

Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Terms 12 & 13 June 2021 TUCO)

Report Date: 7/30/2021

Units are cfs unless noted otherwise

	7/23/2021	7/24/2021	7/25/2021	7/26/2021	7/27/2021	7/28/2021	7/29/2021
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	39.0	39.0	39.0	33.0	29.0	29.0	29.0
PVID Requested Delivery	35.0	35.0	35.0	28.4	25.0	25.0	25.0
PVID Canals Actual Delivery	16.6	16.6	16.6	12.3	10.4	12.3	10.4
East Fork Release	22.4	22.4	22.4	20.7	18.6	16.7	18.6
PVID E Fork Diversions	18.4	18.4	18.4	16.0	14.6	12.7	14.6
PVID Water Use - PG&E Contract	35.0	35.0	35.0	28.4	25.0	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	4.0	4.0	4.0	4.6	4.0	4.0	4.0
PVID Canal Net Return Flow (assumed)	5.9	6.9	7.9	6.2	8.6	6.0	4.9
East Fork / Potter Valley Reach Analysis							
USGS E Fork @ Calpella	9.9	10.9	11.9	10.8	12.6	10.0	8.9
Net Reach Loss(-)/Gain(+)	-29.1	-28.1	-27.1	-22.2	-16.4	-19.0	-20.1
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 (neg. value is return flow)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

II. Lake Mendocino

Resrvoir Operations							
Calculated Inflow (ac-ft)	16.3	16.9	20.1	47.5	12.9	3.9	40.9
(cfs)	8	9	10	24	6	2	21
Natural Flow	0	0	0	0	0	0	0
Import	8	9	10	24	6	2	21
Storage Change (ac-ft)	-186.0	-186.0	-194.0	-173.0	-203.0	-221.0	-190.0
(cfs)	-94	-94	-98	-87	-102	-111	-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)	21.8	22.4	22.2	18.2	13.6	20.5	19.8
RVCWD Diversion (ac-ft) (est.)	0	0	0	0	0	0	0
CVD Release Gage	91	91	97	102	102	103	106
Storage (Project Water)	83	82	87	78	96	101	86
Natural Flow	0	0	0	0	0	0	0
Import Water	8	9	10	24	6	2	21
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage	<i>Rvr mi.</i>						
CVD Release	99.9	91	91	97	102	102	103
106							
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	8	9	10	24	6	2	21
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes

III. Upper Russian River Reach

Minimum Instream Flow Requirement							
15	15	15	15	15	15	15	15
Controlling Compliance Gage							
Min Gage Flow	26	24	23	23	24	20	20
Controlling Gage	Digger Bend	Digger Bend	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg
All Compliance Gages							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	91	91	97	102	102	103
106							
Talmage (USGS 11462080)	96.1	73	73	76	81	79	79
80							
Hopland (USGS 11462500)	84.8	63	65	66	74	75	77
74							
Cloverdale (USGS 11463000)	70.9	51	51	51	55	63	64
62							
Geyserville (USGS 11463500)	54.4	42	41	43	43	39	42
42							
Jimtown (USGS 11463682)	48.5	31	30	31	33	33	35
36							
Digger Bend (USGS 11463980)	38.2	26	24	23	24	25	24
26							
Healdsburg (USGS 11464000)	35.6	26	25	23	23	24	20
20							
Net Reach Loss(-)/Gain(+)							
Forks - Talmage	-18	-18	-20	-20	-23	-23	-26
Talmage - Hopland	-9	-9	-7	-7	-4	-3	-4
Hopland - Cloverdale	-11	-11	-12	-12	-13	-12	-13
Cloverdale - Jimtown	-22	-21	-20	-20	-19	-26	-26
Jimtown - Digger Bend	-7	-7	-8	-9	-9	-10	-10
Digger Bend - Healdsburg	-1	-2	-2	-3	-3	-5	-5
Upper Russian Net Reach Loss/Gain	-69	-69	-70	-71	-71	-78	-85
CVD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-68	-67	-70	-71	-71	-78	-85
Storage (Project Water)	+68	+67	+70	+71	+71	+78	+85
Pass-through Water (Natural + Import)	+0	+0	+0	+0	+0	+0	+0
Total Pass-through Water	8	9	10	24	6	2	21
Project Water Release Required	Yes	Yes	Yes	No	Yes	Yes	No

