

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

Report Date: 9/15/2023

Units are cfs unless noted otherwise

	9/8/2023	9/9/2023	9/10/2023	9/11/2023	9/12/2023	9/13/2023	9/14/2023
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	111.0	111.0	110.0	110.0	107.0	104.0	104.0
PVID Requested Delivery	30.0	30.0	30.0	30.0	26.9	25.0	25.0
PVID Canals Actual Delivery	21.2	21.1	21.0	21.1	20.7	20.5	20.5
East Fork Release	90.0	90.0	89.0	89.0	86.0	84.0	84.0
PVID E Fork Diversions	8.8	8.9	9.0	8.9	6.2	4.5	4.5
PVID Water Use - PG&E Contract	30.0	30.0	30.0	30.0	26.9	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)	81.2	81.1	80.0	80.1	79.8	79.5	79.5
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	81.5	86.0	86.4	83.2	85.7	80.4	86.6
Net Reach Loss(-)/Gain(+)	-29.5	-25.0	-23.6	-26.8	-21.3	-23.6	-17.4
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)	165	175	206	186	193	194	214
(cfs)	83	88	104	94	97	98	108
Natural Flow	2	7	24	14	17	19	29
Import	81	81	80	80	80	79	79
Storage Change (ac-ft)	-208.0	-207.0	-191.0	-208.0	-207.0	-208.0	-190.0
(cfs)	-105	-104	-96	-105	-104	-105	-96
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)	30.0	28.7	30.0	27.5	27.4	27.4	28.7
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	173	178	185	185	188	189	189
Storage (Project Water)	90	90	81	91	91	91	81
Natural Flow	2	7	24	14	17	19	29
Import Water	81	81	80	80	80	79	79
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage	<i>Rvr mi.</i>						
CVD Release	99.9	173	178	185	185	188	189
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	83	88	104	94	97	98	108
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	125	120	121	124	125	126	127
Controlling Gage	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg
All Compliance Gages							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	173	178	185	185	188	189
Talmage (USGS 11462080)	96.1	142	143	149	150	152	154
Hopland (USGS 11462500)	84.8	155	156	163	164	166	167
Cloverdale (USGS 11463000)	70.9	133	138	143	147	146	145
Geyserville (USGS 11463500)	54.4	142	143	138	135	135	138
Jimtown (USGS 11463682)	48.5	135	132	135	138	140	139
Digger Bend (USGS 11463980)	38.2	131	127	130	132	133	134
Healdsburg (USGS 11464000)	35.6	125	120	121	124	125	127
Net Reach Loss(-)/Gain(+)							
Forks - Talmage	-31	-33	-36	-35	-35	-37	-35
Talmage - Hopland	+13	+14	+15	+14	+14	+12	+13
Hopland - Cloverdale	-21	-18	-17	-17	-19	-19	-20
Cloverdale - Jimtown	-1	-1	-4	-6	-7	-7	-7
Jimtown - Digger Bend	-5	-6	-4	-6	-7	-7	-5
Digger Bend - Healdsburg <i>*when Digger Bend > 400 cfs, next u/s gage (Jimtown) used</i>	-8	-6	-8	-8	-7	-7	-7
Upper Russian Net Reach Loss/Gain	-54	-49	-54	-57	-60	-65	-61
CVD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-54	-49	-54	-57	-60	-65	-61
Storage (Project Water)	-54	-49	-54	-57	-60	-65	-61
Pass-through Water (Nat. + Imp.) + Natural	0	0	0	0	0	0	0
Total Pass-through Water	83	88	104	94	97	98	108
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).

