

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

Report Date: 9/30/2022

Units are cfs unless noted otherwise

	9/23/2022	9/24/2022	9/25/2022	9/26/2022	9/27/2022	9/28/2022	9/29/2022
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	17.0	16.0	15.0	15.0	15.0	15.0	15.0
PVID Requested Delivery	10.0	10.0	10.0	10.0	10.0	10.0	10.0
PVID Canals Actual Delivery	5.2	5.2	5.2	5.2	5.2	5.2	4.7
East Fork Release	12.0	11.0	10.0	10.0	10.0	10.0	10.0
PVID E Fork Diversions	4.8	4.8	4.9	4.9	4.8	4.9	5.3
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)	7.2	6.2	5.2	5.2	5.2	5.2	4.7
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	13.2	13.0	10.2	11.2	10.9	10.5	10.2
Net Reach Loss(-)/Gain(+)	-3.8	-3.0	-4.8	-3.8	-4.1	-4.5	-4.8
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.)	-6.2	-7.0	-5.2	-6.2	-5.9	-5.5	-5.2
Natural Flow	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Import (neg. value is return flow)	-6.2	-7.0	-5.2	-6.2	-5.9	-5.5	-5.2
II. Lake Mendocino							
Reservoir Operations							
Calculated Inflow (ac-ft)	33	47	19	44	17	24	24
(cfs)	17	24	10	22	8	12	12
Natural Flow	5	13	0	12	0	2	2
Import	12	11	10	10	8	10	10
Storage Change (ac-ft)	-140.0	-126.0	-154.0	-125.0	-139.0	-125.0	-125.0
(cfs)	-71	-64	-78	-63	-70	-63	-63
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)	20.3	20.3	20.3	20.2	17.2	17.1	18.1
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	77	77	77	75	70	67	66
Storage (Project Water)	60	53	67	53	61	54	54
Natural Flow	5	13	0	12	0	2	2
Import Water	12	11	10	10	8	10	10
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage	<i>Rvr mi.</i>						
CVD Release	99.9	77	77	77	75	70	66
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	17	24	10	22	8	12	12
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes
III. Upper Russian River Reach							
Minimum Instream Flow Requirement	25	25	25	25	25	25	25
Controlling Compliance Gage							
Min Gage Flow	46	44	44	44	45	45	45
Controlling Gage	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg
All Compliance Gages							
	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	77	77	77	75	70	66
Talmage (USGS 11462080)	96.1	79	79	78	77	69	64
Hopland (USGS 11462500)	84.8	70	70	69	70	64	58
Cloverdale (USGS 11463000)	70.9	67	69	69	68	66	58
Geyserville (USGS 11463500)	54.4	60	58	57	57	58	54
Jimtown (USGS 11463682)	48.5	62	60	62	62	61	56
Digger Bend (USGS 11463980)	38.2	53	50	50	51	51	50
Healdsburg (USGS 11464000)	35.6	46	44	44	44	45	45
Net Reach Loss(-)/Gain(+)							
Forks - Talmage	+2	+2	+1	+1	-2	-2	-2
Talmage - Hopland	-9	-9	-9	-9	-7	-7	-6
Hopland - Cloverdale	-1	-1	-1	-2	-1	-0	-1
Cloverdale - Jimtown	-6	-7	-8	-7	-7	-7	-6
Jimtown - Digger Bend	-11	-10	-11	-11	-10	-9	-7
Digger Bend - Healdsburg	-8	-7	-6	-6	-6	-7	-6
Upper Russian Net Reach Loss/Gain	-33	-33	-33	-34	-34	-31	-28
CVD Project Water Release to Meet Min Flow Requirement							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-33	-33	-33	-34	-34	-31	-28
Storage (Project Water)	-33	-33	-33	-34	-34	-31	-28
Pass-through Water (Nat. + Imp.) + Natural	0	0	0	0	0	0	0
Total Pass-through Water	17	24	10	22	8	12	12
Project Water Release Required	Yes	Yes	Yes	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).

