VIA EMAIL

April 5, 2021

Attn: Mr. Erik Ekdahl
Deputy Director of Water Rights
State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812-2000

Re: Reporting Requirements for Term 11 of the State Water Resources Control Board Order Dated February 4, 2021 (Amended February 11, 2021)

Dear Mr. Ekdahl:

In accordance with the requirements of the State Water Resources Control Board Order dated February 4, 2021 and amended on February 11, 2021 that approved the Temporary Urgency Change Petition for water-right Permit 12947A (Applications 12919A), please accept the submittal of the following enclosed report by Sonoma Water:

- Term 11 – Lake Mendocino Water Accounting Methodology

If you have any questions about these reports, please do not hesitate to contact me at tschram@scwa.ca.gov.

Sincerely,

Todd J. Schram, P.E.
Water Agency Engineer IV

Enclosure

c: S. Boland-Brien - State Water Resources Control Board, Division of Water Rights
G. Davis, J. Jasperse, P. Jeane, D. Seymour, J. Martini-Lamb, D. Manning - Sonoma Water
C. O'Donnell, A. Brand - Sonoma County Counsel
R. Bezerra - Bartkiewicz, Kronick & Shanahan
E. Salomone – Mendocino County Russian River FCWCID

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State Water Resources Control Board
Amended Order of February 11, 2021

Term 11

Lake Mendocino Water Accounting Methodology

April 5, 2021

Prepared by

Sonoma County Water Agency
404 Aviation Blvd
Santa Rosa, CA 95403

1 Introduction

The Sonoma County Water Agency (Sonoma Water) submitted a temporary urgency change petition on January 13, 2021 for modifications to water right Permit 12947A that would implement an alternative hydrologic index to establish minimum instream flow requirements in the Upper Russian River (upstream of the Dry Creek confluence). On February 4, 2021, the State Water Resources Control Board (State Water Board) Order was issued approving Sonoma Water's petition. On February 11, 2021, the State Water Board issued an amended order (Order). This report documents Sonoma Water's response to the requirements of Term 11, which was unchanged under the Order.

The following requirements of Term 11 are to be submitted by April 1, 2021:

> '…a proposed accounting methodology to the Deputy Director that characterizes the source and basis of right of water flowing into (inflow) and released from Lake Mendocino and the subsequent rediversion of this water by Sonoma Water or its contractors. The accounting methodology shall be sufficient to define, distinguish, and quantify the following:
>
> a. Inflows from water native to the watershed and flows originating from the Potter Valley Project (PVP) or the Eel River.
>
> b. Releases from Lake Mendocino that constitute bypass of water native to the watershed, bypass of water from the Eel River or PVP, water released from storage for downstream deliveries, or water released from storage to maintain instream flows.
>
> c. Releases from Lake Mendocino that are rediverted by Sonoma Water or its contractors.
>
> d. Sonoma Water may choose to include additional inflow or outflow categories not listed under a, b, and c in the accounting methodology. Explanations for each category and how it is defined shall be included in the proposed accounting methodology. …'

