

# Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Terms 12 & 13 June 2021 TUCO)

Report Date: 11/26/2021

Units are cfs unless noted otherwise

	11/19/2021	11/20/2021	11/21/2021	11/22/2021	11/23/2021	11/24/2021	11/25/2021
<b>I. Upper East Fork Reach</b>							
<b>Potter Valley Project</b>							
Tunnel Diversion	45.0	45.0	45.0	45.0	45.0	44.0	43.0
PVID Requested Delivery	5.0	5.0	5.0	5.0	5.0	5.0	5.0
PVID Canals Actual Delivery	2.8	2.8	2.8	2.8	2.9	2.8	2.7
East Fork Release	42.0	42.0	42.0	42.0	42.0	41.0	40.0
PVID E Fork Diversions	2.2	2.2	2.2	2.2	2.2	2.2	2.3
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)	39.8	39.8	39.8	39.8	39.9	38.8	37.7
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	63.1	61.2	59.4	58.8	58.0	53.7	47.7
Net Reach Loss(-)/Gain(+)	+18.1	+16.2	+14.4	+13.8	+13.0	+9.7	+4.7
Unimpaired Natural Flow @ Calpella (est.)	23.1	21.2	19.4	18.8	18.0	14.7	9.7
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 (neg. value is return flow)	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## II. Lake Mendocino

### Reservoir Operations

Calculated Inflow (ac-ft)	135	119	101	118	111	103	104
(cfs)	68	60	51	60	56	52	53
Natural Flow	28	21	19	20	16	15	15
Import	40	39	32	40	40	37	38
Storage Change (ac-ft)	+74.0	+57.0	+41.0	+58.0	+49.0	+41.0	+42.0
(cfs)	+37	+29	+21	+29	+25	+21	+21
Stored Natural Flow (cfs)	19	14	10	15	12	10	11
Stored Import Water (cfs)	19	14	10	15	12	10	11
Evaporation (ac-ft)	4.0	4.7	2.7	2.7	4.7	4.7	4.7
RVCWD Diversion (ac-ft)	0	0	0	0	0	0	0
CVD Release Gage	29	29	29	29	29	29	29
Storage (Project Water)	0	0	0	0	0	0	0
Natural Flow	10	7	9	5	4	4	4
Import Water	21	24	21	25	28	27	27
<b>East Fork Min Instream Flow Requirement</b>	25	25	25	25	25	25	25
<u>Compliance Gage</u>	<i>Rvr mi.</i>						
CVD Release	99.9	29	29	29	29	29	29
<b>CVD Project Water Release to Meet Min Flow Requirement</b>							
Total Pass-through Water	31	31	30	30	31	31	31
Project Water Release Required	No	No	No	No	No	No	No

## III. Upper Russian River Reach

### Minimum Instream Flow Requirement

	25	25	25	25	25	25	25
--	----	----	----	----	----	----	----

### Controlling Compliance Gage

Min Gage Flow	81	81	76	72	70	68	66
Controlling Gage	Talmage	Talmage	Talmage	Talmage	Talmage	Talmage	Talmage

### All Compliance Gages

	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	107	106	100	96	94	88
Talmage (USGS 11462080)	96.1	81	81	76	72	70	66
Hopland (USGS 11462500)	84.8	88	89	84	79	75	67
Cloverdale (USGS 11463000)	70.9	138	133	126	117	110	99
Geyserville (USGS 11463500)	54.4	246	234	221	208	196	175
Jimtown (USGS 11463682)	48.5	243	227	214	200	189	166
Digger Bend (USGS 11463980)	38.2	293	269	249	231	216	189
Healdsburg (USGS 11464000)	35.6	349	317	289	269	252	218

### Net Reach Loss(-)/Gain(+)

Forks - Talmage	-25	-26	-24	-25	-24	-23	-23
Talmage - Hopland	+8	+7	+6	+6	+4	+2	+1
Hopland - Cloverdale	+49	+44	+40	+37	+34	+32	+30
Cloverdale - Jimtown	+101	+92	+83	+78	+75	+69	+65
Jimtown - Digger Bend	+45	+39	+32	+28	+24	+21	+20
Digger Bend - Healdsburg	+55	+47	+39	+37	+35	+32	+28
Upper Russian Net Reach Loss/Gain	+233	+203	+175	+161	+148	+133	+121

### CVD Project Water Release to Meet Min Flow Requirement

Net Reach Loss(-)/Gain(+) to Controlling Gage	-25	-26	-24	-25	-24	-23	-23
Storage (Project Water)	0	0	0	0	0	0	0
Pass-through Water (Nat. + Imp.) + Natural	-25	-26	-24	-25	-24	-23	-23
Total Pass-through Water	6	5	6	6	7	8	8
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).

