

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

Report Date: 10/13/2023

Units are cfs unless noted otherwise

	10/6/2023	10/7/2023	10/8/2023	10/9/2023	10/10/2023	10/11/2023	10/12/2023
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	51.0	51.0	51.0	51.0	51.0	50.0	46.0
PVID Requested Delivery	20.0	20.0	20.0	20.0	20.0	20.0	15.6
PVID Canals Actual Delivery	10.1	10.1	10.0	14.5	16.8	16.6	11.8
East Fork Release	41.0	41.0	41.0	36.0	34.0	33.0	34.0
PVID E Fork Diversions	9.9	10.0	10.0	5.5	3.2	3.5	3.8
PVID Water Use - PG&E Contract	20.0	20.0	20.0	20.0	20.0	20.0	15.6
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)	31.1	31.1	31.0	30.5	30.8	29.6	30.2
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	50.7	52.9	48.7	46.2	48.6	48.5	48.3
Net Reach Loss(-)/Gain(+)	-0.3	+1.9	-2.3	-4.8	-2.4	-1.5	+2.3
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)	166	91	100	111	116	87	115
(cfs)	84	46	50	56	58	44	58
Natural Flow	53	15	19	25	27	14	28
Import	31	31	31	31	31	30	30
Storage Change (ac-ft)	-171.0	-273.0	-272.0	-256.0	-255.0	-289.0	-272.0
(cfs)	-86	-138	-137	-129	-129	-146	-137
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)	24.0	25.3	24.0	8.0	12.0	17.3	21.3
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	158	171	175	181	181	181	185
Storage (Project Water)	74	125	125	125	123	137	126
Natural Flow	53	15	19	25	27	14	28
Import Water	31	31	31	31	31	30	30
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage	<i>Rvr mi.</i>						
CVD Release	99.9	158	171	175	181	181	185
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	84	46	50	56	58	44	58
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	133	123	123	128	135	142	144
Controlling Gage	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg
All Compliance Gages							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	158	171	175	181	181	185
Talmage (USGS 11462080)	96.1	147	158	164	166	167	169
Hopland (USGS 11462500)	84.8	145	152	158	165	167	168
Cloverdale (USGS 11463000)	70.9	135	137	145	153	158	158
Geyserville (USGS 11463500)	54.4	187	189	183	176	168	164
Jimtown (USGS 11463682)	48.5	139	136	141	148	153	157
Digger Bend (USGS 11463980)	38.2	135	132	132	138	145	154
Healdsburg (USGS 11464000)	35.6	133	123	123	128	135	144
Net Reach Loss(-)/Gain(+)							
Forks - Talmage	-11	-11	-10	-15	-14	-14	-14
Talmage - Hopland	-2	-3	-4	-2	+0	-0	-0
Hopland - Cloverdale	-10	-10	-12	-9	-9	-8	-9
Cloverdale - Jimtown	+4	+1	+2	+2	-2	-2	-2
Jimtown - Digger Bend	-6	-5	-7	-9	-6	-5	-3
Digger Bend - Healdsburg *when Digger Bend > 400 cfs, next u/s gage (Jimtown) used	-3	-9	-9	-8	-7	-7	-10
Upper Russian Net Reach Loss/Gain	-28	-36	-39	-40	-39	-37	-39
CVD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-28	-36	-39	-40	-39	-37	-39
Storage (Project Water)	-28	-36	-39	-40	-39	-37	-39
Pass-through Water (Nat. + Imp.) + Natural	0	0	0	0	0	0	0
Total Pass-through Water	84	46	50	56	58	44	58
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)	-253.0	-227.0	-303.0	-202.0	-215.0	-214.0	-277.0
(cfs)	-128	-114	-153	-102	-108	-108	-140
Evaporation (ac-ft)	25.6	25.6	23.6	7.9	11.8	17.7	19.6
Inflow (Natural Flow)	0	11	0	14	8	10	0
WSD Release Gage	113	112	112	112	110	109	109
Storage (Project Water)	113	102	112	98	102	99	109
Natural Flow	0	11	0	14	8	10	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	98	98	99	101	102	102	102
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	113	112	112	112	110	109
Yoakim (USGS 11465200)	11.1	108	108	109	109	109	109
Lambert (USGS 11465240)	6.8	111	112	112	113	113	113
Dry Crk Mouth (USGS 11465350)	0.1	98	98	99	101	102	102

