

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

Report Date: 7/16/2021

Units are cfs unless noted otherwise

	<u>7/9/2021</u>	<u>7/10/2021</u>	<u>7/11/2021</u>	<u>7/12/2021</u>	<u>7/13/2021</u>	<u>7/14/2021</u>	<u>7/15/2021</u>
I. Upper East Fork Reach							
<u>Potter Valley Project</u>							
Tunnel Diversion	30.0	30.0	30.0	30.0	30.0	30.0	30.0
PVID Requested Delivery	25.0	25.0	25.0	25.6	30.0	30.5	35.0
PVID Canals Actual Delivery	10.8	10.8	10.8	10.8	16.3	16.4	17.1
East Fork Release	19.2	19.2	19.2	19.2	13.7	13.6	12.9
PVID E Fork Diversions	14.2	14.2	14.2	14.8	13.7	14.1	17.9
PVID Water Use - PG&E Contract	25.0	25.0	25.0	25.6	30.0	30.5	35.0
PVID Water Use - License 5264	0.0	0.0	0.0	0.0	0.0	0.0	0.0
East Fork Downstream of PVID	5.0	5.0	5.0	4.4	0.0	-0.5	-5.0
PVID Canal Net Return Flow (assumed)	3.8	2.9	7.4	8.4	9.2	8.6	14.3
<u>East Fork / Potter Valley Reach Analysis</u>							
USGS E Fork @ Calpella	8.8	7.9	12.4	12.8	9.2	8.2	9.3
Net Reach Loss(-)/Gain(+)	-21.2	-22.1	-17.6	-17.2	-20.8	-21.8	-20.7
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.)	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							
<u>Resrvoir Operations</u>							
Calculated Inflow (ac-ft)	34.5	12.5	29.6	8.1	4.9	27.9	6.3
(cfs)	17	6	15	4	2	14	3
Natural Flow	0	0	0	0	0	0	0
Import	17	6	15	4	2	14	3
Storage Change (ac-ft)	-158.0	-179.0	-155.0	-188.0	-198.0	-175.0	-195.0
(cfs)	-80	-90	-78	-95	-100	-88	-98
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)	25.9	25.0	25.6	24.7	23.9	22.4	20.8
RVCWD Diversion (ac-ft) (est.)	0	0	0	0	0	0	0
CVD Release Gage	84	84	80	86	90	91	91
Storage (Project Water)	67	78	65	82	88	77	88
Natural Flow	0	0	0	0	0	0	0
Import Water	17	6	15	4	2	14	3
<u>East Fork Min Instream Flow Requirement</u>	25	25	25	25	25	25	25
<u>Compliance Gage</u>	<i>Rvr mi.</i>						
CVD Release	99.9	84	84	80	86	90	91
<u>CVD Project Water Release to Meet Min Flow Requirement</u>							
Total Pass-through Water	17	6	15	4	2	14	3
Project Water Release Required	Yes	Yes	Yes	Yes	Yes	Yes	Yes
III. Upper Russian River Reach							
<u>Minimum Instream Flow Requirement</u>	15	15	15	15	15	15	15
<u>Controlling Compliance Gage</u>							
Min Gage Flow	28	25	24	25	25	26	26
Controlling Gage	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg	Healdsburg
<u>All Compliance Gages</u>	<i>Rvr mi.</i>						
Forks (CVD + USGS 11461000)	99.0	84	84	80	86	90	91
Talmage (USGS 11462080)	96.1	68	67	68	69	71	70
Hopland (USGS 11462500)	84.8	56	55	56	59	59	59
Cloverdale (USGS 11463000)	70.9	56	55	55	58	62	56
Geyserville (USGS 11463500)	54.4	41	39	39	38	42	46
Jimtown (USGS 11463682)	48.5	33	30	30	31	31	33
Digger Bend (USGS 11463980)	38.2	30	26	26	26	27	26
Healdsburg (USGS 11464000)	35.6	28	25	24	25	25	26
<u>Net Reach Loss(-)/Gain(+)</u>							
Forks - Talmage	-16	-16	-13	-16	-19	-20	-22
Talmage - Hopland	-12	-12	-12	-9	-11	-12	-10
Hopland - Cloverdale	-5	-4	-5	-5	-3	-3	-5
Cloverdale - Jimtown	-22	-23	-22	-20	-19	-23	-23
Jimtown - Digger Bend	-4	-5	-4	-4	-4	-5	-6
Digger Bend - Healdsburg	-2	-2	-2	-1	-1	-1	-1
Upper Russian Net Reach Loss/Gain	-63	-62	-56	-55	-58	-64	-67
<u>CVD Project Water Release to Meet Min Flow Requirement</u>							
Net Reach Loss(-)/Gain(+) to Controlling Gage	-63	-62	-56	-55	-58	-64	-67
Storage (Project Water)	+63	+62	+56	+55	+58	+64	+67
Pass-through Water (Natural + Import)	+0	+0	+0	+0	+0	+0	+0
Total Pass-through Water	17	6	15	4	2	14	3
Project Water Release Required	No	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).