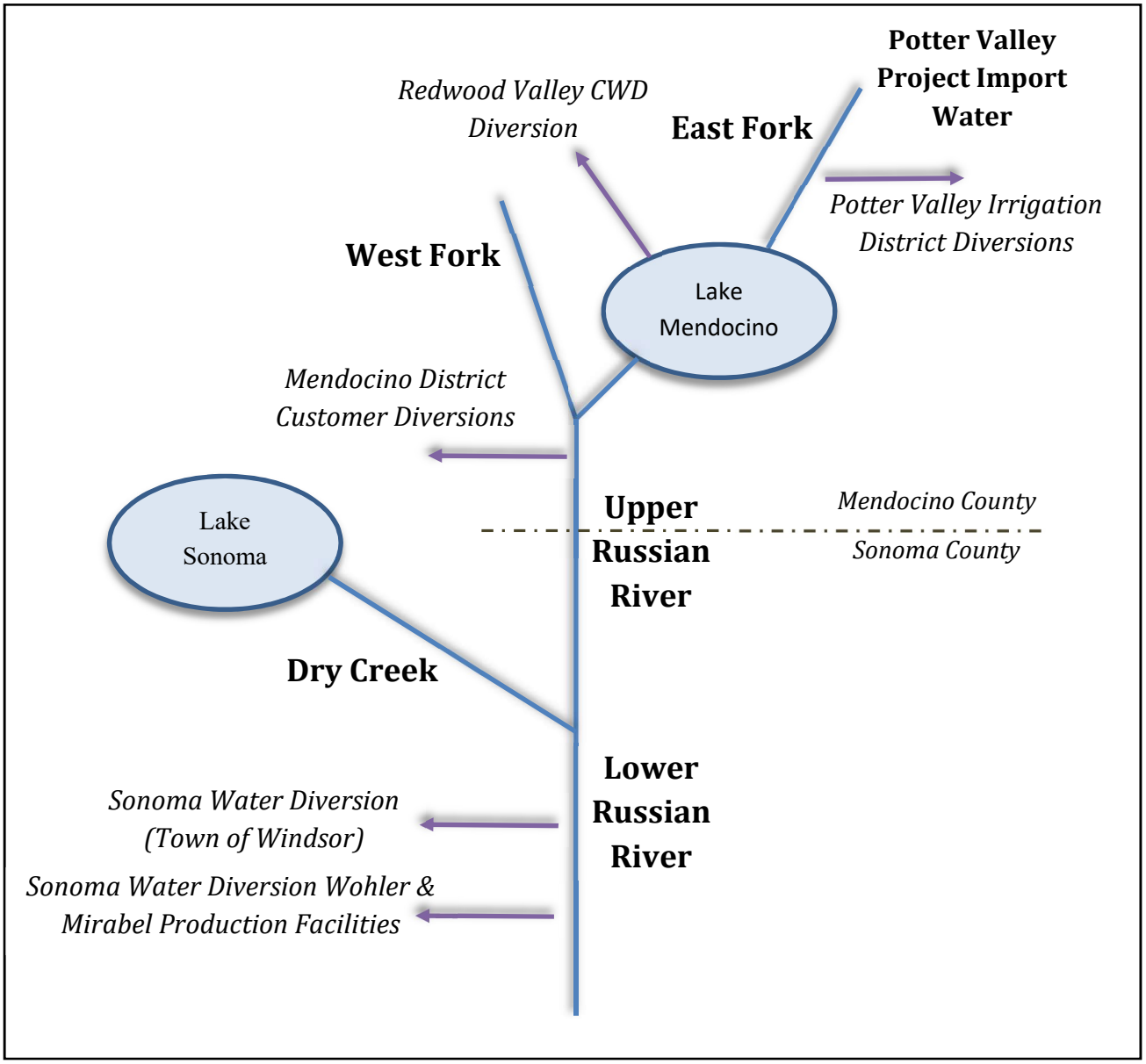
Sonoma Water understands that the State Water Board may submit requested revisions to the accounting methodology. Furthermore, if the Upper Russian River minimum instream flow requirements are established by the hydrologic index of the Order on May 1st as 'Critical' or Dry', then the accounting methodology shall be implemented with weekly reports posted publically online. Any revisions requested by the State Water Board shall be implemented within 30 days.

2 Russian River System

The Russian River is approximately 110 miles long with a watershed that spans more than 1,485 square miles. A schematic of the major features and reaches of the Russian River related to the water accounting effort is presented in Figure 1. The headwaters of the East and West Forks of the Russian River are north of the City of Ukiah in Mendocino County. The East Fork originates in Potter Valley and receives transfers from the Eel River watershed to the north through the Potter Valley Project, a hydroelectric project operated by PG&E. The Potter Valley Irrigation District has a water supply contract with PG&E that serves as their primary water supply. The Coyote Valley Dam that forms Lake Mendocino is located further downstream on the East Fork just prior to the confluence with the West Fork. In the most general terms,

the river can be divided into two reaches, the Upper Russian and the Lower Russian with the confluence of Dry Creek as the boundary between the two reaches. The Warm Springs Dam that forms Lake Sonoma lies on Dry Creek. Lake Sonoma and Lake Mendocino are operated by Sonoma Water for water supply and combined, releases from the two reservoirs are used to meet minimum instream flow requirements and downstream users authorized to divert stored project water.

Figure 1: Schematic of Russian River Reaches



3 Lake Mendocino Operations

Sonoma Water is the local sponsor for Lake Mendocino, a U.S. Army Corps of Engineers (USACE) facility, and is responsible for making water supply releases in compliance with its water right permits. As the local

sponsor, Sonoma Water has the exclusive right to control releases from the water supply pool. Under flood control operations, reservoir releases are performed by the USACE.

Sonoma Water makes releases from Coyote Valley Dam at Lake Mendocino to maintain the minimum instream flow requirements specified in its water right permits and for downstream beneficial uses along the Russian River, including diversions for domestic, municipal, industrial and agricultural purposes. These releases are made by Sonoma Water when reservoir storage levels are in the water supply pool as determined by the reservoir guide curve, a seasonally-variable water surface elevation documented in the facility's Water Control Manual.

Sonoma Water and the Mendocino County Russian River Flood Control and Water Conservation Improvement District (Mendocino District) each have a water right that authorizes storage of water in Lake Mendocino's water supply pool, rediversion of storage releases downstream, and direct diversion of Russian River water.