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>7/23/2021</u>	<u>7/24/2021</u>	<u>7/25/2021</u>	<u>7/26/2021</u>	<u>7/27/2021</u>	<u>7/28/2021</u>	<u>7/29/2021</u>
IV. Lake Sonoma								
<u>Lake Sonoma</u>								
Storage Change (ac-ft)		-251.0	-234.0	-250.0	-234.0	-233.0	-249.0	-232.0
(cfs)		-127	-118	-126	-118	-117	-126	-117
Evaporation (ac-ft)		24.2	24.2	23.1	14.7	17.8	23.0	24.0
Inflow (Natural Flow)		0	0	0	0	0	0	0
WSD Release Gage		99	99	99	99	100	99	100
Storage (Project Water)		99	99	99	99	100	99	100
Natural Flow		0	0	0	0	0	0	0
V. Lower Dry Creek Reach								
<u>Minimum Instream Flow Requirement</u>		25	25	25	25	25	25	25
<u>Controlling Compliance Gage</u>								
Min Gage Flow		86	86	88	90	90	89	87
Controlling Gage		Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth
<u>All Compliance Gages</u>		<u>Crk mi.</u>						
WSD Release		<i>14.3</i>	99	99	99	100	99	100
Yoakim (USGS 11465200)		<i>11.1</i>	101	102	103	103	102	102
Lambert (USGS 11465240)		<i>6.8</i>	108	108	110	109	108	108
Dry Crk Mouth (USGS 11465350)		<i>0.1</i>	86	86	88	90	89	87
<u>WSD to Russian River Confluence Reach Analysis</u>								
Total Pass-through Water		0	0	0	0	0	0	0
<u>Net Reach Loss(-)/Gain(+)</u>								
WSD - Yoakim		+2	+3	+4	+4	+3	+3	+2
Yoakim - Lambert		+7	+6	+7	+7	+6	+6	+6
Lambert - Dry Crk Mouth		-22	-22	-21	-21	-19	-19	-21
WSD - Dry Crk Mouth		-13	-13	-11	-10	-9	-10	-13
<u>WSD Project Water Release to Meet Min Flow Requirement</u>								
Net Reach Loss/Gain to Controlling Gage		-13	-13	-11	-10	-9	-10	-13
Project Water Release Required		Yes	Yes	Yes	Yes	Yes	Yes	Yes
VI. Russian River - Dry Creek Confluence								
<u>Upper Russian River Flow (Healdsburg Gage)</u>								
L. Mendocino Project Water + Import Water		26	25	23	23	24	20	20
Natural Flow		0	0	0	0	0	0	0
<u>Dry Creek Flow (Mouth Gage)</u>								
L. Sonoma Project Water		86	86	88	90	90	89	87
Natural Flow		0	0	0	0	0	0	0
<u>Russian River d/s of Confluence Flow</u>		112	111	111	113	114	109	107
L. Mendocino Project Water + Import Water		26	25	23	23	24	20	20
L. Sonoma Project Water		86	86	88	90	90	89	87
Natural Flow		0	0	0	0	0	0	0
VII. Lower Russian River Reach								
<u>Minimum Instream Flow Requirement</u>		35	35	35	35	35	35	35
<u>Controlling Compliance Gage</u>								
Min Gage Flow		39	35	37	39	37	38	37
Controlling Gage		Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
<u>All Compliance Gages</u>		<u>Rvr mi.</u>						
Windsor (USGS 11465390)		<i>26.6</i>	115	114	114	115	115	114
Hacienda (USGS 11467000)		<i>21.8</i>	39	35	37	39	38	37
<u>Confluence to Windsor Reach Analysis</u>								
Net Reach Loss/Gain to Windsor Gage		+2	+3	+4	+2	+1	+6	+7
L. Mendocino Project Water + Import Water		26	25	23	23	24	20	20
L. Sonoma Project Water		81	81	83	85	85	84	81
Natural Flow		8	8	8	7	6	12	12
<u>Confluence to SCWA Wohler Production Facility Reach Analysis</u>								
<u>Approx. Flow u/s of Wohler</u>		100	96	112	111	98	92	115
Net Reach Loss(-)/Gain(+)		-12	-14	+2	-1	-16	-17	+8
L. Mendocino Project Water + Import Water		19	15	23	23	13	8	20
L. Sonoma Project Water		81	81	83	85	85	84	81
Natural Flow		0	0	6	4	0	0	13
<u>Confluence to Hacienda (Guerneville) Reach Analysis</u>								
Net Reach Loss(-)/Gain(+)		-73	-76	-73	-74	-77	-71	-71
L. Mendocino Project Water + Import Water		19	15	23	23	13	8	20
L. Sonoma Project Water		20	20	8	12	24	29	3
Natural Flow		0	0	6	4	0	0	13
VIII. Water Production under Sonoma Water Water Rights (ac-ft)								
<u>Lower Russian River</u>								
Sonoma Water Total		120.8	122.0	148.8	143.5	120.9	108.0	155.2
Wohler		74.6	77.1	73.4	77.5	73.3	76.5	75.2
Mirabel		46.2	44.9	75.4	65.9	47.6	31.6	79.9
Town of Windsor River Wellfield		10.3	9.5	9.4	10.0	10.1	10.7	11.3
Camp Meeker & Occidental		<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>	<i>0.1</i>
<u>Upper Russian River</u>								
City of Healdsburg								
Gauntlett & Fitch Mtn		0.0	0.0	0.0	0.0	0.0	0.0	0.0
<u>Dry Creek</u>								
City of Healdsburg								
Dry Creek Wellfield		3.0	2.6	1.1	1.7	2.5	2.7	2.5