		7/9/2021	7/10/2021	7/11/2021	7/12/2021	7/13/2021	7/14/2021	7/15/2021
IV. Lake Sonoma								
Lake Sonoma								
Storage Change (ac-ft)		-273.0	-255.0	-255.0	-221.0	-203.0	-255.0	-338.0
(cfs)		-138	-129	-129	-111	-102	-129	-170
Evaporation (ac-ft)		26.8	27.9	25.7	25.7	24.6	24.5	24.5
Inflow (Natural Flow)		0	0	0	6	14	0	0
WSD Release Gage		102	101	101	104	104	103	93
Storage (Project Water)		102	101	101	98	90	103	93
Natural Flow		0	0	0	6	14	0	0
V. Lower Dry Creek Reach								
Minimum Instream Flow Requirement		25	25	25	25	25	25	25
Controlling Compliance Gage								
Min Gage Flow		87	88	89	90	92	93	92
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	Crk mi.							
WSD Release	14.3	102	101	101	104	104	103	93
Yoakim (USGS 11465200)	11.1	108	108	109	111	112	111	108
Lambert (USGS 11465240)	6.8	110	110	111	113	115	115	113
Dry Crk Mouth (USGS 11465350)	0.1	87	88	89	90	92	93	92
WSD to Russian River Confluence Reach Analysis								
Total Pass-through Water		0	0	0	6	14	0	0
Net Reach Loss(-)/Gain(+)								
WSD - Yoakim		+7	+7	+8	+7	+8	+8	+7
Yoakim - Lambert		+2	+3	+3	+2	+3	+4	+4
Lambert - Dry Crk Mouth		-22	-22	-22	-22	-23	-22	-22
WSD - Dry Crk Mouth		-14	-13	-11	-13	-12	-10	-11
WSD Project Water Release to Meet Min Flow Requirement								
Net Reach Loss/Gain to Controlling Gage		-14	-13	-11	-7	+2	-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		28	25	24	25	25	26	26
Natural Flow		0	0	0	0	0	0	0
Dry Creek Flow (Mouth Gage)								
L. Sonoma Project Water		87	88	89	90	91	93	92
Natural Flow		0	0	0	0	2	0	0
Russian River d/s of Confluence Flow		116	113	113	115	117	118	118
L. Mendocino Project Water + Import Water		28	25	24	25	25	26	26
L. Sonoma Project Water		87	88	89	90	91	93	92
Natural Flow		0	0	0	0	2	0	0
VII. Lower Russian River Reach								
Minimum Instream Flow Requirement		35	35	35	35	35	35	35
Controlling Compliance Gage								
Min Gage Flow		47	43	43	43	43	46	47
Controlling Gage		Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
All Compliance Gages	Rvr mi.							
Windsor (USGS 11465390)	26.6	119	117	117	117	118	119	119
Hacienda (USGS 11467000)	21.8	47	43	43	43	43	46	47
Confluence to Windsor Reach Analysis								
Net Reach Loss/Gain to Windsor Gage		+3	+4	+3	+2	+1	+1	+1
L. Mendocino Project Water + Import Water		28	25	24	25	25	26	26
L. Sonoma Project Water		82	83	84	85	86	87	87
Natural Flow		8	9	8	7	9	6	6
Confluence to SCWA Wohler Production Facility Reach Analysis								
Approx. Flow u/s of Wohler		126	112	110	121	109	111	113
Net Reach Loss(-)/Gain(+)		+10	-2	-3	+6	-8	-7	-5
L. Mendocino Project Water + Import Water		28	25	24	25	23	24	25
L. Sonoma Project Water		82	83	84	85	86	87	87
Natural Flow		16	3	2	11	0	0	0
Confluence to Hacienda (Guerneville) Reach Analysis								
Net Reach Loss(-)/Gain(+)		-69	-71	-70	-72	-74	-72	-71
L. Mendocino Project Water + Import Water		28	25	24	25	23	24	25
L. Sonoma Project Water		3	14	18	7	20	22	21
Natural Flow		16	3	2	11	0	0	0
VIII. Water Production under Sonoma Water Water Rights (ac-ft)								
Lower Russian River								
Sonoma Water Total		156.5	136.4	132.7	154.4	131.3	130.4	130.4
Wohler		69.0	54.9	75.1	66.9	45.2	45.0	46.3
Mirabel		87.4	81.5	57.6	87.5	86.1	85.4	84.2
Town of Windsor River Wellfield		10.8	10.2	9.8	10.3	9.6	10.1	9.8
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		2.3	1.7	2.3	2.5	2.7	2.7	2.6