IV. Lake Sonoma

Lake Sonoma

Storage Change (ac-ft)	-218.0	-218.0	-233.0	-187.0	-201.0	-217.0	-201.0
(cfs)	-110	-110	-117	-94	-101	-109	-101
Evaporation (ac-ft)	15.7	15.7	12.3	11.2	10.0	12.3	14.5
Inflow (Natural Flow)	0	0	0	6	0	0	1
WSD Release Gage	94	94	94	95	95	94	95
Storage (Project Water)	94	94	94	89	95	94	94
Natural Flow	0	0	0	6	0	0	1

V. Lower Dry Creek Reach

Minimum Instream Flow Requirement

	80	80	80	80	80	80	80
--	----	----	----	----	----	----	----

Controlling Compliance Gage

Min Gage Flow	87	86	86	87	87	86	85
Controlling Gage	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth	Dry Crk Mouth

All Compliance Gages

	<i>Crk mi.</i>						
WSD Release	14.3	94	94	94	95	95	94
Yoakim (USGS 11465200)	11.1	97	96	97	98	98	97
Lambert (USGS 11465240)	6.8	93	93	93	93	93	93
Dry Crk Mouth (USGS 11465350)	0.1	87	86	86	87	87	85

WSD to Russian River Confluence Reach Analysis

Total Pass-through Water	0	0	0	6	0	0	1
--------------------------	---	---	---	---	---	---	---

Net Reach Loss(-)/Gain(+)

WSD - Yoakim	+1	+0	+1	+2	+2	+2	+1
Yoakim - Lambert	-3	-3	-4	-5	-4	-4	-4
Lambert - Dry Crk Mouth	-6	-7	-7	-7	-6	-7	-8
WSD - Dry Crk Mouth	-9	-10	-9	-9	-9	-10	-11

WSD Project Water Release to Meet Min Flow Requirement

Net Reach Loss/Gain to Controlling Gage	-9	-10	-9	-9	-9	-10	-11
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	46	44	44	44	45	45	45
Natural Flow	0	0	0	0	0	0	0

Dry Creek Flow (Mouth Gage)

L. Sonoma Project Water	94	94	94	89	95	94	94
Natural Flow	0	0	0	0	0	0	0

Russian River d/s of Confluence Flow

	133	130	130	131	131	131	130
L. Mendocino Project Water + Import Water	46	44	44	44	45	45	45
L. Sonoma Project Water	94	94	94	89	95	94	94
Natural Flow	0	0	0	0	0	0	0

VII. Lower Russian River Reach

Minimum Instream Flow Requirement

	35	35	35	35	35	35	35
--	----	----	----	----	----	----	----

Controlling Compliance Gage

Min Gage Flow	98	93	90	88	88	90	87
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda

All Compliance Gages

	<i>Rvr mi.</i>						
Windsor (USGS 11465390)	26.6	131.5	124.8	123.4	124.3	124.5	124.2
Hacienda (USGS 11467000)	21.8	98	93	90	88	88	87

Confluence to Windsor Reach Analysis

Net Reach Loss/Gain to Windsor Gage	-1	-5	-6	-7	-7	-6	-6
L. Mendocino Project Water + Import Water	46	44	44	44	45	45	45
L. Sonoma Project Water	90	90	91	85	91	90	89
Natural Flow	0	0	0	0	0	0	0

Confluence to SCWA Wohler Production Facility Reach Analysis

Approx. Flow u/s of Wohler	153	148	141	152	135	149	142
Net Reach Loss(-)/Gain(+)	+20	+18	+11	+20	+4	+18	+12
L. Mendocino Project Water + Import Water	46	44	44	44	45	45	45
L. Sonoma Project Water	90	90	91	85	91	90	89
Natural Flow	20	18	11	20	4	18	12

Confluence to Hacienda (Guerneville) Reach Analysis

Net Reach Loss(-)/Gain(+)	-35	-37	-40	-43	-43	-41	-42
L. Mendocino Project Water + Import Water	46	44	44	44	45	45	45
L. Sonoma Project Water	35	35	39	22	44	31	34
Natural Flow	20	18	11	20	4	18	12