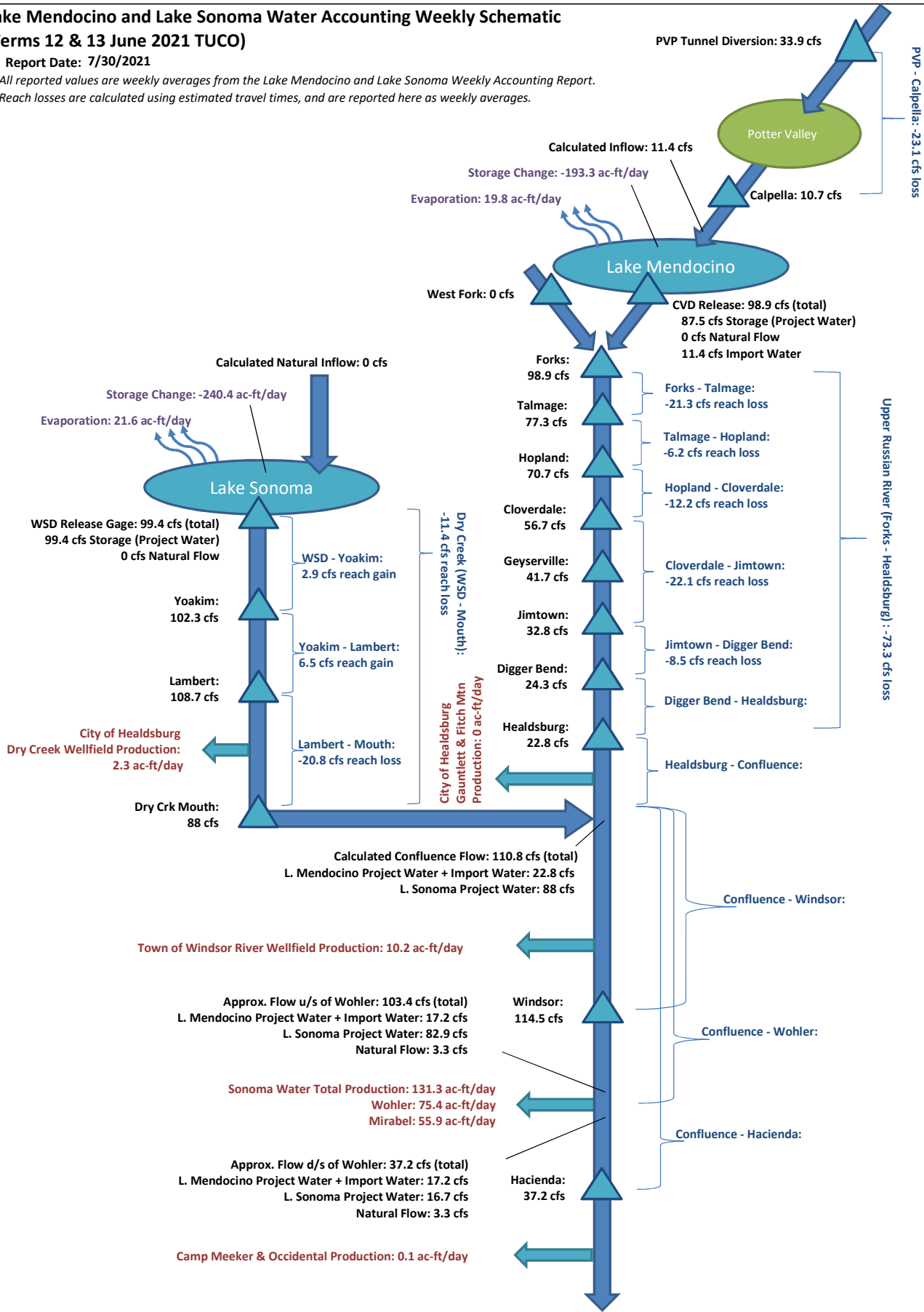
Notes:

- 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 (Terms 12 & 13 June 2021 TUCO)

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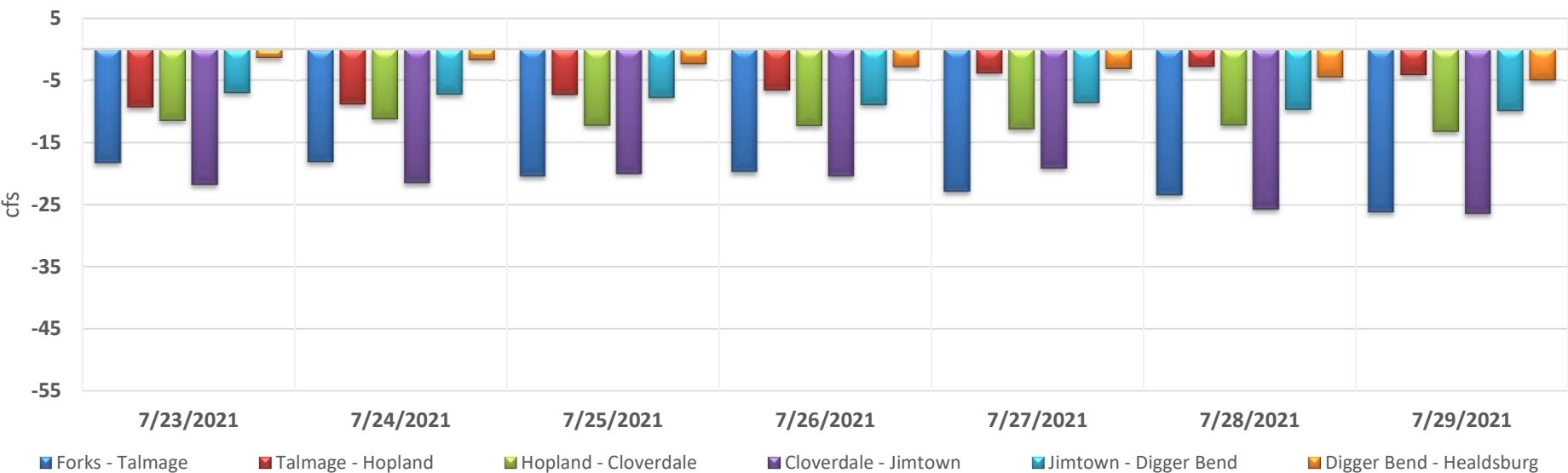
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