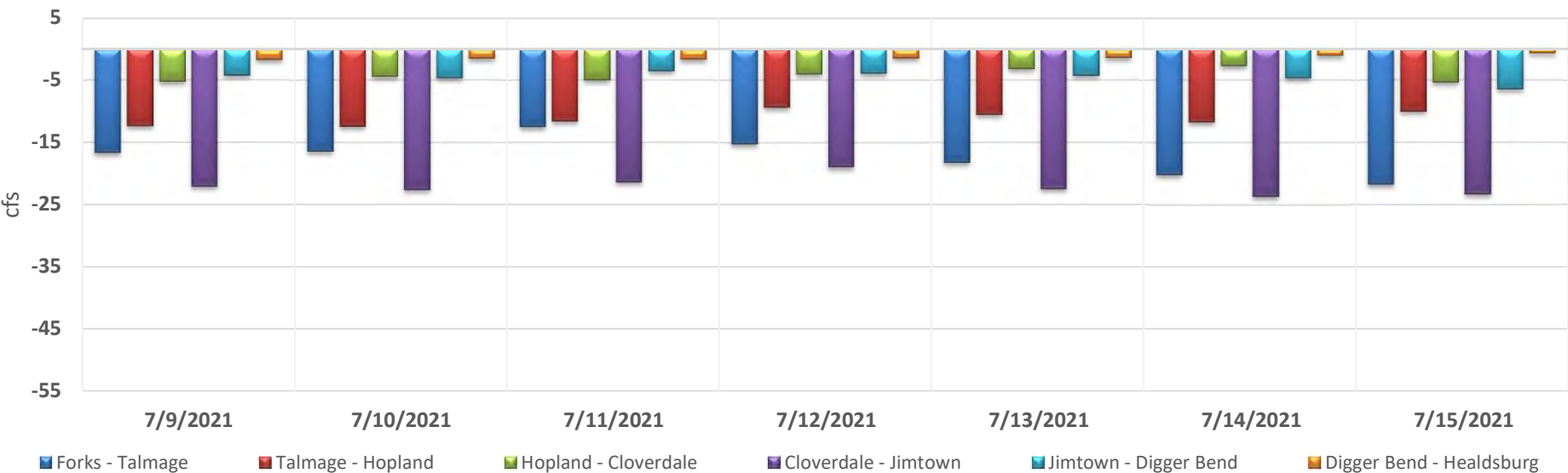
Notes:

- 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).