WSD to Russian River Confluence Reach Analysis

Total Pass-through Water	0	11	0	14	8	10	0
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Net Reach Loss(-)/Gain(+)

WSD - Yoakim	-5	-4	-4	-3	-1	-1	-0
Yoakim - Lambert	+3	+3	+4	+4	+4	+4	+4
Lambert - Dry Crk Mouth	-13	-13	-13	-12	-11	-11	-11
WSD - Dry Crk Mouth	-15	-14	-13	-10	-8	-7	-8

WSD Project Water Release to Meet Min Flow Requirement

Net Reach Loss/Gain to Controlling Gage	-15	-14	-13	-10	-8	-7	-8
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	105	123	123	128	135	142	144
Natural Flow	25	0	0	0	0	0	0

Dry Creek Flow (Mouth Gage)

L. Sonoma Project Water	113	102	112	98	102	99	109
Natural Flow	0	0	0	4	0	3	0

Russian River d/s of Confluence Flow

	230	222	222	229	238	245	246
L. Mendocino Project Water + Import Water	105	123	123	128	135	142	144
L. Sonoma Project Water	113	102	112	98	102	99	109
Natural Flow	25	0	0	4	0	3	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	163	160	158	168	186	187	188
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda

All Compliance Gages

	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	248	243	242	249	260	263
Hacienda (USGS 11467000)	21.8	163	160	158	168	186	188

Confluence to Windsor Reach Analysis

Net Reach Loss/Gain to Windsor Gage	+17	+22	+21	+23	+26	+17	+17
L. Mendocino Project Water + Import Water	105	123	123	128	135	142	144
L. Sonoma Project Water	109	97	108	94	98	95	105
Natural Flow	42	22	21	27	26	20	17

Confluence to SCWA Wohler Production Facility Reach Analysis

Approx. Flow u/s of Wohler	237	252	227	245	253	258	275
Net Reach Loss(-)/Gain(+)	+6	+30	+5	+16	+15	+14	+30
L. Mendocino Project Water + Import Water	105	123	123	128	135	142	144
L. Sonoma Project Water	109	97	108	94	98	95	105
Natural Flow	31	30	5	19	15	17	30

Confluence to Hacienda (Guerneville) Reach Analysis

Net Reach Loss(-)/Gain(+)	-67	-62	-64	-61	-52	-58	-58
L. Mendocino Project Water + Import Water	105	123	123	128	135	142	144
L. Sonoma Project Water	35	5	39	17	31	24	17
Natural Flow	31	30	5	19	15	17	30

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

Lower Russian River

Sonoma Water Total	145.6	182.0	137.0	152.7	133.8	141.2	174.0
Wohler	80.6	76.3	76.9	65.1	82.5	82.2	76.7
Mirabel	65.0	105.7	60.1	87.7	51.2	58.9	97.3
Town of Windsor River Wellfield	9.3	9.0	8.4	7.9	8.3	7.9	8.3
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