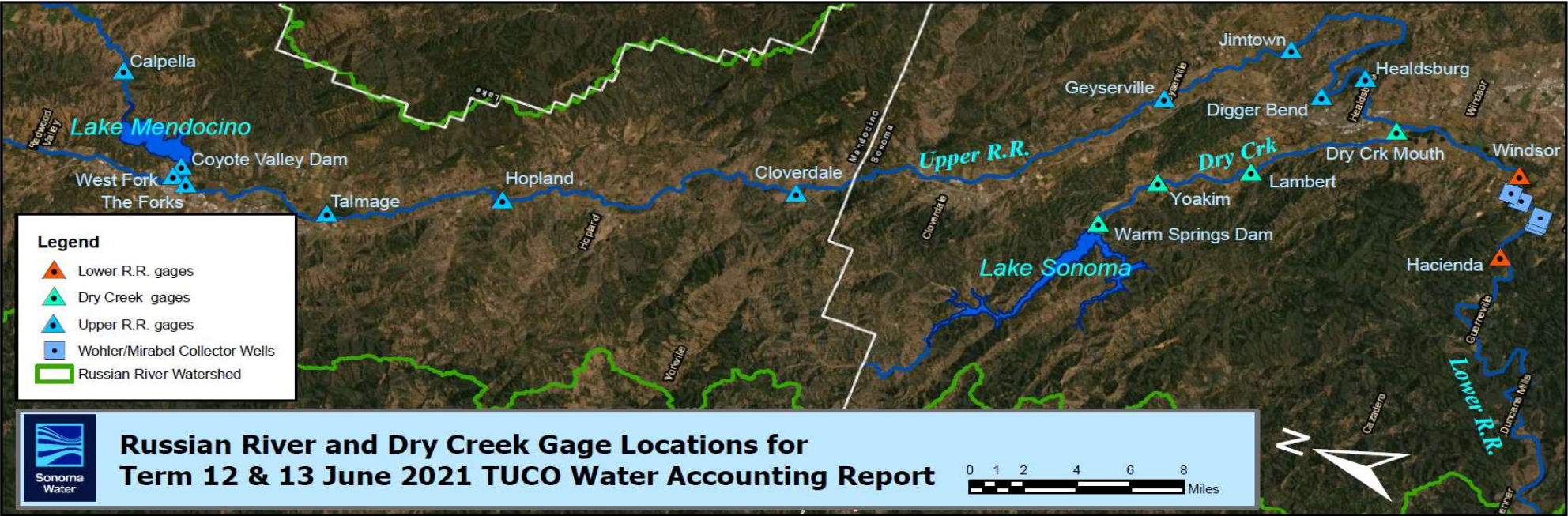
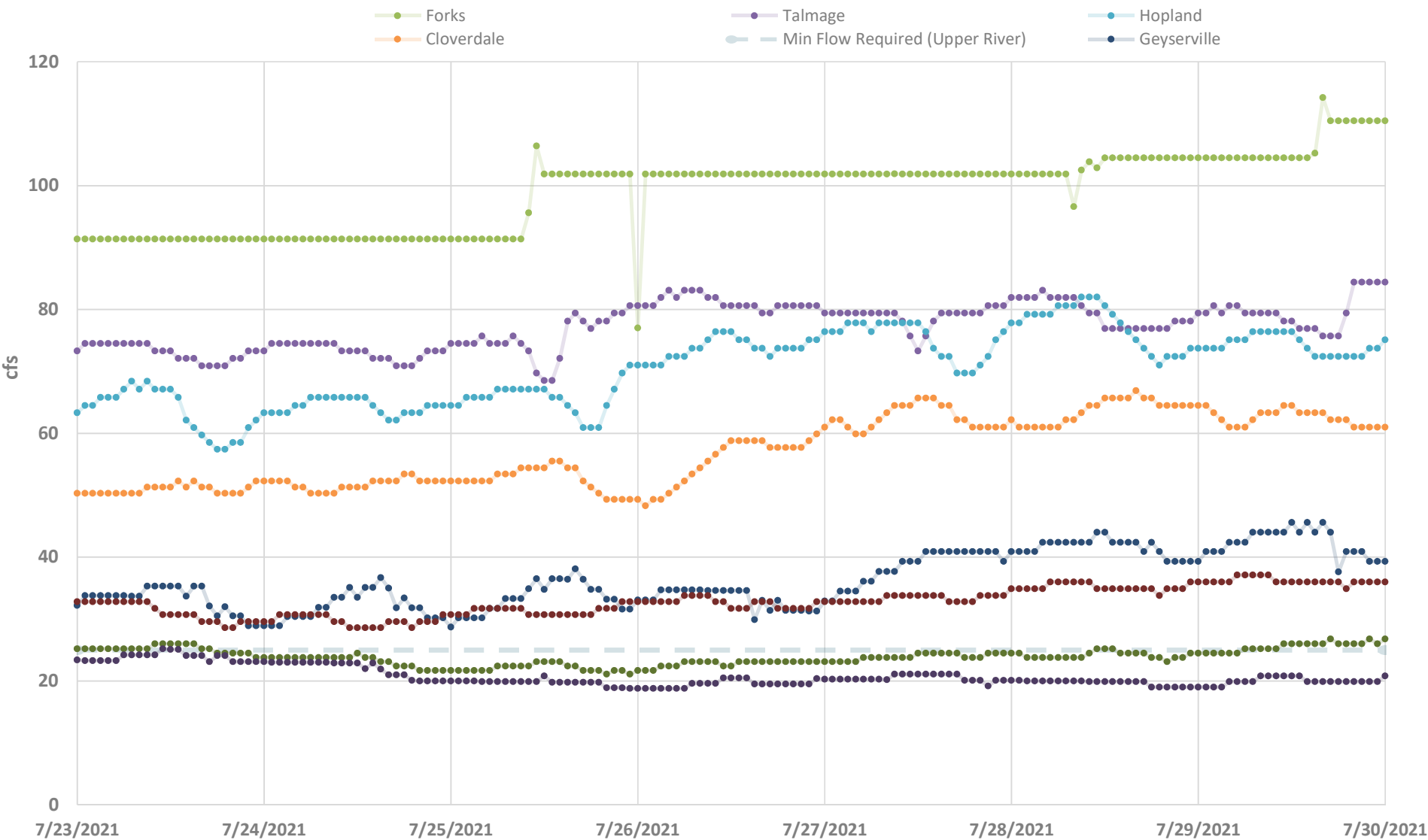
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UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



