Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 12, Dec 2023 TUCO)

Report Date: 6/28/2024

Units are cfs unless noted otherwise

			6/21/2024	6/22/2024	6/23/2024	6/24/2024	6/25/2024	6/26/2024	6/27/2024
I. Upper East Fork Reach									
Potter Valley Project									
Tunnel Diversion			97.0	99.0	100.0	100.0	103.0	105.0	94.0
PVID Requested Delivery			17.0	18.3	20.0	20.0	22.7	25.0	29.1
PVID Canals Actual Delivery			15.6	17.7	19.4	19.6	22.2	24.4	24.4
East Fork Release			81.0	81.0	81.0	80.0	81.0	81.0	70.0
PVID E Fork Diversions			1.3	0.6	0.6	0.4	0.5	0.6	4.8
PVID Water Use - PG&E Contract			17.0	18.3	20.0	20.0	22.7	25.0	29.1
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)			79.7	80.4	80.4	79.6	80.5	80.4	65.2
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			81.0	81.3	89.4	80.1	82.6	89.2	87.6
Net Reach Loss(-)/Gain(+)			-16.0	-17.7	-10.6	-19.9	-20.4	-15.8	-6.4
Unimpaired Natural Flow @ Calpella (est.)			4.6	4.6	4.6	4.2	4.2	3.8	3.8
Non-PVID East Fork Net Reach Losses (est.)			-3.6	-3.9	0.0	-4.1	-1.9	0.0	0.0
Natural Flow			0.0	0.0	0.0	0.0	0.0	0.0	0.0
Import			-3.6	-3.9	0.0	-4.1	-1.9	0.0	0.0
II. Lake Mendocino									
Reservoir Operations									
Calculated Inflow (ac-ft)			179	216	250	198	174	230	174
(cfs)			90	109	126	100	88	116	88
Natural Flow			7	24	46	16	6	36	23
Import			84	85	80	84	82	80	65
Storage Change (ac-ft)			-142.0	-106.0	-71.0	-124.0	-142.0	-88.0	-142.0
(cfs)			-72	-53	-36	-63	-72	-44	-72
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)			35.1	36.2	35.1	36.2	30.8	31.9	30.8
RVCWD Diversion (ac-ft)			0	0	0	0	0	0	0
CVD Release Gage			144	144	144	144	144	144	144
Storage (Project Water)			54	35	18	44	56	28	56
Natural Flow			7	24	46	16	6	36	23
Import Water			84	85	80	84	82	80	65
East Fork Min Instream Flow Requirement			25	25	25	25	25	25	25
Compliance Gage		*Rvr mi.*							
CVD Release		*99.9*	144	144	144	144	144	144	144
CVD Project Water Release to Meet Min Flow Requirement									
Total Pass-through Water			90	109	126	100	88	116	88
Project Water Release Required			No	No	No	No	No	No	No
III. Upper Russian River Reach									
Minimum Instream Flow Requirement			125	125	125	125	125	125	125
Controlling Compliance Gage									
Min Gage Flow			132	131	131	129	127	114	126
Controlling Gage			Talmage	Talmage	Talmage	Talmage	Talmage	Healdsburg	Talmage
All Compliance Gages		*Rvr mi.*							
Forks	(CVD + USGS 11461000)	*99.0*	148	148	148	147	147	147	147
Talmage	(USGS 11462080)	*96.1*	132	131	131	129	127	127	126
Hopland	(USGS 11462500)	*84.8*	167	168	168	167	164	161	159
Cloverdale	(USGS 11463000)	*70.9*	174	168	167	164	161	157	154
Geyserville	(USGS 11463500)	*54.4*	172	169	166	162	159	158	153
Jimtown	(USGS 11463682)	*48.5*	187	183	176	167	165	159	153
Digger Bend	(USGS 11463980)	*38.2*	179	179	179	179	179	179	179
Healdsburg	(USGS 11464000)	*35.6*	178	176	172	167	144	114	153
Net Reach Loss(-)/Gain(+)									
Forks - Talmage			-17	-17	-17	-18	-20	-20	-20
Talmage - Hopland			+35	+37	+38	+37	+37	+34	+32
Hopland - Cloverdale			+5	+2	-1	-4	-4	-6	-5
Cloverdale - Jimtown			+18	+11	+7	+0	+1	-1	-2
Jimtown - Digger Bend			-10	-5	+2	+10	+14	+19	+25
Digger Bend - Healdsburg **when Digger Bend > 400 cfs, next u/s gage (Jimtown) used*			-1	-3	-7	-12	-35	-65	-26
Upper Russian Net Reach Loss/Gain			+30	+24	+21	+13	-6	-40	+4
CVD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss(-)/Gain(+) to Controlling Gage			-17	-17	-17	-18	-20	-40	-20
Storage (Project Water)			-17	-17	-17	-18	-20	-28	-20
Pass-through Water (Nat. + Imp.) + Natural			0	0	0	0	0	-12	0
Total Pass-through Water			90	109	126	100	88	104	88
Project Water Release Required			Yes	Yes	No	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).

