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

Report Date: 5/17/2024

Units are cfs unless noted otherwise

			5/10/2024	5/11/2024	5/12/2024	5/13/2024	5/14/2024	5/15/2024	5/16/2024
I. Upper East Fork Reach									
Potter Valley Project									
Tunnel Diversion			90.0	90.0	90.0	90.0	100.0	130.0	130.0
PVID Requested Delivery			5.0	5.0	5.0	5.0	5.0	5.0	5.0
PVID Canals Actual Delivery			5.4	5.4	5.3	5.3	5.4	5.7	7.1
East Fork Release			85.0	85.0	85.0	85.0	95.0	124.0	123.0
PVID E Fork Diversions			0.0	0.0	0.0	0.0	0.0	0.0	0.0
PVID Water Use - PG&E Contract			5.4	5.4	5.3	5.3	5.4	5.7	7.1
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)			85.0	85.0	85.0	85.0	95.0	124.0	123.0
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			128.4	125.5	120.8	122.4	118.1	162.0	165.7
Net Reach Loss(-)/Gain(+)			+38.4	+35.5	+30.8	+32.4	+18.1	+32.0	+35.7
Unimpaired Natural Flow @ Calpella (est.)			18.1	16.6	16.3	14.8	14.8	14.1	13.7
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)			294	276	275	276	257	319	333
(cfs)			148	139	138	139	130	161	168
Natural Flow			63	54	53	54	35	36	43
Import			85	85	85	85	95	125	125
Storage Change (ac-ft)			-35.0	-54.0	-54.0	-53.0	-72.0	-18.0	+0.0
(cfs)			-18	-27	-27	-27	-36	-9	+0
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)			29.1	30.1	29.1	29.1	29.0	30.1	25.9
RVCWD Diversion (ac-ft)			0	0	0	0	0	0	0
CVD Release Gage			151	151	151	151	151	155	155
Storage (Project Water)			3	12	13	12	22	0	0
Natural Flow			63	54	53	54	35	36	37
Import Water			85	85	85	85	95	125	118
East Fork Min Instream Flow Requirement			25	25	25	25	25	25	25
Compliance Gage		*Rvr mi.*							
CVD Release		*99.9*	151	151	151	151	151	155	155
CVD Project Water Release to Meet Min Flow Requirement									
Total Pass-through Water			148	139	138	139	130	161	155
Project Water Release Required			No	No	No	No	No	No	No
III. Upper Russian River Reach									
Minimum Instream Flow Requirement			185	185	185	185	185	185	185
Controlling Compliance Gage									
Min Gage Flow			191	188	186	184	183	185	184
Controlling Gage			Forks	Forks	Forks	Forks	Forks	Forks	Forks
All Compliance Gages		*Rvr mi.*							
Forks	(CVD + USGS 11461000)	*99.0*	191	188	186	184	183	185	184
Talmage	(USGS 11462080)	*96.1*	217	211	207	203	201	198	192
Hopland	(USGS 11462500)	*84.8*	276	270	266	262	258	255	246
Cloverdale	(USGS 11463000)	*70.9*	368	360	353	345	338	330	319
Geyserville	(USGS 11463500)	*54.4*	429	417	404	393	384	374	364
Jimtown	(USGS 11463682)	*48.5*	472	465	455	447	439	426	416
Digger Bend	(USGS 11463980)	*38.2*	>400 cfs	>400 cfs	>400 cfs	>400 cfs	>400 cfs	>400 cfs	>400 cfs
Healdsburg	(USGS 11464000)	*35.6*	501	489	476	465	454	441	430
Net Reach Loss(-)/Gain(+)									
Forks - Talmage			+25	+23	+20	+20	+18	+14	+8
Talmage - Hopland			+58	+58	+58	+58	+57	+55	+54
Hopland - Cloverdale			+94	+88	+85	+82	+78	+73	+70
Cloverdale - Jimtown			+101	+101	+99	+99	+97	+91	+91
Jimtown - Digger Bend			n/d	n/d	n/d	n/d	n/d	n/d	n/d
Digger Bend - Healdsburg **when Digger Bend > 400 cfs, next u/s gage (Jimtown) used*			+25	+21	+17	+16	+12	+11	+11
Upper Russian Net Reach Loss/Gain			+303	+290	+280	+273	+262	+244	+233
CVD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss(-)/Gain(+) to Controlling Gage			+0	+0	+0	+0	+0	+0	+0
Storage (Project Water)			0	0	0	0	0	0	0
Pass-through Water (Nat. + Imp.) + Natural			0	0	0	0	0	0	0
Total Pass-through Water			148	139	138	139	130	161	155
Project Water Release Required			No	Yes	Yes	Yes	Yes	No	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).