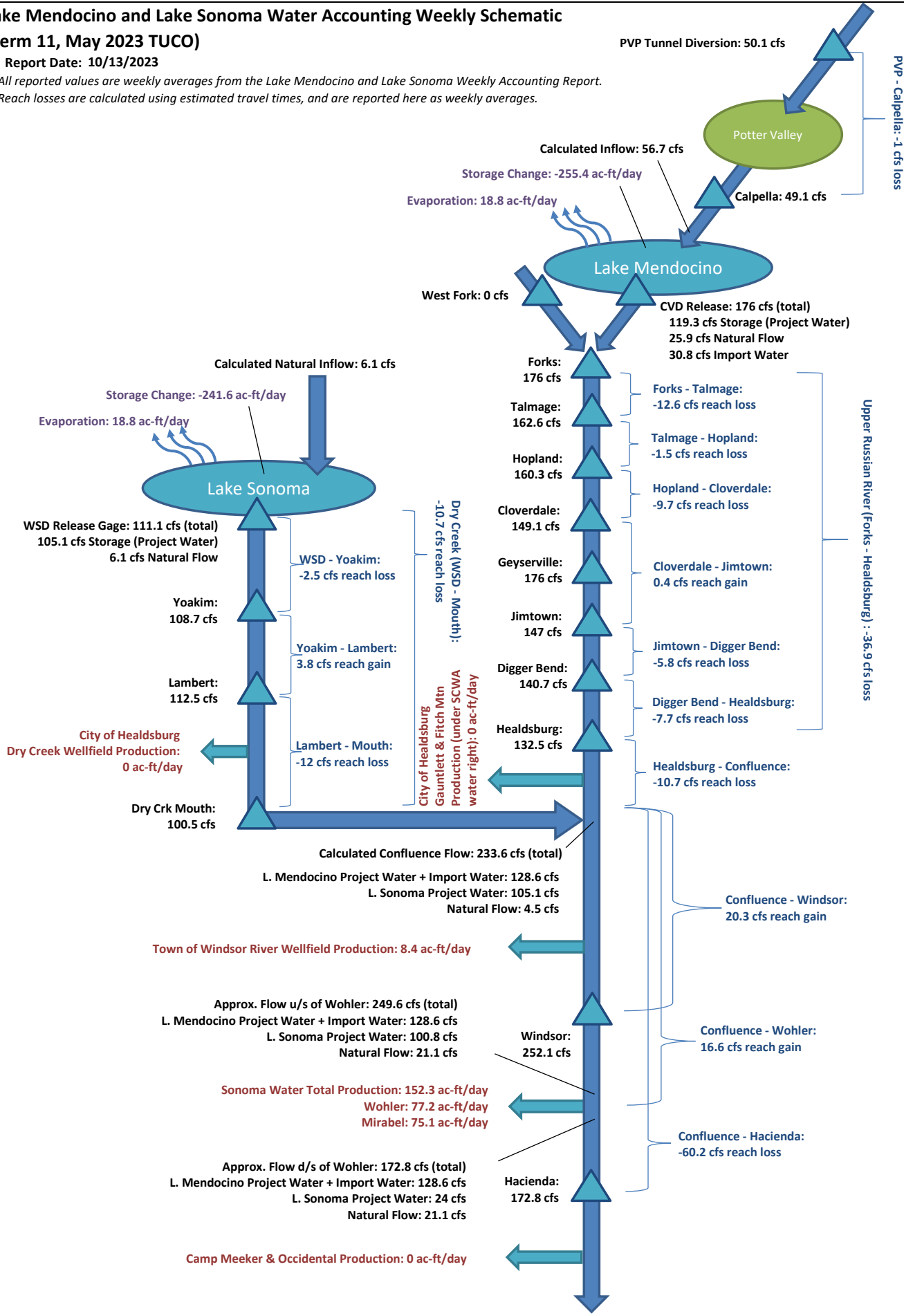
Notes:
 - Water Accounting for the Lower Russian River and Dry Creek is an analysis that approximates the current conditions based on the methodology in Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

Lake Mendocino and Lake Sonoma Water Accounting Weekly Schematic

(Term 11, May 2023 TUCO)

Report Date: 10/13/2023

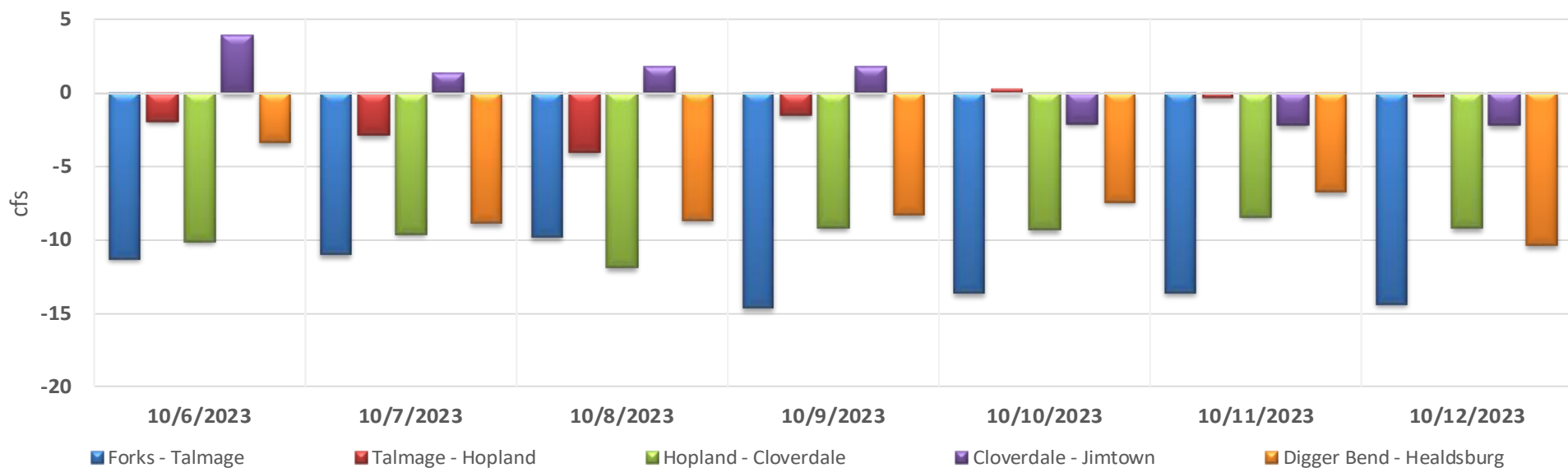
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