	9/8/2023	9/9/2023	9/10/2023	9/11/2023	9/12/2023	9/13/2023	9/14/2023
IV. Lake Sonoma							
Lake Sonoma							
Storage Change (ac-ft)	-258.0	-258.0	-232.0	-283.0	-231.0	-283.0	-257.0
(cfs)	-130	-130	-117	-143	-116	-143	-130
Evaporation (ac-ft)	27.9	27.8	27.8	33.4	25.9	27.8	24.0
Inflow (Natural Flow)	0	0	7	0	10	0	0
WSD Release Gage	109	110	110	110	113	111	107
Storage (Project Water)	109	110	103	110	103	111	107
Natural Flow	0	0	7	0	10	0	0
V. Lower Dry Creek Reach							
Minimum Instream Flow Requirement	80	80	80	80	80	80	80
Controlling Compliance Gage							
Min Gage Flow	90	92	92	92	92	92	92
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	109	110	110	113	111	107
Yoakim (USGS 11465200)	11.1	105	106	107	106	105	106
Lambert (USGS 11465240)	6.8	110	110	111	110	109	110
Dry Crk Mouth (USGS 11465350)	0.1	90	92	92	92	92	92
WSD to Russian River Confluence Reach Analysis							
Total Pass-through Water	0	0	7	0	10	0	0
Net Reach Loss(-)/Gain(+)							
WSD - Yoakim	-4	-4	-3	-4	-7	-7	-1
Yoakim - Lambert	+5	+4	+5	+4	+4	+4	+4
Lambert - Dry Crk Mouth	-20	-19	-19	-18	-17	-17	-17
WSD - Dry Crk Mouth	-19	-18	-18	-18	-21	-20	-14
WSD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss/Gain to Controlling Gage	-19	-18	-18	-18	-21	-20	-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	125	120	121	124	125	126	127
Natural Flow	0	0	0	0	0	0	0
Dry Creek Flow (Mouth Gage)							
L. Sonoma Project Water	109	110	103	110	103	111	107
Natural Flow	0	0	0	0	0	0	0
Russian River d/s of Confluence Flow							
L. Mendocino Project Water + Import Water	125	120	121	124	125	126	127
L. Sonoma Project Water	109	110	103	110	103	111	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
Controlling Compliance Gage							
Min Gage Flow	162	153	152	154	152	153	154
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
All Compliance Gages							
	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	248	241	242	246	245	245
Hacienda (USGS 11467000)	21.8	162	153	152	154	152	154
Confluence to Windsor Reach Analysis							
Net Reach Loss/Gain to Windsor Gage	+33	+29	+30	+30	+28	+27	+26
L. Mendocino Project Water + Import Water	125	120	121	124	125	126	127
L. Sonoma Project Water	105	105	98	105	99	106	102
Natural Flow	33	29	30	30	28	27	26
Confluence to SCWA Wohler Production Facility Reach Analysis							
Approx. Flow u/s of Wohler	244	238	240	247	231	232	233
Net Reach Loss(-)/Gain(+)	+29	+26	+26	+31	+13	+14	+14
L. Mendocino Project Water + Import Water	125	120	121	124	125	126	127
L. Sonoma Project Water	105	105	98	105	99	106	102
Natural Flow	29	26	26	31	13	14	14
Confluence to Hacienda (Guerneville) Reach Analysis							
Net Reach Loss(-)/Gain(+)	-53	-59	-61	-63	-65	-65	-65
L. Mendocino Project Water + Import Water	125	120	121	124	125	126	127
L. Sonoma Project Water	22	20	11	11	21	27	24
Natural Flow	29	26	26	31	13	14	14
VIII. Water Production under Sonoma Water Water Rights (ac-ft)							
Lower Russian River							
Sonoma Water Total	163.9	168.6	174.3	186.3	155.4	157.1	155.1
Wohler	59.2	64.0	60.0	67.8	68.7	71.1	67.7
Mirabel	104.7	104.6	114.3	118.6	86.6	85.9	87.4
Town of Windsor River Wellfield	9.3	9.6	8.9	9.5	9.1	9.8	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