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

Lower Russian River

Sonoma Water Total	108.8	108.1	102.0	125.2	93.3	117.2	109.0
Wohler	46.8	46.8	46.0	46.4	46.1	46.3	46.6
Mirabel	62.0	61.3	56.0	78.8	47.2	70.9	62.4
Town of Windsor River Wellfield	8.0	8.1	7.2	6.9	8.1	7.8	9.7
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

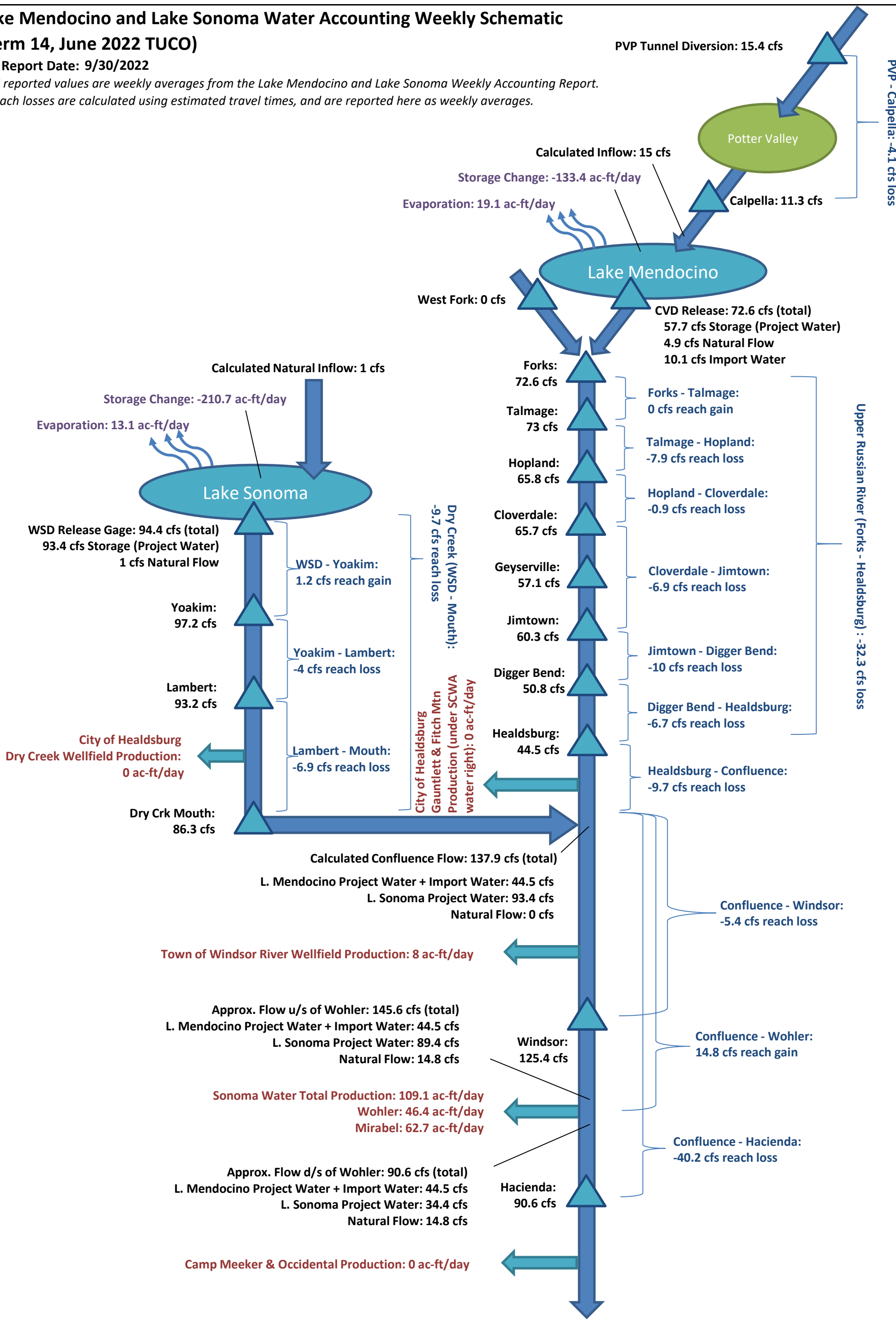
Notes:
 - Water Accounting for the Lower Russian River and Dry Creek is an analysis that approximates the current conditions based on the methodology in Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

Lake Mendocino and Lake Sonoma Water Accounting Weekly Schematic

(Term 14, June 2022 TUCO)

Report Date: 9/30/2022

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.



