

Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 14, June 2022 TUCO)

Report Date: 8/5/2022

Units are cfs unless noted otherwise

	7/29/2022	7/30/2022	7/31/2022	8/1/2022	8/2/2022	8/3/2022	8/4/2022
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	57.0	55.0	55.0	55.0	55.0	55.0	55.0
PVID Requested Delivery	50.0	50.0	50.0	50.0	50.0	50.0	50.0
PVID Canals Actual Delivery	18.8	20.1	20.0	20.0	20.0	20.0	21.8
East Fork Release	38.0	35.0	35.0	35.0	35.0	35.0	33.0
PVID E Fork Diversions	31.2	29.9	30.0	30.0	30.0	30.1	28.2
PVID Water Use - PG&E Contract	50.0	50.0	50.0	50.0	50.0	50.0	50.0
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)	6.8	5.1	5.0	5.0	5.0	5.0	4.8
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	32.5	16.3	19.7	17.8	16.9	25.4	22.5
Net Reach Loss(-)/Gain(+)	-24.5	-38.7	-35.3	-37.2	-38.1	-29.6	-32.5
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.)	-25.5	-11.3	-14.7	-12.8	-11.9	-20.4	-17.5
Natural Flow	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Import (neg. value is return flow)	-25.5	-11.3	-14.7	-12.8	-11.9	-20.4	-17.5

II. Lake Mendocino

Reservoir Operations

Calculated Inflow (ac-ft)	74	10	51	26	43	41	62
(cfs)	37	5	26	13	22	21	31
Natural Flow	5	0	6	0	5	0	9
Import	32	5	20	13	17	21	23
Storage Change (ac-ft)	-120.0	-181.0	-135.0	-150.0	-150.0	-150.0	-135.0
(cfs)	-61	-91	-68	-76	-76	-76	-68
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)	31.5	28.6	23.8	13.3	30.7	28.7	34.8
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	82	82	82	82	82	82	82
Storage (Project Water)	45	77	56	69	60	61	51
Natural Flow	5	0	6	0	5	0	9
Import Water	32	5	20	13	17	21	23
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage	<i>Rvr mi.</i>						
CVD Release	99.9	82	82	82	82	82	82
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	37	5	26	13	22	21	31
Project Water Release Required	No	Yes	No	Yes	Yes	Yes	No

III. Upper Russian River Reach

Minimum Instream Flow Requirement	25	25	25	25	25	25	25
Controlling Compliance Gage							
Min Gage Flow	29	29	29	30	31	31	29
Controlling Gage	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg
All Compliance Gages							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	82	82	82	82	82	82
Talmage (USGS 11462080)	96.1	73	72	74	72	71	71
Hopland (USGS 11462500)	84.8	64	57	62	60	56	57
Cloverdale (USGS 11463000)	70.9	57	57	59	63	58	56
Geyserville (USGS 11463500)	54.4	37	38	39	42	40	37
Jimtown (USGS 11463682)	48.5	39	40	41	44	45	42
Digger Bend (USGS 11463980)	38.2	31	31	31	32	34	31
Healdsburg (USGS 11464000)	35.6	29	29	29	30	31	29
Net Reach Loss(-)/Gain(+)							
Forks - Talmage	-9	-9	-8	-8	-10	-11	-11
Talmage - Hopland	-10	-15	-11	-13	-13	-15	-15
Hopland - Cloverdale	-10	-3	+2	+1	+1	-1	+1
Cloverdale - Jimtown	-16	-16	-15	-14	-18	-19	-17
Jimtown - Digger Bend	-8	-9	-10	-11	-12	-11	-12
Digger Bend - Healdsburg	-2	-1	-1	-1	-2	-3	-4
Upper Russian Net Reach Loss/Gain	-55	-54	-44	-47	-53	-61	-57
CVD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-55	-54	-44	-47	-53	-61	-57
Storage (Project Water)	-45	-54	-44	-47	-53	-61	-51
Pass-through Water (Nat. + Imp.) + Natural	-10	0	0	0	0	0	-7
Total Pass-through Water	27	5	26	13	22	21	24
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).