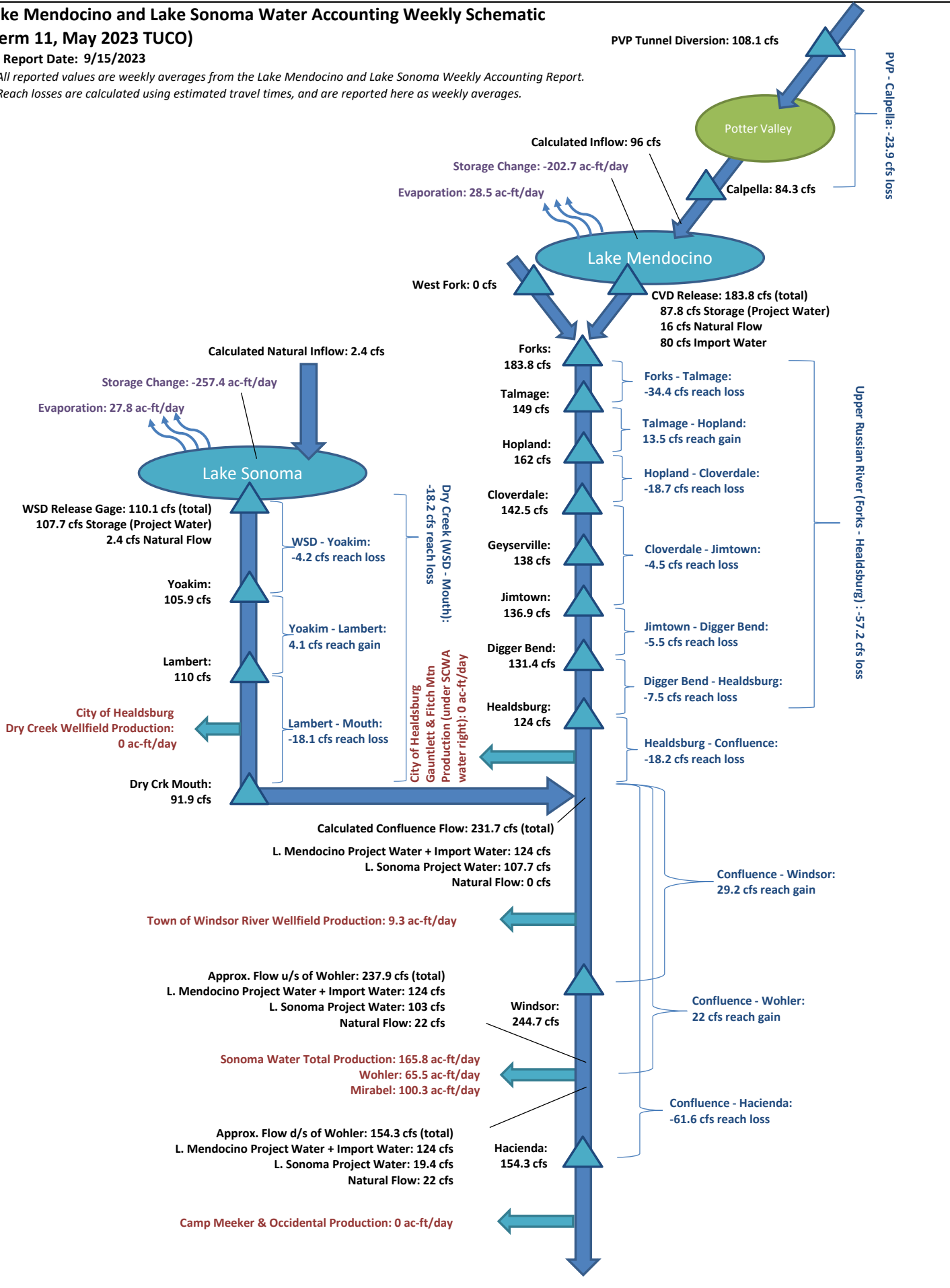
Notes:

- 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 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.



