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

Report Date: 3/8/2024

Units are cfs unless noted otherwise

			3/1/2024	3/2/2024	3/3/2024	3/4/2024	3/5/2024	3/6/2024	3/7/2024
I. Upper East Fork Reach									
Potter Valley Project									
Tunnel Diversion			46.0	46.0	46.0	46.0	46.0	46.0	46.0
PVID Requested Delivery			5.0	5.0	5.0	5.0	5.0	5.0	5.0
PVID Canals Actual Delivery			1.6	1.3	1.2	1.0	1.4	1.5	1.0
East Fork Release			44.0	45.0	45.0	45.0	45.0	45.0	45.0
PVID E Fork Diversions			3.4	3.7	3.9	4.0	3.6	3.5	4.0
PVID Water Use - PG&E Contract			5.0	5.0	5.0	5.0	5.0	5.0	5.0
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)			40.6	41.3	41.2	41.0	41.4	41.5	41.0
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			1,335.9	1,474.6	1,166.6	914.5	1,051.9	1,375.3	850.1
Net Reach Loss(-)/Gain(+)			+1,289.9	+1,428.6	+1,120.6	+868.5	+1,005.9	+1,329.3	+804.1
Unimpaired Natural Flow @ Calpella (est.)			1249.3	1387.3	1079.4	827.5	964.6	1287.9	763.2
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)			2,698	3,000	2,303	1,948	2,270	2,928	1,636
(cfs)			1,360	1,513	1,161	982	1,144	1,476	825
Natural Flow			1,319	1,472	1,120	941	1,103	1,435	784
Import			41	41	41	41	41	41	41
Storage Change (ac-ft)			+2,396.0	+2,705.0	+998.0	+508.0	+1,193.0	+2,077.0	+159.0
(cfs)			+1,208	+1,364	+503	+256	+601	+1,047	+80
Stored Natural Flow (cfs)			1,208	1,364	503	256	601	1,047	80
Stored Import Water (cfs)			0	0	0	0	0	0	0
Evaporation (ac-ft)			2.9	2.9	5.9	3.9	4.9	6.9	11.9
RVCWD Diversion (ac-ft)			0	0	0	0	0	0	0
CVD Release Gage			151	147	655	724	540	426	739
Storage (Project Water)			0	0	0	0	0	0	0
Natural Flow			110	107	615	684	501	386	701
Import Water			40	40	40	40	40	39	38
East Fork Min Instream Flow Requirement			25	25	25	25	25	25	25
Compliance Gage		*Rvr mi.*							
CVD Release		*99.9*	151	147	655	724	540	426	739
CVD Project Water Release to Meet Min Flow Requirement									
Total Pass-through Water			151	147	655	724	540	425	739
Project Water Release Required			No	No	No	No	No	No	No
III. Upper Russian River Reach									
Minimum Instream Flow Requirement			150	150	150	150	150	150	150
Controlling Compliance Gage									
Min Gage Flow			873	1,569	1,635	1,477	1,501	2,112	1,579
Controlling Gage			Forks	Forks	Forks	Forks	Forks	Forks	Forks
All Compliance Gages		*Rvr mi.*							
Forks	(CVD + USGS 11461000)	*99.0*	873	1,569	1,635	1,477	1,501	2,112	1,579
Talmage	(USGS 11462080)	*96.1*	1,580	3,002	2,625	2,325	2,288	3,467	2,382
Hopland	(USGS 11462500)	*84.8*	1,713	3,808	3,278	3,064	2,804	4,010	3,011
Cloverdale	(USGS 11463000)	*70.9*	2,298	5,158	4,353	4,150	3,855	5,115	4,076
Geyserville	(USGS 11463500)	*54.4*	3,436	6,578	5,828	5,339	5,388	6,115	5,450
Jimtown	(USGS 11463682)	*48.5*	3,201	6,413	6,053	5,491	5,451	6,088	5,741
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*	3,662	7,493	7,539	6,250	6,428	6,900	6,912
Net Reach Loss(-)/Gain(+)									
Forks - Talmage			+825	+1,381	+1,053	+785	+827	+1,340	+811
Talmage - Hopland			+339	+742	+693	+646	+563	+567	+591
Hopland - Cloverdale			+945	+1,383	+1,118	+882	+1,107	+1,244	+943
Cloverdale - Jimtown			+1,280	+1,616	+1,532	+1,159	+1,666	+1,355	+1,239
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*			+543	+1,554	+1,286	+710	+1,078	+1,010	+828
Upper Russian Net Reach Loss/Gain			+3,932	+6,676	+5,683	+4,181	+5,240	+5,517	+4,413
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			151	147	655	724	540	425	739
Project Water Release Required			No	No	No	No	No	No	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).

