

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

Report Date: 2/17/2023

*Units are cfs unless noted otherwise*

	2/10/2023	2/11/2023	2/12/2023	2/13/2023	2/14/2023	2/15/2023	2/16/2023
<b>I. Upper East Fork Reach</b>							
<b>Potter Valley Project</b>							
Tunnel Diversion	45.0	45.0	45.0	45.0	45.0	45.0	45.0
PVID Requested Delivery	10.0	10.0	10.0	10.0	10.0	10.0	10.0
PVID Canals Actual Delivery	1.3	1.3	1.2	1.2	1.2	1.2	1.2
East Fork Release	44.0	44.0	44.0	44.0	44.0	44.0	44.0
PVID E Fork Diversions	8.7	8.8	8.8	8.8	8.8	8.8	8.8
PVID Water Use - PG&E Contract	10.0	10.0	10.0	10.0	10.0	10.0	10.0
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)	35.3	35.3	35.2	35.2	35.2	35.2	35.2
PVID Canal Net Return Flow (assumed)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>East Fork / Potter Valley Reach Analysis</b>							
USGS E Fork @ Calpella	126.4	123.3	115.8	110.2	104.6	100.0	97.7
Net Reach Loss(-)/Gain(+)	+81.4	+78.3	+70.8	+65.2	+59.6	+55.0	+52.7
Unimpaired Natural Flow @ Calpella (est.)	41.9	38.9	36.4	33.1	31.3	29.4	27.2
Non-PVID East Fork Net Reach Losses (est.)	91.4	88.3	80.8	75.2	69.6	65.0	62.7
Natural Flow	56.1	53.0	45.6	39.9	34.3	29.7	27.5
Import (neg. value is return flow)	35.3	35.3	35.2	35.2	35.2	35.2	35.2

## II. Lake Mendocino

### Reservoir Operations

Calculated Inflow (ac-ft)	260	254	267	210	207	203	209
(cfs)	131	128	135	106	104	102	105
Natural Flow	96	93	100	71	69	67	70
Import	35	35	35	35	35	35	35
Storage Change (ac-ft)	-87.0	-51.0	-17.0	-35.0	-17.0	-12.0	-5.0
(cfs)	-44	-26	-9	-18	-9	-6	-3
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)	6.0	7.0	11.0	10.0	7.0	10.0	8.0
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	172	150	138	119	109	103	104
Storage (Project Water)	41	22	3	13	5	1	0
Natural Flow	96	93	100	71	69	67	70
Import Water	35	35	35	35	35	35	35
<b>East Fork Min Instream Flow Requirement</b>	25	25	25	25	25	25	25
<b>Compliance Gage</b>	<i>Rvr mi.</i>						
CVD Release	99.9	172	150	138	119	109	104
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Total Pass-through Water	131	128	135	106	104	102	105
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
<b>Controlling Compliance Gage</b>							
Min Gage Flow	272	246	224	199	183	172	169
Controlling Gage	Forks	Forks	Forks	Forks	Forks	Forks	Forks
<b>All Compliance Gages</b>							
Forks (CVD + USGS 11461000)	<i>Rvr mi.</i>	99.0	272	246	224	199	183
Talmage (USGS 11462080)	96.1	373	349	327	299	284	272
Hopland (USGS 11462500)	84.8	496	466	432	387	356	330
Cloverdale (USGS 11463000)	70.9	757	721	677	626	585	551
Geyserville (USGS 11463500)	54.4	1,217	1,148	1,057	958	870	801
Jimtown (USGS 11463682)	48.5	1,183	1,102	1,041	966	898	846
Digger Bend (USGS 11463980)	38.2	>400 cfs	>400 cfs	>400 cfs	>400 cfs	>400 cfs	>400 cfs
Healdsburg (USGS 11464000)	35.6	1,054	1,001	963	920	877	837
<b>Net Reach Loss(-)/Gain(+)</b>							
Forks - Talmage	+93	+103	+98	+99	+99	+99	+96
Talmage - Hopland	+117	+115	+100	+85	+69	+57	+46
Hopland - Cloverdale	+247	+251	+234	+230	+222	+216	+211
Cloverdale - Jimtown	+399	+370	+347	+321	+299	+282	+243
Jimtown - Digger Bend	n/d	n/d	n/d	n/d	n/d	n/d	n/d
Digger Bend - Healdsburg <i>*when Digger Bend &gt; 400 cfs, next u/s gage (Jimtown) used</i>	-164	-121	-101	-73	-41	-27	+6
Upper Russian Net Reach Loss/Gain	+691	+717	+678	+662	+648	+627	+603
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
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	131	128	135	106	104	102	105
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).