**IV. Lake Sonoma**

**Lake Sonoma**

Storage Change (ac-ft)	+0.0	-82.0	-66.0	-83.0	-82.0	-116.0	-99.0
(cfs)	+0	-41	-33	-42	-41	-58	-50
Evaporation (ac-ft)	4.0	6.6	6.6	6.6	6.6	6.6	5.3
Inflow (Natural Flow)	78	37	45	36	37	20	28
WSD Release Gage	76	75	75	75	75	75	75
Storage (Project Water)	0	38	30	39	38	55	47
Natural Flow	76	37	45	36	37	20	28

**V. Lower Dry Creek Reach**

<b>Minimum Instream Flow Requirement</b>	75	75	75	75	75	75	75
--	----	----	----	----	----	----	----

**Controlling Compliance Gage**

Min Gage Flow	76	75	75	75	75	75	75
Controlling Gage	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release	WSD Release

**All Compliance Gages**

	<i>Crk mi.</i>						
WSD Release	14.3	76	75	75	75	75	75
Yoakim (USGS 11465200)	11.1	87	86	84	83	83	81
Lambert (USGS 11465240)	6.8	108	107	106	105	103	101
Dry Crk Mouth (USGS 11465350)	0.1	110	106	101	99	96	91

**WSD to Russian River Confluence Reach Analysis**

Total Pass-through Water	76	37	45	36	37	20	28
--------------------------	----	----	----	----	----	----	----

**Net Reach Loss(-)/Gain(+)**

WSD - Yoakim	+12	+10	+9	+8	+8	+7	+6
Yoakim - Lambert	+21	+21	+21	+21	+20	+19	+19
Lambert - Dry Crk Mouth	+1	-2	-4	-6	-8	-9	-10
WSD - Dry Crk Mouth	+34	+30	+26	+24	+20	+18	+16

**WSD Project Water Release to Meet Min Flow Requirement**

Net Reach Loss/Gain to Controlling Gage	+12	+10	+9	+8	+8	+7	+6
Project Water Release Required	No	Yes	Yes	Yes	Yes	Yes	Yes

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

**Upper Russian River Flow (Healdsburg Gage)**

L. Mendocino Project Water + Import Water	21	24	21	25	28	27	27
Natural Flow	242	210	184	166	152	138	125

**Dry Creek Flow (Mouth Gage)**

L. Sonoma Project Water	0	38	30	39	38	55	47
Natural Flow	110	68	71	60	58	38	44

**Russian River d/s of Confluence Flow**

L. Mendocino Project Water + Import Water	21	24	21	25	28	27	27
L. Sonoma Project Water	0	38	30	39	38	55	47
Natural Flow	352	278	256	226	210	176	169

**VII. Lower Russian River Reach**

<b>Minimum Instream Flow Requirement</b>	35	35	35	35	35	35	35
--	----	----	----	----	----	----	----

**Controlling Compliance Gage**

Min Gage Flow	544	503	468	436	408	381	362
Controlling Gage	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda

**All Compliance Gages**

	<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>
Hacienda (USGS 11467000)	21.8	544	503	468	436	408	362

**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**

<b>Approx. Flow u/s of Wohler</b>	605	552	529	497	469	431	411
Net Reach Loss(-)/Gain(+)	+146	+129	+139	+129	+122	+104	+102
L. Mendocino Project Water + Import Water	21	24	21	25	28	27	27
L. Sonoma Project Water	0	36	28	36	35	52	44
Natural Flow	498	406	395	355	332	280	271

**Confluence to Hacienda (Guerneville) Reach Analysis**

Net Reach Loss(-)/Gain(+)	+85	+80	+78	+68	+60	+54	+53
L. Mendocino Project Water + Import Water	21	24	21	25	28	27	27
L. Sonoma Project Water	0	0	0	0	0	2	0
Natural Flow	437	394	361	330	306	280	266

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

**Lower Russian River**

Sonoma Water Total	120.8	96.3	121.4	120.7	121.5	98.6	97.7
Wohler	37.4	37.2	36.8	38.6	65.7	55.0	54.9
Mirabel	83.5	59.1	84.6	82.1	55.9	43.6	42.8
Town of Windsor River Wellfield	4.3	4.0	4.8	4.6	5.2	6.3	5.5
Camp Meeker & Occidental	0.1	0.1	0.1	0.1	0.1	0.1	0.1