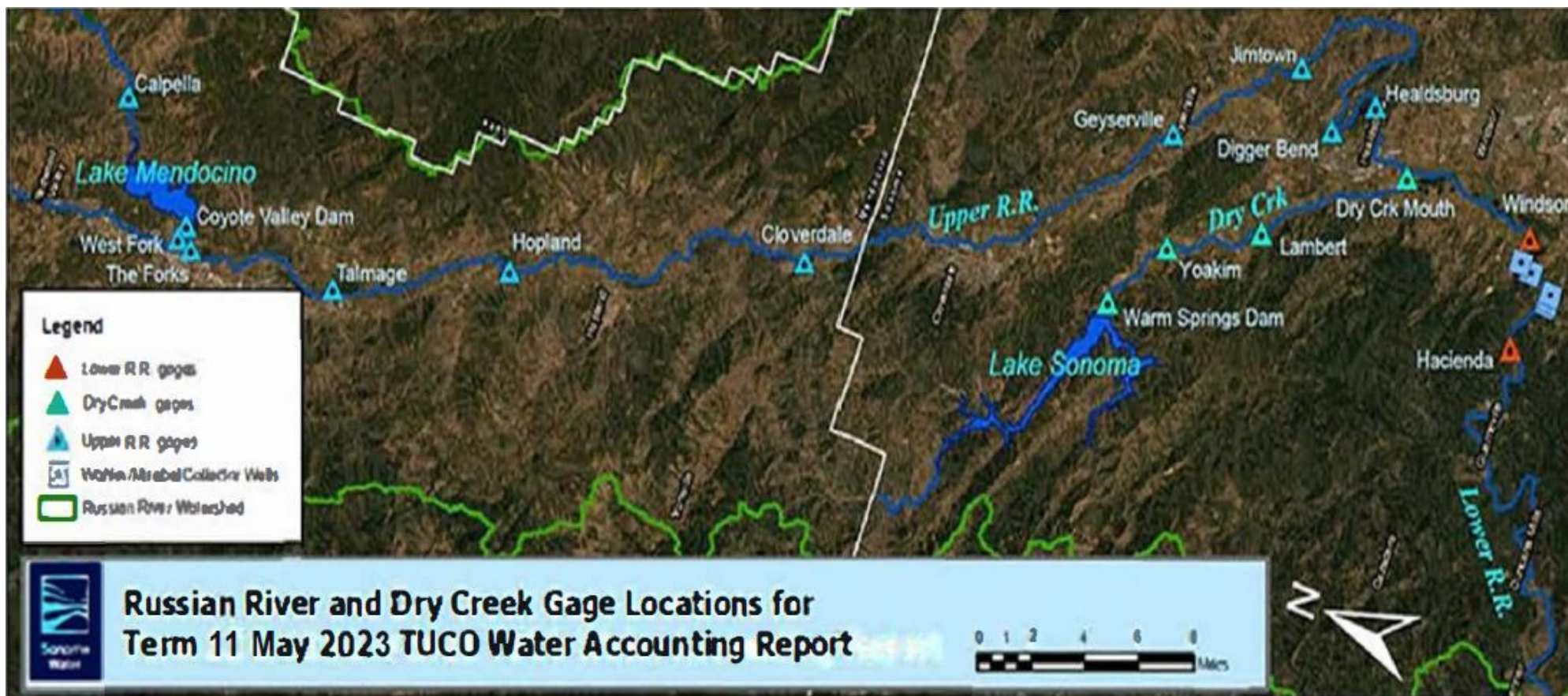
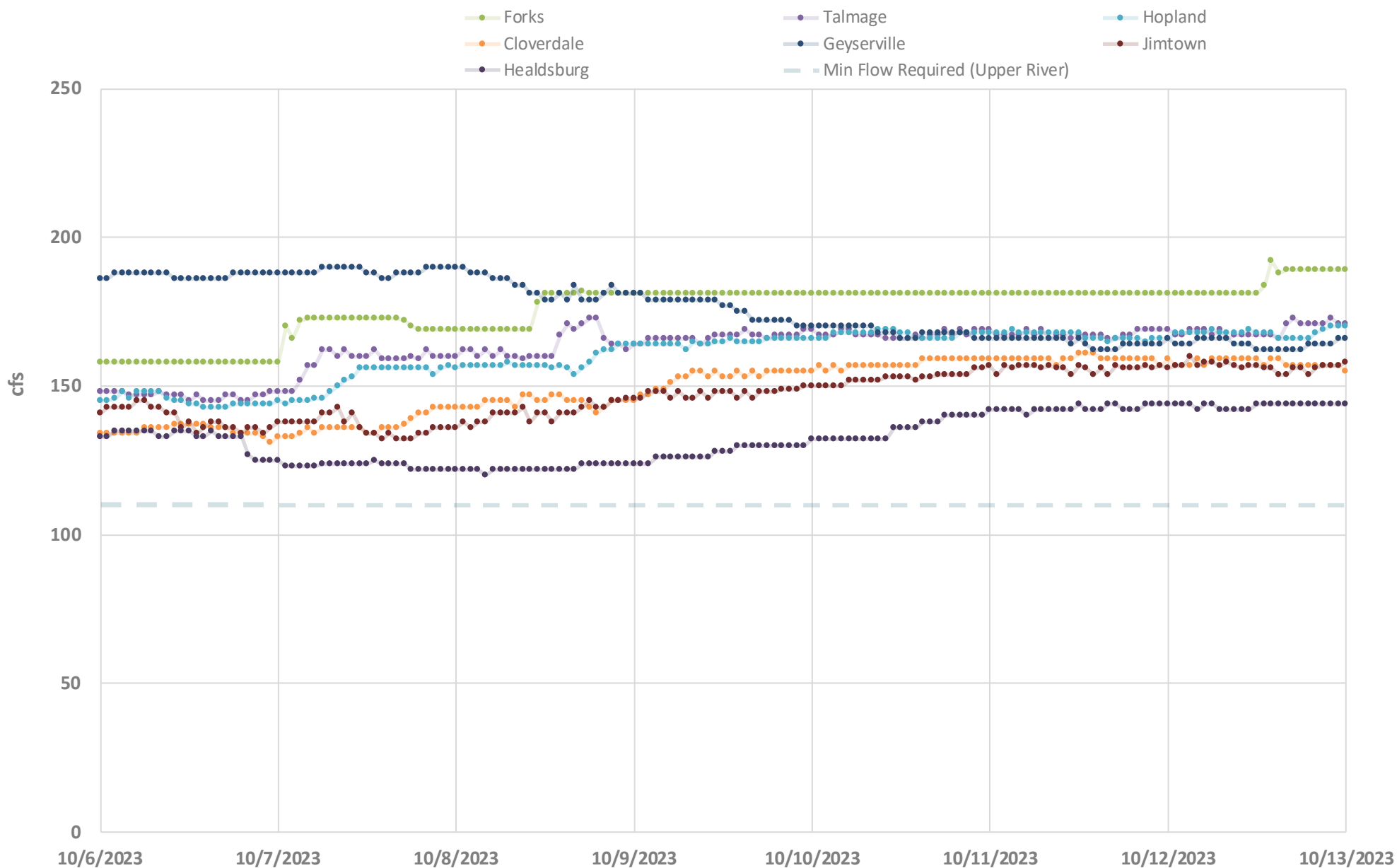
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UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