			6/21/2024	6/22/2024	6/23/2024	6/24/2024	6/25/2024	6/26/2024	6/27/2024
IV. Lake Sonoma									
Lake Sonoma									
Storage Change (ac-ft)			-190.0	-190.0	-217.0	-244.0	-216.0	-217.0	-216.0
(cfs)			-96	-96	-109	-123	-109	-109	-109
Evaporation (ac-ft)			42.3	45.6	45.5	45.5	22.7	47.1	51.9
Inflow (Natural Flow)			26	27	14	0	3	14	16
WSD Release Gage			100	100	100	100	100	100	99
Storage (Project Water)			74	73	86	100	97	86	83
Natural Flow			26	27	14	0	3	14	16
V. Lower Dry Creek Reach									
Minimum Instream Flow Requirement			80	80	80	80	80	80	80
Controlling Compliance Gage									
Min Gage Flow			100	100	100	100	100	100	99
Controlling Gage			WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release
All Compliance Gages		*Crk mi.*							
WSD Release		*14.3*	100	100	100	100	100	100	99
Yoakim	(USGS 11465200)	*11.1*	108	109	109	107	107	106	106
Lambert	(USGS 11465240)	*6.8*	112	111	112	110	110	110	109
Dry Crk Mouth	(USGS 11465350)	*0.1*	137	137	137	137	137	137	137
WSD to Russian River Confluence Reach Analysis									
Total Pass-through Water			26	27	14	0	3	14	16
Net Reach Loss(-)/Gain(+)									
WSD - Yoakim			+7	+8	+8	+6	+6	+5	+5
Yoakim - Lambert			+4	+3	+3	+3	+3	+4	+3
Lambert - Dry Crk Mouth			+25	+26	+25	+26	+27	+27	+28