**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

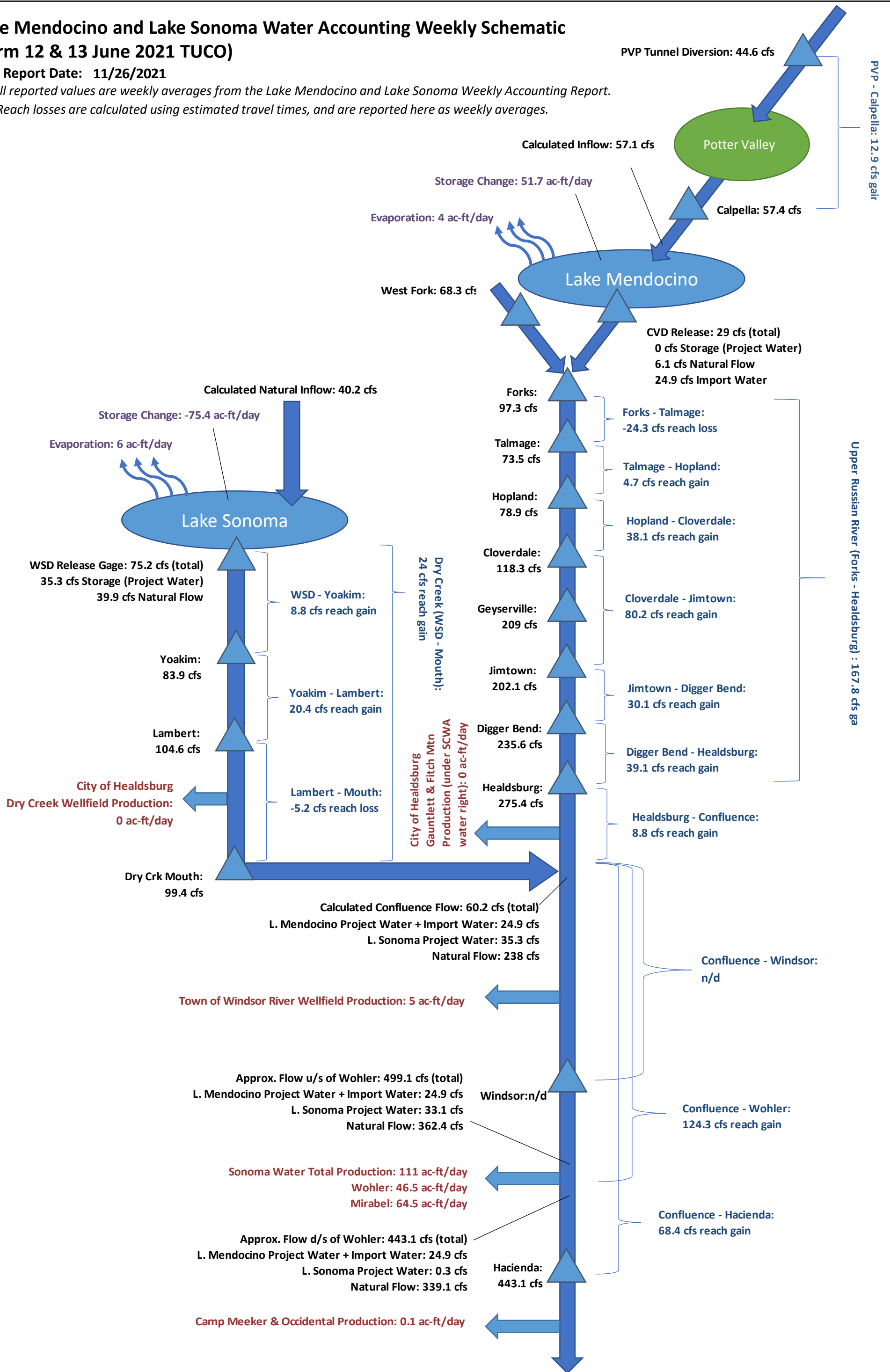
Notes:  
 - Water Accounting for the Lower Russian River and Dry Creek is an analysis that approximates the current conditions based on the methodology in Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

# Lake Mendocino and Lake Sonoma Water Accounting Weekly Schematic (Term 12 & 13 June 2021 TUCO)

Report Date: 11/26/2021

All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.