	<u>7/29/2022</u>	<u>7/30/2022</u>	<u>7/31/2022</u>	<u>8/1/2022</u>	<u>8/2/2022</u>	<u>8/3/2022</u>	<u>8/4/2022</u>
IV. Lake Sonoma							
Lake Sonoma							
Storage Change (ac-ft)	-218.0	-251.0	-235.0	-217.0	-251.0	-217.0	-233.0
(cfs)	-110	-127	-118	-109	-127	-109	-117
Evaporation (ac-ft)	26.4	22.2	25.3	12.5	28.4	24.9	28.3
Inflow (Natural Flow)	2	0	0	0	0	2	0
WSD Release Gage	99	99	100	100	99	99	98
Storage (Project Water)	97	99	100	100	99	97	98
Natural Flow	2	0	0	0	0	2	0
V. Lower Dry Creek Reach							
Minimum Instream Flow Requirement	80	80	80	80	80	80	80
Controlling Compliance Gage							
Min Gage Flow	90	90	91	90	87	85	85
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	99	99	100	100	99	99
Yoakim (USGS 11465200)	11.1	102	102	103	102	101	100
Lambert (USGS 11465240)	6.8	100	101	102	102	100	99
Dry Crk Mouth (USGS 11465350)	0.1	90	90	91	90	87	85
WSD to Russian River Confluence Reach Analysis							
Total Pass-through Water	2	0	0	0	0	2	0
Net Reach Loss(-)/Gain(+)							
WSD - Yoakim	+3	+3	+3	+2	+1	+0	+1
Yoakim - Lambert	-2	-1	-1	-1	-0	-2	-2
Lambert - Dry Crk Mouth	-10	-11	-11	-11	-14	-14	-13
WSD - Dry Crk Mouth	-9	-9	-8	-10	-14	-15	-14
WSD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss/Gain to Controlling Gage	-9	-9	-8	-10	-14	-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	29	29	29	30	31	31	29
Natural Flow	0	0	0	0	0	0	0
Dry Creek Flow (Mouth Gage)							
L. Sonoma Project Water	97	99	100	100	99	97	98
Natural Flow	0	0	0	0	0	0	0
Russian River d/s of Confluence Flow							
L. Mendocino Project Water + Import Water	29	29	29	30	31	31	29
L. Sonoma Project Water	97	99	100	100	99	97	98
Natural Flow	0	0	0	0	0	0	0
VII. Lower Russian River Reach							
Minimum Instream Flow Requirement	35	35	35	35	35	35	35
Controlling Compliance Gage							
Min Gage Flow	50	49	49	52	44	48	47
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
All Compliance Gages							
	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	122.7	123.5	123.4	122.5	121.2	117.3
Hacienda (USGS 11467000)	21.8	50	49	49	52	44	48
Confluence to Windsor Reach Analysis							
Net Reach Loss/Gain to Windsor Gage	+4	+5	+3	+2	+2	+2	-2
L. Mendocino Project Water + Import Water	29	29	29	30	31	31	29
L. Sonoma Project Water	91	94	94	95	94	92	94
Natural Flow	4	5	3	2	2	2	0
Confluence to SCWA Wohler Production Facility Reach Analysis							
Approx. Flow u/s of Wohler	114	124	104	115	107	110	110
Net Reach Loss(-)/Gain(+)	-5	+5	-17	-5	-11	-6	-4
L. Mendocino Project Water + Import Water	29	29	29	30	31	31	29
L. Sonoma Project Water	91	94	94	95	94	92	94
Natural Flow	0	5	0	0	0	0	0
Confluence to Hacienda (Guerneville) Reach Analysis							
Net Reach Loss(-)/Gain(+)	-69	-70	-72	-69	-73	-68	-68
L. Mendocino Project Water + Import Water	29	29	29	30	31	31	29
L. Sonoma Project Water	27	19	39	32	32	29	30
Natural Flow	0	5	0	0	0	0	0
VIII. Water Production under Sonoma Water Rights (ac-ft)							
Lower Russian River							
Sonoma Water Total	128.1	148.3	109.4	125.5	123.3	124.3	126.1
Wohler	117.1	141.2	103.1	118.7	94.5	71.7	77.9
Mirabel	6.0	2.1	1.5	2.0	24.0	47.8	43.3
Town of Windsor River Wellfield	10.9	10.5	10.2	9.8	10.4	9.8	8.7
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