	2/10/2023	2/11/2023	2/12/2023	2/13/2023	2/14/2023	2/15/2023	2/16/2023
<b>IV. Lake Sonoma</b>							
<b>Lake Sonoma</b>							
Storage Change (ac-ft)	+261.0	+315.0	+210.0	+131.0	+131.0	+79.0	+79.0
(cfs)	+132	+159	+106	+66	+66	+40	+40
Evaporation (ac-ft)	9.1	7.6	12.2	12.2	9.1	9.1	7.6
Inflow (Natural Flow)	216	243	193	154	152	124	124
WSD Release Gage	80	80	81	81	82	80	80
Storage (Project Water)	0	0	0	0	0	0	0
Natural Flow	80	80	81	81	82	80	80

#### V. Lower Dry Creek Reach

<b>Minimum Instream Flow Requirement</b>		75	75	75	75	75	75	75
<b>Controlling Compliance Gage</b>								
Min Gage Flow		80	80	81	81	82	80	80
Controlling Gage		WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release
<b>All Compliance Gages</b>								
	<i>Crk mi.</i>							
WSD Release	14.3	80	80	81	81	82	80	80
Yoakim (USGS 11465200)	11.1	125	122	120	117	115	113	112
Lambert (USGS 11465240)	6.8	127	124	120	116	113	109	107
Dry Crk Mouth (USGS 11465350)	0.1	249	237	215	204	188	176	170
<b>WSD to Russian River Confluence Reach Analysis</b>								
Total Pass-through Water		80	80	81	81	82	80	80
<b>Net Reach Loss(-)/Gain(+)</b>								
WSD - Yoakim		+45	+42	+39	+36	+34	+33	+32
Yoakim - Lambert		+2	+2	-0	-1	-3	-4	-5
Lambert - Dry Crk Mouth		+122	+113	+95	+87	+75	+66	+63
WSD - Dry Crk Mouth		+169	+156	+134	+121	+106	+95	+90
<b>WSD Project Water Release to Meet Min Flow Requirement</b>								
Net Reach Loss/Gain to Controlling Gage		+0	+0	+0	+0	+0	+0	+0
Project Water Release Required		No	No	No	No	No	No	No

#### VI. Russian River - Dry Creek Confluence

<b>Upper Russian River Flow (Healdsburg Gage)</b>								
L. Mendocino Project Water + Import Water		76	57	38	48	40	36	35
Natural Flow		787	810	777	733	717	694	673
<b>Dry Creek Flow (Mouth Gage)</b>								
L. Sonoma Project Water		0	0	0	0	0	0	0
Natural Flow		249	237	215	204	188	176	170
<b>Russian River d/s of Confluence Flow</b>								
L. Mendocino Project Water + Import Water		76	57	38	48	40	36	35
L. Sonoma Project Water		0	0	0	0	0	0	0
Natural Flow		1,036	1,047	992	937	905	870	843

#### VII. Lower Russian River Reach

<b>Minimum Instream Flow Requirement</b>		125	125	125	125	125	125	125
<b>Controlling Compliance Gage</b>								
Min Gage Flow		1,970	1,780	1,650	1,530	1,430	1,320	1,250
Controlling Gage		Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
<b>All Compliance Gages</b>								
	<i>Rvr mi.</i>							
Windsor (USGS 11465390)	26.6	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>	<i>n/d</i>
Hacienda (USGS 11467000)	21.8	1,970	1,780	1,650	1,530	1,430	1,320	1,250
<b>Confluence to Windsor Reach Analysis</b>								
Net Reach Loss/Gain to Windsor Gage		-	-	-	-	-	-	-
L. Mendocino Project Water + Import Water		-	-	-	-	-	-	-
L. Sonoma Project Water		-	-	-	-	-	-	-
Natural Flow		-	-	-	-	-	-	-
<b>Confluence to SCWA Wohler Production Facility Reach Analysis</b>								
Approx. Flow u/s of Wohler		2,019	1,839	1,709	1,575	1,474	1,349	1,284
Net Reach Loss(-)/Gain(+)		+717	+600	+531	+451	+409	+336	+310
L. Mendocino Project Water + Import Water		76	57	38	48	40	36	35
L. Sonoma Project Water		0	0	0	0	0	0	0
Natural Flow		1,753	1,648	1,524	1,388	1,315	1,206	1,153
<b>Confluence to Hacienda (Guerneville) Reach Analysis</b>								
Net Reach Loss(-)/Gain(+)		+667	+542	+472	+406	+365	+307	+276
L. Mendocino Project Water + Import Water		76	57	38	48	40	36	35
L. Sonoma Project Water		0	0	0	0	0	0	0
Natural Flow		1,703	1,589	1,464	1,343	1,271	1,177	1,119