			5/10/2024	5/11/2024	5/12/2024	5/13/2024	5/14/2024	5/15/2024	5/16/2024
IV. Lake Sonoma									
Lake Sonoma									
Storage Change (ac-ft)			-138.0	-111.0	-111.0	-138.0	-111.0	-138.0	-139.0
(cfs)			-70	-56	-56	-70	-56	-70	-70
Evaporation (ac-ft)			45.0	38.5	33.7	30.5	34.0	35.3	28.9
Inflow (Natural Flow)			54	63	61	46	61	48	44
WSD Release Gage			101	100	100	100	100	100	100
Storage (Project Water)			47	37	39	54	39	52	56
Natural Flow			54	63	61	46	61	48	44
V. Lower Dry Creek Reach									
Minimum Instream Flow Requirement			80	80	80	80	80	80	80
Controlling Compliance Gage									
Min Gage Flow			91	91	91	89	89	89	89
Controlling Gage			Yoakim	Yoakim	Yoakim	Yoakim	Yoakim	Yoakim	Yoakim
All Compliance Gages		*Crk mi.*							
WSD Release		*14.3*	101	100	100	100	100	100	100
Yoakim	(USGS 11465200)	*11.1*	91	91	91	89	89	89	89
Lambert	(USGS 11465240)	*6.8*	131	131	129	129	128	128	127
Dry Crk Mouth	(USGS 11465350)	*0.1*	157	157	157	157	157	157	157
WSD to Russian River Confluence Reach Analysis									
Total Pass-through Water			54	63	61	46	61	48	44
Net Reach Loss(-)/Gain(+)									
WSD - Yoakim			-10	-10	-10	-12	-12	-12	-12
Yoakim - Lambert			+40	+40	+39	+39	+39	+39	+39
Lambert - Dry Crk Mouth			+26	+26	+28	+28	+29	+29	+30