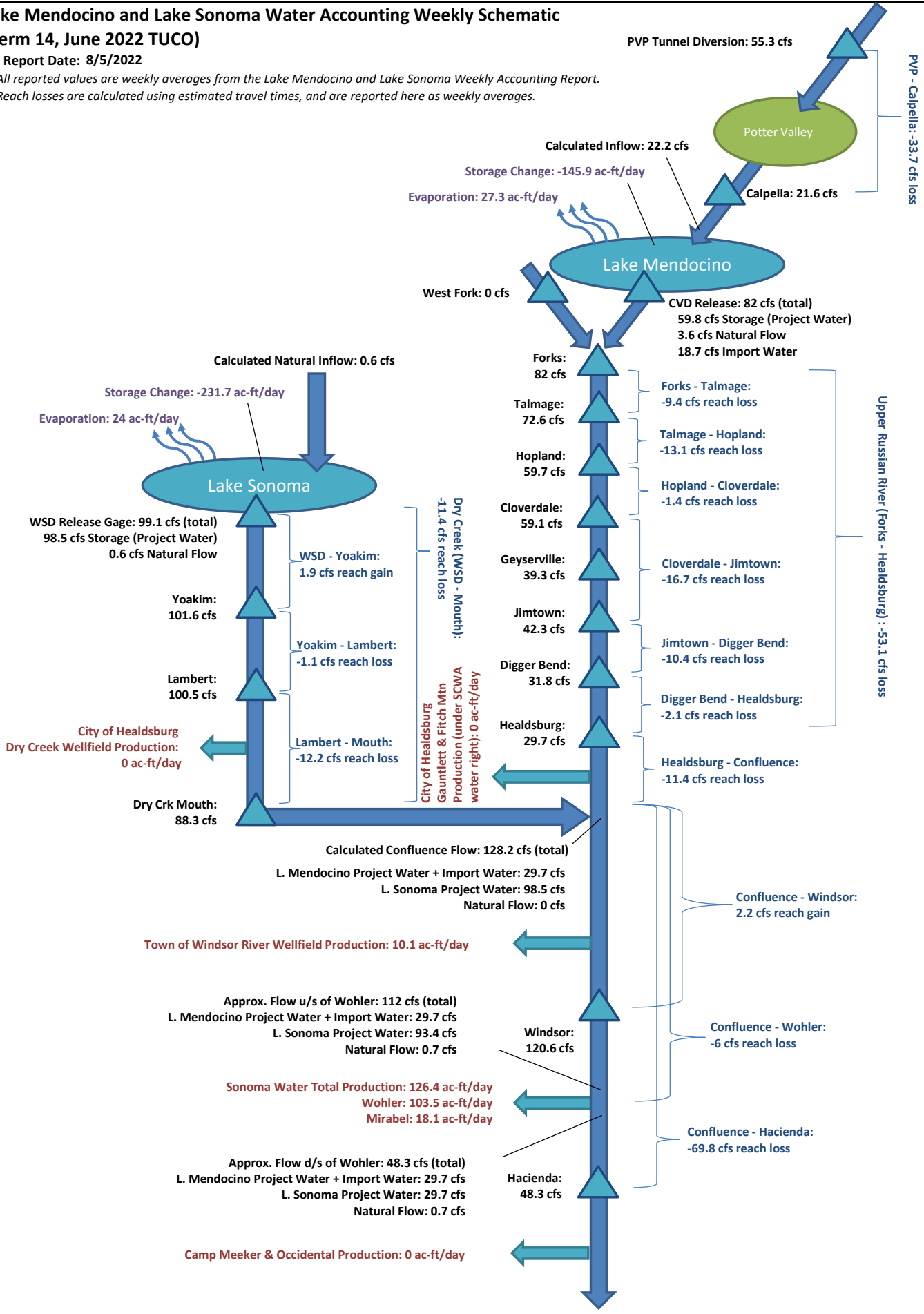
Notes:

- 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 14, June 2022 TUCO)