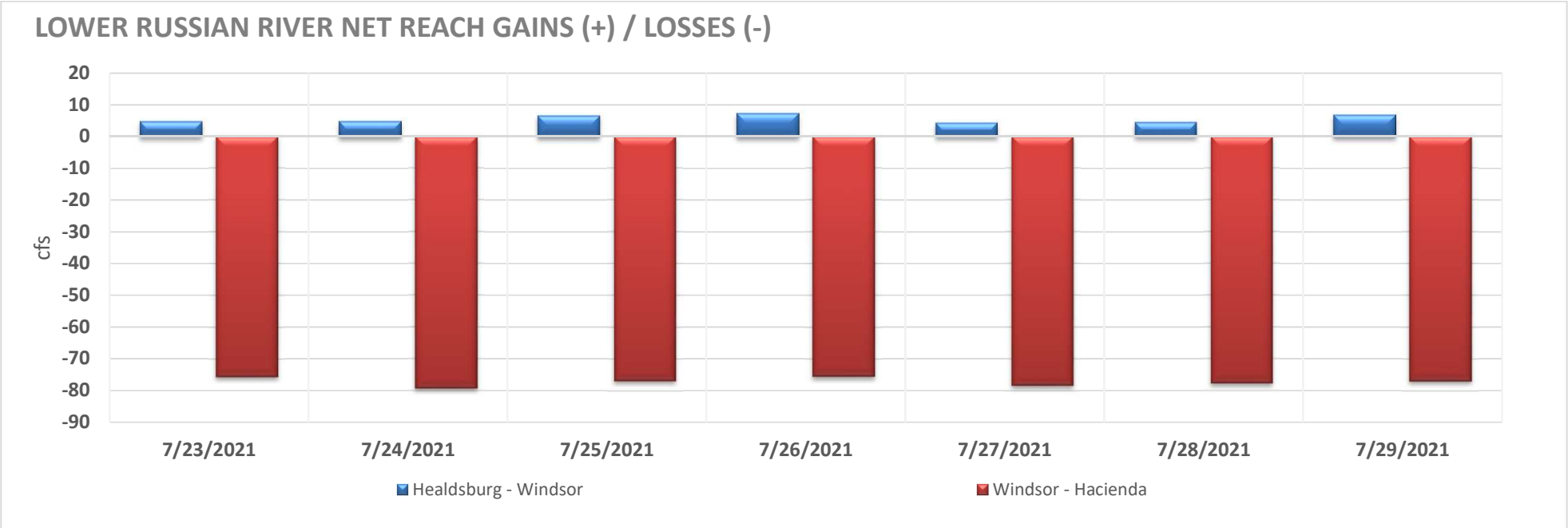
UPPER RUSSIAN RIVER STREAM FLOWS



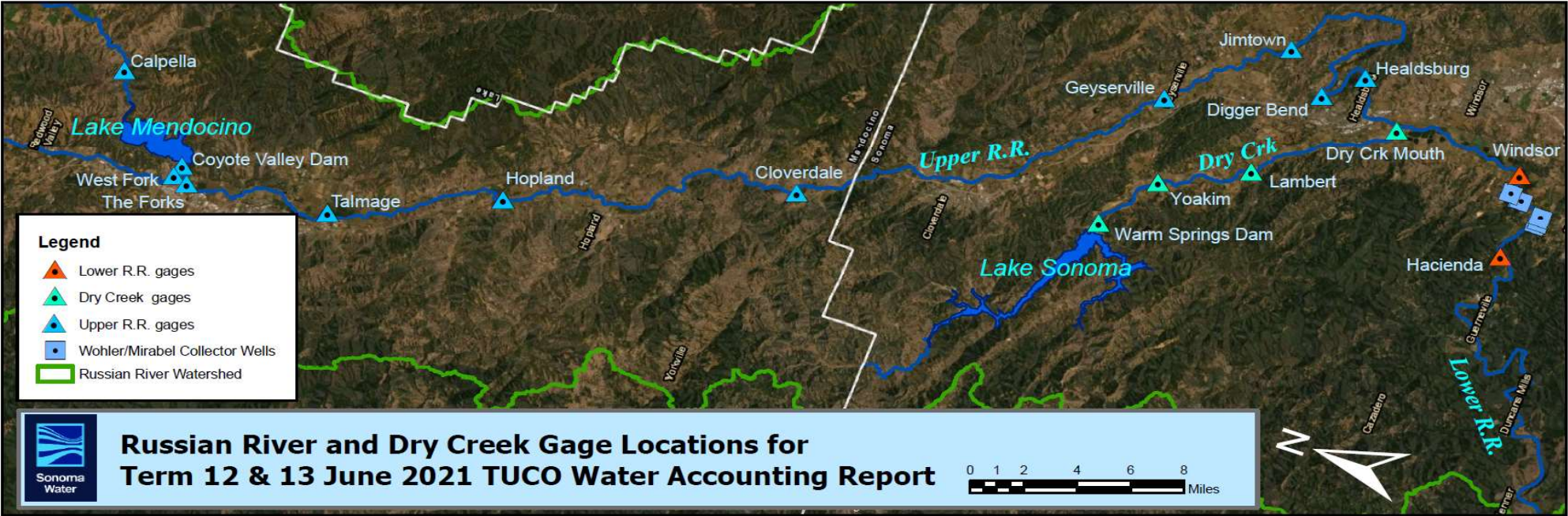
