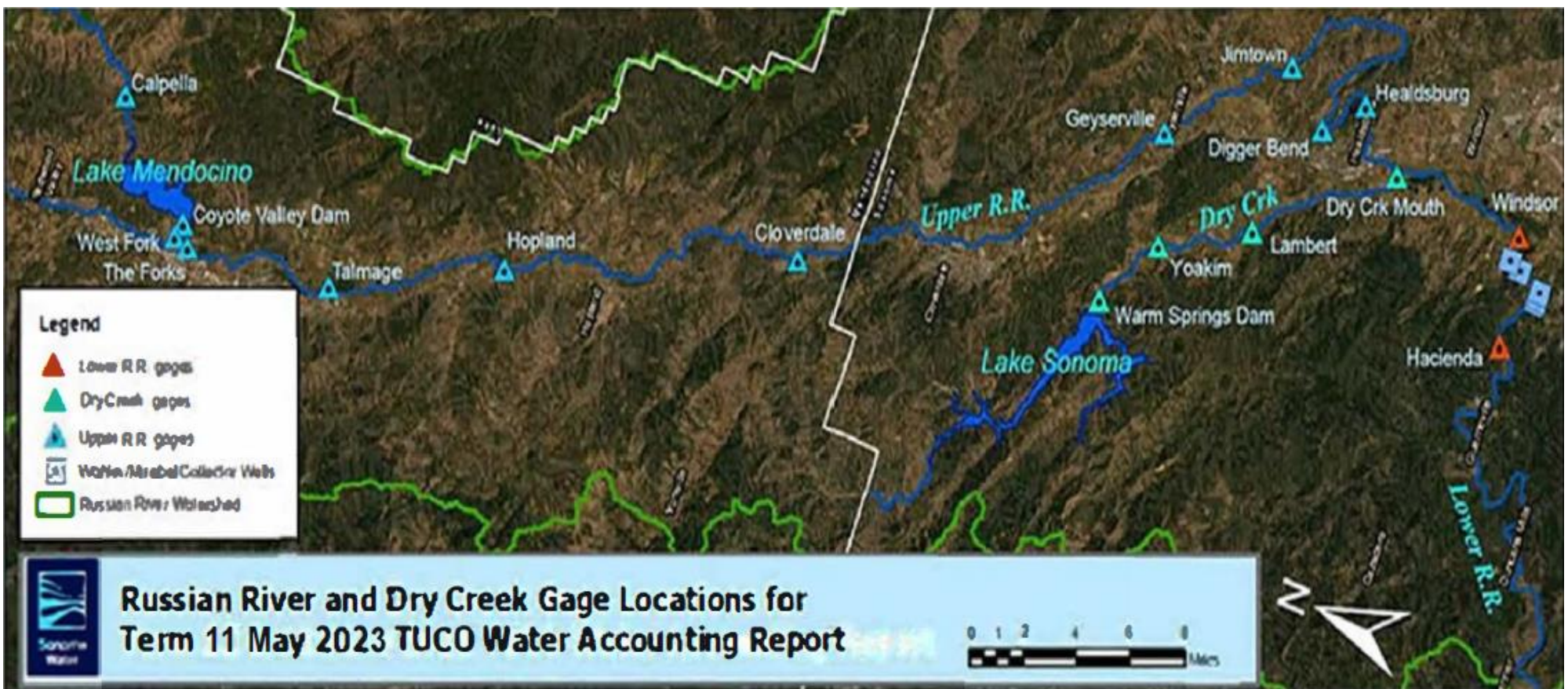
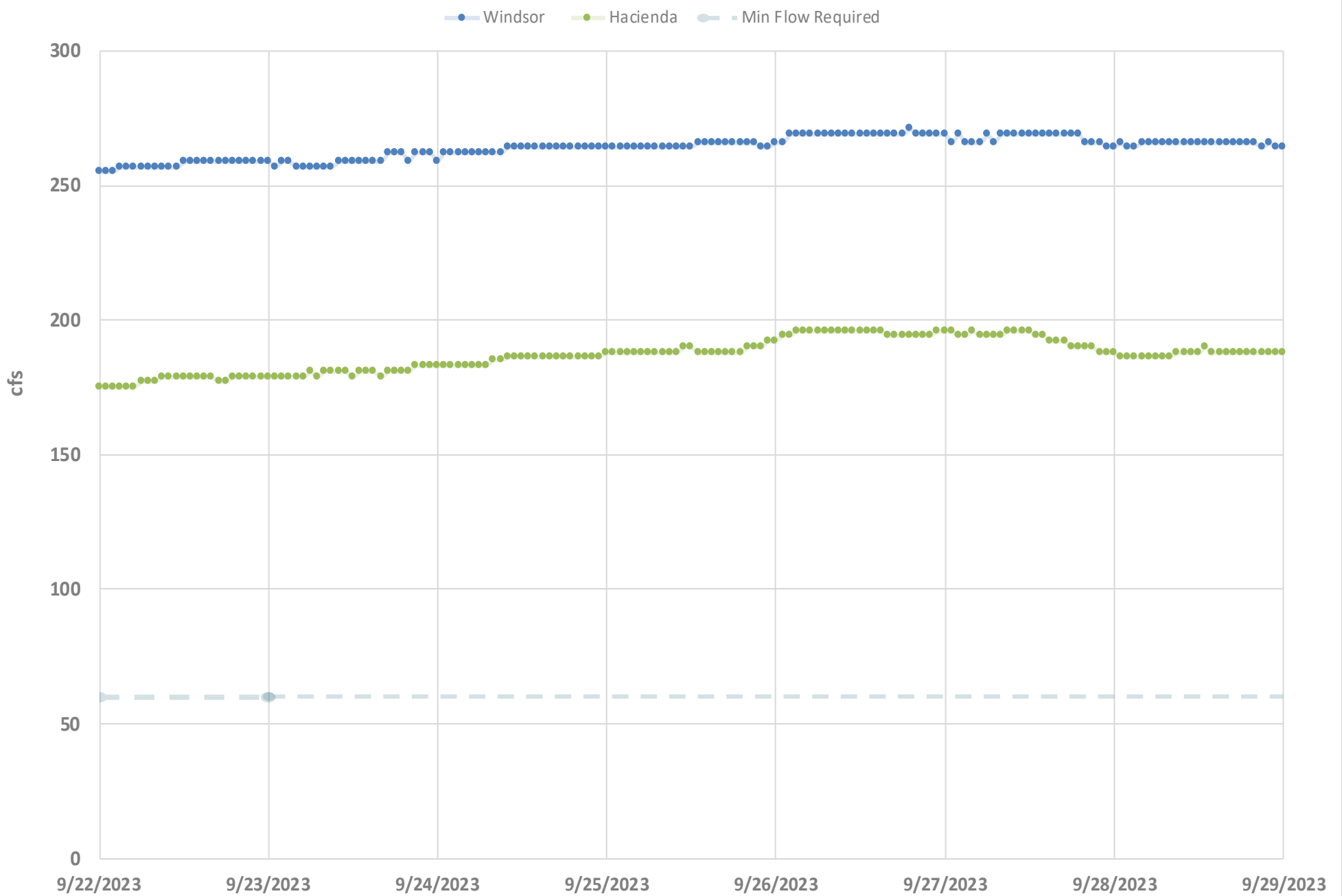
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LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