Under standard operations, Sonoma Water makes release decisions from Lake Mendocino based on compliance with minimum instream flow requirements in its water right permits at compliance gage locations in the Upper Russian River that extends to the confluence with Dry Creek in Healdsburg, over 64 miles downstream of Lake Mendocino. The minimum instream flow requirements for the Upper Russian River downstream of Lake Mendocino are divided into two regulatory reaches. Lake Mendocino lies on the East Fork of the Russian River and the region downstream has a year-round minimum instream flow requirement of 25 cubic feet per second (cfs). The East Fork confluence with the West Fork lies approximately one mile downstream of Coyote Valley Dam (CVD). From this point, referred to as The Forks, to the Russian River's confluence with Dry Creek, the minimum instream flow requirements range from 25 cfs under *Critical* conditions to 185 cfs under *Normal* conditions in the spring and summer.

4 Watershed Water Rights

To perform a proper water accounting in the Upper Russian River, a methodology must account for the amount of the various water sources types in the reservoir or reaches and the transactions of inflows and outflows for each water source. Diversions under water rights in the watershed is a major component of the outflows or reach losses observed during the dry season. Table 1 identifies the categories of water rights present in the Russian River watershed and their relative priorities to the three main types of water present downstream of Lake Mendocino—natural flow, imported water and reservoir storage water. As identified in Table 1, releases of stored water from Lake Mendocino is available for authorized rediversions by Sonoma Water, the Mendocino District, and post-1949 appropriative water rights in Sonoma County under the 10,000 acre-foot storage reservation. Stored water releases are also used to meet minimum instream flow requirements.

Table 1: Priority of Water Rights Associated with Lake Mendocino

	Downstream Water Rights by Priority	Pass-through, Natural Flow	Pass-through, Import Water (PVP)	Storage Releases (Project Water)	Notes
(a)	Riparian	1			
(b)	Pre-1914	2	1		
(c)	Pre-1949 (Post-1914)	3	2		
(d)	Sonoma Water Permit 12947A	4	3	1	Exports out of Russian River watershed have lower priority than (e) and (f) to project water
(e)	Mendocino RRFCWCID License 13898	4	3	1	
(f)	Post-1949 Mainstem, Sonoma County	5	4	2	Project water available under the 10,000-afa Storage Reservation for Sonoma County
(g)	Post-1949 Mainstem, Mendocino County	5	4		

In order to provide a comprehensive accounting of Sonoma Water's rediversions of Lake Mendocino, the water accounting must include an analysis of the Lower Russian River, defined from the confluence with Dry Creek down to the last compliance stream gage at Hacienda Bridge near Guerneville. The water accounting in the Lower Russian River introduces another water source type, stored water released from Lake Sonoma. Unlike Lake Mendocino, Sonoma Water is the sole authorized diverter for stored water releases from Lake Sonoma. The two reservoirs are operated conjunctively, but because Lake Sonoma is significantly larger, compliance with minimum instream flow requirements in the Lower Russian River is largely met by releases from Lake Sonoma, particularly under *Dry* and *Critical* water year classifications.

5 Water Accounting

In response to Term 11 of the Order, Sonoma Water has developed a water accounting methodology that can be implemented to produce a weekly report that characterizes the inflows and releases of Lake Mendocino. The methodology uses available measured data, estimated data, and assumptions to provide estimates of water availability by source on a daily basis.

Lake Mendocino Inflow

A conceptual water balance was developed for the region upstream of Lake Mendocino and is included as Attachment 1. Inflow into Lake Mendocino is either natural flow or imported water from the Potter Valley Project and measured in aggregate by two methods. First, the USGS East Fork Russian River near Calpella stream gage (USGS 11461500) lies just upstream of Lake Mendocino. This stream gage measures flow draining from the Potter Valley (including water imported by the Potter Valley Hydroelectric Project), Cold Creek, and other watersheds of the upper East Fork. Second, the USACE calculates inflow for Lake