Report Date: 8/5/2022

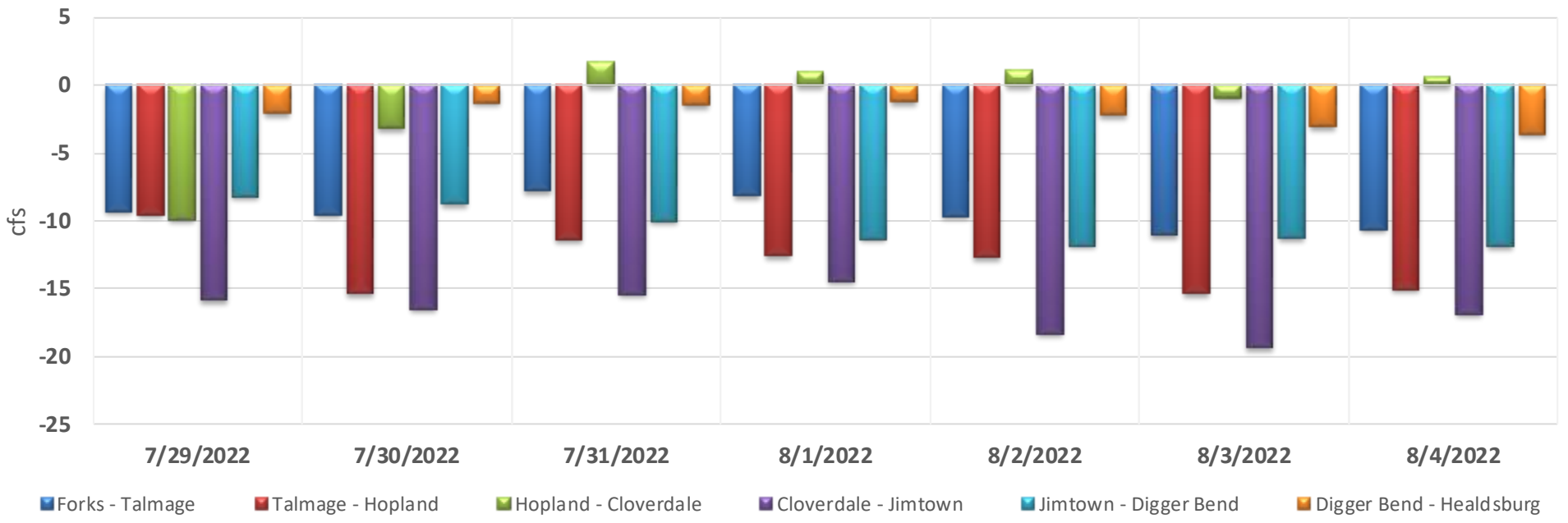
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