			3/1/2024	3/2/2024	3/3/2024	3/4/2024	3/5/2024	3/6/2024	3/7/2024
IV. Lake Sonoma									
Lake Sonoma									
Storage Change (ac-ft)			+1,533.0	+2,155.0	+1,519.0	+564.0	+537.0	+594.0	-114.0
(cfs)			+773	+1,086	+766	+284	+271	+299	-57
Evaporation (ac-ft)			7.8	7.9	7.9	6.3	9.5	9.5	14.3
Inflow (Natural Flow)			1,227	1,543	1,223	978	1,268	1,296	942
WSD Release Gage			450	453	453	690	992	992	992
Storage (Project Water)			0	0	0	0	0	0	50
Natural Flow			450	453	453	690	992	992	942
V. Lower Dry Creek Reach									
Minimum Instream Flow Requirement			75	75	75	75	75	75	75
Controlling Compliance Gage									
Min Gage Flow			450	453	453	690	992	992	992
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*	450	453	453	690	992	992	992
Yoakim	(USGS 11465200)	*11.1*	545	665	646	780	1,160	1,148	1,100
Lambert	(USGS 11465240)	*6.8*	627	823	772	878	1,403	1,395	1,350
Dry Crk Mouth	(USGS 11465350)	*0.1*	987	1,459	1,388	1,263	1,791	1,756	1,687
WSD to Russian River Confluence Reach Analysis									
Total Pass-through Water			450	453	453	690	992	992	942
Net Reach Loss(-)/Gain(+)									
WSD - Yoakim			+436	+555	+536	+670	+1,049	+1,037	+990
Yoakim - Lambert			+91	+155	+124	+119	+245	+245	+248
Lambert - Dry Crk Mouth			+399	+630	+606	+455	+400	+359	+332
WSD - Dry Crk Mouth			+926	+1,340	+1,266	+1,244	+1,694	+1,642	+1,570