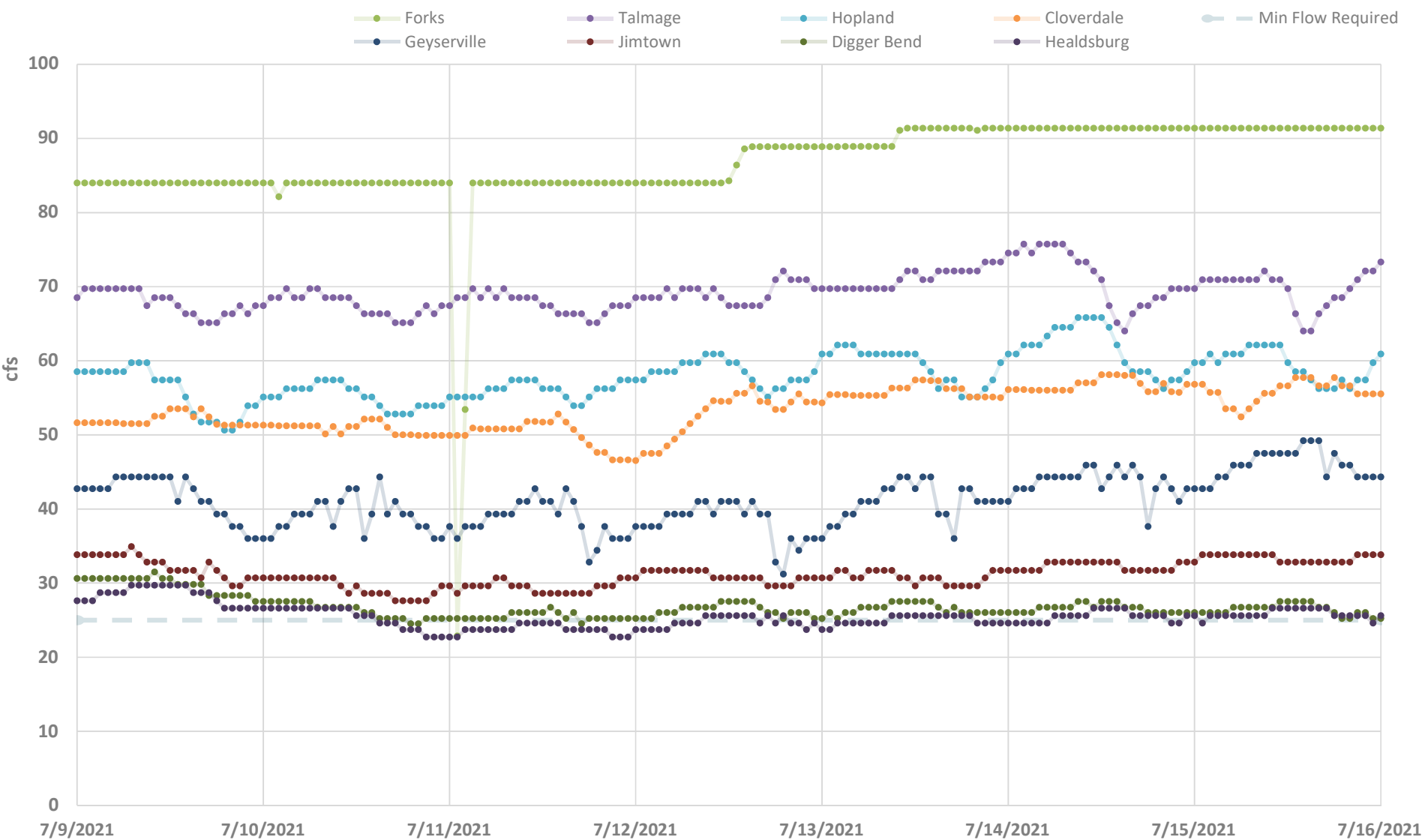
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