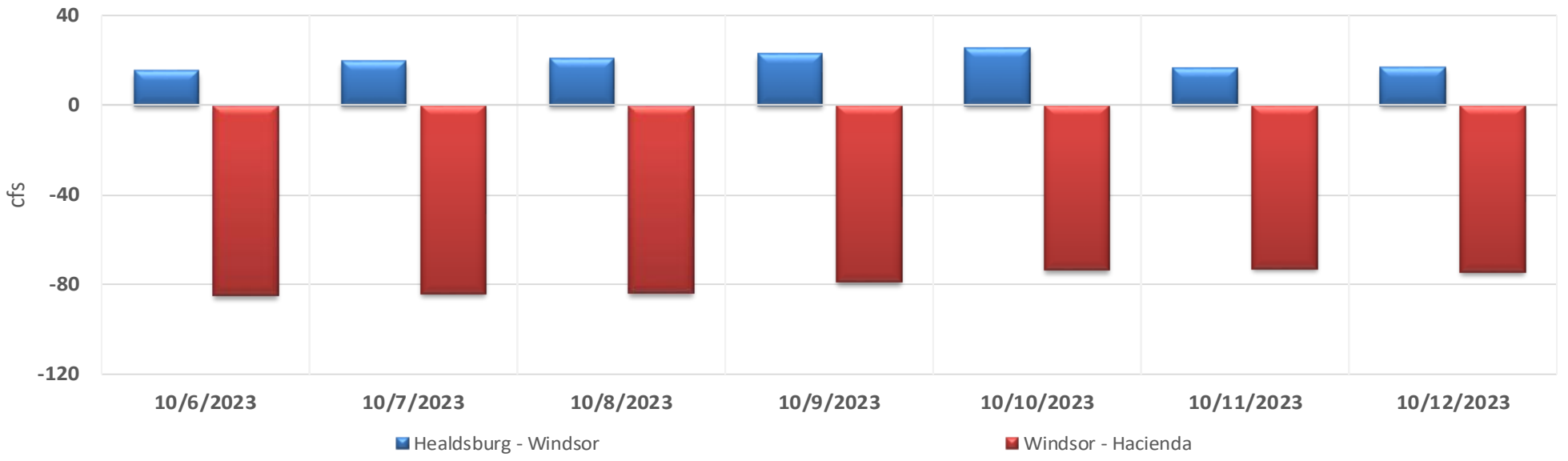
UPPER RUSSIAN RIVER STREAM FLOWS



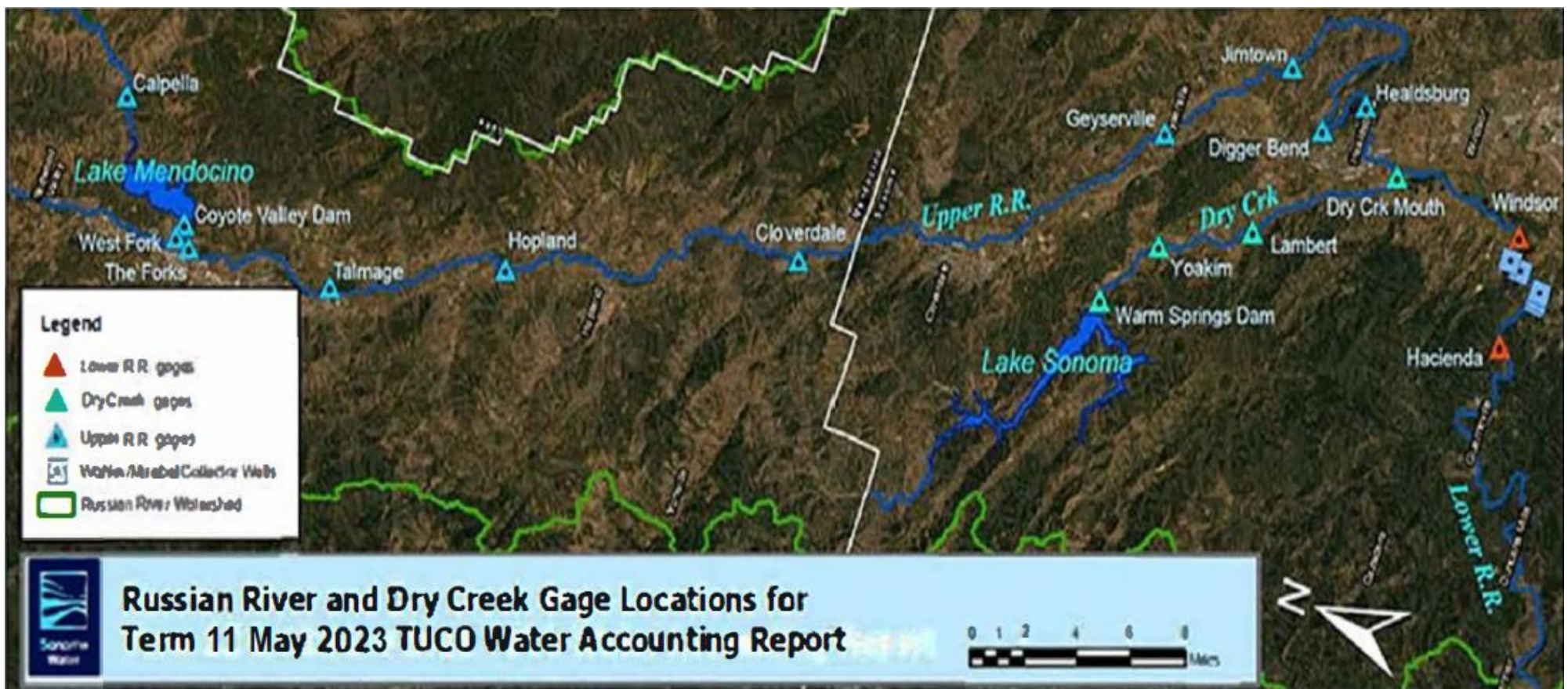