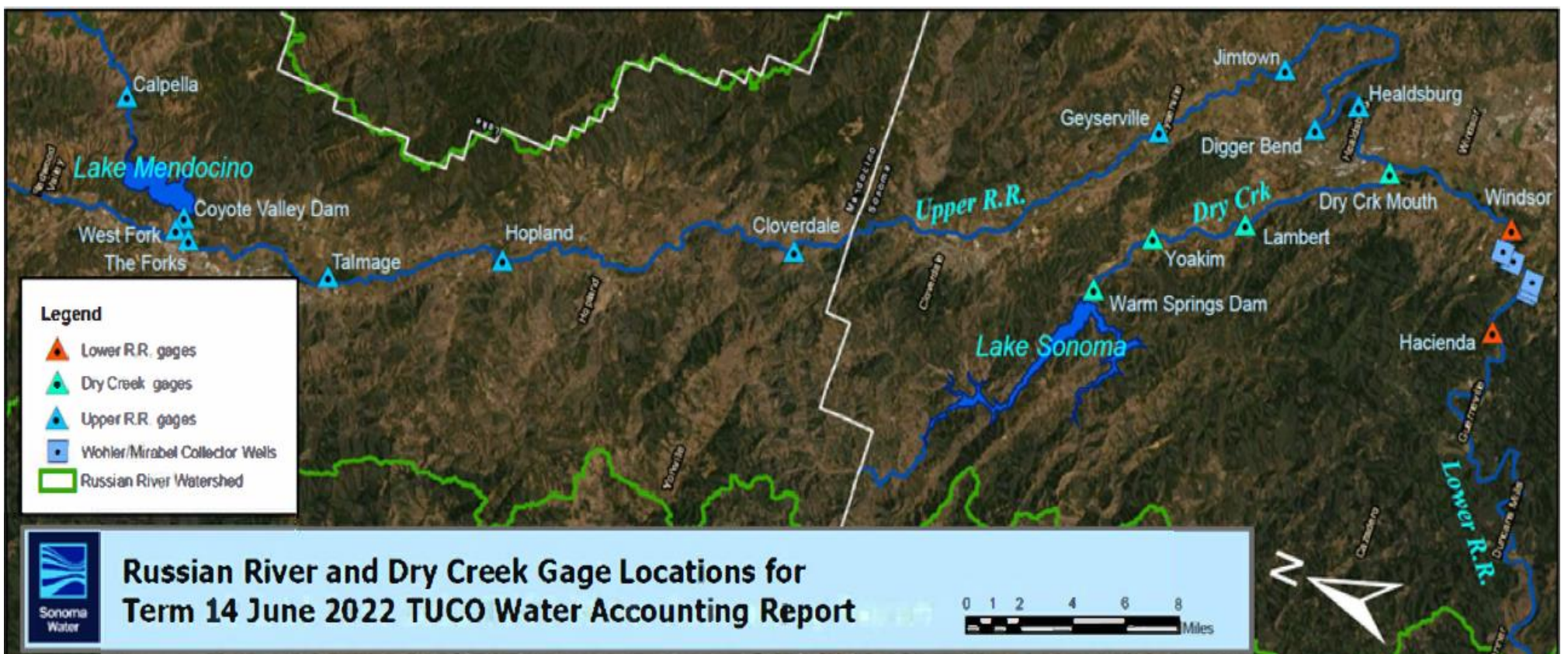
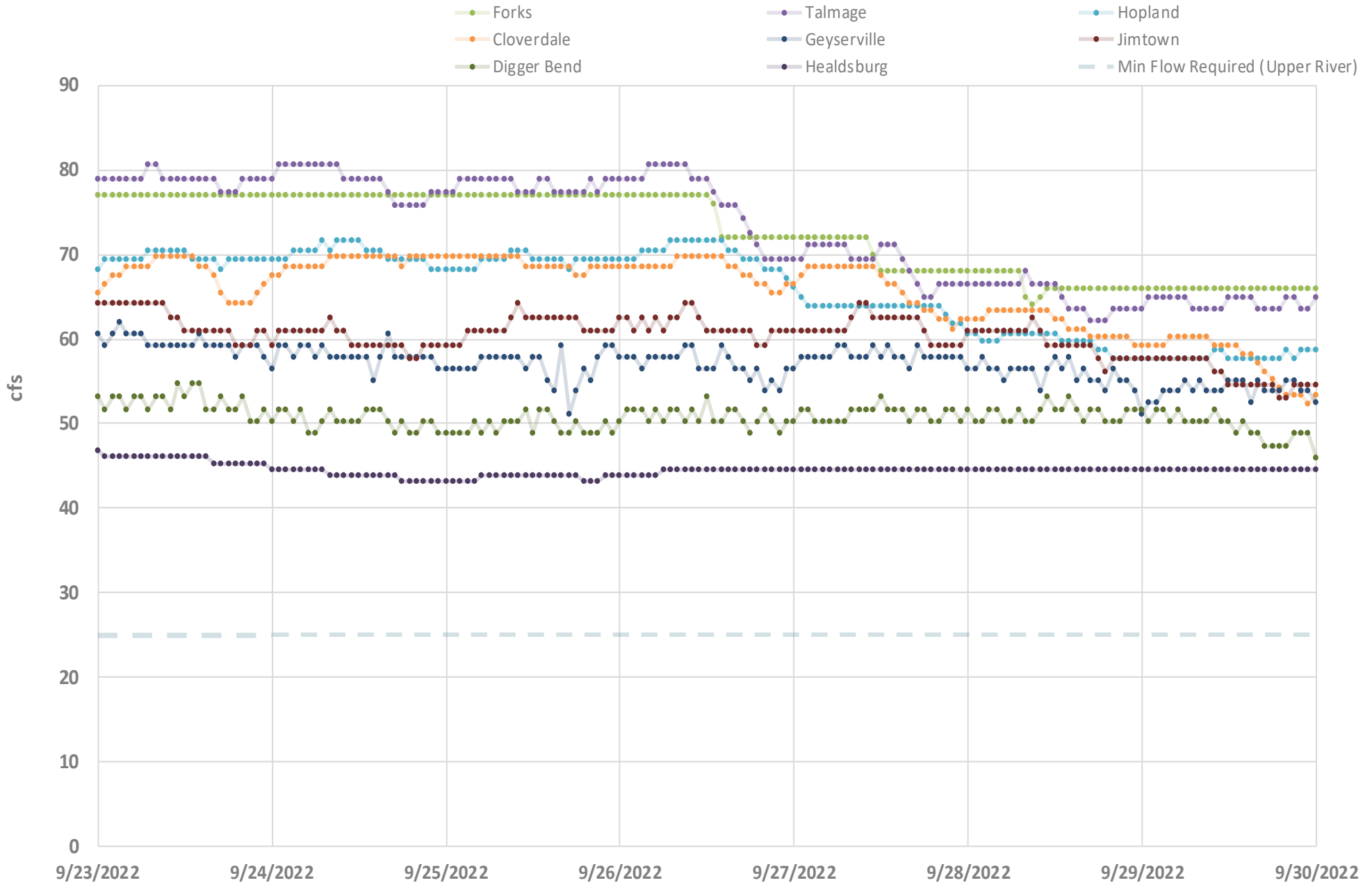
Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 14, June 2022 TUCO)