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			No	No	No	No	No	No	Yes
VI. Russian River - Dry Creek Confluence									
Upper Russian River Flow (Healdsburg Gage)									
L. Mendocino Project Water + Import Water			40	40	40	40	40	39	38
Natural Flow			4,042	6,783	6,298	4,865	5,741	5,903	5,113
Dry Creek Flow (Mouth Gage)									
L. Sonoma Project Water			0	0	0	0	0	0	50
Natural Flow			987	1,459	1,388	1,263	1,791	1,756	1,637
Russian River d/s of Confluence Flow			4,649	8,952	8,926	7,513	8,220	8,656	8,599
L. Mendocino Project Water + Import Water			40	40	40	40	40	39	38
L. Sonoma Project Water			0	0	0	0	0	0	50
Natural Flow			5,029	8,243	7,686	6,127	7,532	7,659	6,750
VII. Lower Russian River Reach									
Minimum Instream Flow Requirement			125	125	125	125	125	125	125
Controlling Compliance Gage									
Min Gage Flow			5,625	8,875	10,850	9,566	9,713	10,165	10,276
Controlling Gage			Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
All Compliance Gages		*Rvr mi.*							
Windsor	(USGS 11465390)	*26.6*	*n/d*	*n/d*	*n/d*	*n/d*	*n/d*	*n/d*	*n/d*
Hacienda	(USGS 11467000)	*21.8*	5,625	8,875	10,850	9,566	9,713	10,165	10,276
Confluence to Windsor Reach Analysis									
Net Reach Loss/Gain to Windsor Gage			-	-	-	-	-	-	-
L. Mendocino Project Water + Import Water			-	-	-	-	-	-	-