#### VIII. Water Production under Sonoma Water Rights (ac-ft)

<b>Lower Russian River</b>								
Sonoma Water Total		97.4	116.9	117.5	90.0	87.0	57.4	66.7
Wohler		52.1	72.8	73.9	43.9	41.0	12.3	20.9
Mirabel		45.3	44.1	43.6	46.1	46.0	45.1	45.9
Town of Windsor River Wellfield		4.6	4.3	5.1	4.1	4.6	4.7	4.7
Camp Meeker & Occidental		0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Upper Russian River</b>								
City of Healdsburg								
Gauntlett & Fitch Mtn		0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Dry Creek</b>								
City of Healdsburg								
Dry Creek Wellfield		0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Notes:**

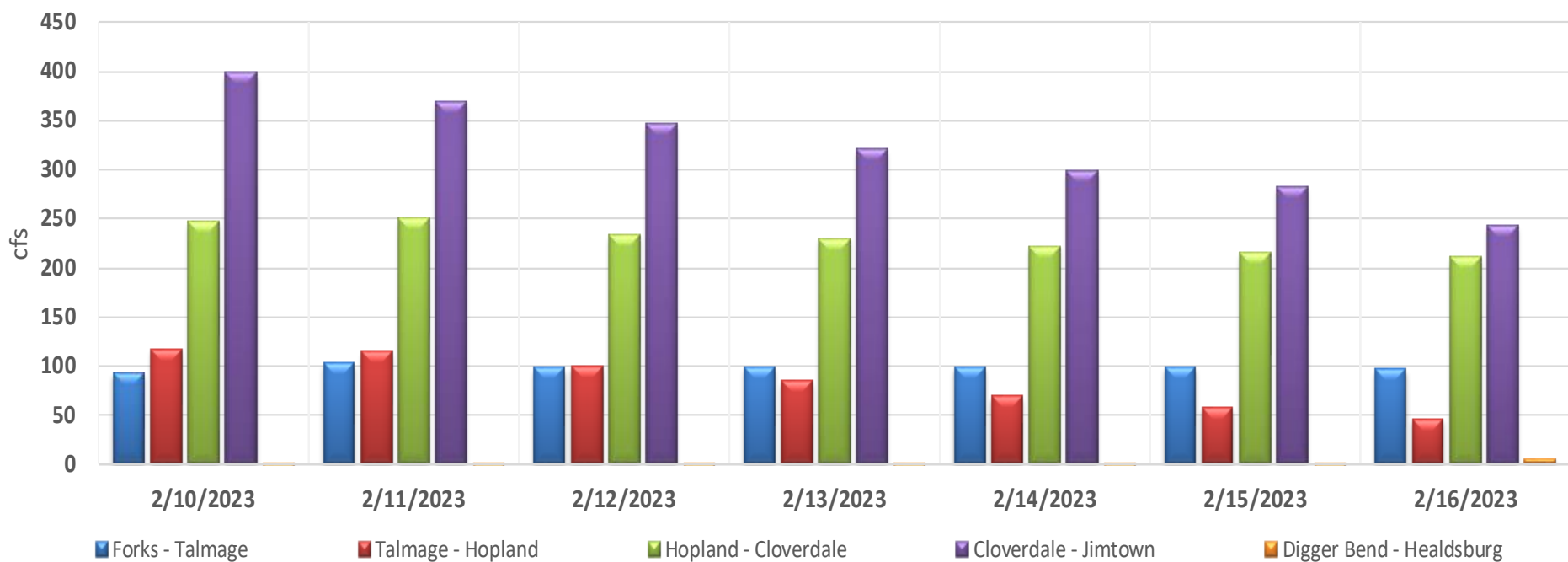
- Water Accounting for the Lower Russian River and Dry Creek is an analysis that approximates the current conditions based on the methodology in Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).