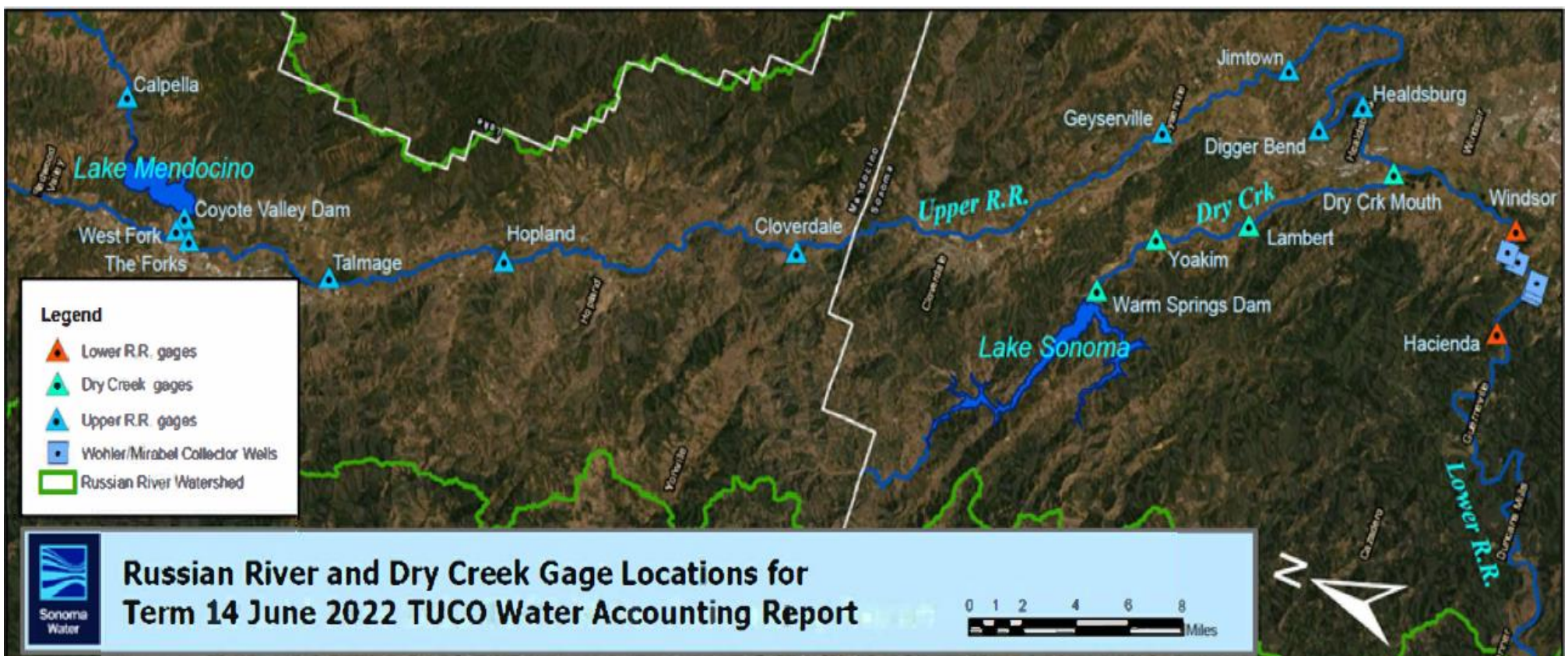
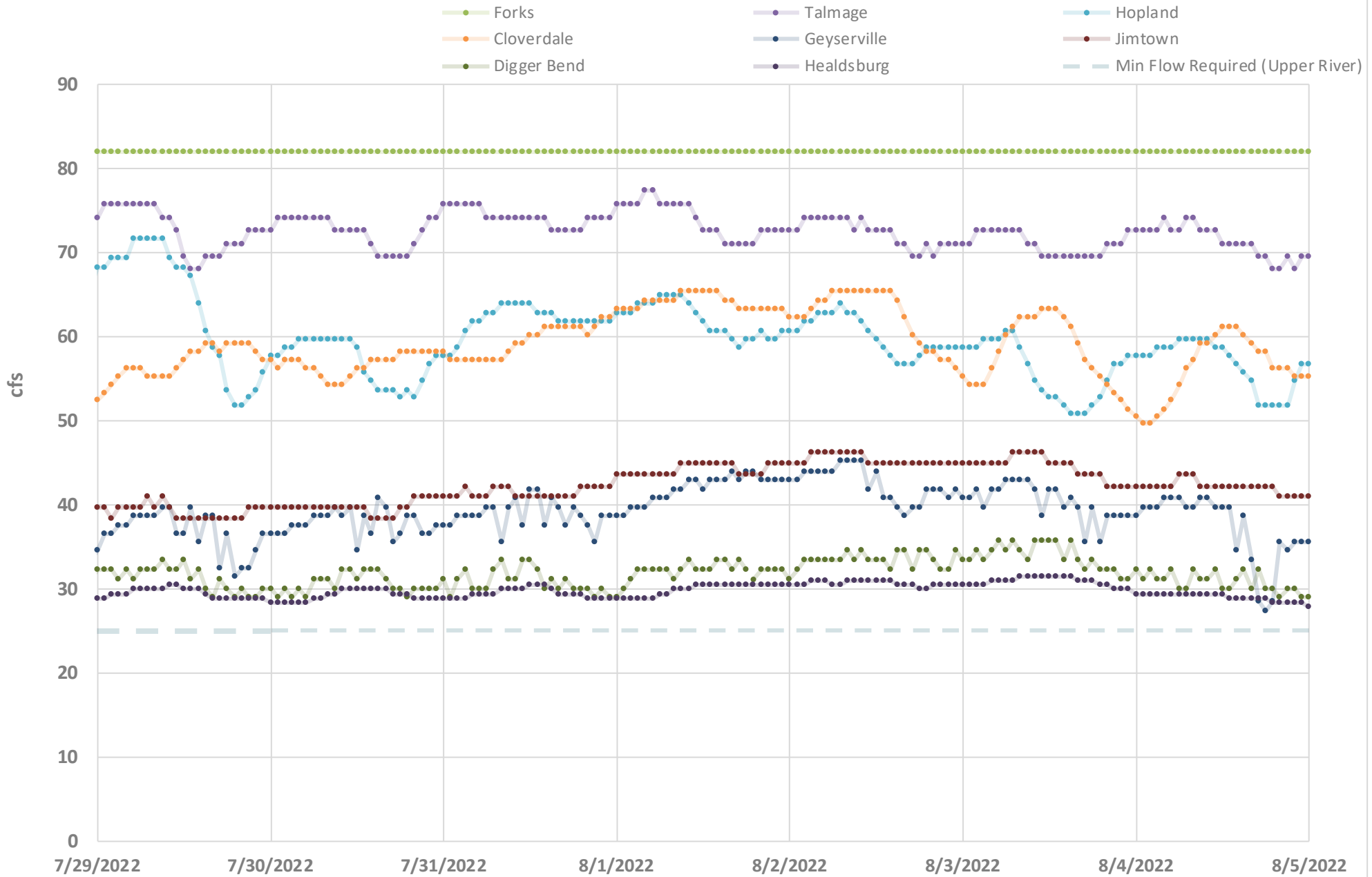
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UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