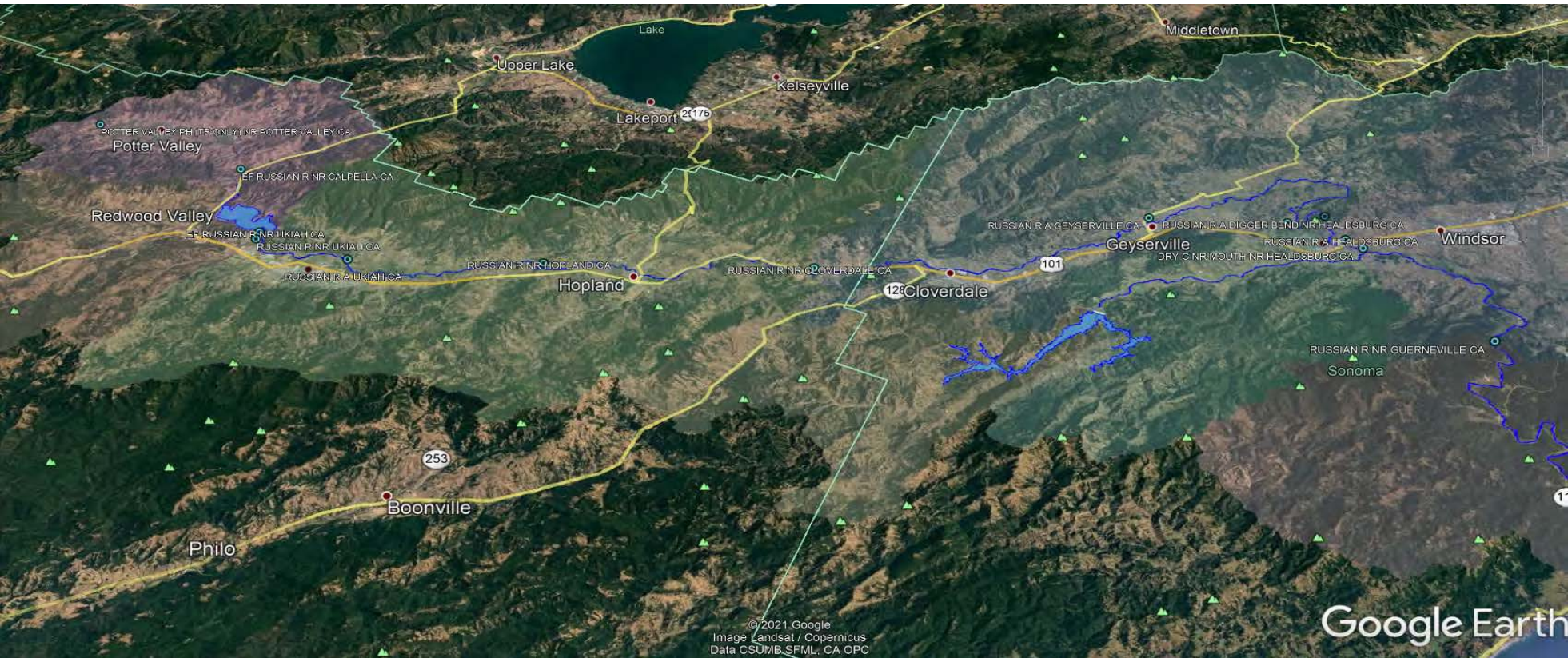
UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