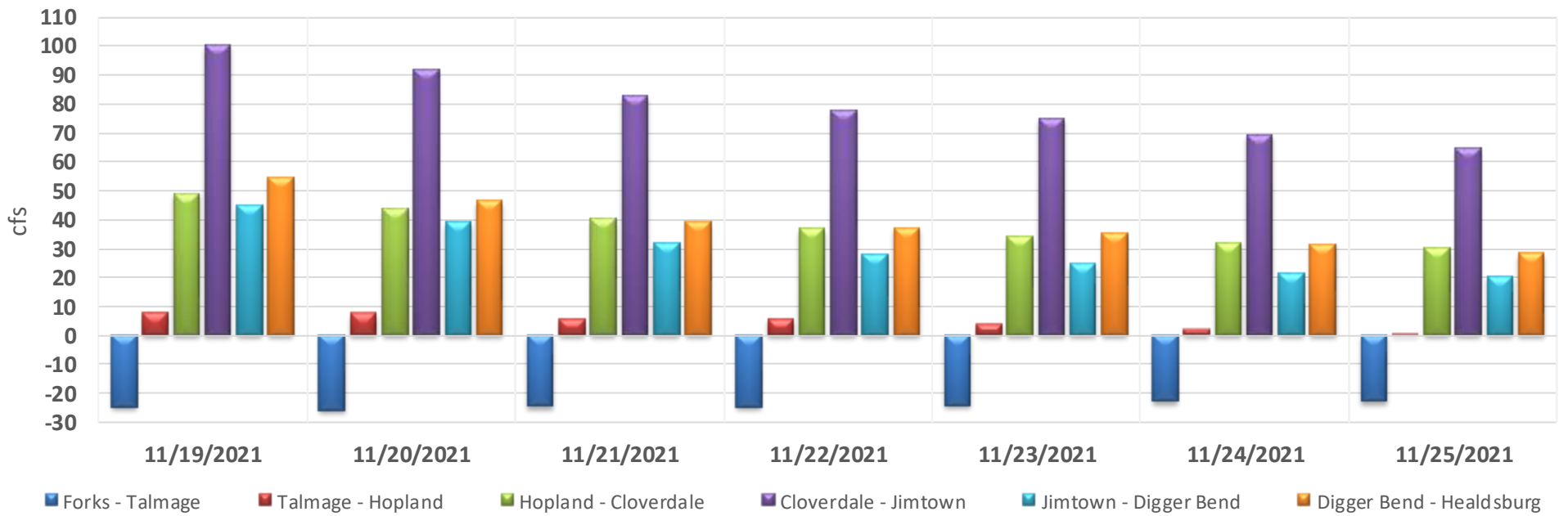
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