UPPER RUSSIAN RIVER STREAM FLOWS



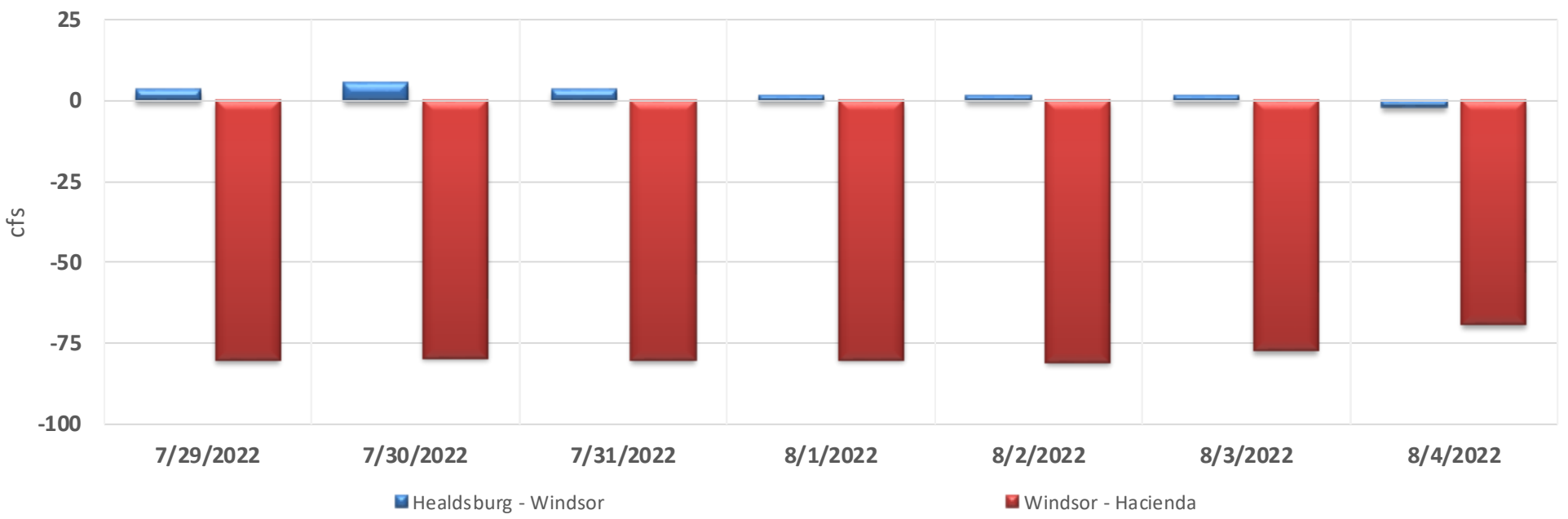
Russian River and Dry Creek Gage Locations for Term 14 June 2022 TUCO Water Accounting Report