Report Date: 9/30/2022

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



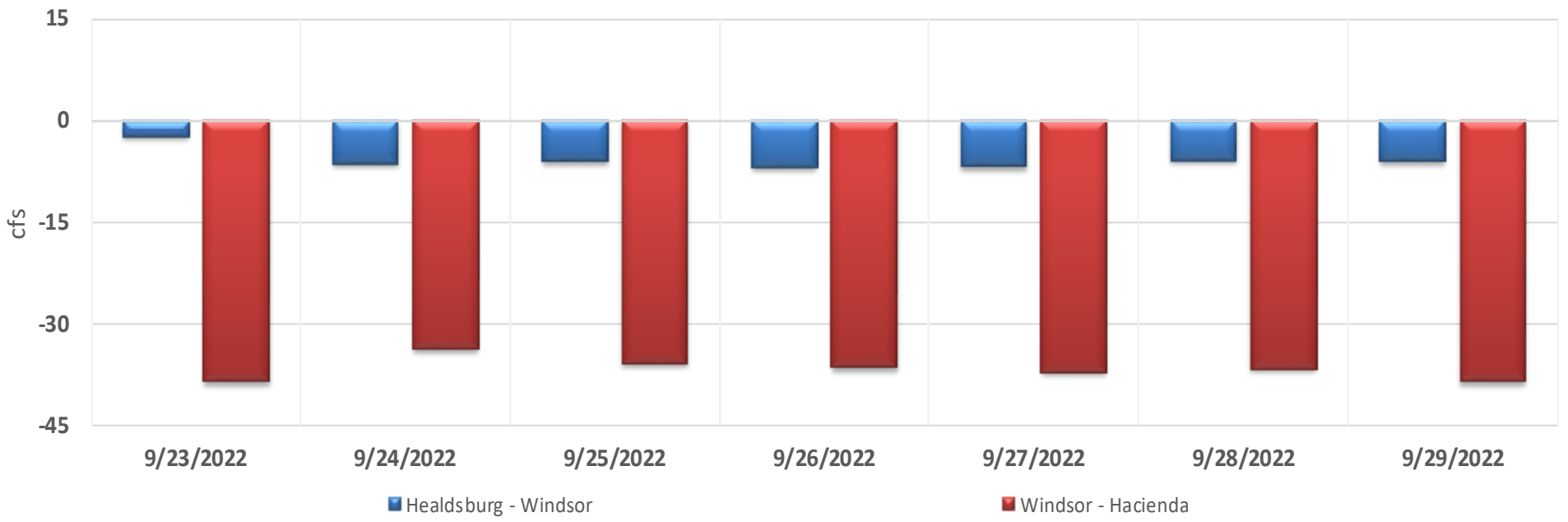
UPPER RUSSIAN RIVER STREAM FLOWS