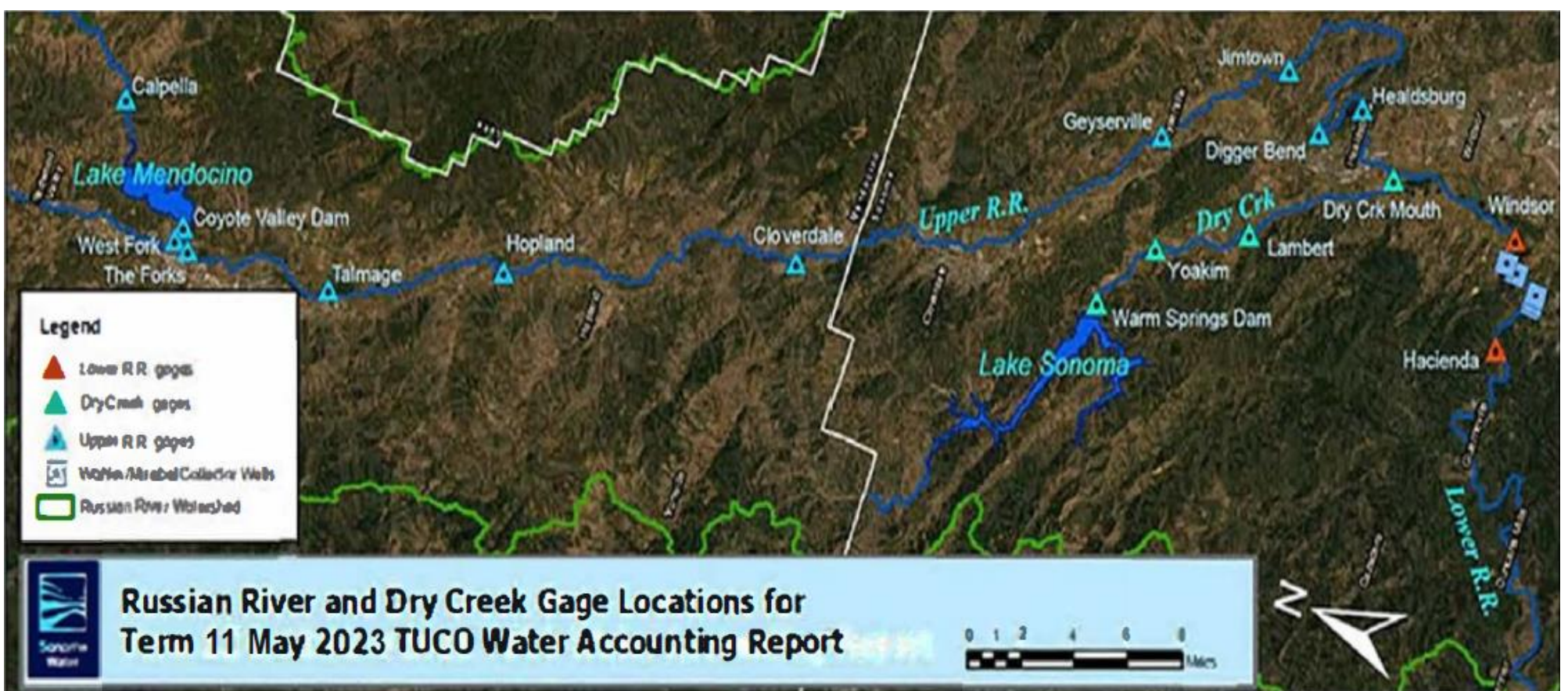
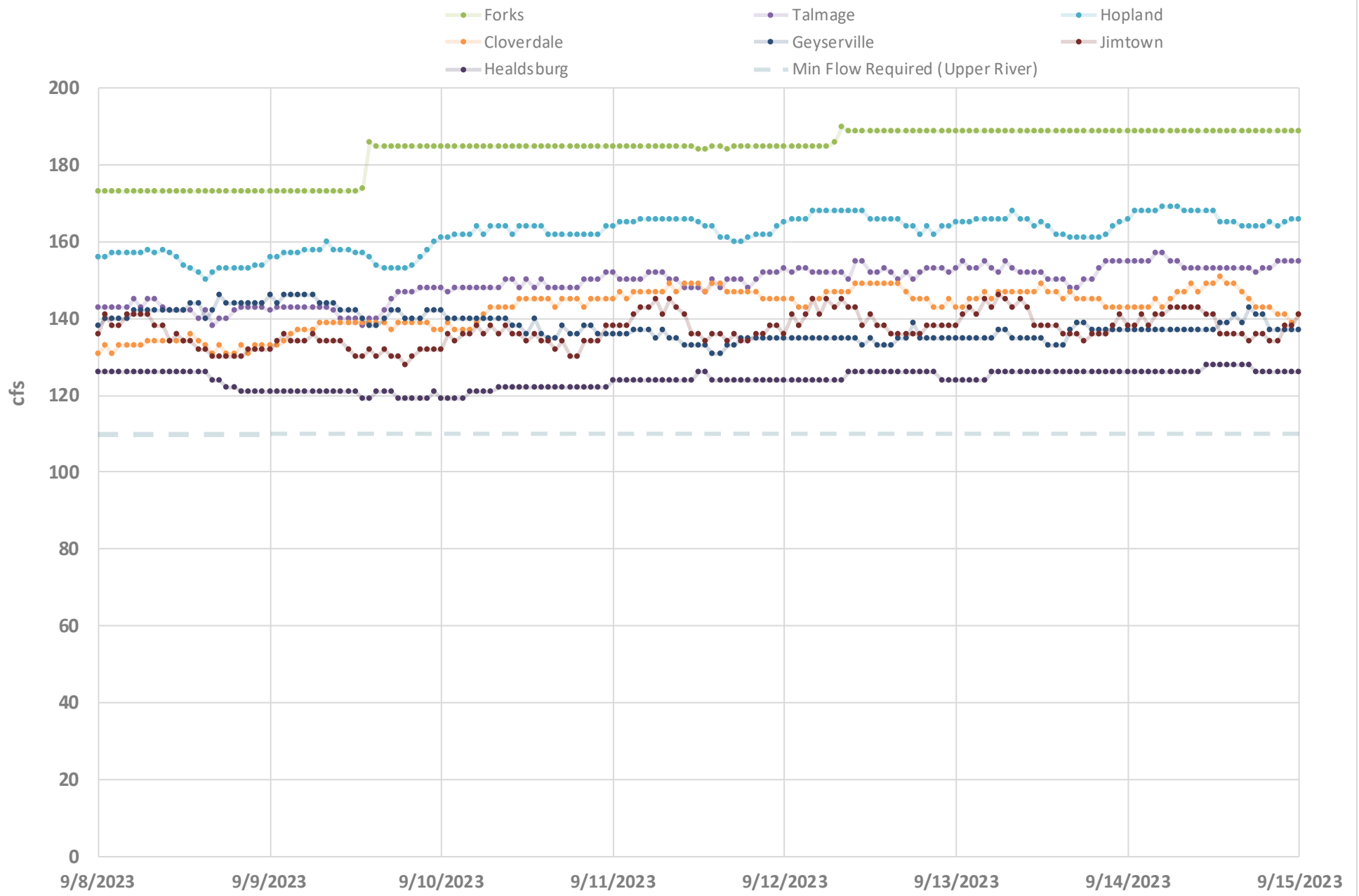
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UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