L. Sonoma Project Water			-	-	-	-	-	-	-
Natural Flow			-	-	-	-	-	-	-
Confluence to SCWA Wohler Production Facility Reach Analysis									
Approx. Flow u/s of Wohler			5,660	8,910	10,887	9,610	9,746	10,202	10,320
Net Reach Loss(-)/Gain(+)			+1,011	-42	+1,961	+2,098	+1,526	+1,546	+1,722
L. Mendocino Project Water + Import Water			40	40	40	40	40	39	38
L. Sonoma Project Water			0	0	0	0	0	0	49
Natural Flow			6,040	8,201	9,647	8,225	9,058	9,205	8,472
Confluence to Hacienda (Guerneville) Reach Analysis									
Net Reach Loss(-)/Gain(+)			+976	-77	+1,924	+2,053	+1,494	+1,508	+1,677
L. Mendocino Project Water + Import Water			40	40	40	40	40	39	38
L. Sonoma Project Water			0	0	0	0	0	0	4
Natural Flow			6,005	8,166	9,609	8,181	9,026	9,167	8,472
VIII. Water Production under Sonoma Water Water Rights (ac-ft)									
Lower Russian River									
Sonoma Water Total			70.0	68.8	73.9	87.8	64.8	74.3	88.4
Wohler			20.2	30.7	27.4	38.2	37.9	38.2	38.8
Mirabel			49.8	38.1	46.5	49.6	26.9	36.1	49.6
Town of Windsor River Wellfield			5.6	4.9	4.2	3.9	3.6	3.2	3.4
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)

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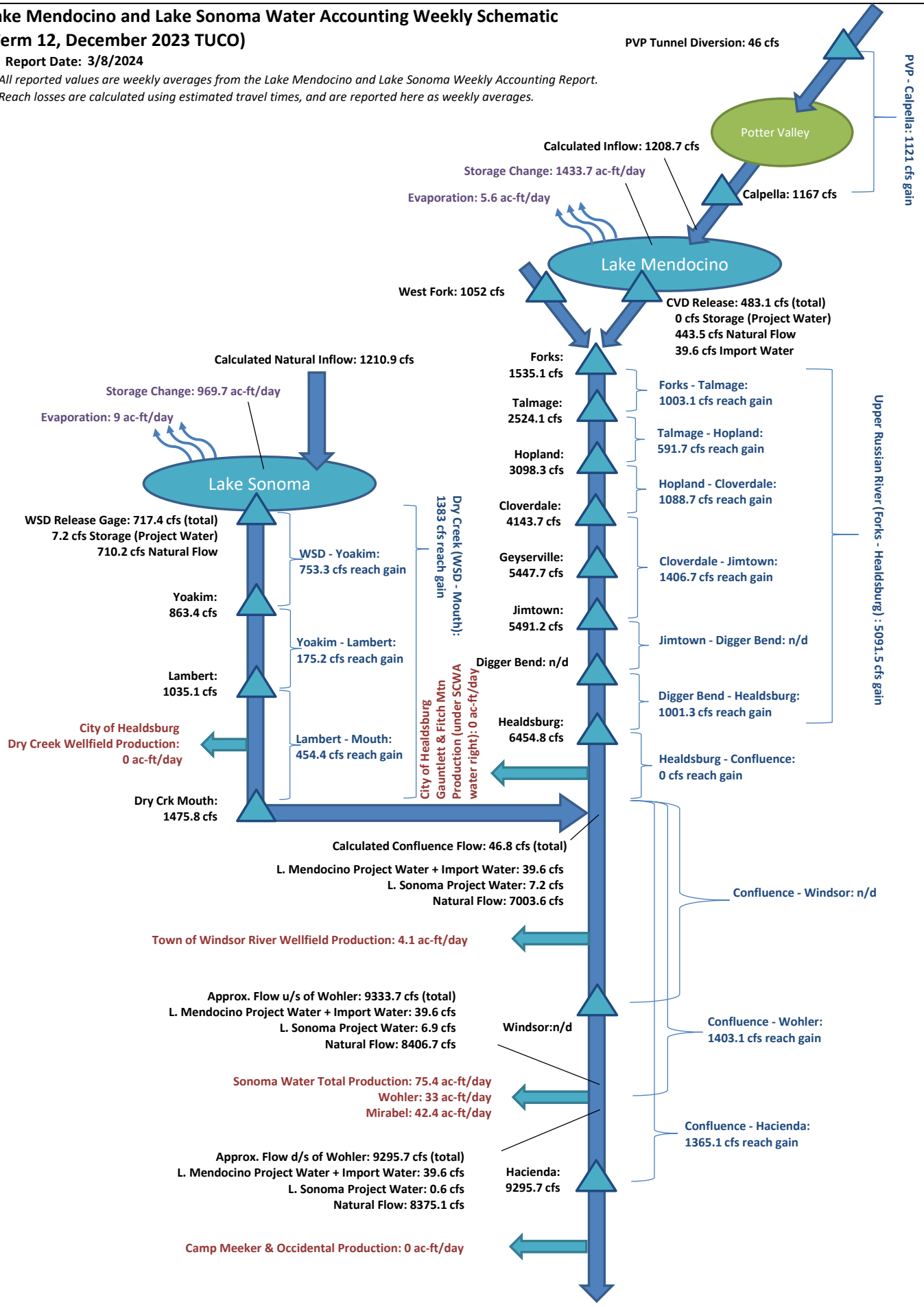
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



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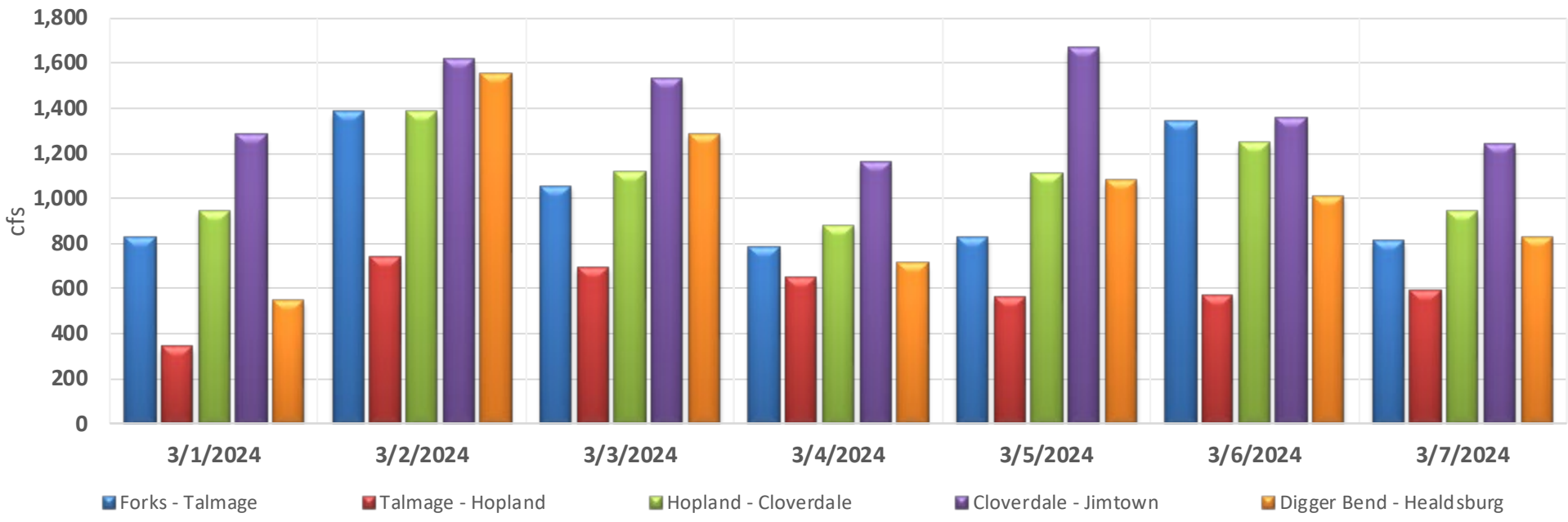