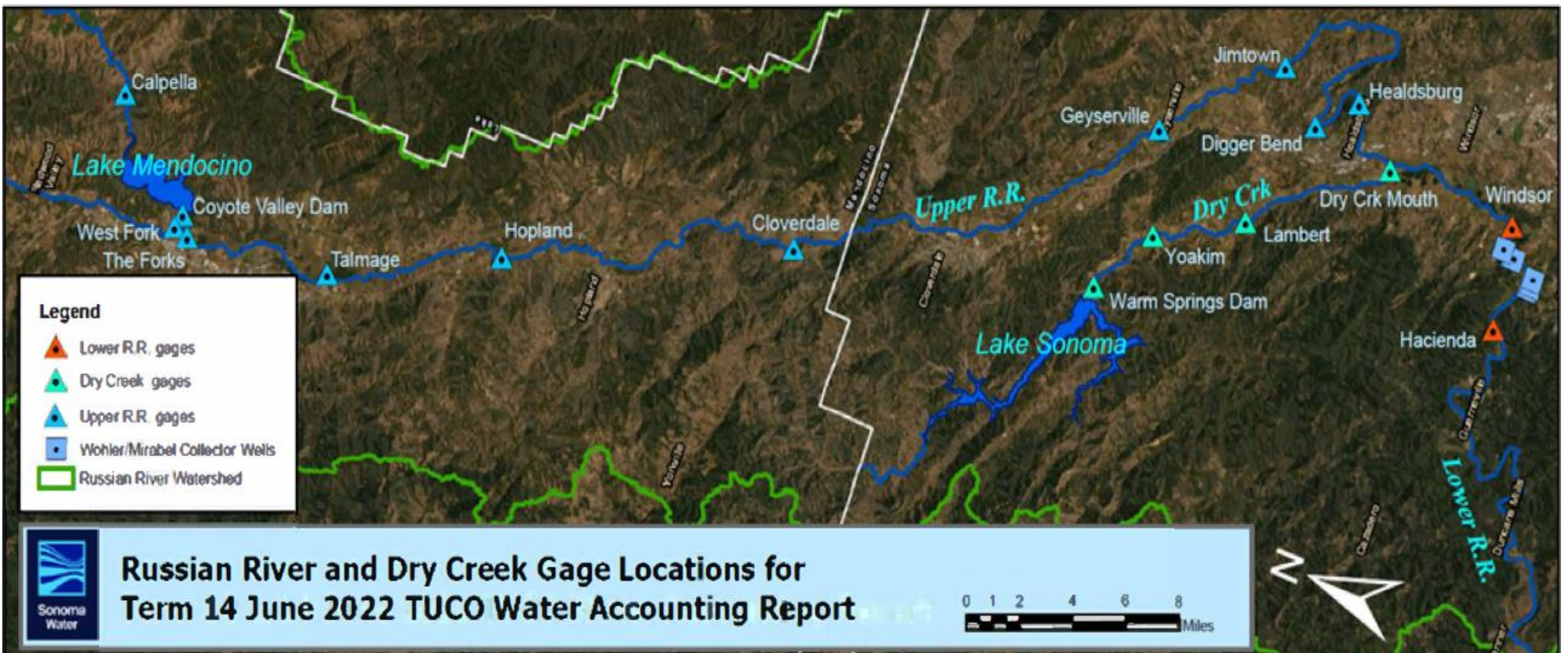
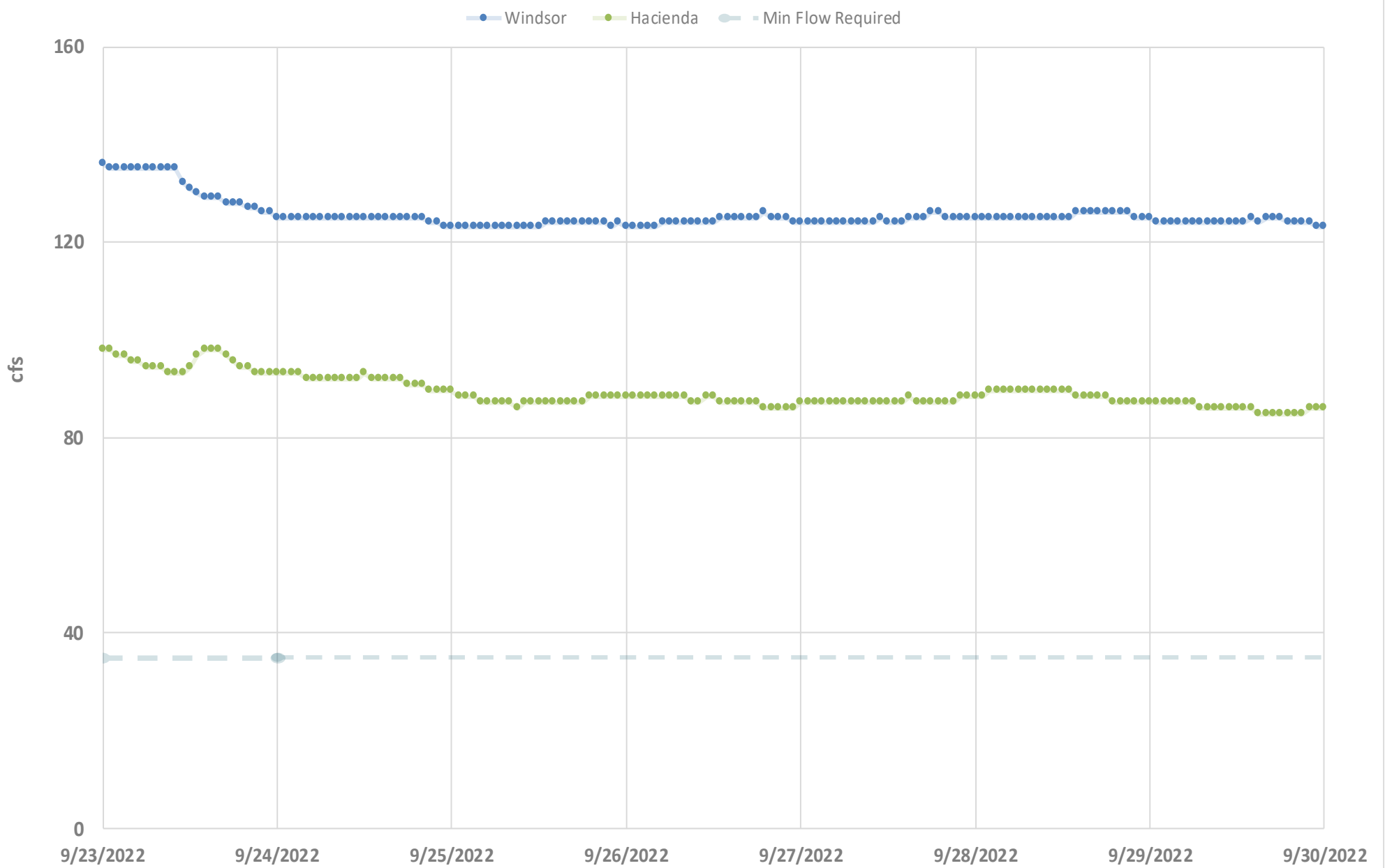
Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 14, June 2022 TUCO)