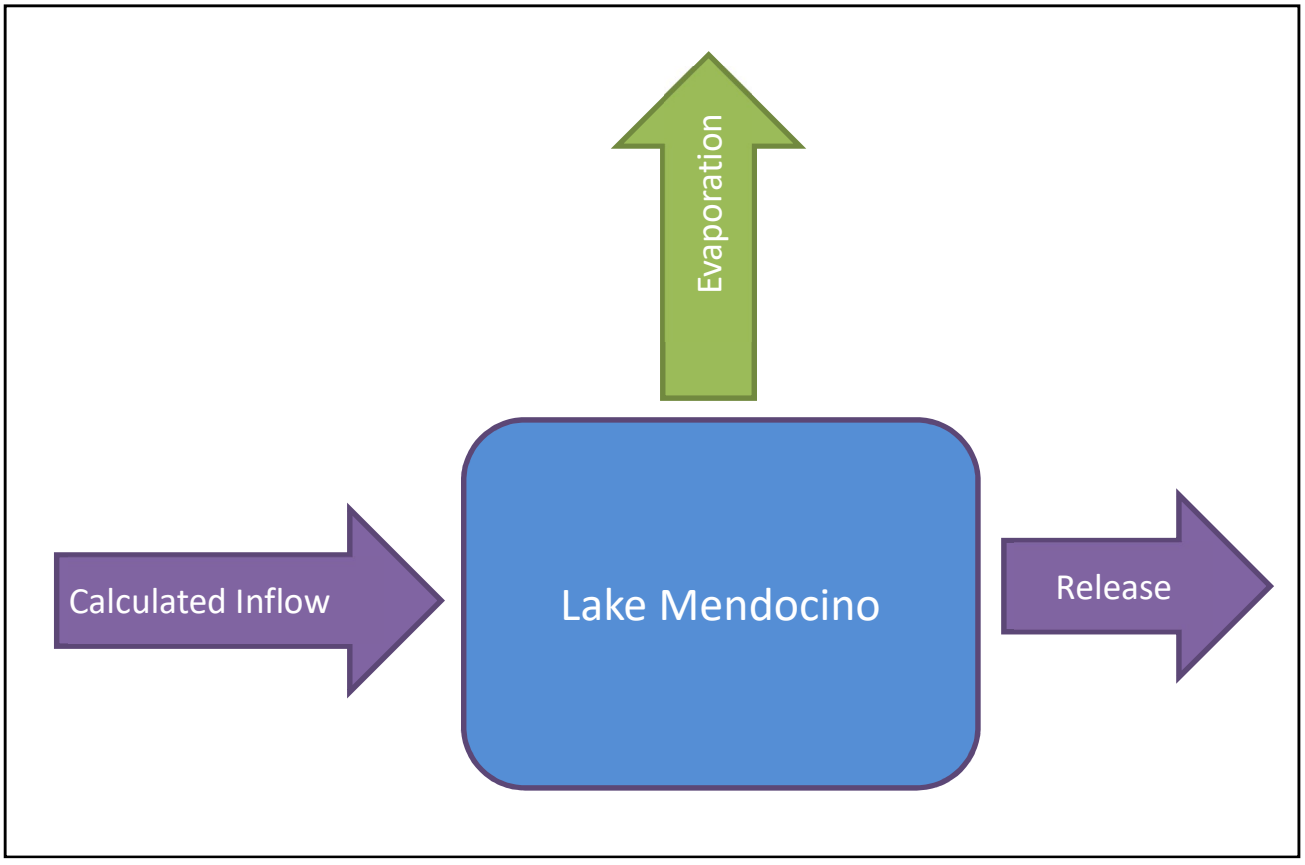
Mendocino based on a water balance for the reservoir. Figure 2 documents the components of the water balance considered in the USACE calculation. The equation for the water balance is:

$$V_{Inflow} = \left(\Delta S_{Lake\ Mendocino} + \left(V_{Release} + V_{Evaporation}\right)\right)$$

The volume of the inflow is calculated as the daily change in storage plus the volume of the reservoir release plus the calculated reservoir evaporation. This is a simplification of the complete water balance that would also include reservoir seepage and diversions by Redwood Valley County Water District, which operates a collector well capable of producing at a flowrate of approximately 25 cfs. The complete water balance equation is:

$$\Delta S_{Lake\ Mendocino} = \left(V_{Inflow} - \left(V_{Release} + V_{Evaporation} + V_{Seepage} + V_{Redwood\ Valley}\right)\right)$$

Figure 2: General Reservoir Water Balance for Lake Mendocino



Sonoma Water receives daily production data in monthly reports from Redwood Valley County Water District (CWD). For dry season conditions, the lack of this data for the weekly reports is inconsequential as the value in calculating inflow accurately is to assess the additional natural flow contribution for the small watersheds that surround Lake Mendocino that are downstream of the Calpella gage. The same rationale holds for the assumption that reservoir seepage is zero.

To establish the accounting of the inflow into Lake Mendocino, it is necessary to work through the components of the water balance from the upstream to downstream end. At the upstream-most portion of the East Fork, the Powerhouse Canal connects the East Fork to the Potter Valley Project's imported water from the Eel River. Sonoma Water receives daily reports from PG&E that provides the following data:

1) Tunnel Diversion Average Daily Flowrate from Eel River (PVP Import)
2) Potter Valley Irrigation District Canals Requested Flowrate
3) Actual Canal Release Flowrate
4) East Fork Release Flowrate

Diversions in Potter Valley are predominantly under the contracts of the Potter Valley Irrigation District (PVID). PVID has a water supply agreement with PG&E for PVP import water, but also holds water right License 5246, which lists its source as the Powerhouse Canal. Therefore, all water use by PVID can be assumed to be PVP import water. For our accounting, Sonoma Water will assume zero return flow from the canals back into the East Fork due to lack of data, however, this likely represents a significant source of inflow into the East Fork.