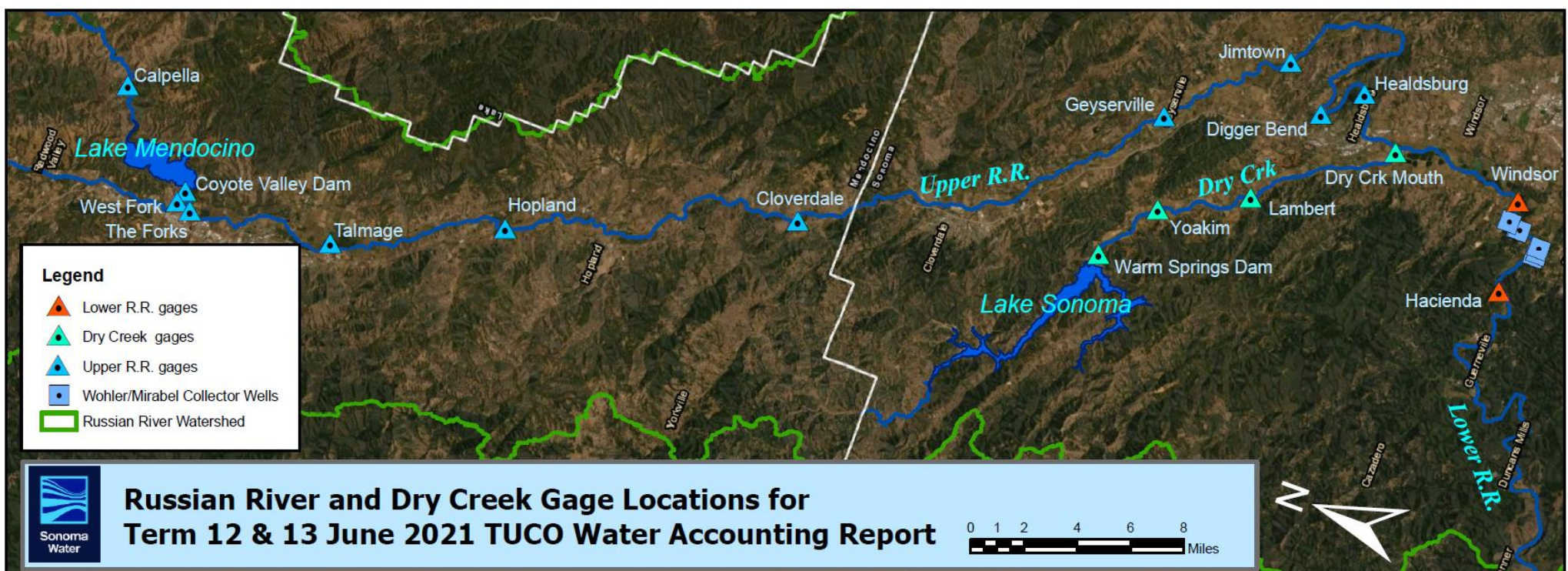
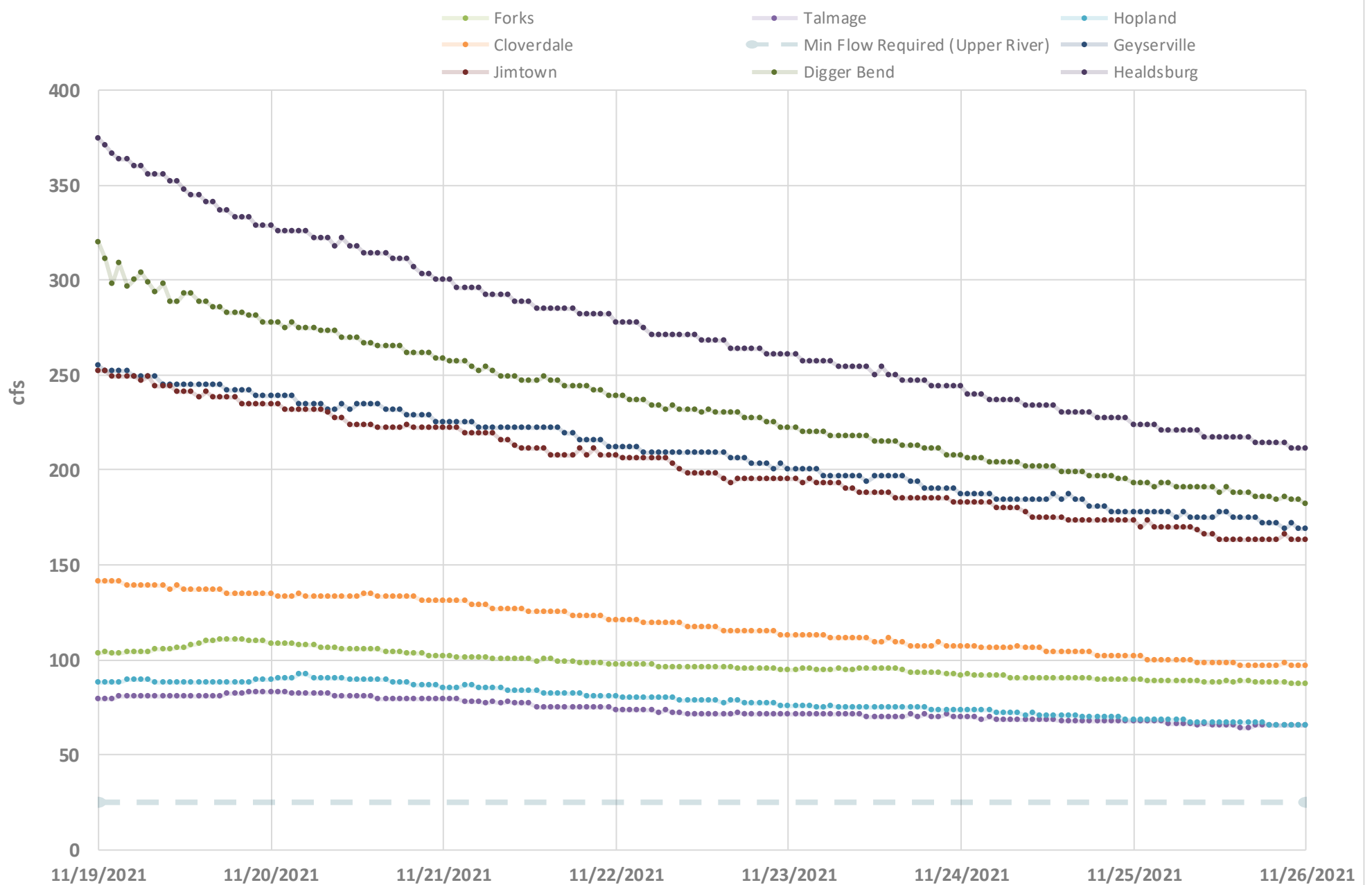
# Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 12 June 2021 TUCO)