WSD - Dry Crk Mouth			+36	+36	+36	+36	+36	+36	+36
WSD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss/Gain to Controlling Gage			+0	+0	+0	+0	+0	+0	+0
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	120	98	128	138	108	121
Natural Flow			37	48	67	29	0	0	27
Dry Creek Flow (Mouth Gage)									
L. Sonoma Project Water			74	73	86	100	97	86	83
Natural Flow			63	64	51	37	40	51	54
Russian River d/s of Confluence Flow			315	313	309	304	281	251	290
L. Mendocino Project Water + Import Water			137	120	98	128	138	108	121
L. Sonoma Project Water			74	73	86	100	97	86	83
Natural Flow			99	112	118	66	40	51	81
VII. Lower Russian River Reach									
Minimum Instream Flow Requirement			70	70	70	70	70	70	70
Controlling Compliance Gage									
Min Gage Flow			219	216	211	188	162	150	179
Controlling Gage			Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
All Compliance Gages		*Rvr mi.*							
Windsor	(USGS 11465390)	*26.6*	*327*	*324*	*321*	*301*	*281*	*281*	*299*
Hacienda	(USGS 11467000)	*21.8*	219	216	211	188	162	150	179
Confluence to Windsor Reach Analysis									
Net Reach Loss/Gain to Windsor Gage			+12	+11	+11	-4	-16	+40	+12
L. Mendocino Project Water + Import Water			137	120	98	128	138	108	121
L. Sonoma Project Water			69	68	81	95	92	80	77