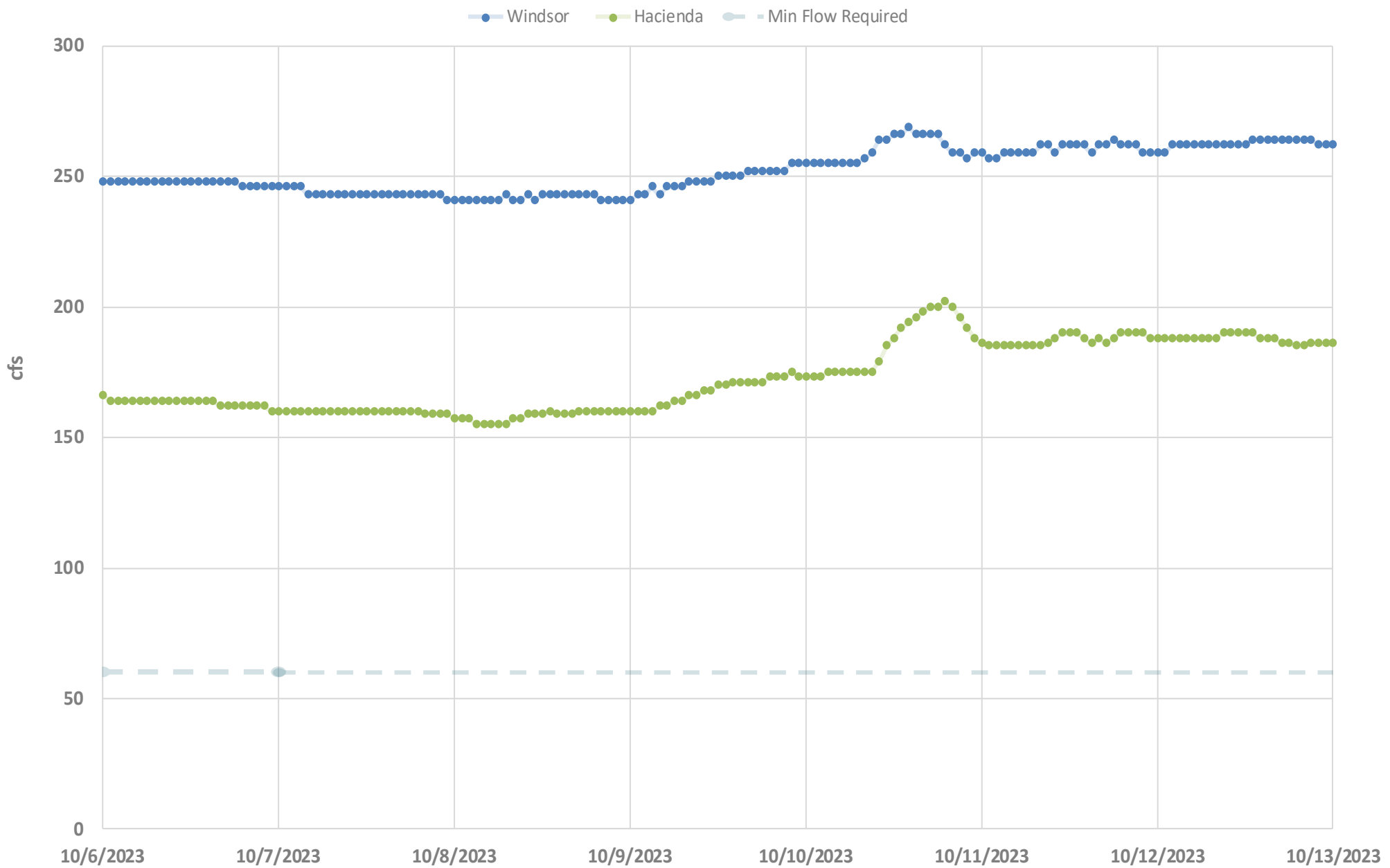
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LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