UPPER RUSSIAN RIVER STREAM FLOWS

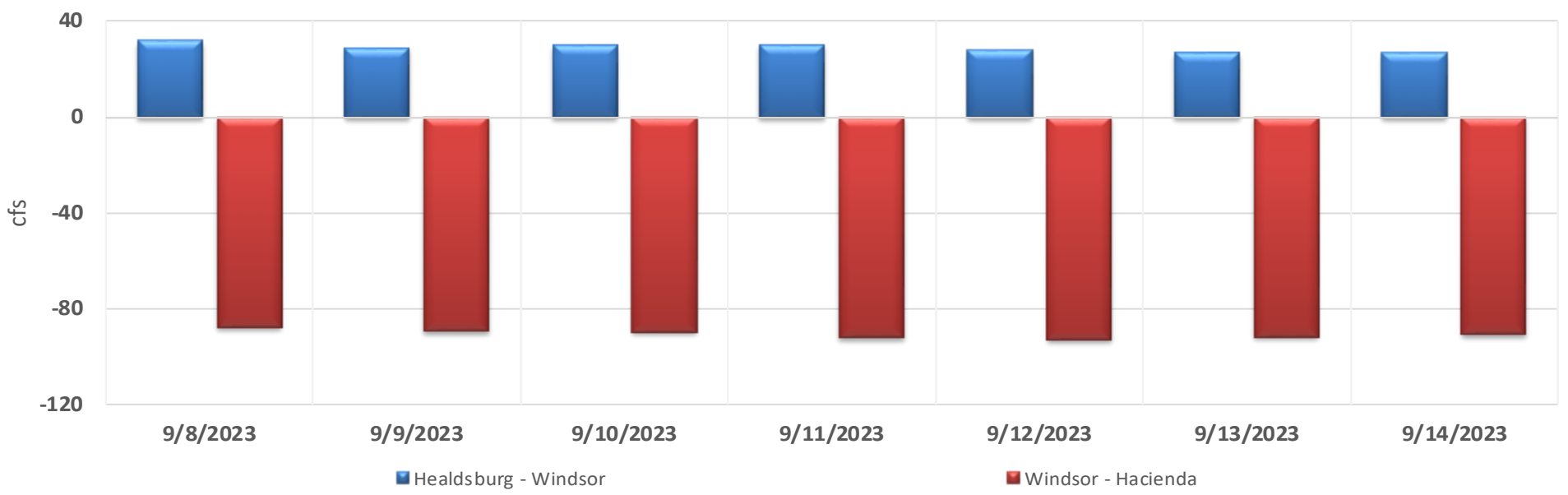


Russian River and Dry Creek Gage Locations for Term 11 May 2023 TUCO Water Accounting Report