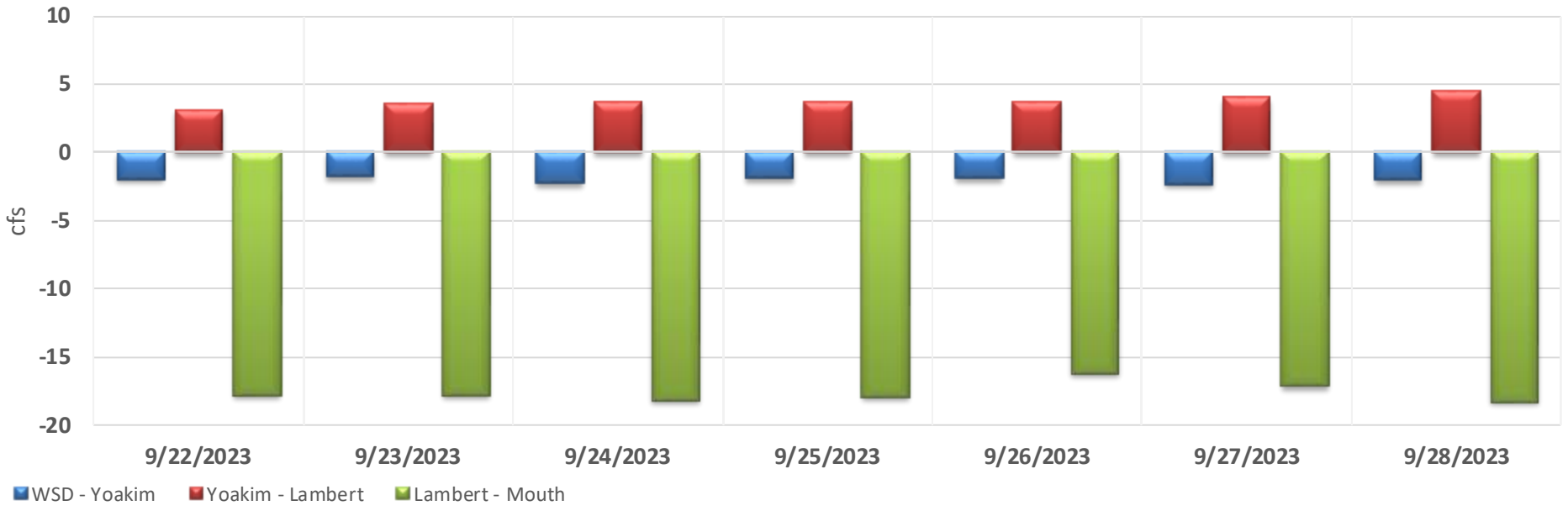
LOWER RUSSIAN RIVER STREAM FLOWS



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



DRY CREEK STREAM FLOWS