Comparing the PVP Tunnel Diversion to the East Fork Calpella gage flows, a net reach gain/loss can be calculated. A conceptual model of the reach water balance is shown in Figure 3. The net reach gain/loss term only determines the relative difference between inflows and outflows in the reach. The following approach is proposed for the following inflows and outflows:

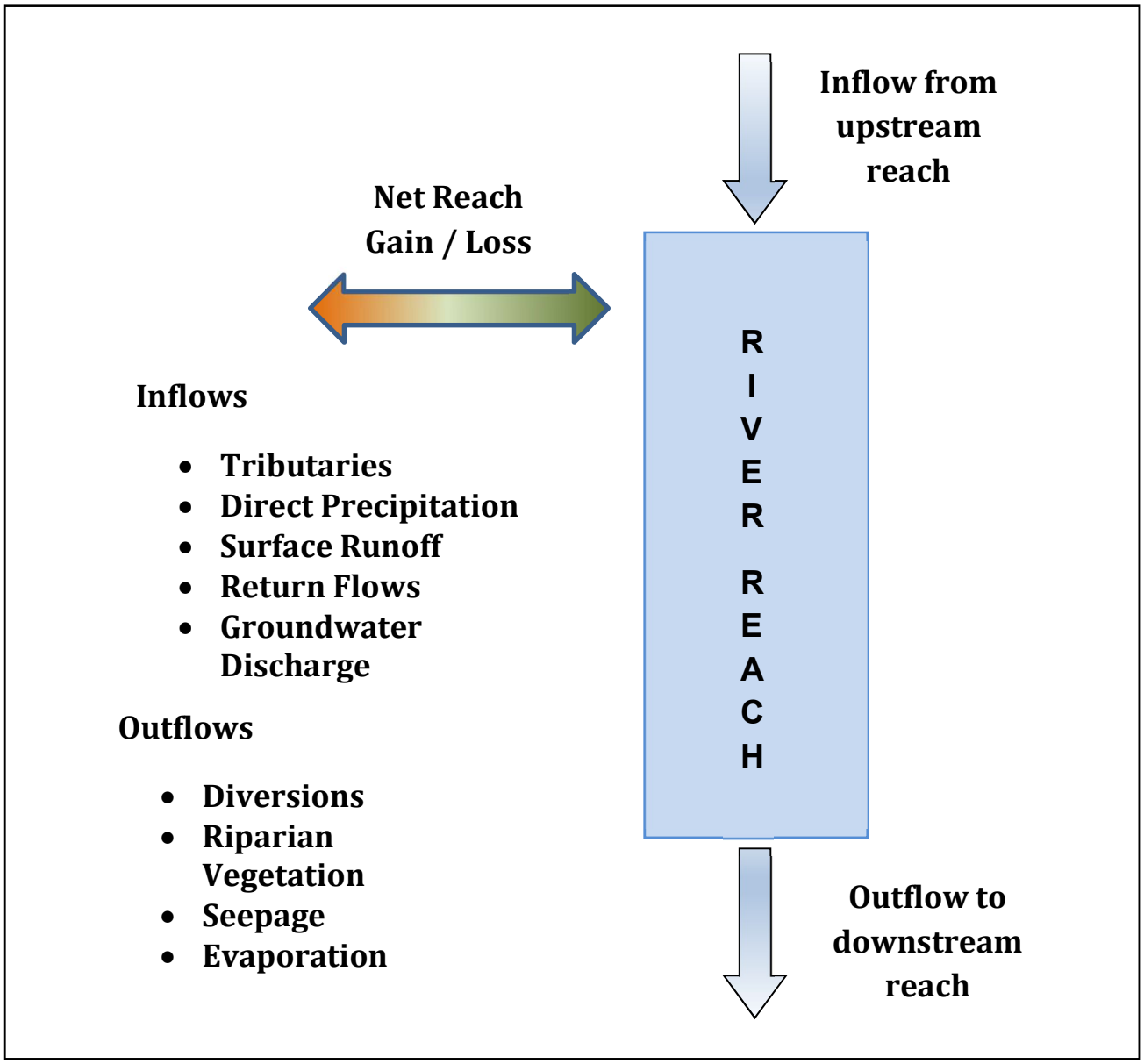
- Tributaries – There are no gaged tributaries in this reach. Sonoma Water has developed an estimation of natural flows in the watershed using the Basin Characterization Model developed by the U.S. Geological Survey.
- Direct Precipitation / Surface Runoff – Assume negligible.
- Return Flows – There is no available data nor a clear method to develop an estimated value of return flows on a daily basis. Assume value to be zero.
- Groundwater Discharge – Assume negligible.
- Diversions – Use PVID daily measurement data and eWRIMS reported data for estimated average daily water use by other water rights.
- Riparian Vegetation – There is a lack of information on how riparian vegetation evapotranspiration demands vary on a daily basis. Assume value to be zero.
- Seepage – Assume negligible.
- Evaporation – Assume negligible.