Report Date: 9/30/2022

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



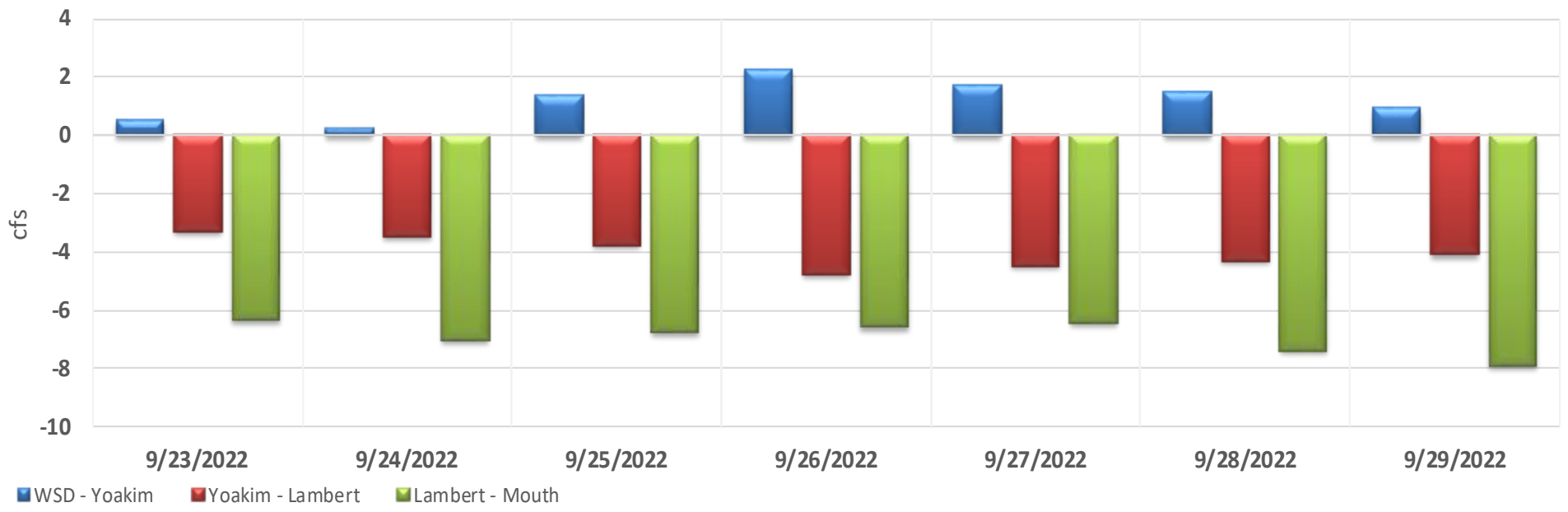
LOWER RUSSIAN RIVER STREAM FLOWS



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

Report Date: 9/30/2022

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



DRY CREEK STREAM FLOWS