WSD - Dry Crk Mouth			+56	+56	+56	+56	+56	+56	+56
WSD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss/Gain to Controlling Gage			-10	-10	-10	-12	-12	-12	-12
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			88	97	98	97	117	125	118
Natural Flow			366	344	333	327	297	280	270
Dry Creek Flow (Mouth Gage)									
L. Sonoma Project Water			47	37	39	54	39	52	56
Natural Flow			110	120	118	103	118	105	101
Russian River d/s of Confluence Flow			658	646	633	622	611	598	587
L. Mendocino Project Water + Import Water			88	97	98	97	117	125	118
L. Sonoma Project Water			47	37	39	54	39	52	56
Natural Flow			476	464	451	430	415	385	371
VII. Lower Russian River Reach									
Minimum Instream Flow Requirement			125	125	125	125	125	125	125
Controlling Compliance Gage									
Min Gage Flow			710	687	667	650	632	615	601
Controlling Gage			Windsor	Windsor	Windsor	Windsor	Windsor	Windsor	Windsor
All Compliance Gages		*Rvr mi.*							
Windsor	(USGS 11465390)	*26.6*	*710*	*687*	*667*	*650*	*632*	*615*	*601*
Hacienda	(USGS 11467000)	*21.8*	743	713	691	667	648	628	614
Confluence to Windsor Reach Analysis									
Net Reach Loss/Gain to Windsor Gage			+53	+41	+32	+26	+19	+14	+11
L. Mendocino Project Water + Import Water			88	97	98	97	117	125	118