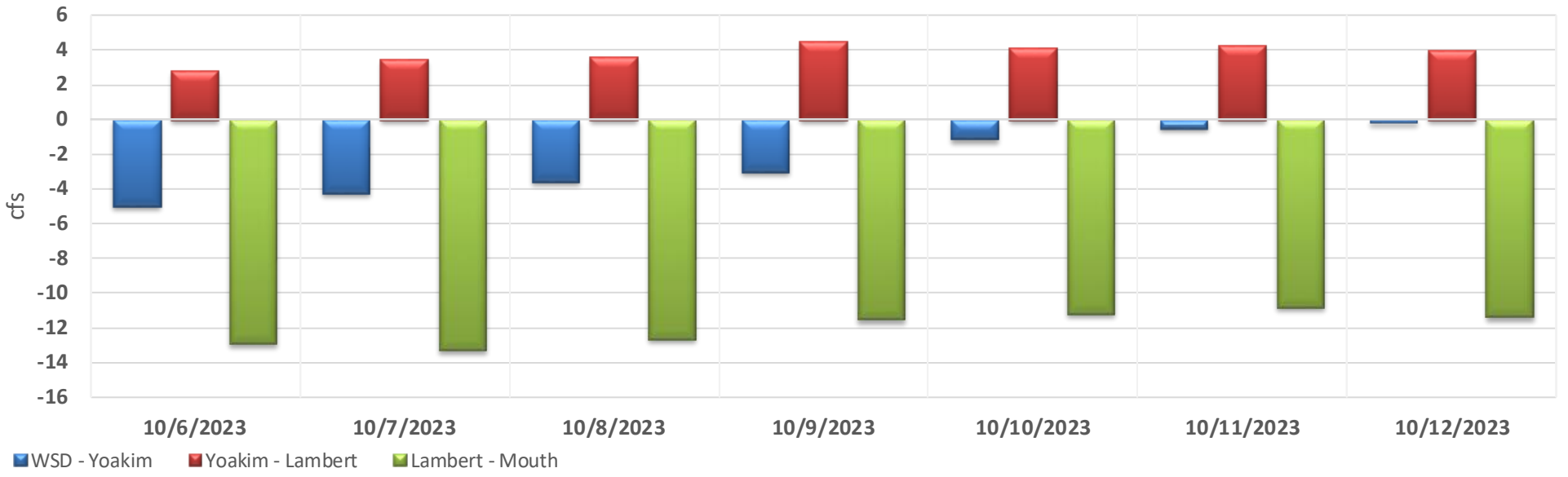
LOWER RUSSIAN RIVER STREAM FLOWS



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



DRY CREEK STREAM FLOWS