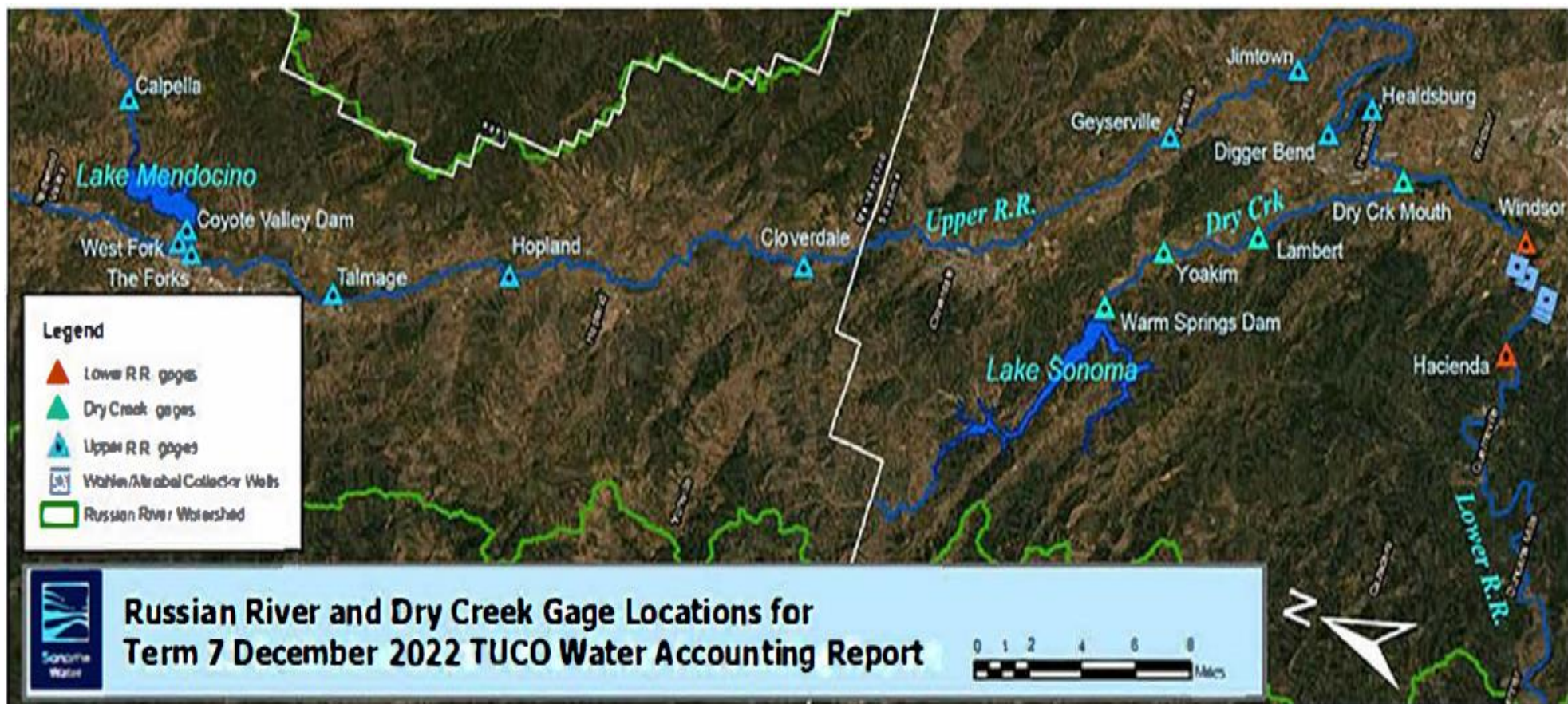
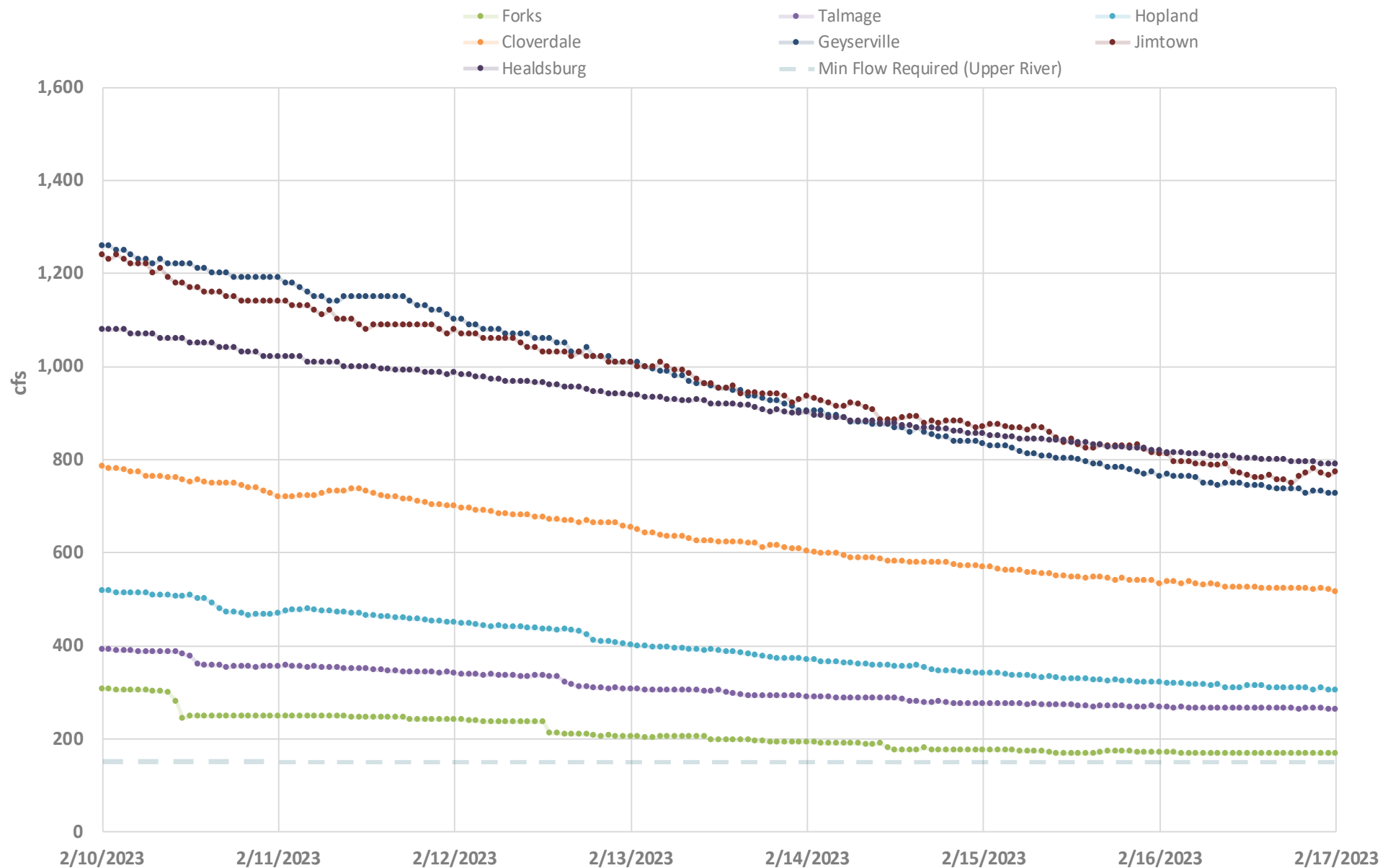
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## UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