Report Date: 11/26/2021

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



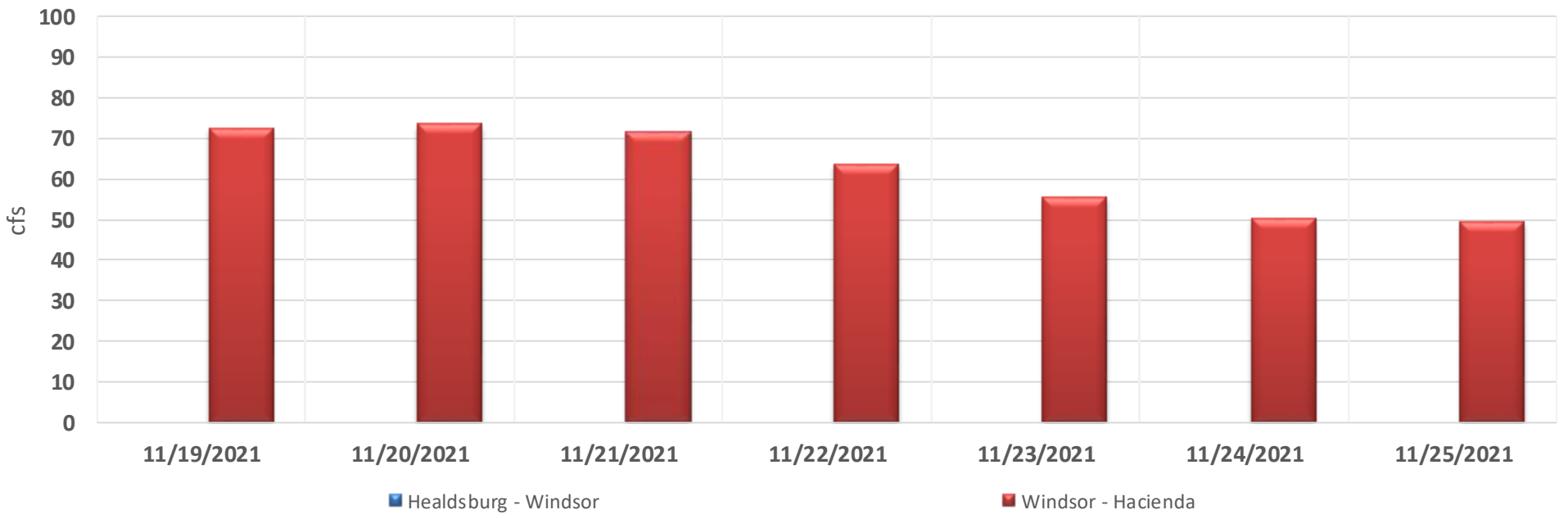
## UPPER RUSSIAN RIVER STREAM FLOWS



# Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Terms 12 & 13 June 2021 TUCO)