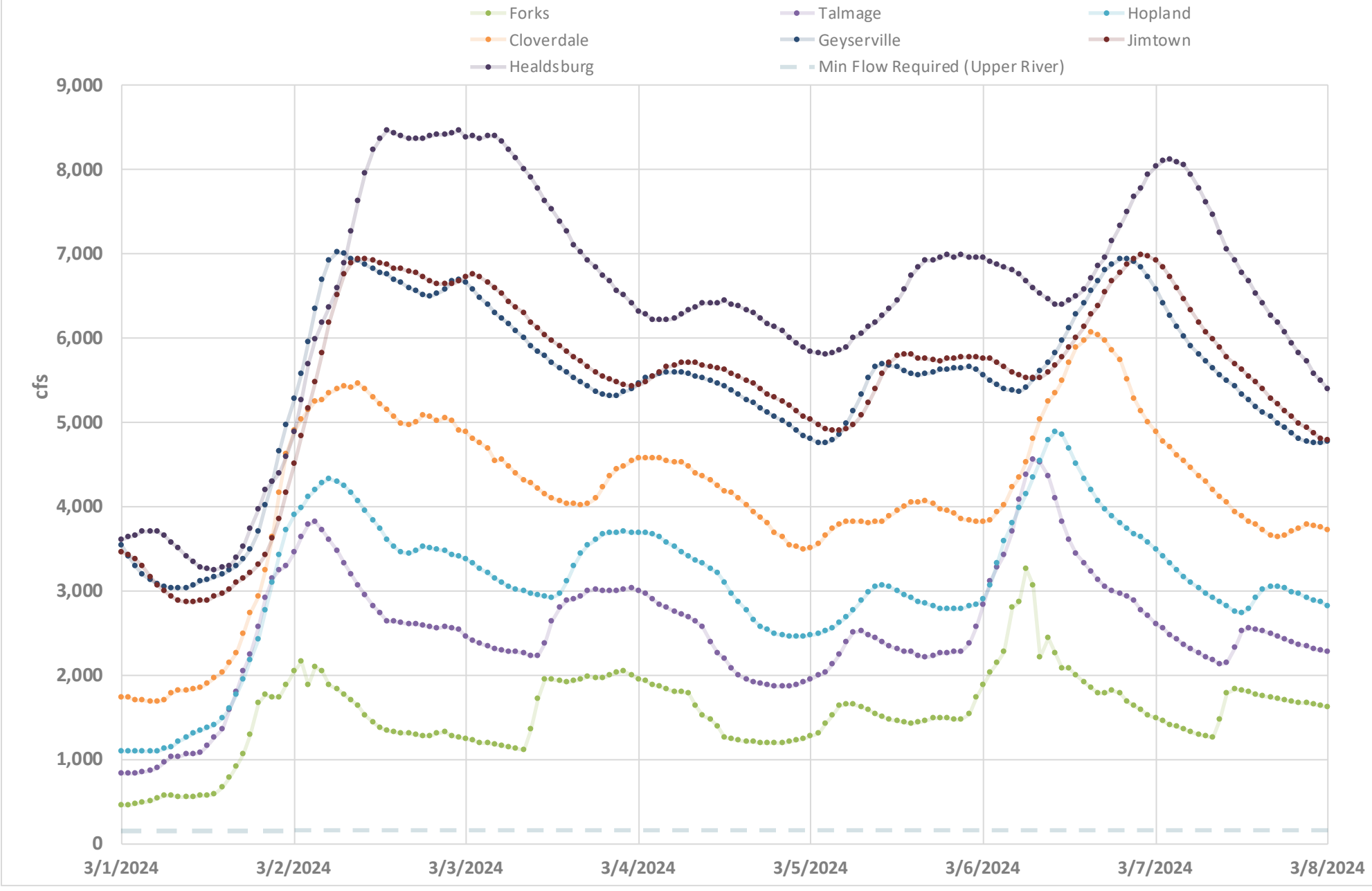
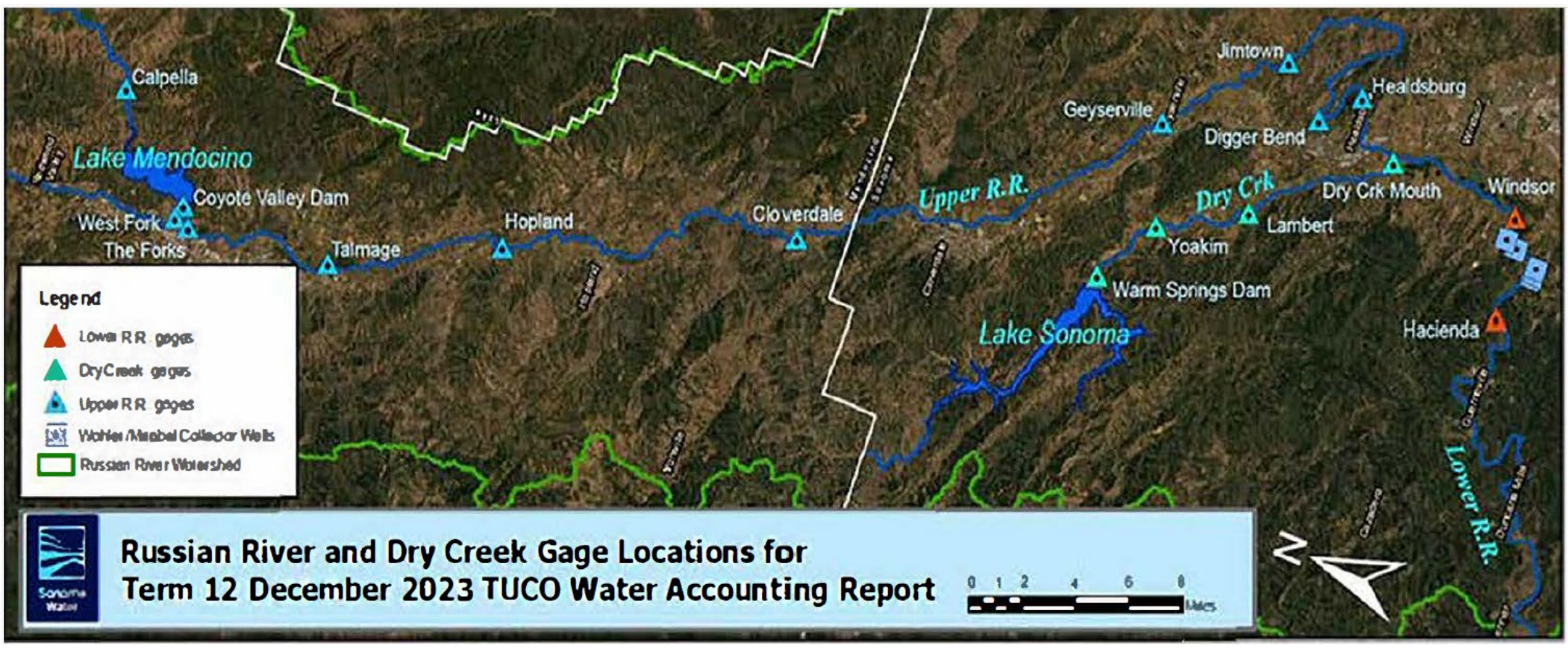
UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



UPPER RUSSIAN RIVER STREAM FLOWS





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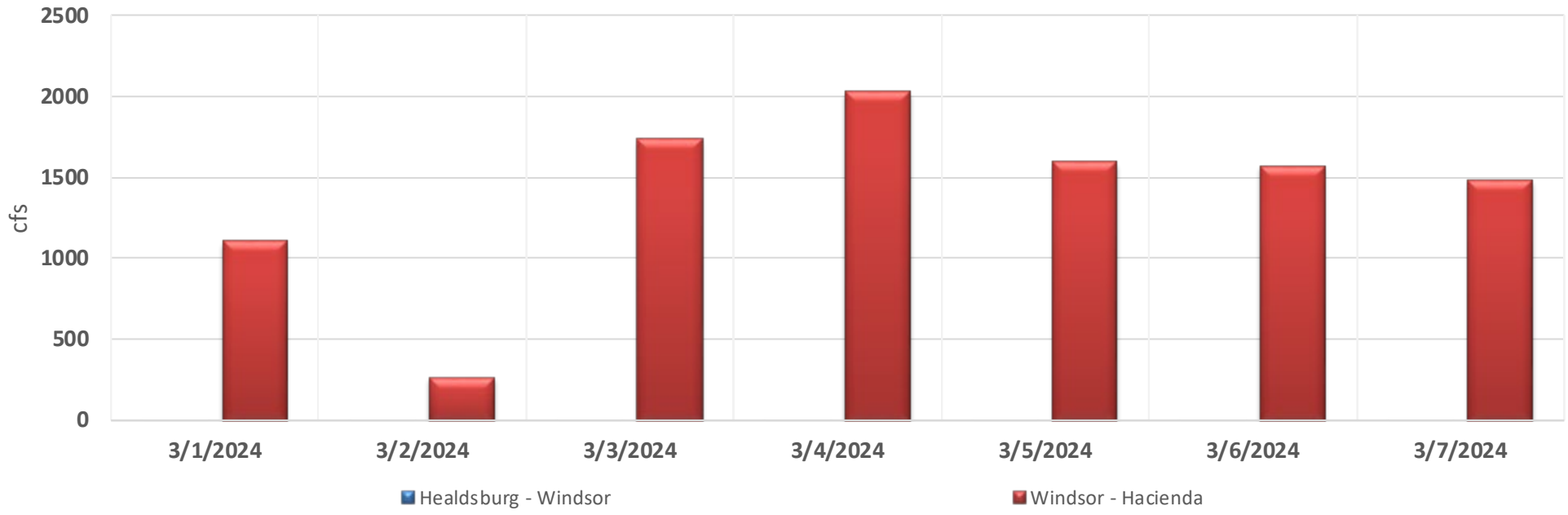
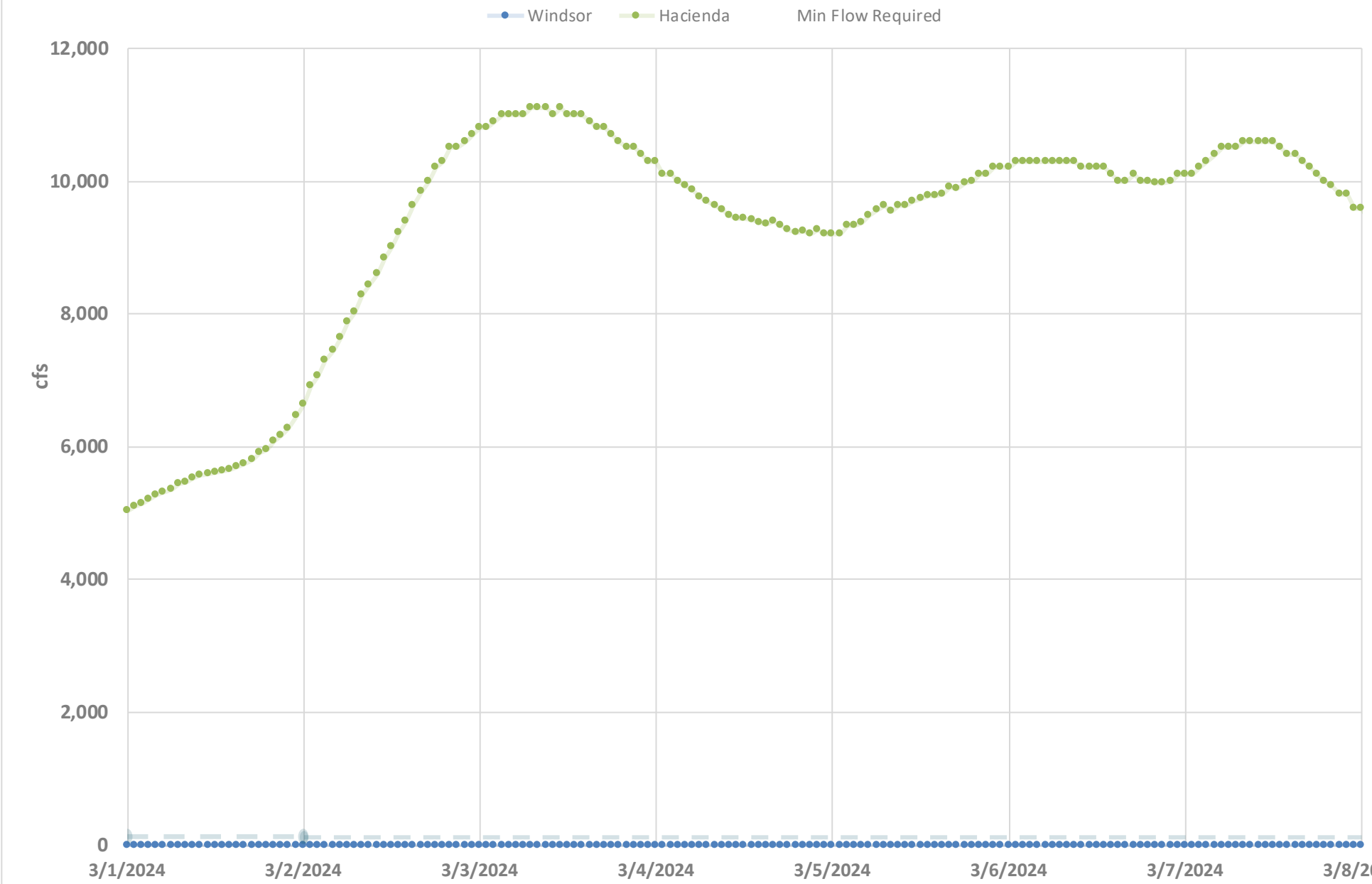
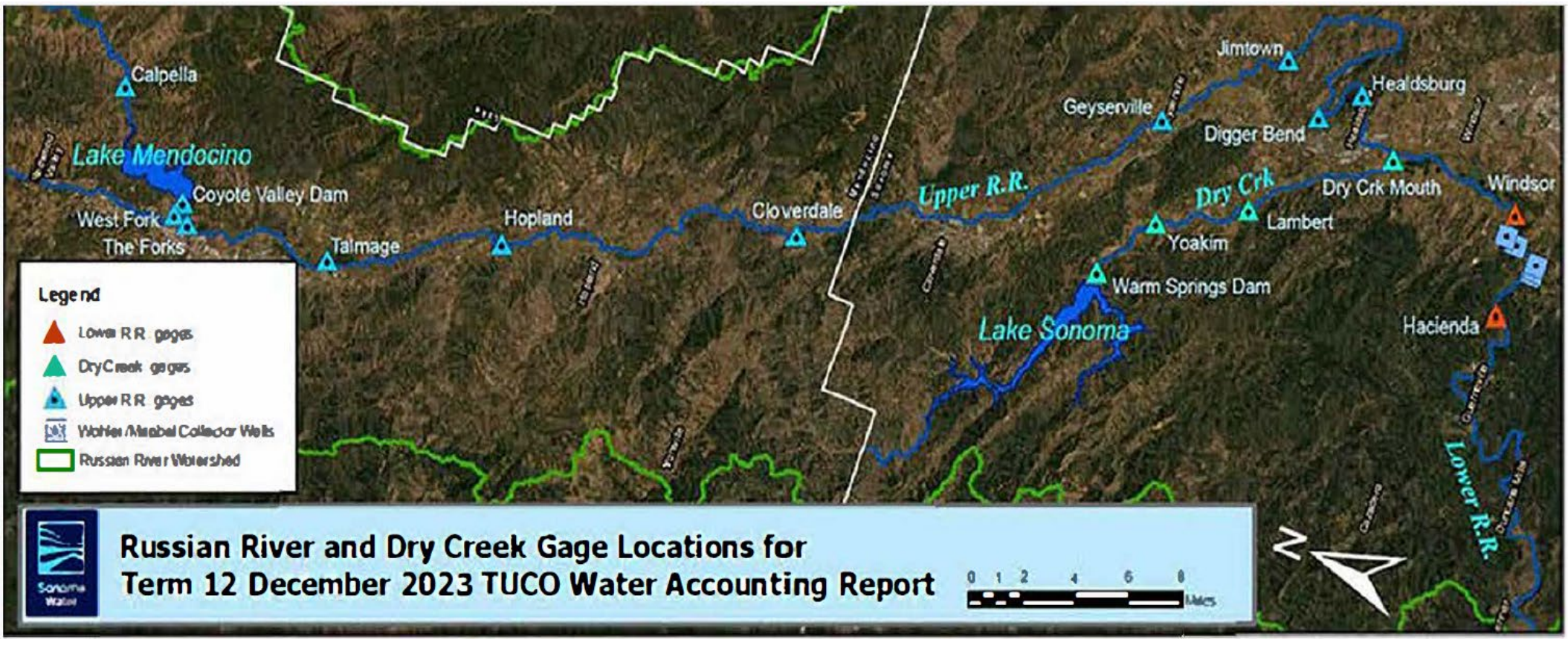
LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



LOWER RUSSIAN RIVER STREAM FLOWS





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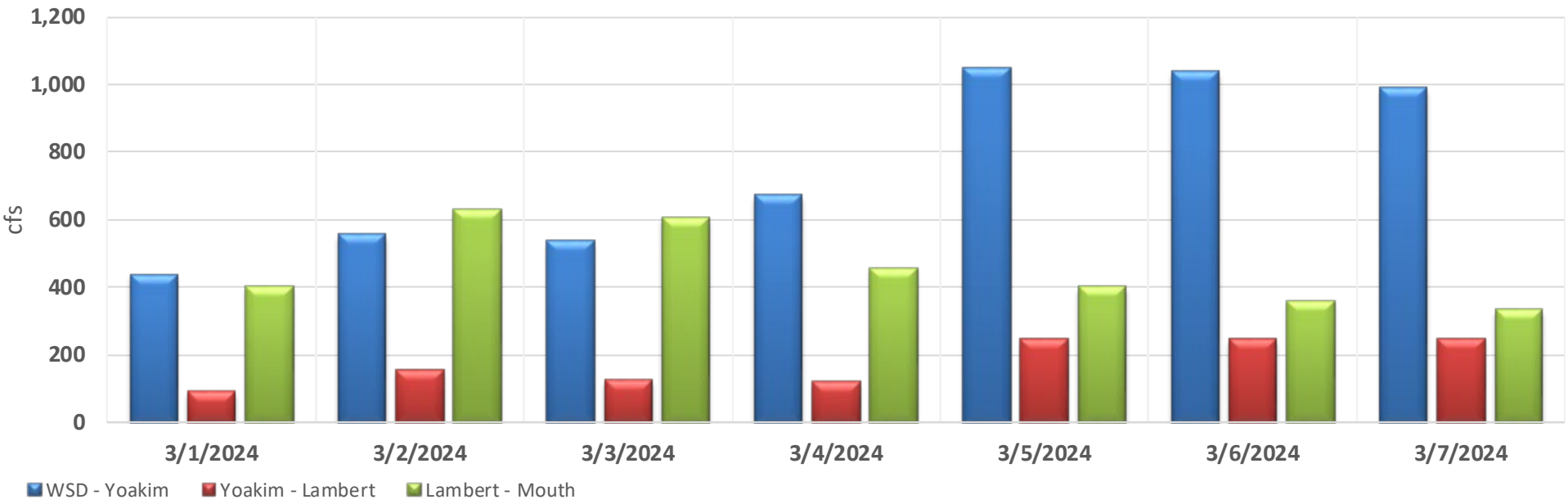
DRY CREEK NET REACH GAINS (+) / LOSSES (-)



DRY CREEK STREAM FLOWS