Natural Flow			111	123	129	62	23	92	92
Confluence to SCWA Wohler Production Facility Reach Analysis									
Approx. Flow u/s of Wohler			304	297	292	283	240	233	247
Net Reach Loss(-)/Gain(+)			-12	-16	-17	-21	-41	-17	-43
L. Mendocino Project Water + Import Water			137	120	98	128	138	108	121
L. Sonoma Project Water			69	68	81	95	92	80	77
Natural Flow			87	96	101	45	0	34	38
Confluence to Hacienda (Guerneville) Reach Analysis									
Net Reach Loss(-)/Gain(+)			-97	-98	-98	-116	-119	-100	-111
L. Mendocino Project Water + Import Water			137	120	98	128	138	108	121
L. Sonoma Project Water			0	0	0	0	14	0	8
Natural Flow			72	82	101	45	0	31	38
VIII. Water Production under Sonoma Water Water Rights (ac-ft)									
Lower Russian River									
Sonoma Water Total			168.4	161.0	160.6	188.8	154.3	164.8	135.3
Wohler			56.5	53.5	66.4	79.6	72.5	61.6	64.2
Mirabel			111.9	107.5	94.3	109.2	81.8	103.2	71.1
Town of Windsor River Wellfield			10.8	10.4	10.2	10.8	10.8	10.8	12.2
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

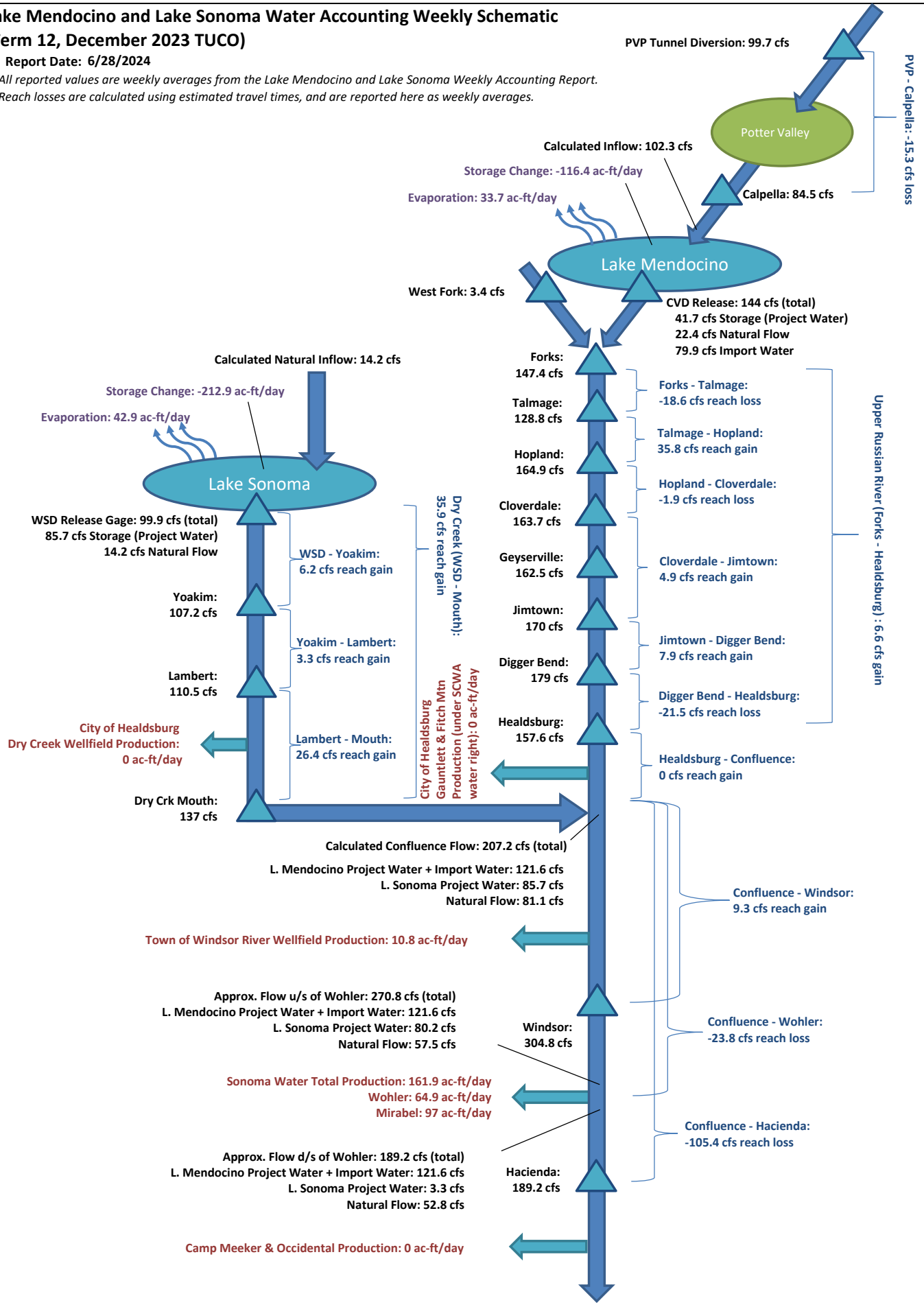
Notes:

- 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 12, December 2023 TUCO)

Report Date: 6/28/2024

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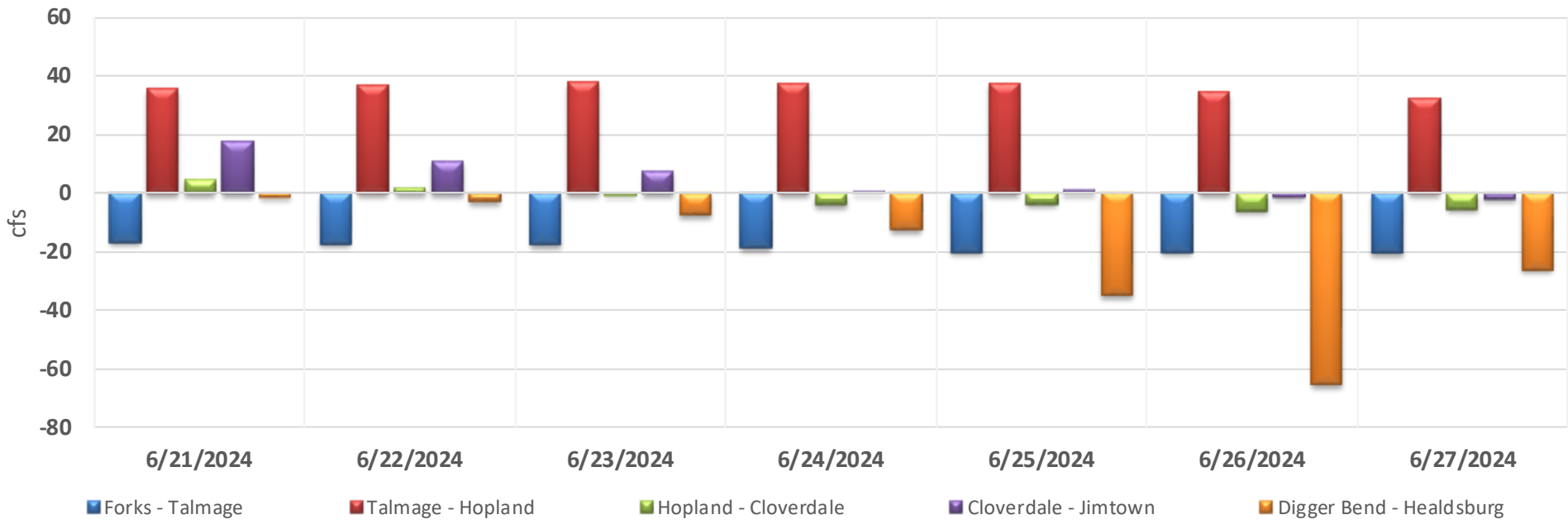