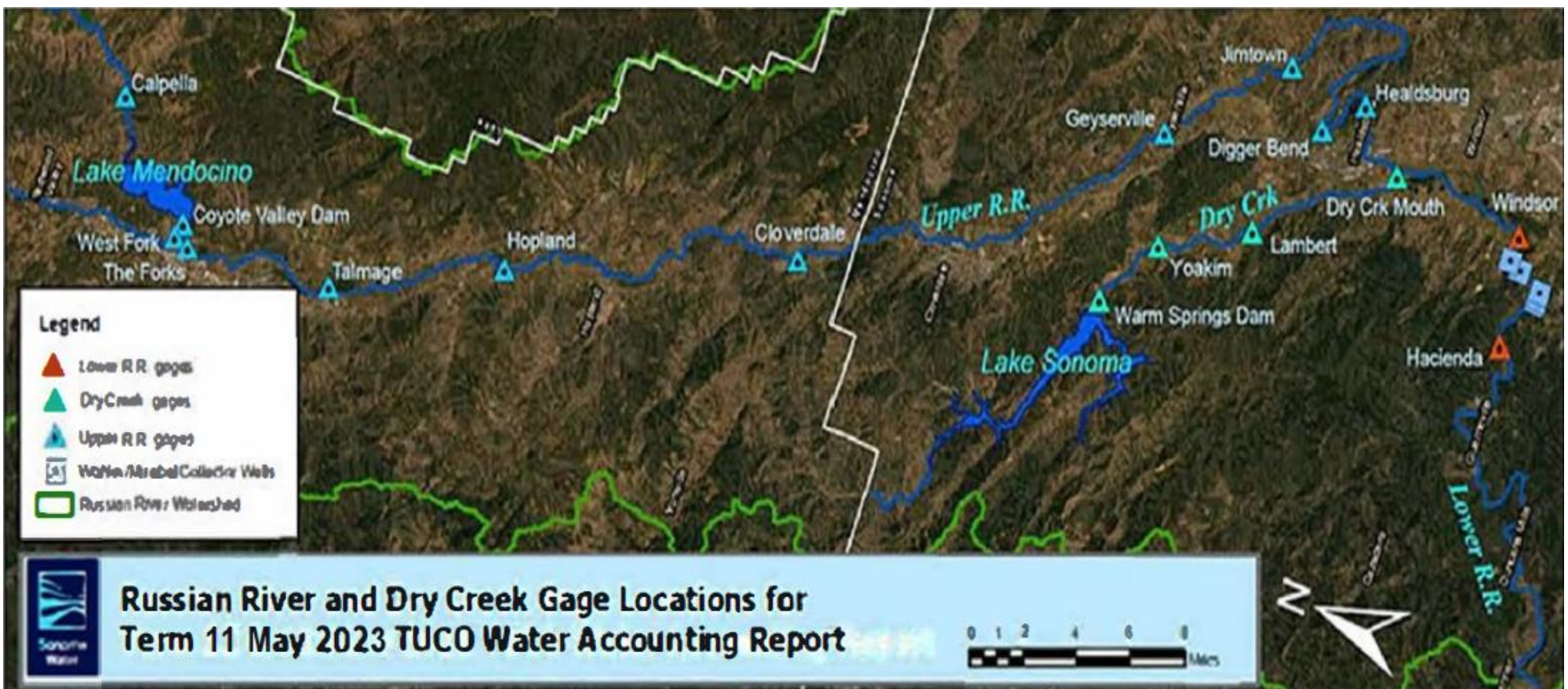
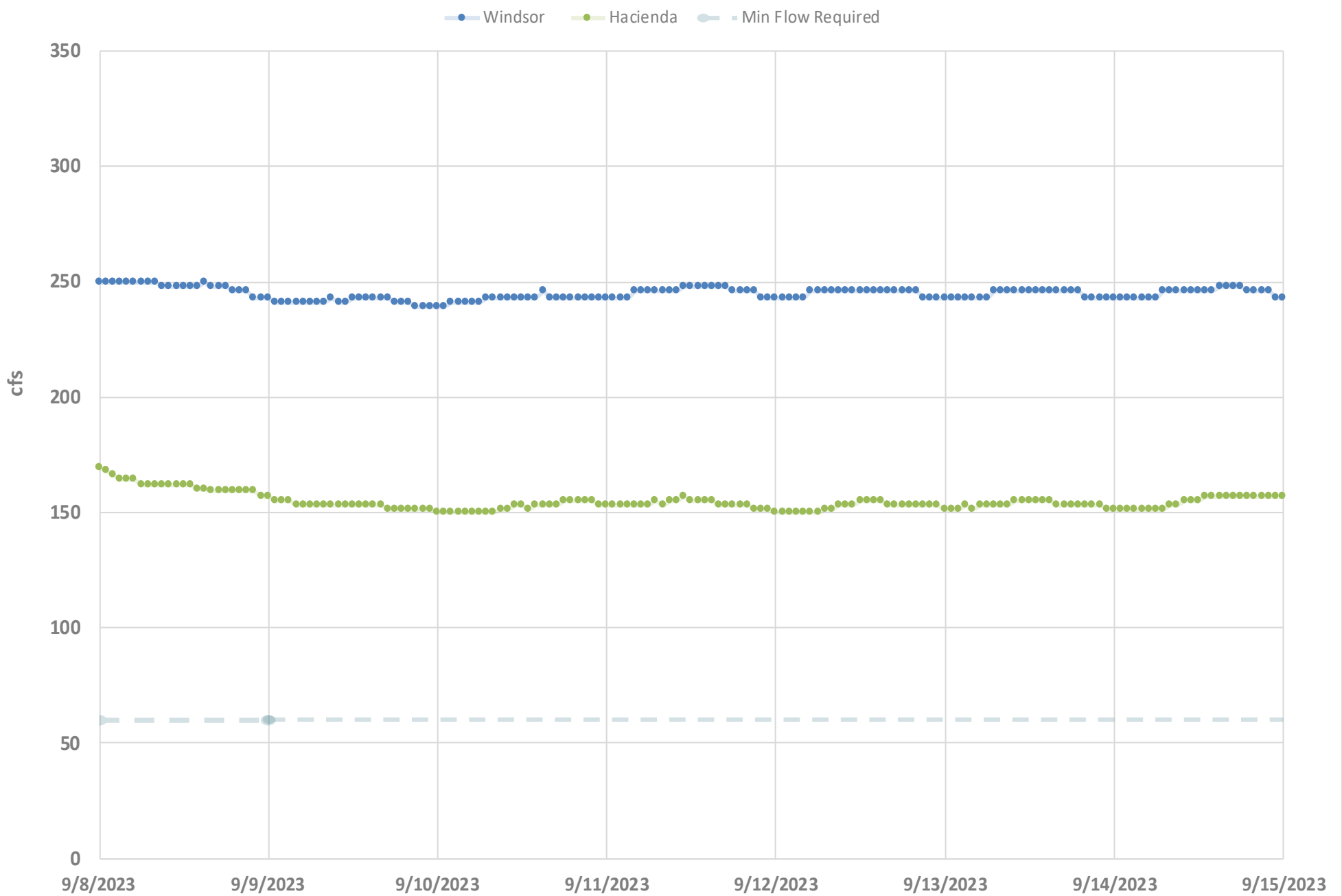
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LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