## UPPER RUSSIAN RIVER STREAM FLOWS

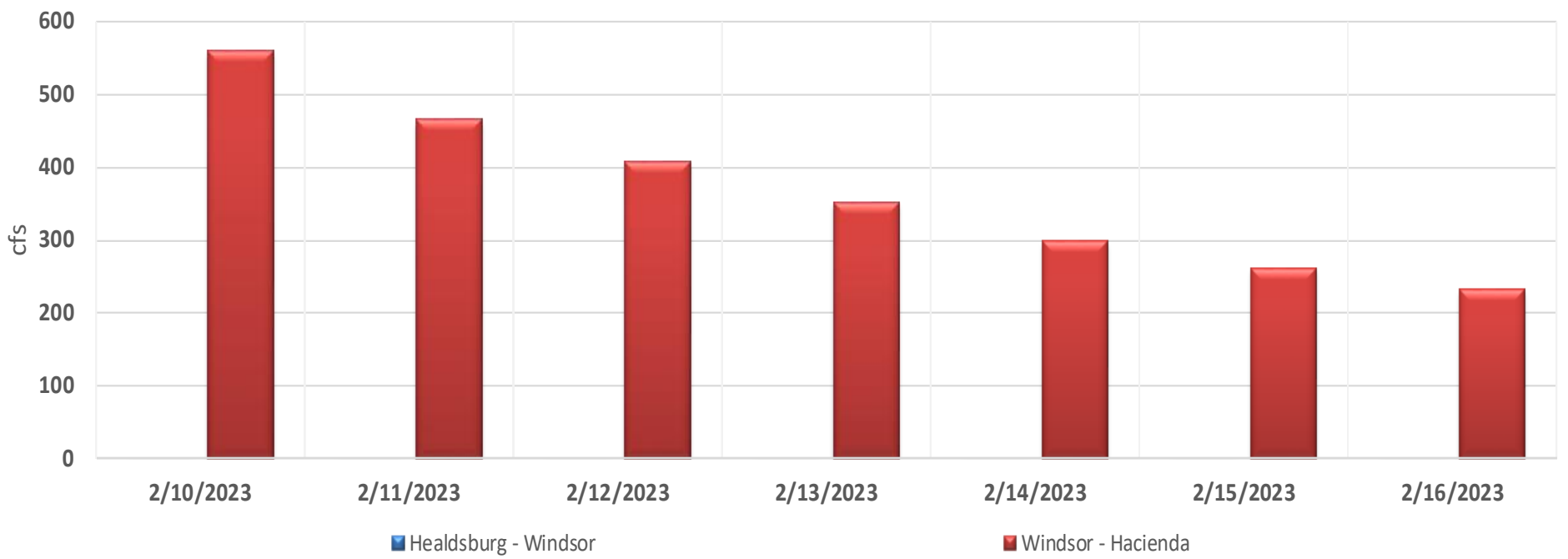




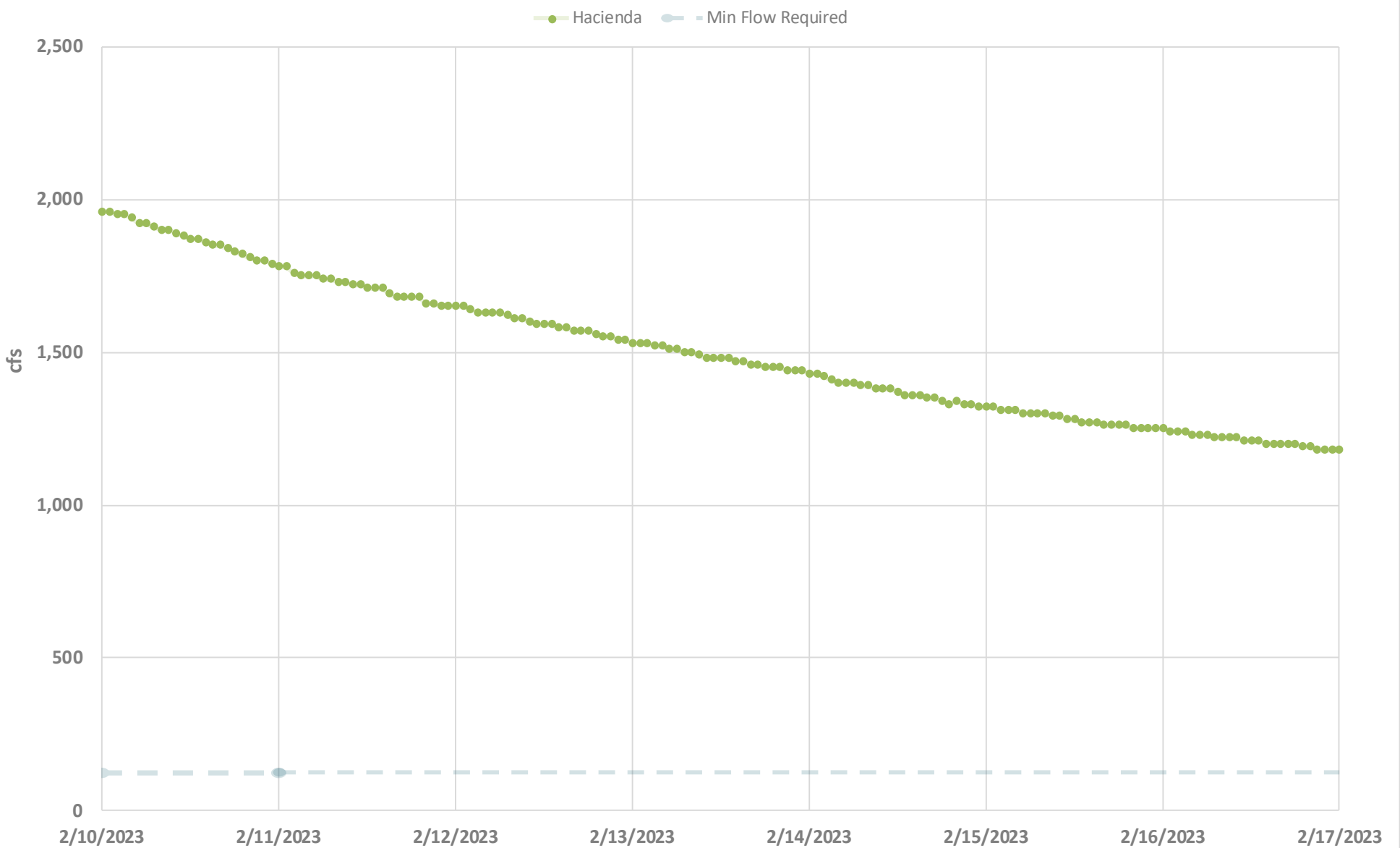