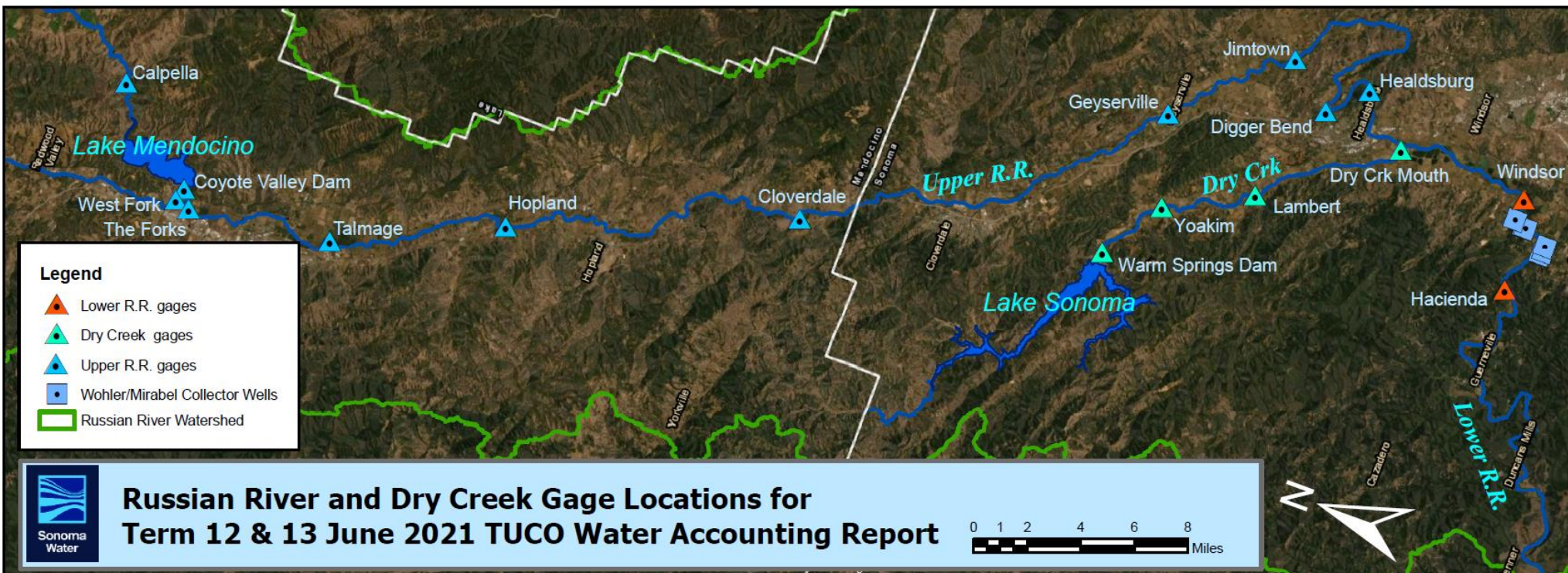
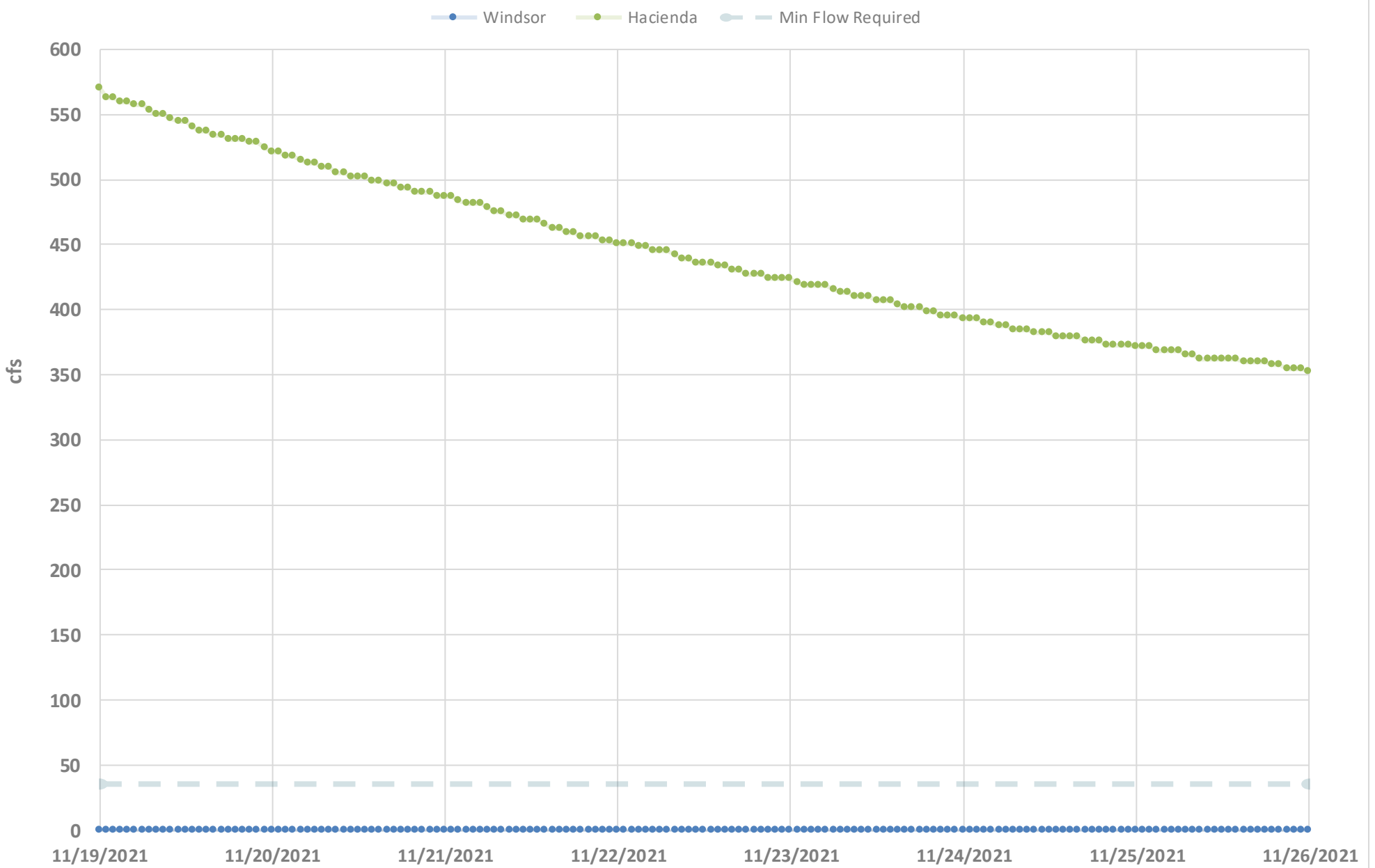
Report Date: 11/26/2021