0 1 2 4 6 8 Miles

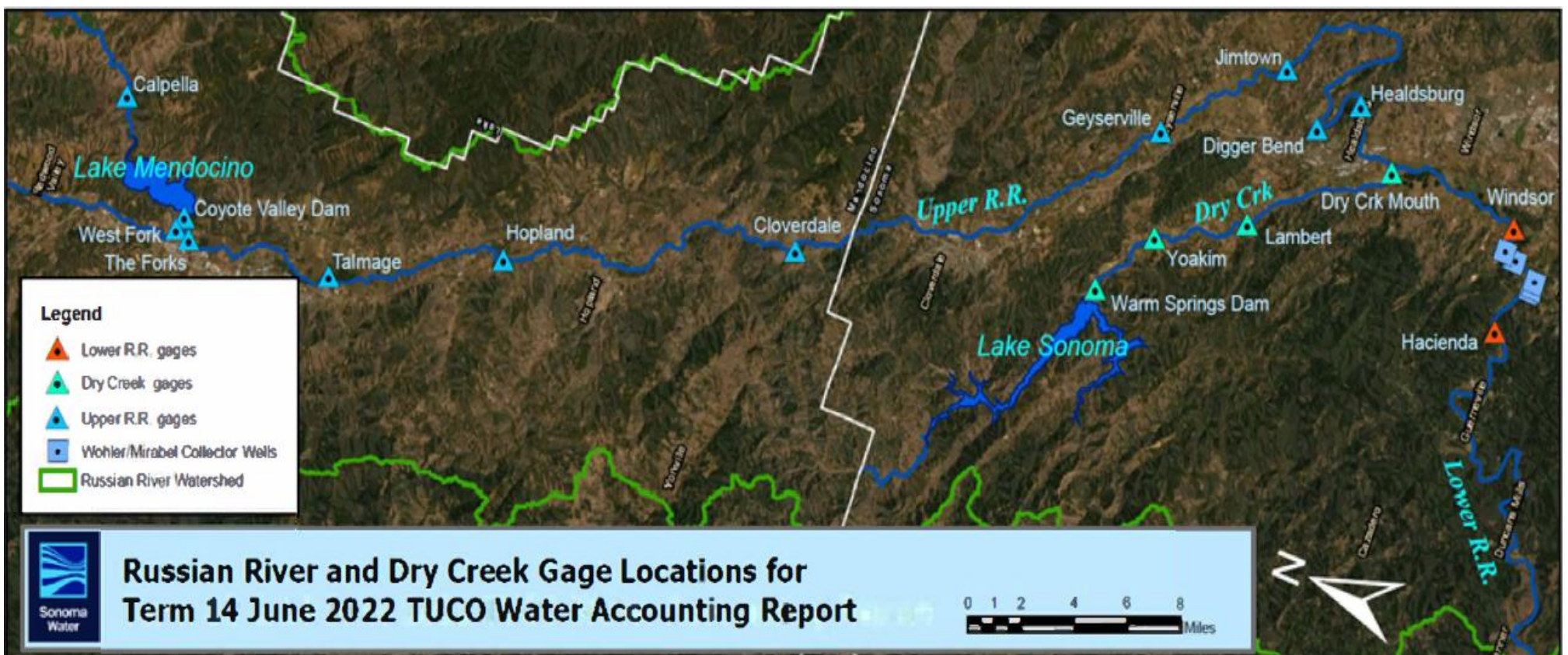
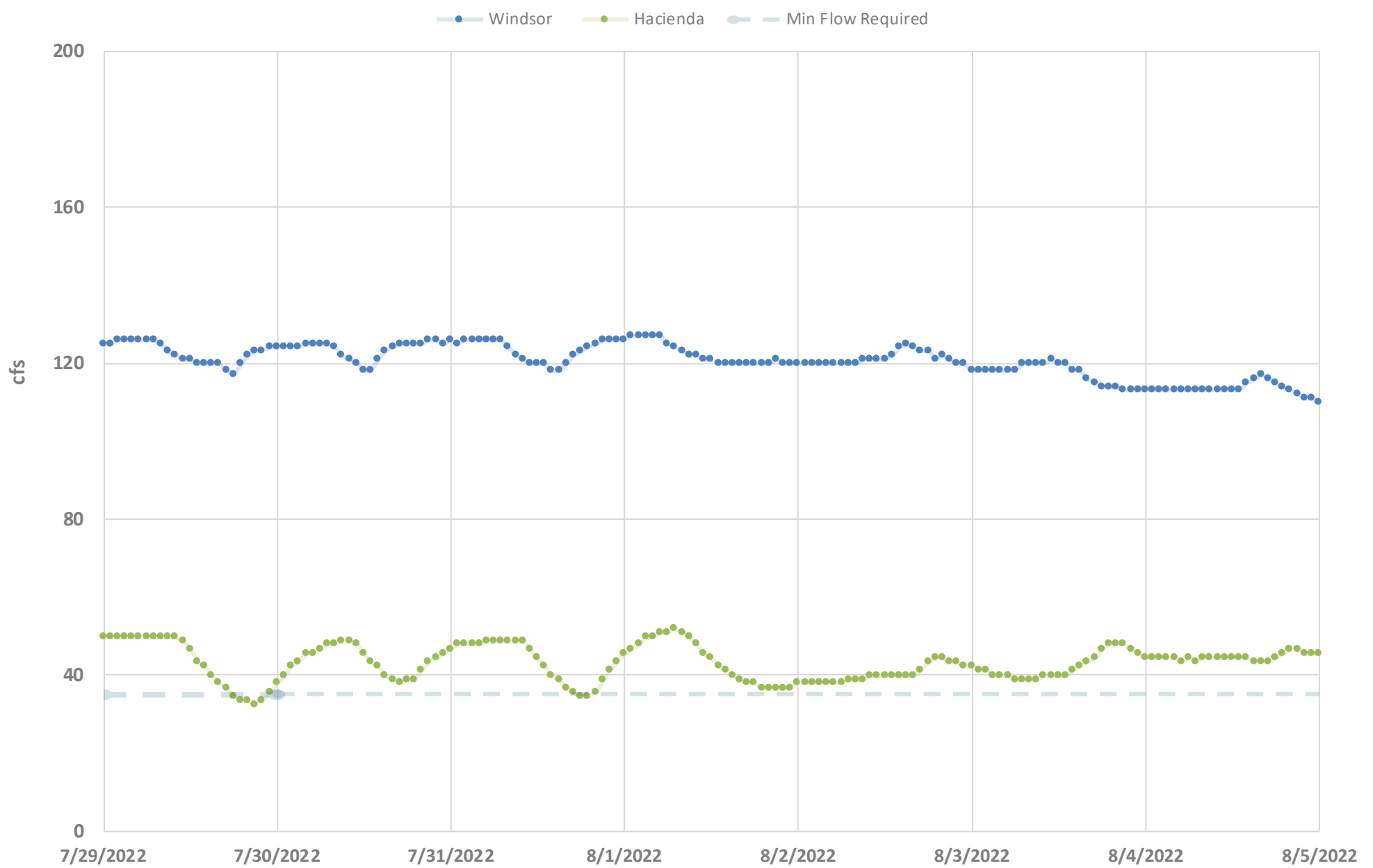
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LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