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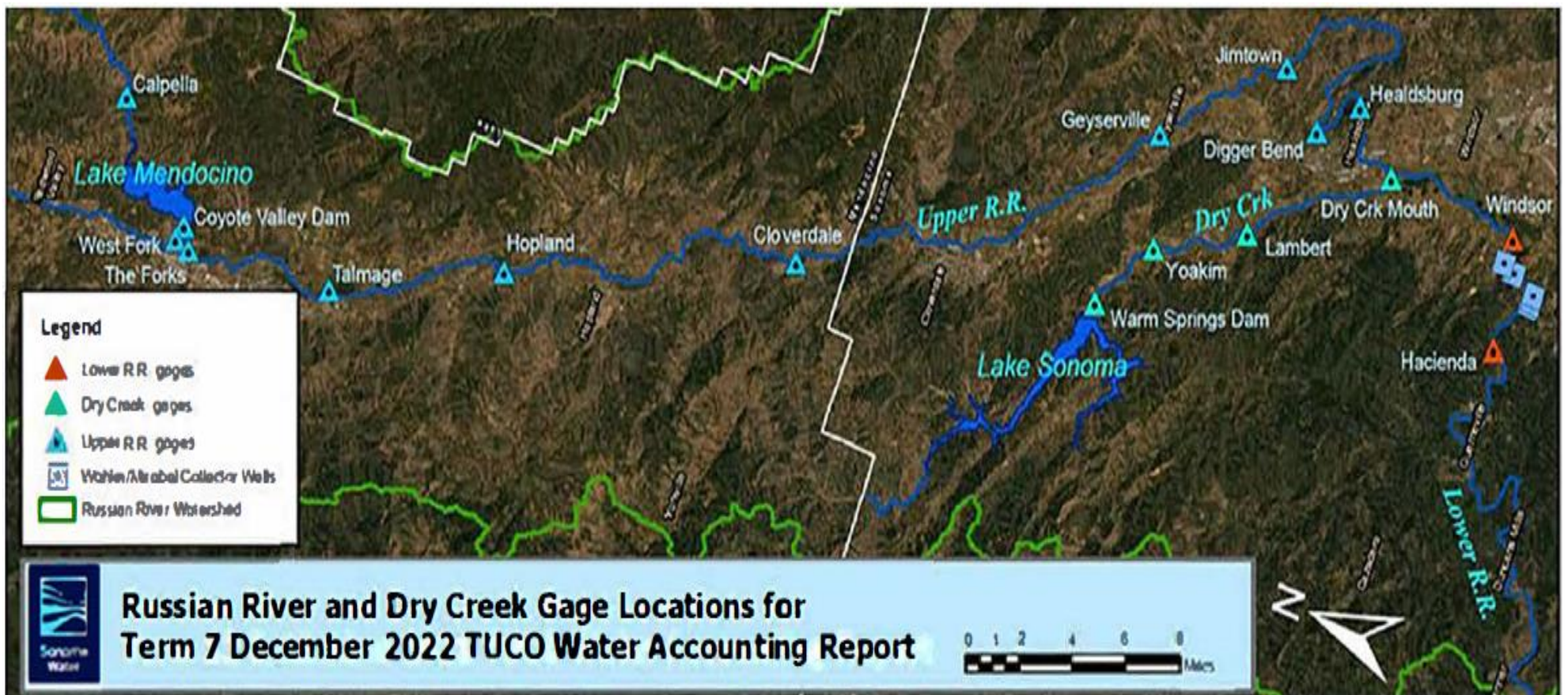
## LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