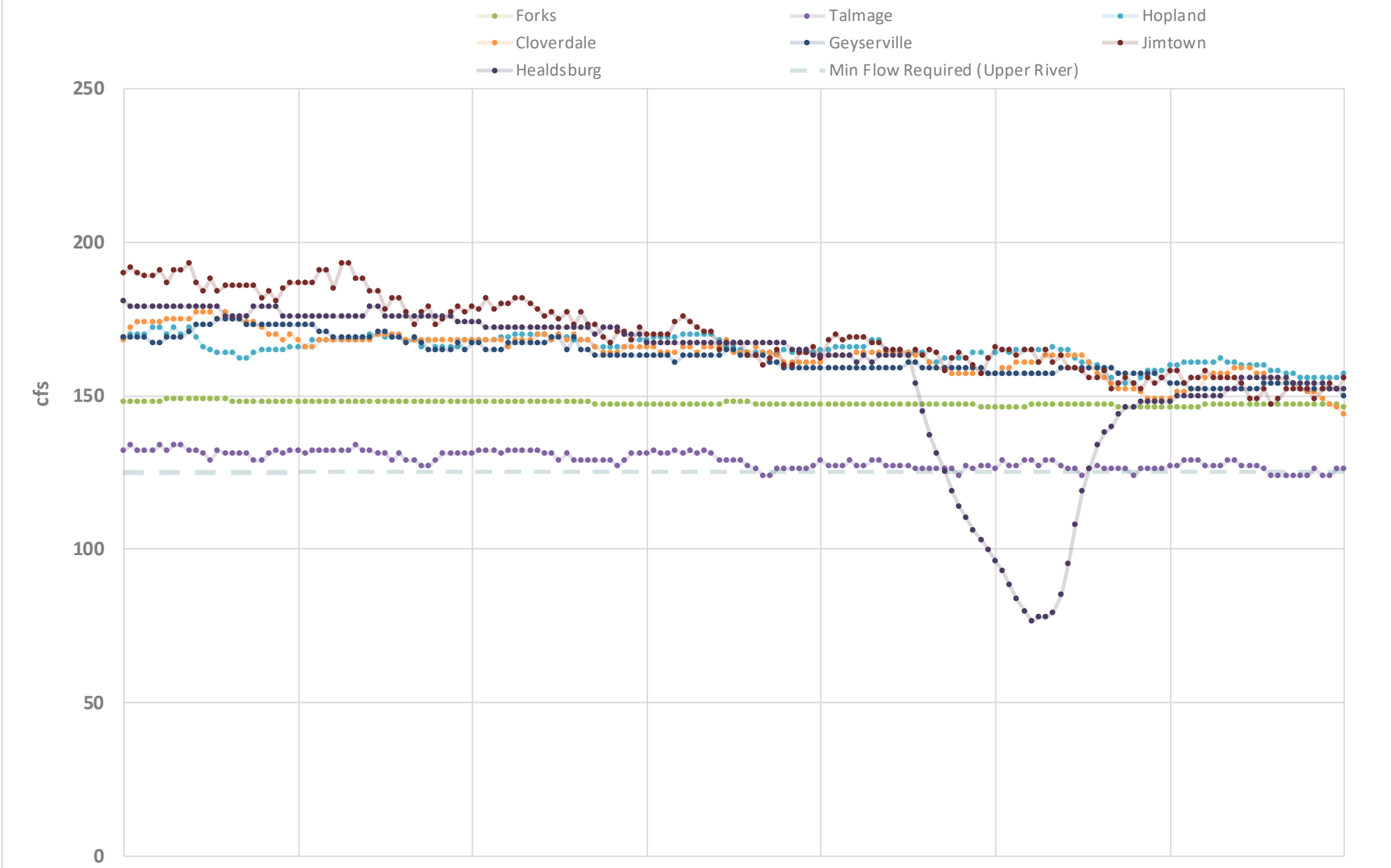
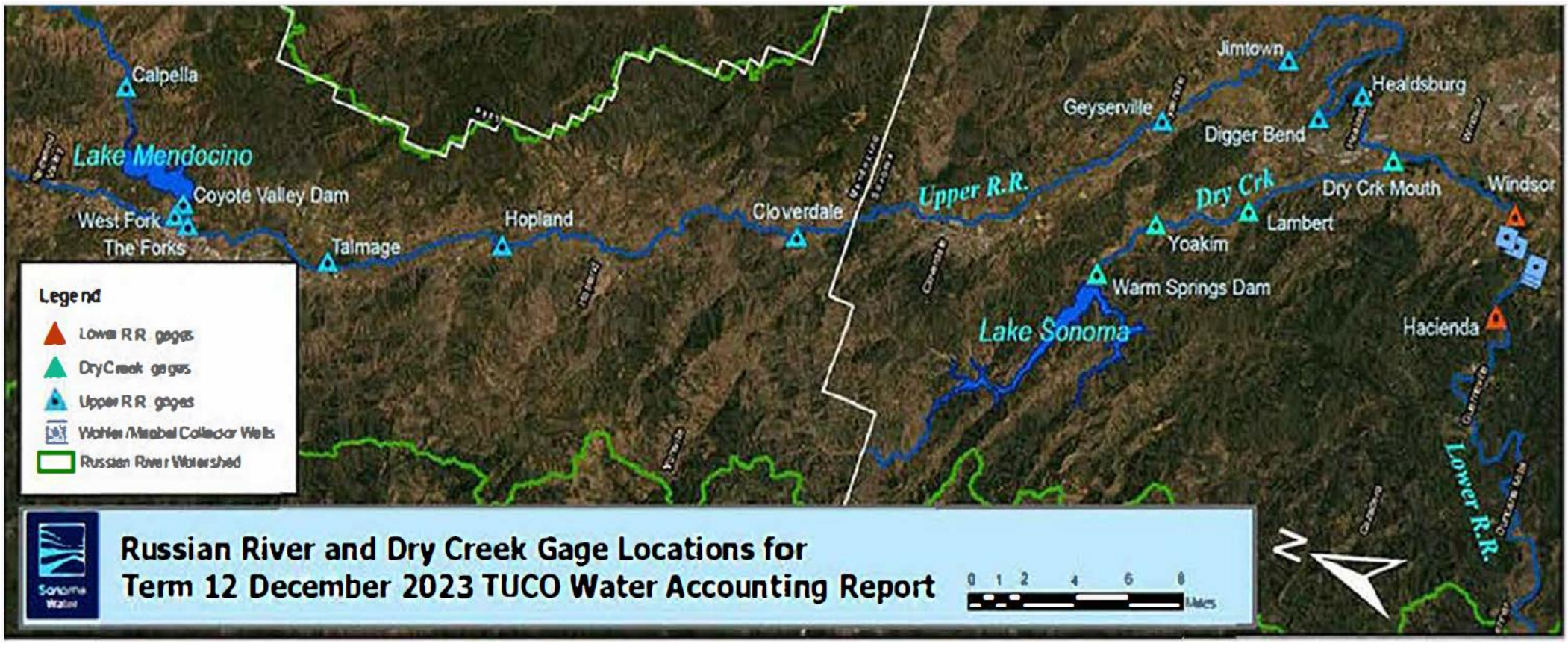
UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



UPPER RUSSIAN RIVER STREAM FLOWS





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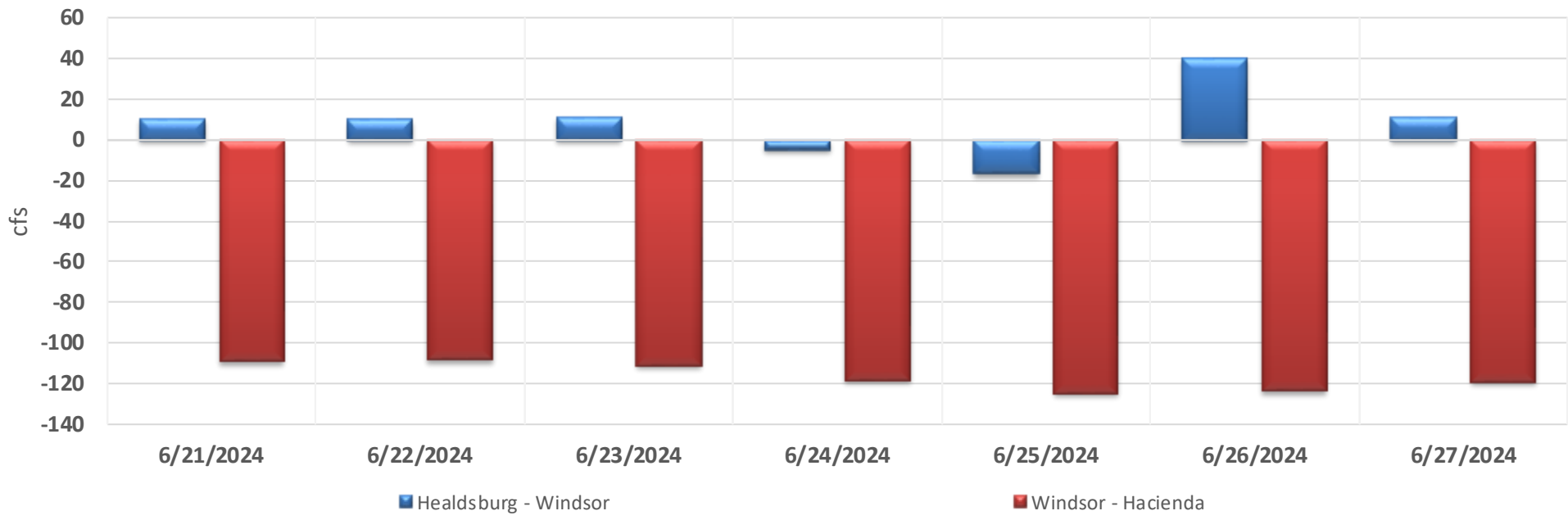
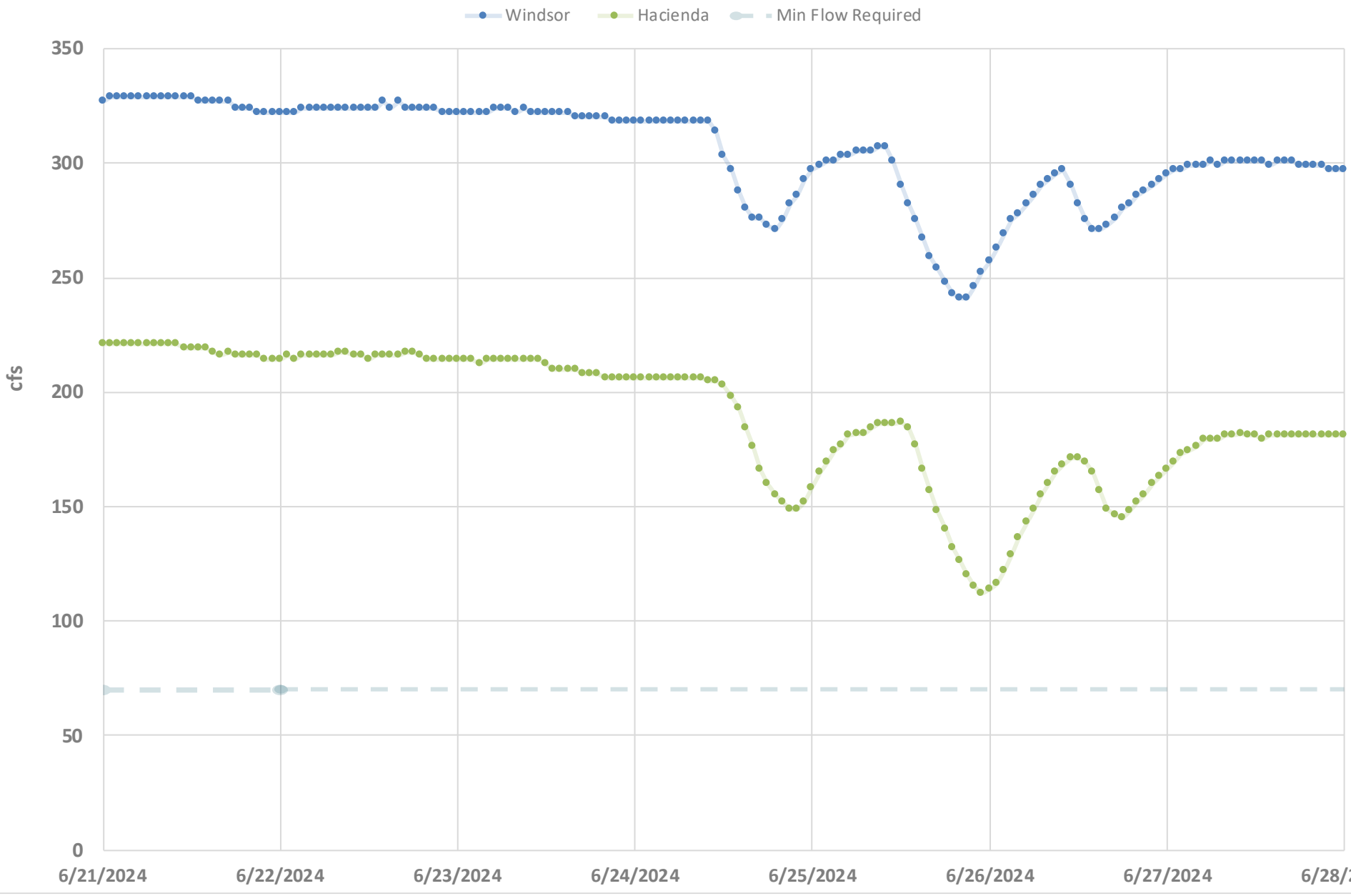
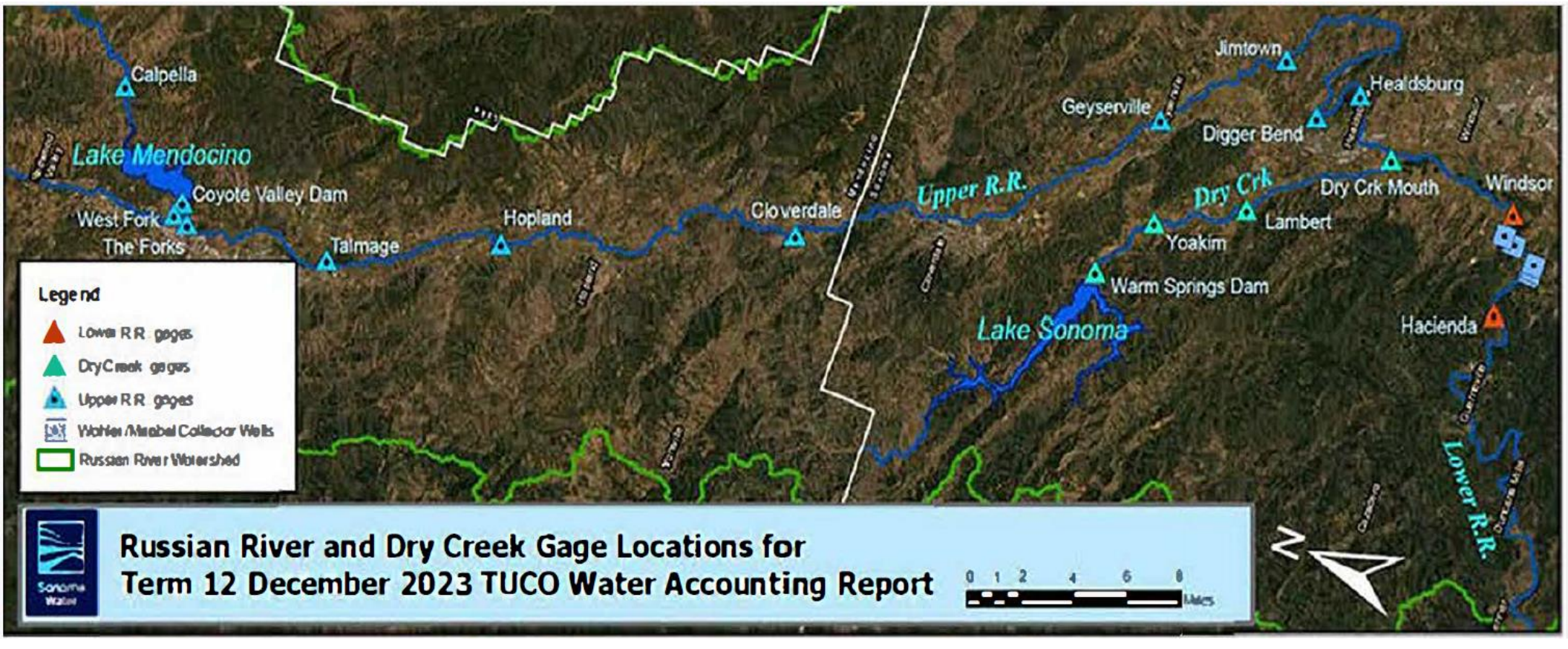
LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



LOWER RUSSIAN RIVER STREAM FLOWS





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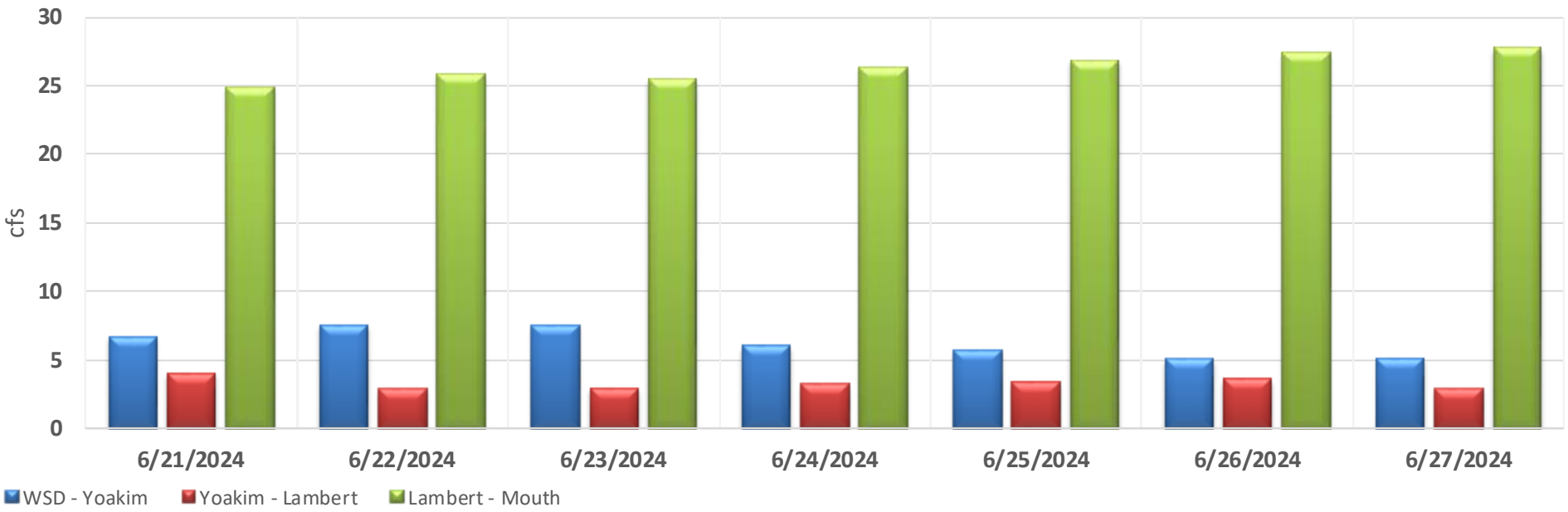
DRY CREEK NET REACH GAINS (+) / LOSSES (-)



DRY CREEK STREAM FLOWS