Lake Mendocino Reservoir Releases

Based on the above approach, the reservoir inflow of natural flow and PVP import water is calculated. To determine the components of the releases from the reservoir, it is important to characterize the state of the reservoir as collecting, withdrawing or regulation. For our approach, it is assumed that increases in storage are collection and decreases in storage are all withdrawals or release of stored water.

Under storage collection conditions, the relative priority is assumed that imported water is prioritized over natural flow for volume stored. This approach was chosen as there are fewer downstream water right holders that would be able to claim senior rights as opposed to natural flow. Under withdrawal conditions, the reservoir losses to evaporation are equally shared across the natural flow and imported water. The USACE maintains and publishes the release gage data for the Coyote Valley Dam. The natural flow and import water decrease from the inflow amounts by accounting for the shared losses and the diversion to storage amounts. The amount of stored water released is the residual of subtracting out the calculated natural flow and import water from the reservoir release.

Figure 3: Reach Water Balance



Attachment 2 shows a preliminary draft of what Sonoma Water expects for the weekly report on the analysis of Lake Mendocino inflows and releases.

Sonoma Water Rediversions of Lake Mendocino Storage Withdrawals

The determination of Sonoma Water rediversions of Lake Mendocino storage water is complicated. Sonoma Water has four water right permits (Permits 12947A, 12949, 12950 and 16596) from which to claim authorized diversions. Under water supply agreements, there are currently four other water systems that could feasibly use water under Sonoma Water's water rights. The potential diversions that could be realized from the Lake Mendocino related permit, Permit 12947A, are summarized in Table 2. Only the Town of Windsor water supply agreement is used on a continual basis. The City of Healdsburg and the communities of Camp Meeker and Occidental have a water supply agreement as a backup source for times when their water rights are deficient. For comparison, the total average summer water diversion rate for each is shown in Table 2.

Table 2: Review of Potential Diversions under Sonoma Water's Water Right Permit 12947A