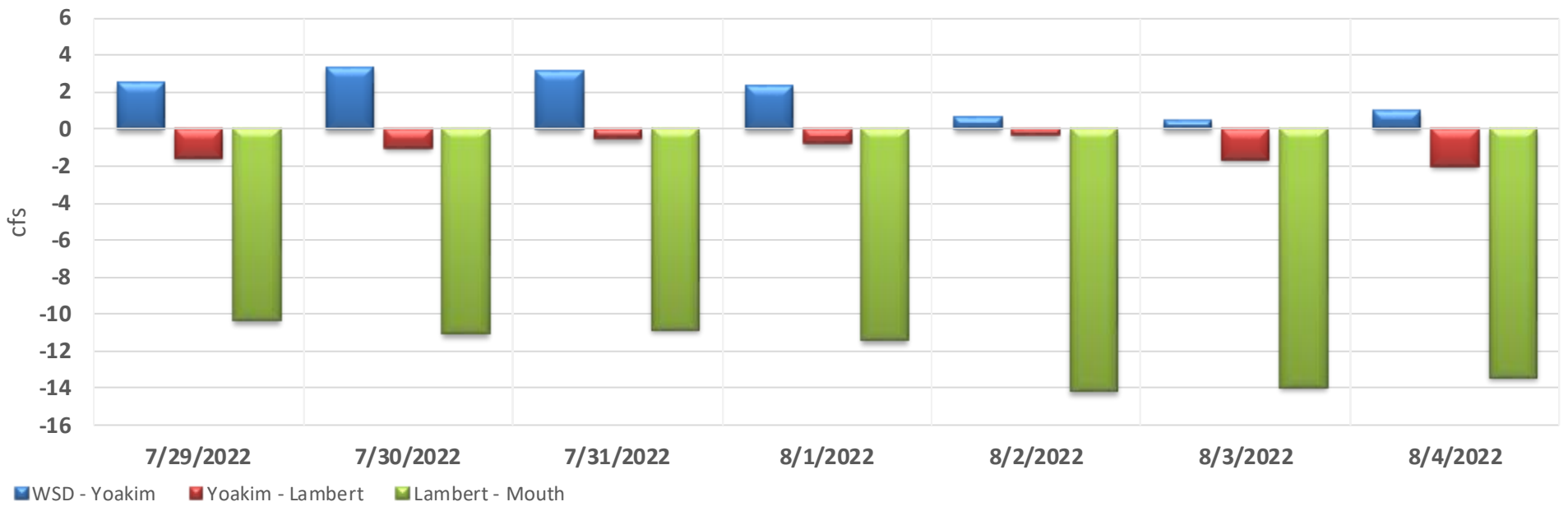
LOWER RUSSIAN RIVER STREAM FLOWS



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



DRY CREEK STREAM FLOWS