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



Note: Windsor gage is a seasonal gage and not operational. Reach gains for Windsor – Hacienda reach calculated with Healdsburg gages as upstream gages

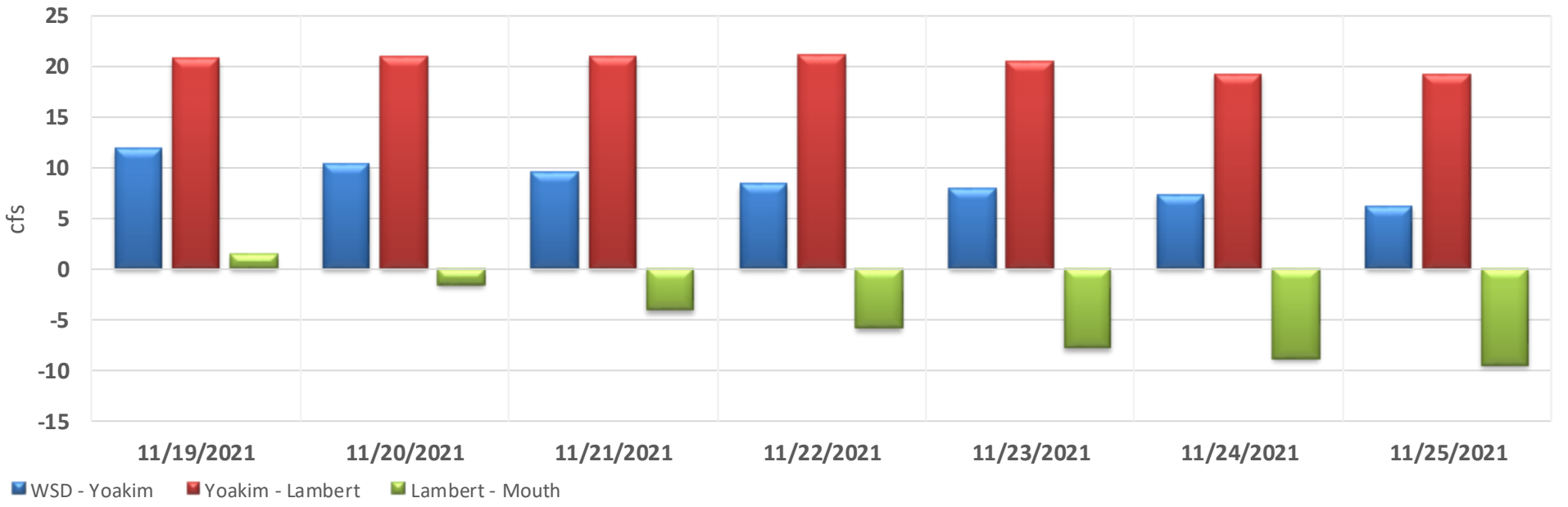
## LOWER RUSSIAN RIVER STREAM FLOWS



# Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Terms 12 & 13 June 2021 TUCO)

Report Date: 11/26/2021

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



## DRY CREEK STREAM FLOWS