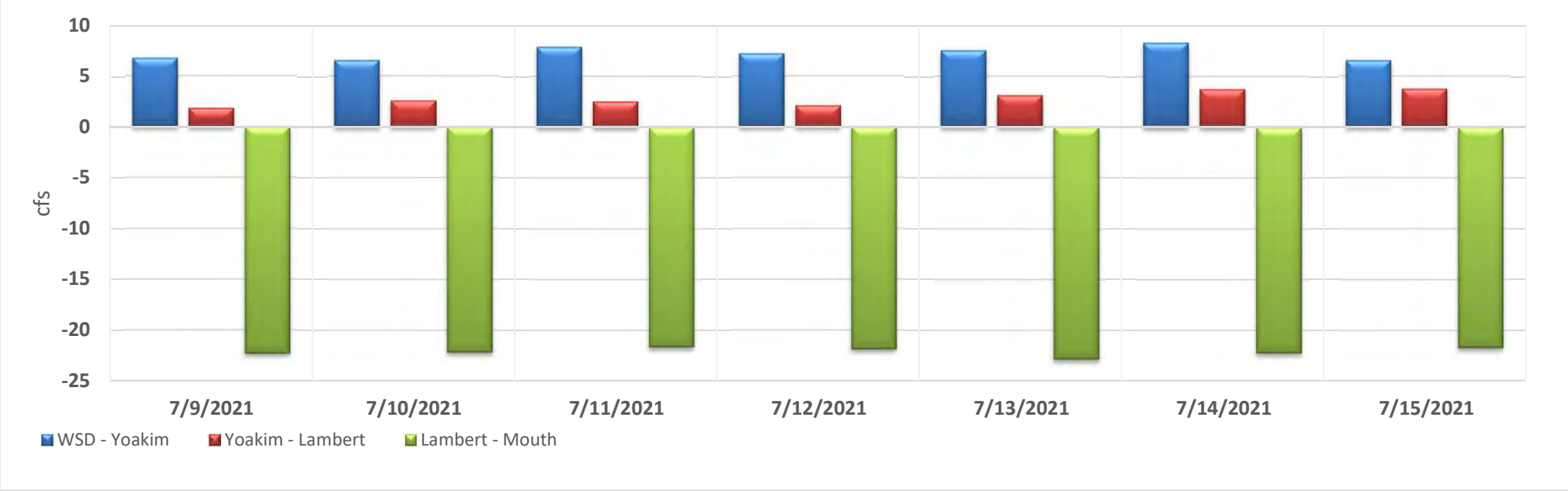
UPPER RUSSIAN RIVER STREAM FLOWS



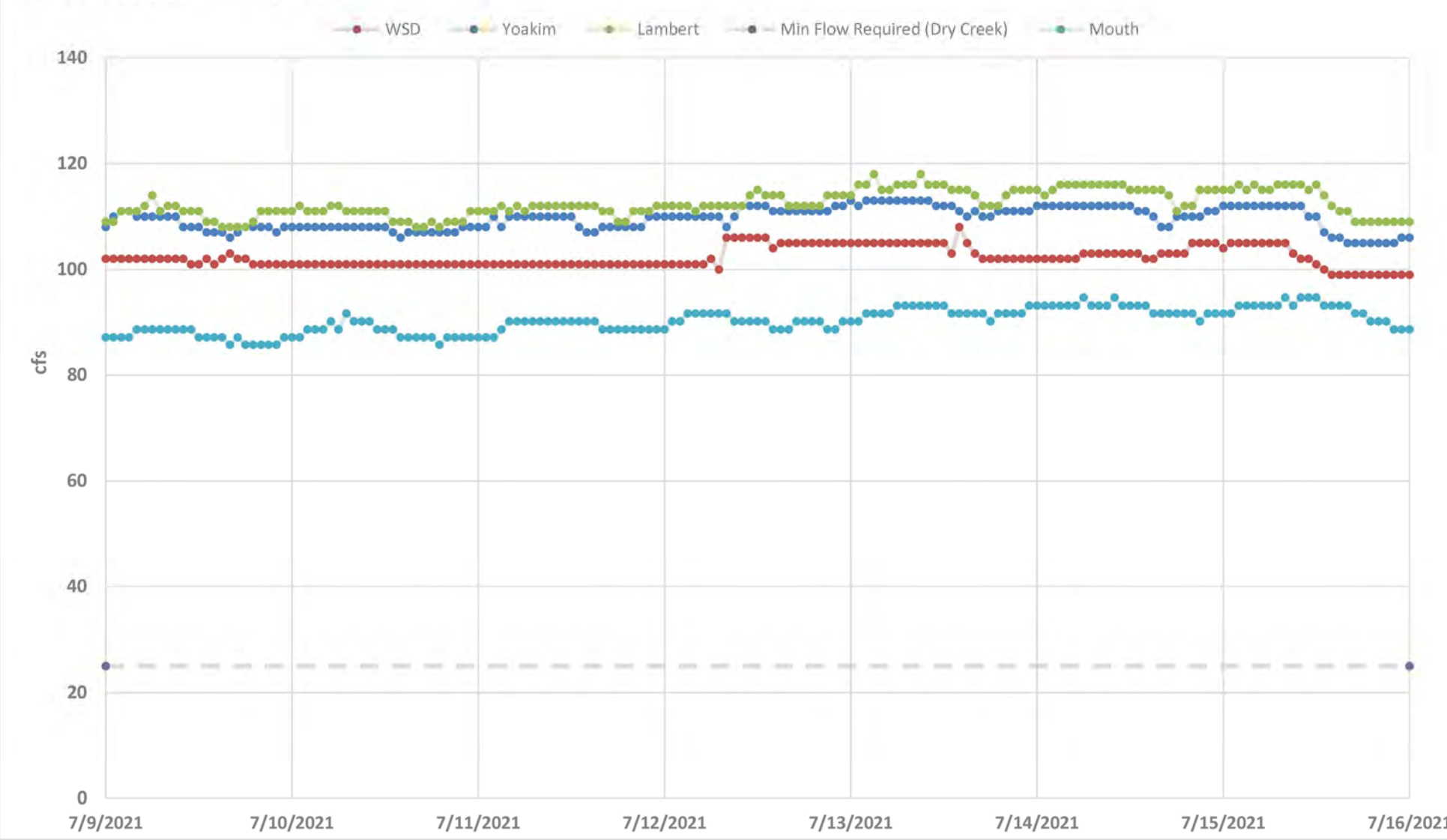
MAP OF UPPER RUSSIAN RIVER and STREAM GAGES