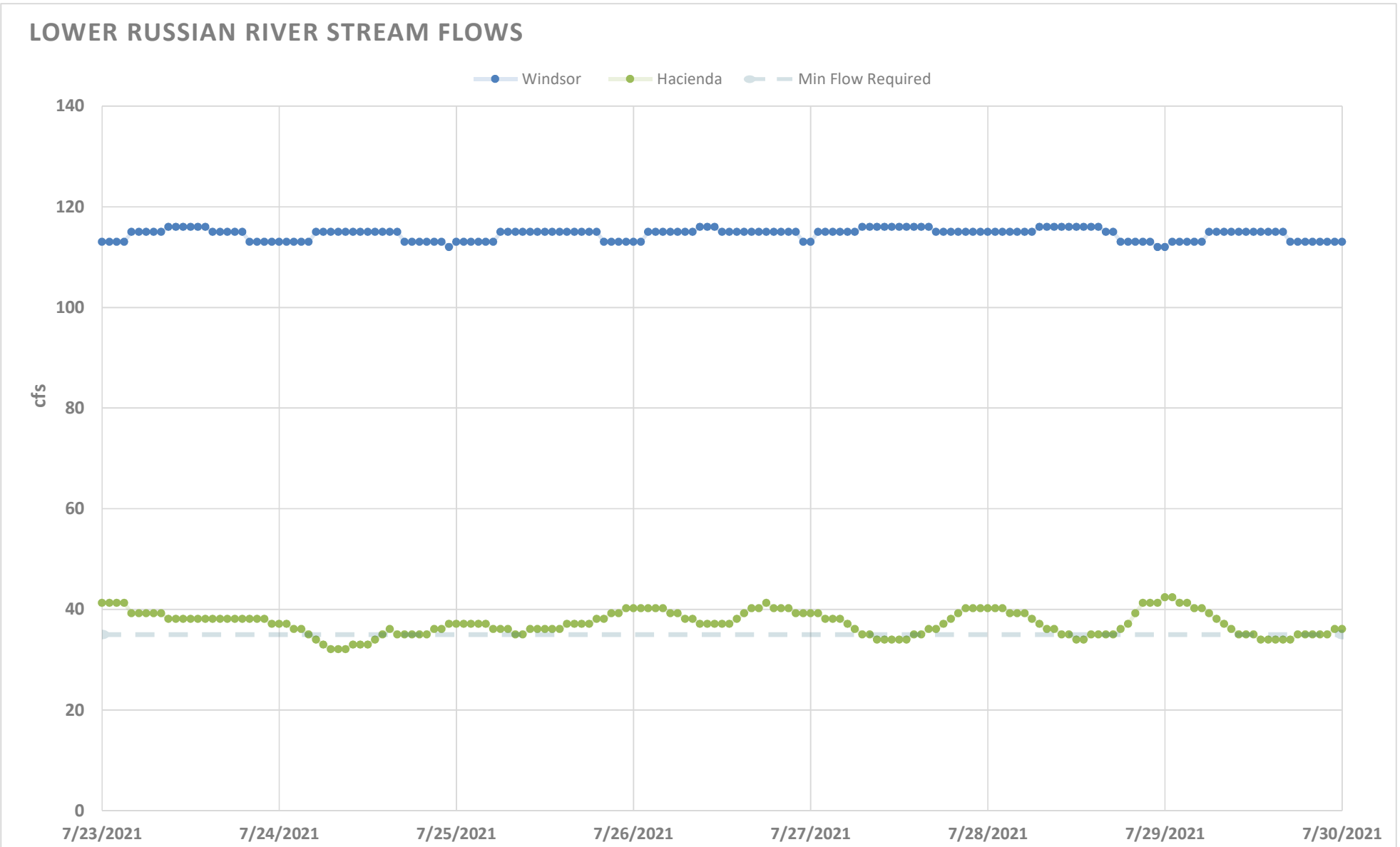
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LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