## LOWER RUSSIAN RIVER STREAM FLOWS



Note: Winsor gage is a seasonal gage and currently not operational. Winsor – Hacienda reach gain/loss is calculated with Healdsburg gages as the upstream gage.

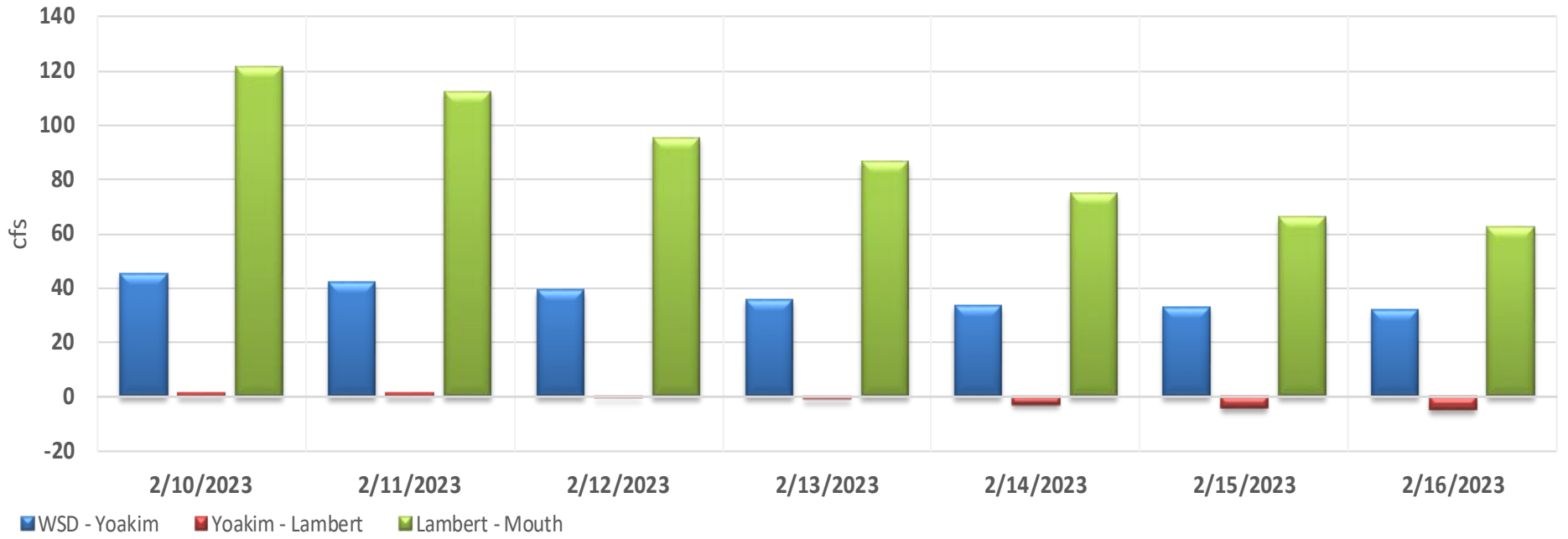




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## DRY CREEK NET REACH GAINS (+) / LOSSES (-)



## DRY CREEK STREAM FLOWS