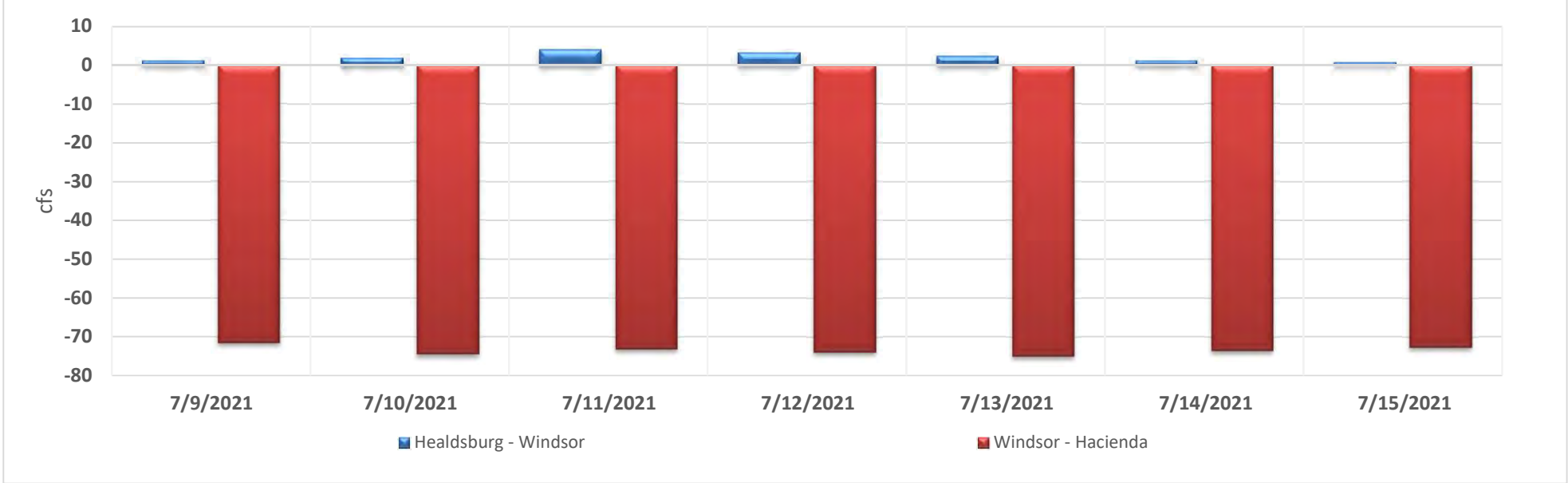
DRY CREEK NET REACH GAINS (+) / LOSSES (-)



DRY CREEK STREAM FLOWS



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



LOWER RUSSIAN RIVER STREAM FLOWS