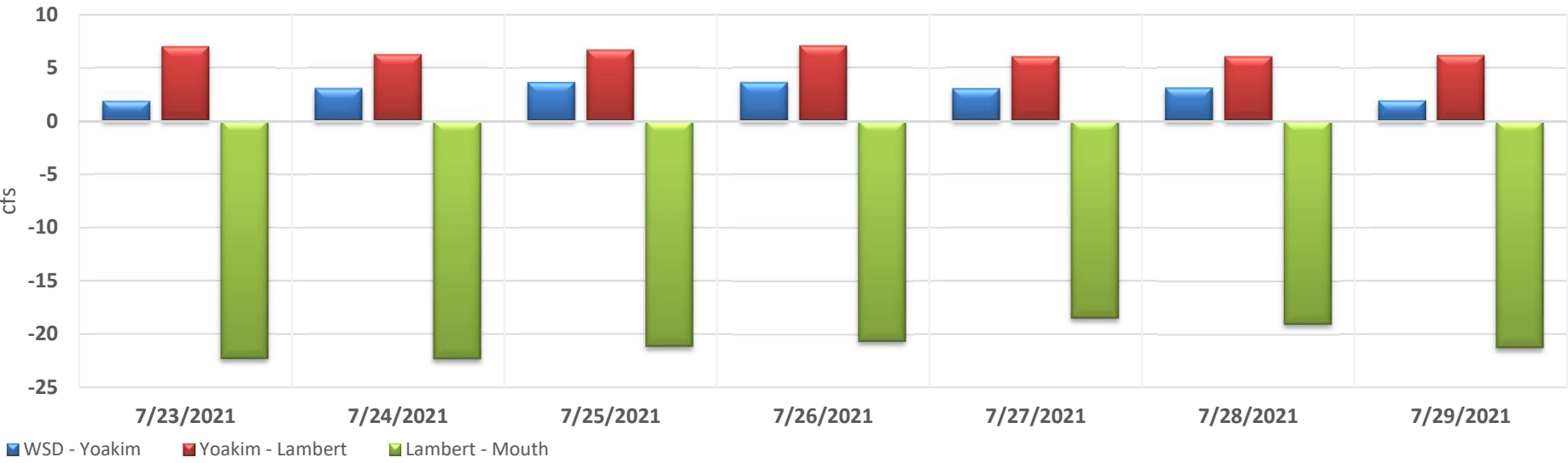
LOWER RUSSIAN RIVER STREAM FLOWS



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



DRY CREEK STREAM FLOWS