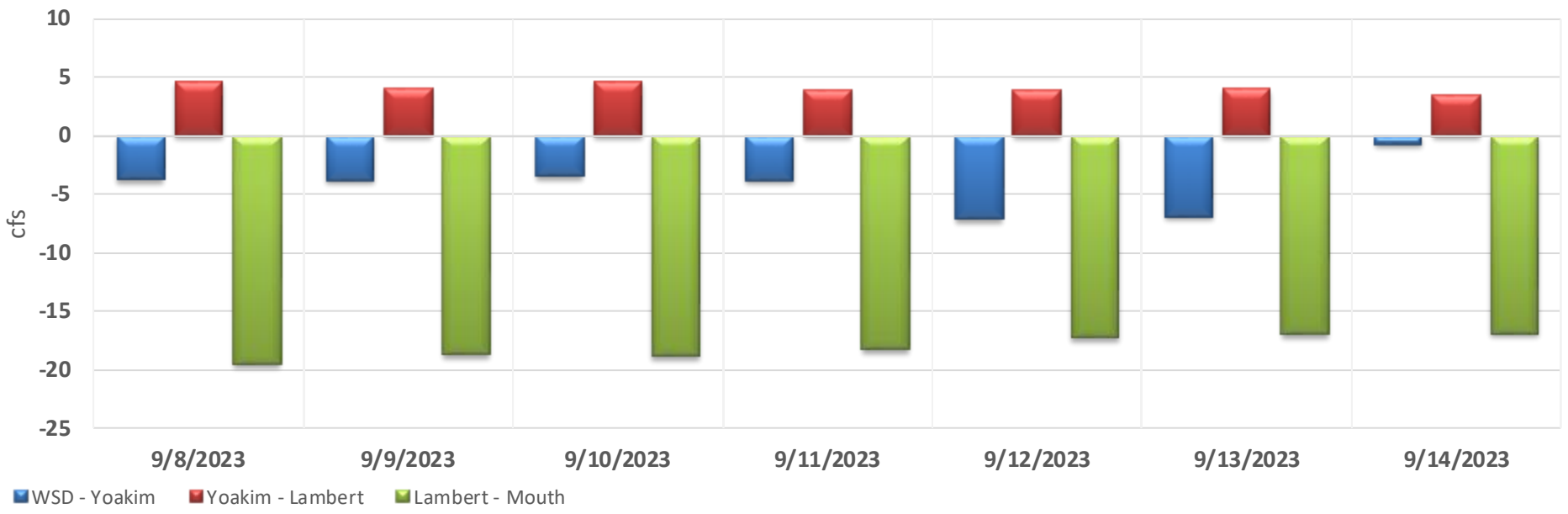
LOWER RUSSIAN RIVER STREAM FLOWS



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



DRY CREEK STREAM FLOWS