L. Sonoma Project Water			43	33	35	50	35	48	51
Natural Flow			529	505	483	456	434	399	383
Confluence to SCWA Wohler Production Facility Reach Analysis									
Approx. Flow u/s of Wohler			807	773	739	733	718	689	662
Net Reach Loss(-)/Gain(+)			+149	+127	+106	+111	+107	+91	+75
L. Mendocino Project Water + Import Water			88	97	98	97	117	125	118
L. Sonoma Project Water			43	33	35	50	35	48	51
Natural Flow			625	591	557	541	523	476	446
Confluence to Hacienda (Guerneville) Reach Analysis									
Net Reach Loss(-)/Gain(+)			+85	+67	+59	+45	+38	+30	+27
L. Mendocino Project Water + Import Water			88	97	98	97	117	125	118
L. Sonoma Project Water			0	0	0	0	0	0	3
Natural Flow			604	564	545	526	488	463	446
VIII. Water Production under Sonoma Water Water Rights (ac-ft)									
Lower Russian River									
Sonoma Water Total			126.6	117.8	94.0	130.9	138.1	121.3	95.4
Wohler			71.3	50.3	24.0	59.8	46.6	52.2	46.3
Mirabel			55.3	67.5	70.1	71.0	91.6	69.1	49.1
Town of Windsor River Wellfield			8.1	7.5	7.7	7.8	8.0	8.0	8.2
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

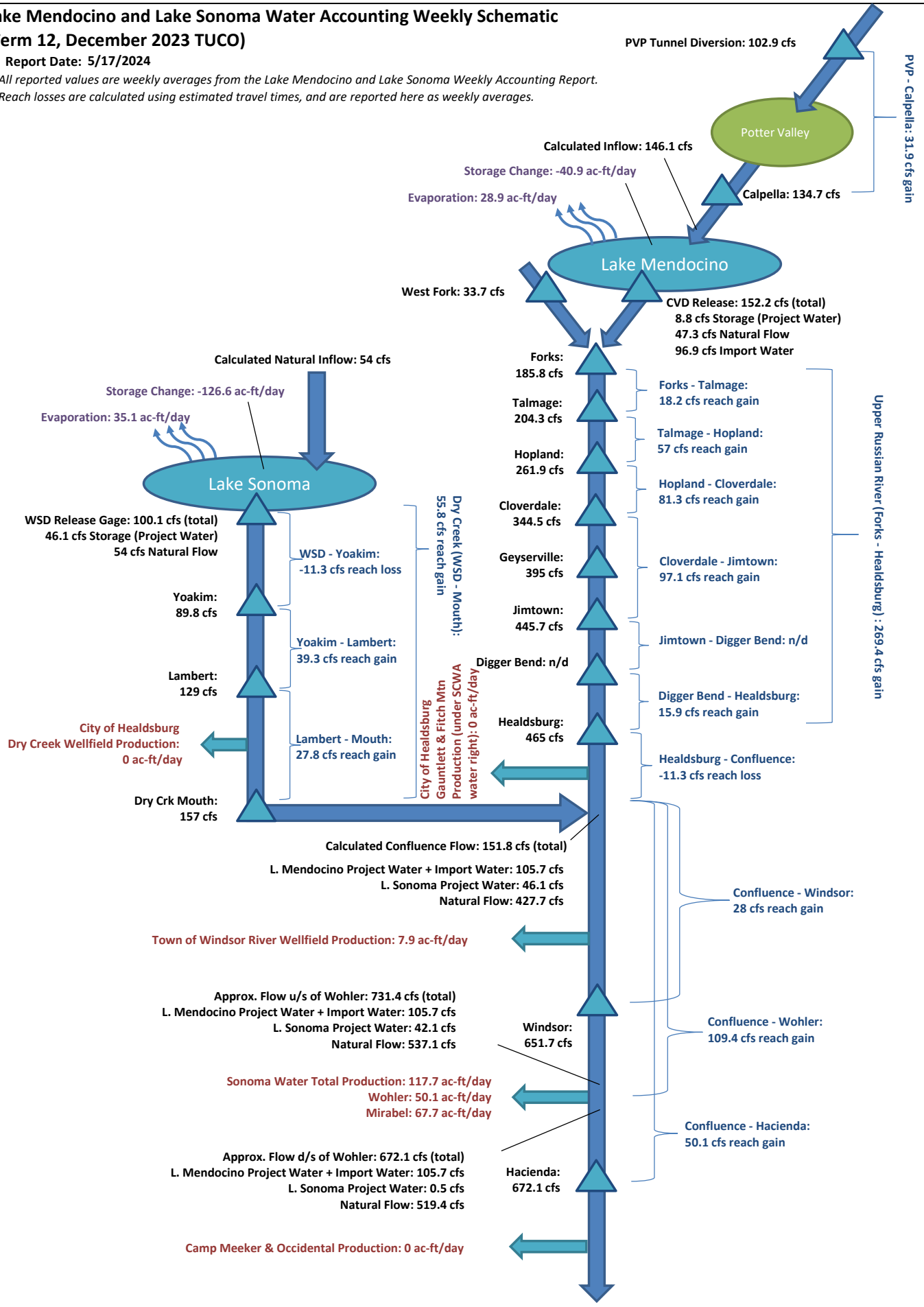
Notes:

- 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: 5/17/2024

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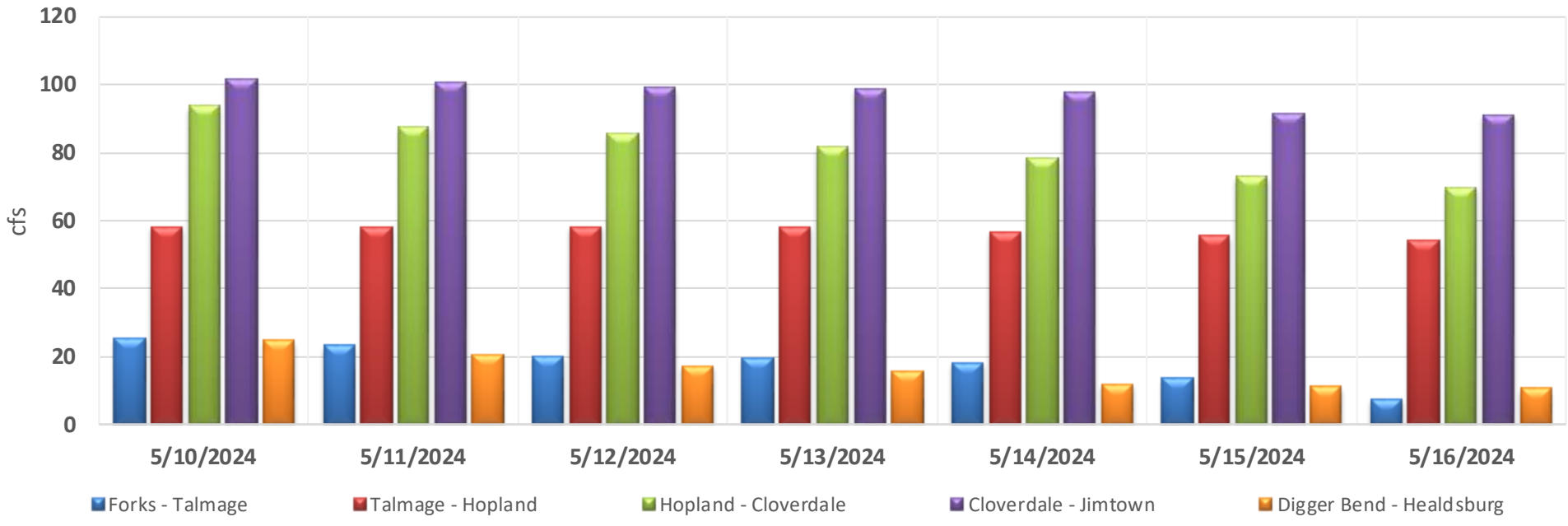