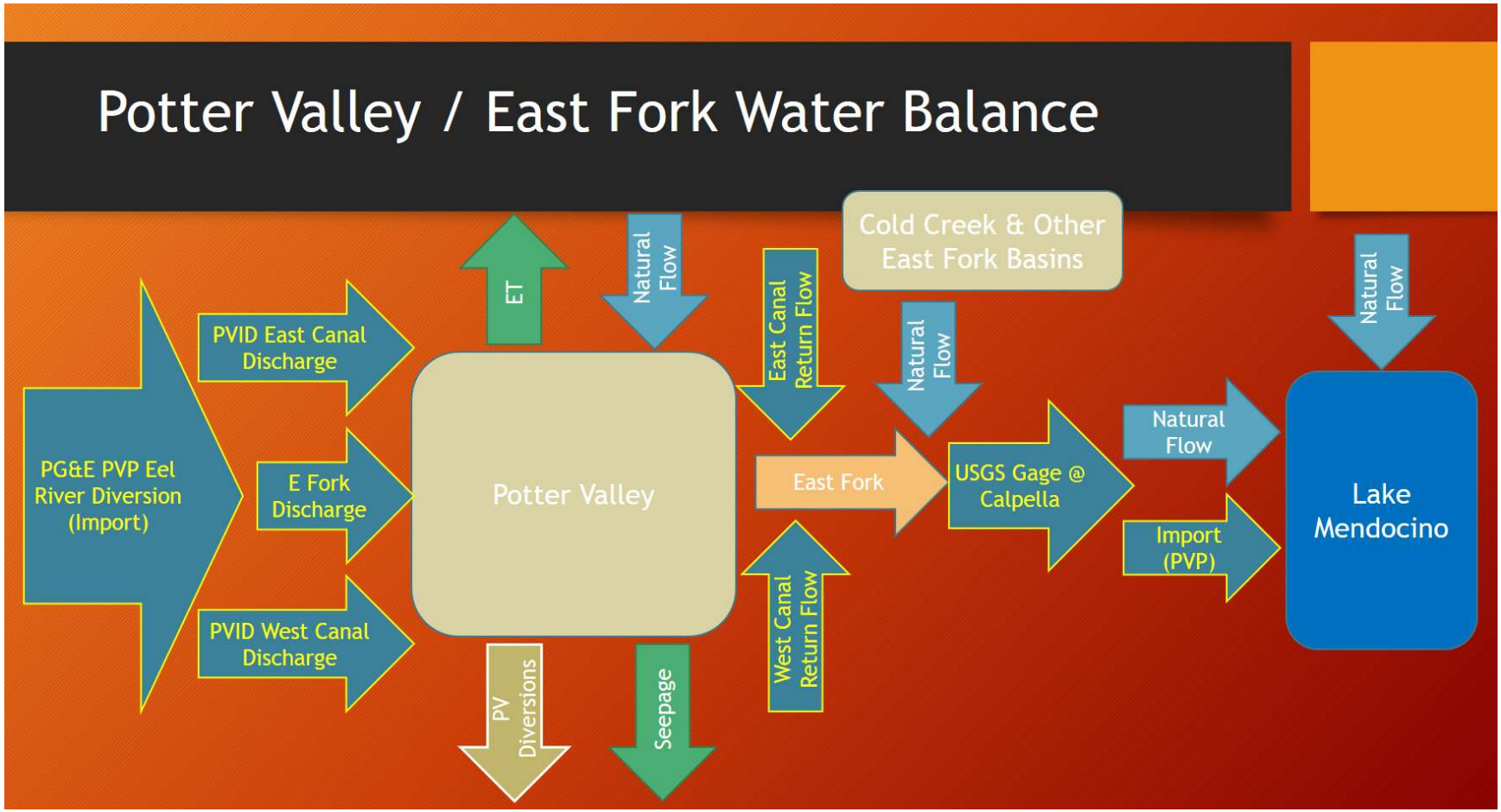
Entity	POD(s)	Permit/ Agreement Max Rate (gpm)	Actual Production Capacity (gpm)	Annual Limit (ac-ft)	Typical Diversions under SCWA Rights	Summer Diversion Rate Avg. (gpm)
Sonoma Water	Wohler & Mirabel Collector Wells	41,290	64,000	37,544	Year-round primary supply source	37,700
a) Town of Windsor	River Wellfield	5,000	5,000	4,725	Year-round primary supply source	2,600
a) City of Healdsburg	Gauntlett & Fitch Mountain Wellfields	4,375	2,825	425	None on Russian River; Limited use on Dry Creek from Nov 1 – Mar 31	0
a) Camp Meeker / Occidental	River Well	100	100	35	Limited use from Nov 1 – Jun 30 under dry conditions	0

While the above describes the potential diversions, the actual diversions reported annually in Sonoma Water's permittee progress reports only includes diversions by Sonoma Water at its Wohler and Mirabel Production Facilities under Permit 12947A. According to these reports, Sonoma Water can appear heavily reliant on Lake Mendocino storage releases, but operationally, Sonoma Water makes release from Coyote Valley Dam to meet the demands and minimum instream flow requirements on the Upper Russian River reach only.

Alternatively, much of the diversions claimed by Sonoma Water could be assigned to another one of its water rights. By virtue of being Sonoma Water's most senior water right, diversions and rediversions are preferentially assigned to Permit 12947A through a water rights allocation program that was developed in consultation with State Water Board staff over 20 years ago. Storage releases from Lake Mendocino could be viewed as reserved for minimum instream flows in the Lower Russian River and thereby shifting how Sonoma Water diversions are claimed.

A similar net reach loss analysis could be completed for the Upper Russian River, Lower Russian River, and Dry Creek as was presented for the East Fork / Potter Valley reach. The challenge with these reaches is the drastic increase in scale of diverters, riparian evapotranspiration and tributaries. Attachment 3 presents a preliminary draft of the components of the reach water balances.