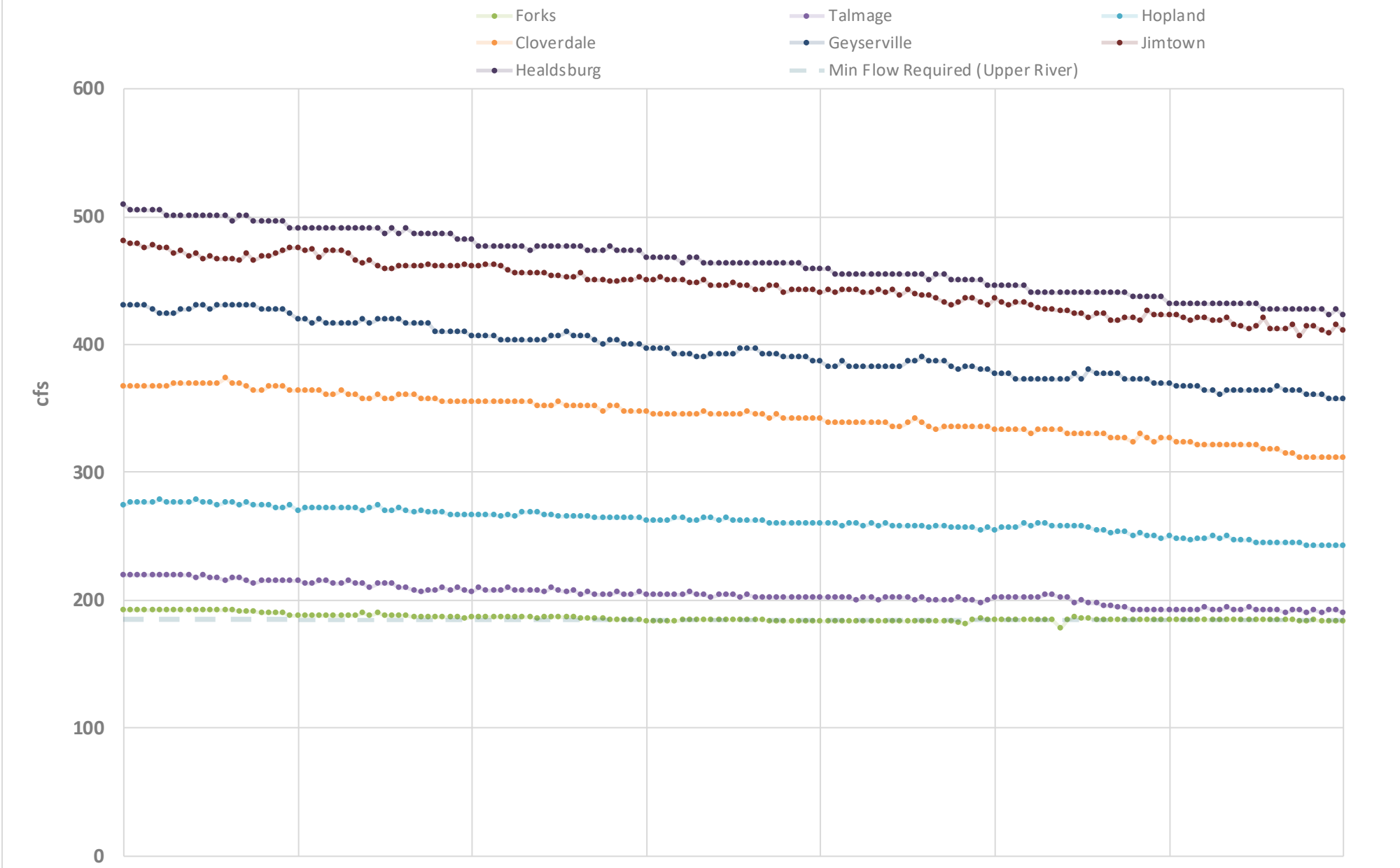
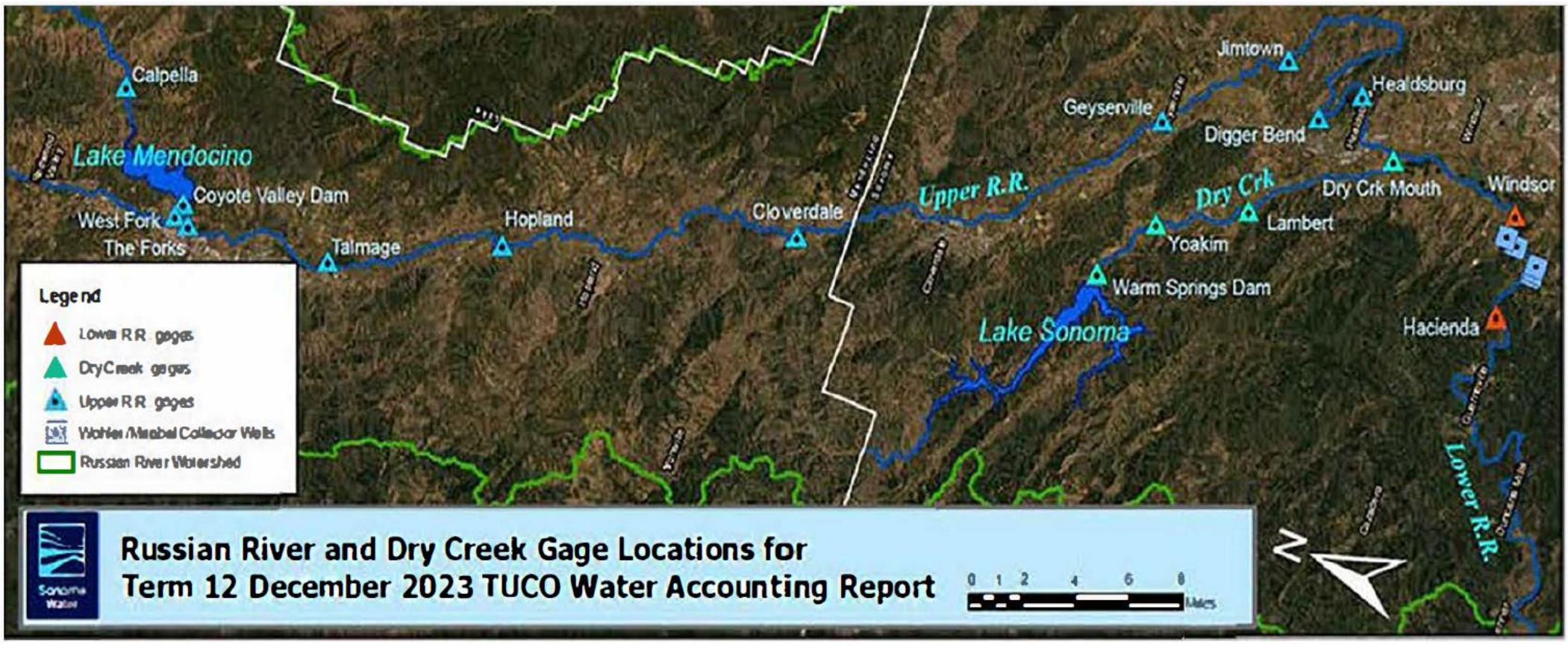
UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



UPPER RUSSIAN RIVER STREAM FLOWS





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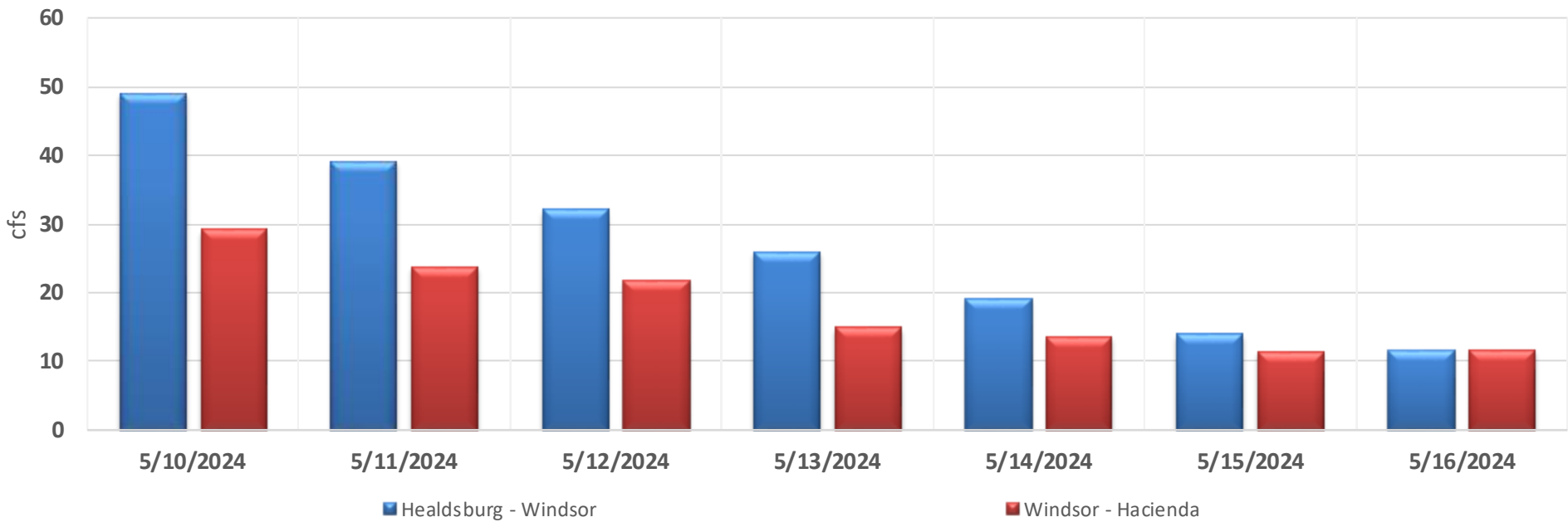
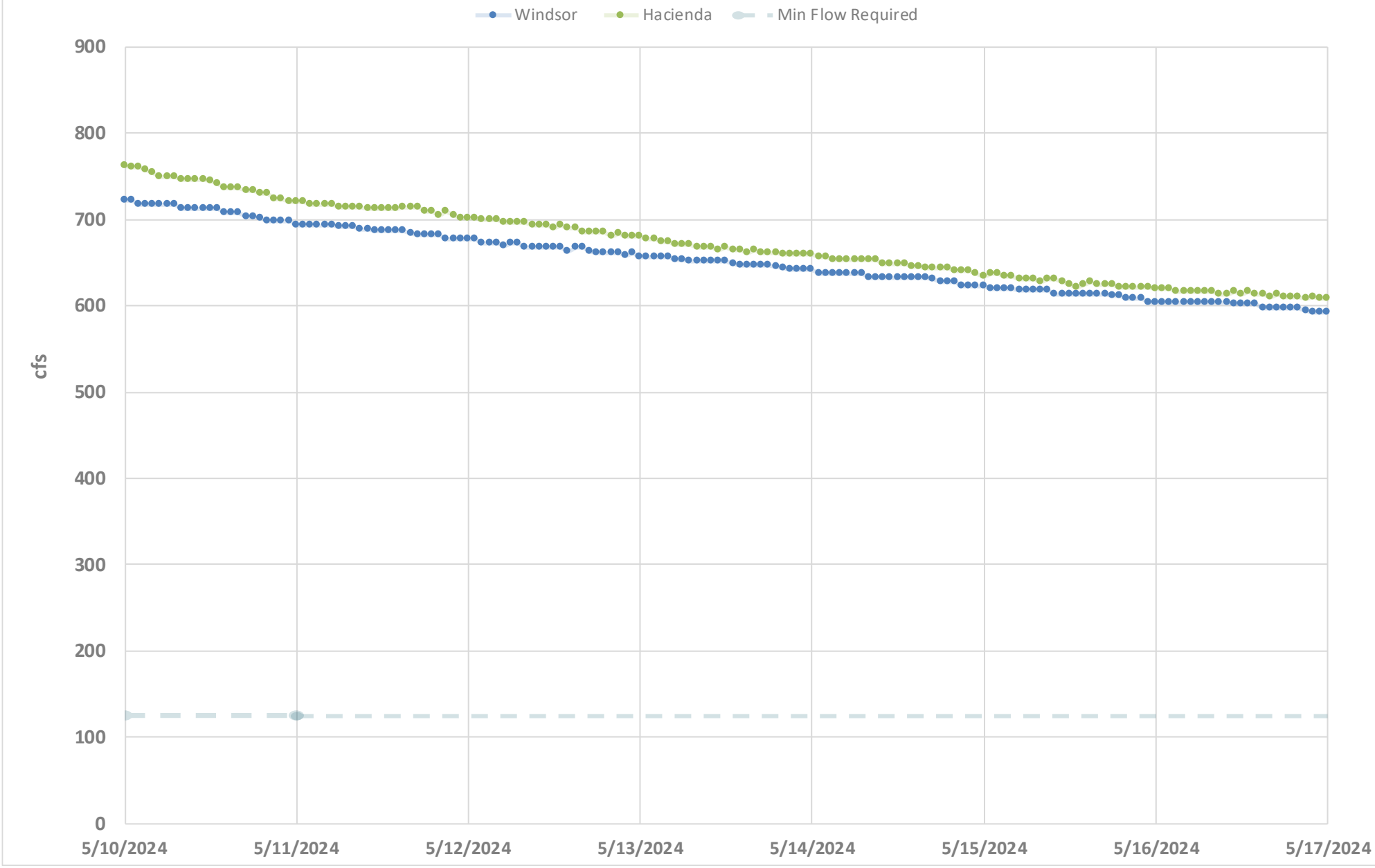
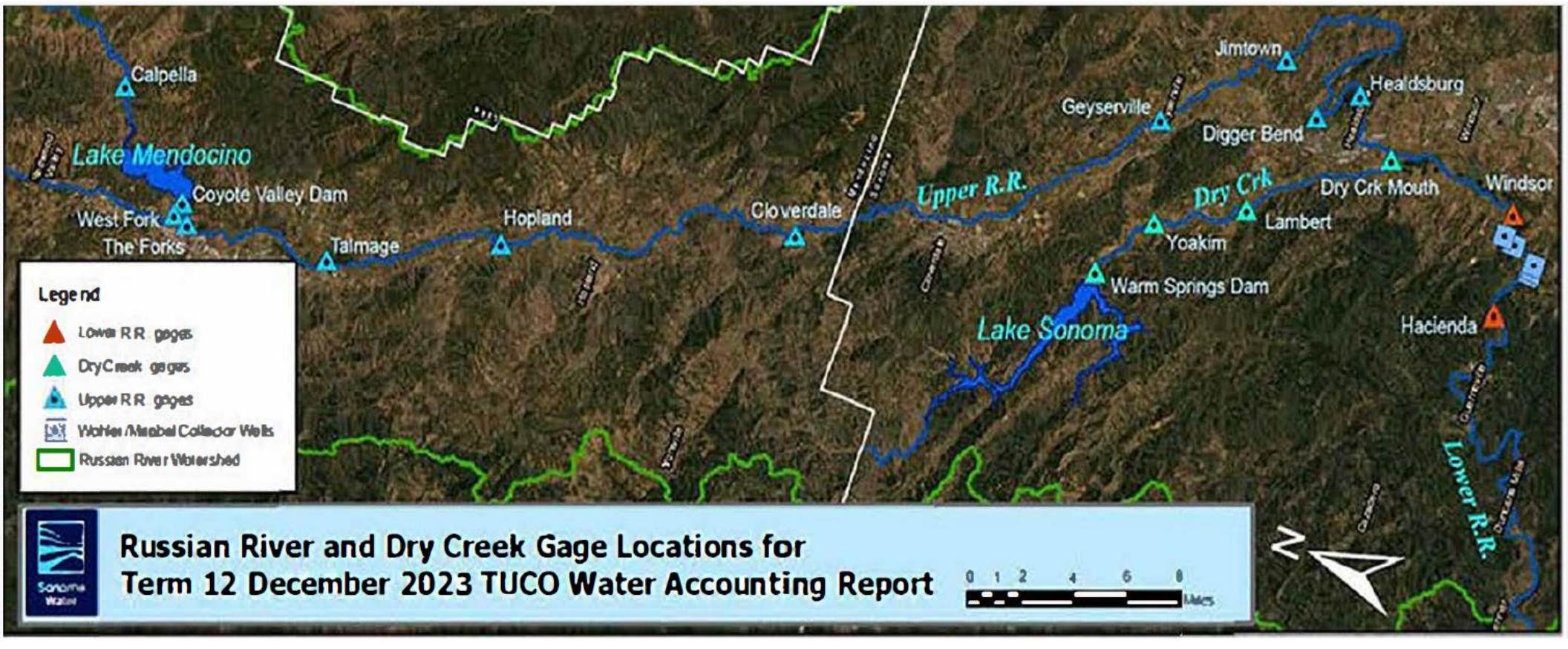
LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



LOWER RUSSIAN RIVER STREAM FLOWS





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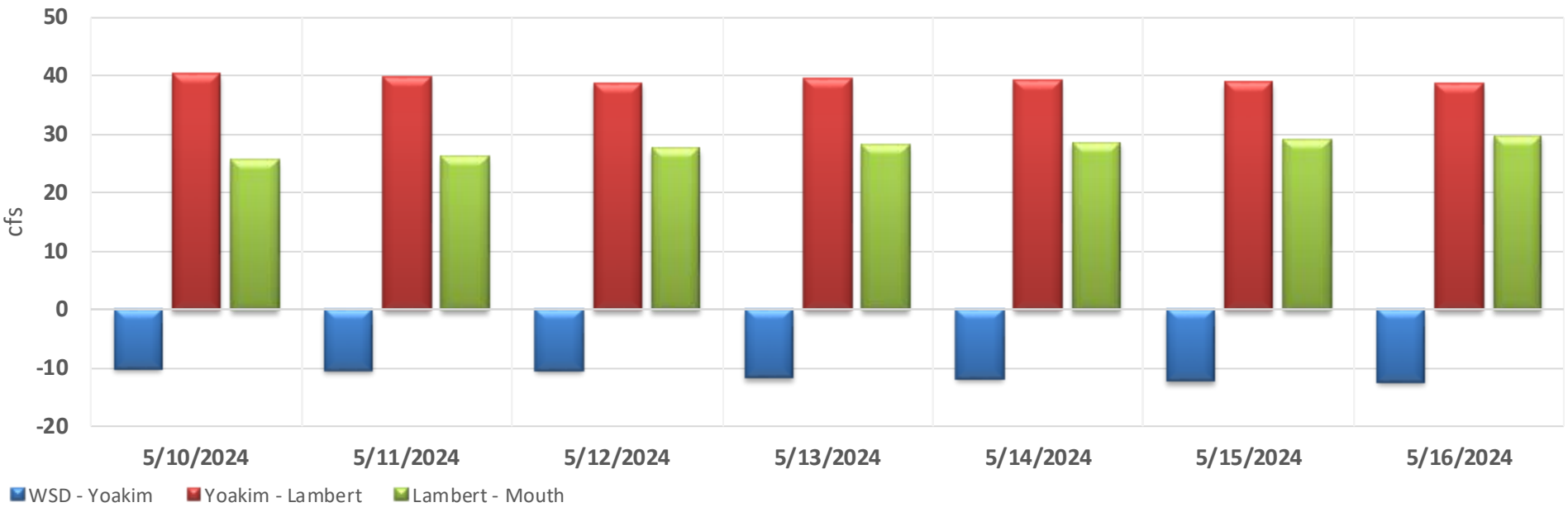
DRY CREEK NET REACH GAINS (+) / LOSSES (-)



DRY CREEK STREAM FLOWS