Attachment 1



Attachment 2 – Example of Weekly Water Accounting Report

4/5/2021

Lake Mendocino Water Accounting Weekly Report

Report Date: 3/10/2021

Units are cfs unless noted otherwise

	1 3/3/2021	*2* 3/4/2021	*3* 3/5/2021	*4* 3/6/2021	*5* 3/7/2021	*6* 3/8/2021	*7* 3/9/2021
I. Upper East Fork Reach							
Potter Valley Project							
Tunnel Diversion	47.0	47.0	47.0	47.0	47.0	47.0	47.0
Canals Release Request	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Canals Actual Release	1.2	1.2	1.1	1.2	1.1	1.1	1.2
East Fork Release	46.0	46.0	46.0	46.0	46.0	46.0	46.0
PVID PG&E Contract	1.2	1.2	1.1	1.2	1.1	1.1	1.2
PVID Water Right	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*
Canal Return Flow	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
PVID Canal Diversions	*1.2*	*1.2*	*1.1*	*1.2*	*1.1*	*1.1*	*1.2*
PVID E Fork Diversions	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*	*4.0*
East Fork / Potter Valley Reach Analysis							
USGS E Fork @ Calpella	61.1	62.0	61.8	82.2	68.3	66.2	81.6
Net Reach Loss/Gain	+14.1	+15.0	+14.8	+35.2	+21.3	+19.2	+34.6
Natural Flow							
Non-PVID East Fork Net Losses	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							
Resrvoir Operations							
Calculated Inflow (ac-ft)	136.3	129.8	160.2	171.2	174.4	168.9	197.8
(cfs)	69	65	81	86	88	85	100
Natural Flow	23	20	35	41	42	39	54
Import	46	46	46	46	46	46	46
Storage Change (ac-ft)	+75.0	+62.0	+100.0	+100.0	+25.0	-38.0	+25.0
(cfs)	+38	+31	+50	+50	+13	-19	+13
Stored Natural Flow (cfs)	2	2	6	7	2	0	1
Stored Import Water (cfs)	36	29	44	44	10	0	12
Evaporation (ac-ft)	7.7	8.4	7.0	8.4	8.4	4.2	4.2
RVCWD Diversion (ac-ft)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CVD Release Gage	27	30	27	32	71	102	85
Storage (Project Water)	0	0	0	0	0	19	0
Natural Flow	19	15	27	32	38	38	52
Import Water	8	15	0	0	33	45	33
East Fork Min Instream Flow Requirement	25	25	25	25	25	25	25
Compliance Gage *Rvr mi.*							
CVD Release *99.9*	27	30	27	32	71	102	85
CVD Project Water Release to Meet Min Flow Requirement							
Total Pass-through Water	27	30	27	32	71	83	85
Project Water Release Required	No	No	No	No	No	No	No

Attachment 3 – Example of Additional Reach Analyses for Weekly Water Accounting Report

III. Upper Russian River Reach									
Minimum Instream Flow Requirement			25	25	25	25	25	25	25
Controlling Compliance Gage									
Min Gage Flow			50	50	46	100	111	132	125
Controlling Gage			Forks	Forks	Forks	Forks	Forks	Forks	Forks
All Compliance Gages		*Rvr mi.*							
Forks	(CVD + USGS 11461000)	*99.0*	50	50	46	100	111	132	125
Talmage	(USGS 11462080)	*96.1*	72	71	66	138	134	159	166
Hopland	(USGS 11462500)	*84.8*	113	108	106	153	159	180	195
Cloverdale	(USGS 11463000)	*70.9*	133	121	119	144	177	189	208
Geyserville	(USGS 11463500)	*54.4*	144	134	126	142	172	171	192
Jimtown	(USGS 11463682)	*48.5*	153	142	130	138	162	167	188
Digger Bend	(USGS 11463980)	*38.2*	190	180	169	175	186	193	205
Healdsburg	(USGS 11464000)	*35.6*	187	179	170	175	183	192	201
CVD to Healdsburg Reach Analysis									
Upper Russian Net Reach Loss/Gain			+160	+149	+143	+143	+112	+90	+116
Total Pass-through Water			27	30	27	32	71	83	85
CVD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss/Gain to Controlling Gage			+23	+20	+19	+68	+40	+29	+40
Project Water Release Required			No	No	No	No	No	No	No
IV. Lake Sonoma									
Lake Sonoma									
Storage Change (ac-ft)			-195.0	-155.0	-39.0	-59.0	-97.0	-136.0	+0.0
(cfs)			-98	-78	-20	-30	-49	-69	+0
Evaporation (ac-ft)			9.8	5.4	6.5	7.6	8.7	4.3	5.4
Inflow (Natural Flow)			0	2	59	49	30	9	78
WSD Release Gage			80	78	75	75	75	75	75
Storage (Project Water)			80	75	16	26	45	66	0
Natural Flow			0	2	59	49	30	9	75
V. Lower Dry Creek Reach									
Minimum Instream Flow Requirement			75	75	75	75	75	75	75
Controlling Compliance Gage									
Min Gage Flow			80	78	58	75	75	75	75
Controlling Gage			WSD Release	WSD Release	Dry Crk Mouth	WSD Release	WSD Release	WSD Release	WSD Release
All Compliance Gages		*Crk mi.*							

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4/5/2021

WSD Release		*14.3*	80	78	75	75	75	75	75
Yoakim	(USGS 11465200)	*11.1*	90	88	82	83	83	83	83
Lambert	(USGS 11465240)	*6.8*	90	89	83	84	83	83	85
Dry Crk Mouth	(USGS 11465350)	*0.1*	85	86	58	85	79	79	82
WSD to Russian River Confluence Reach Analysis									
Total Pass-through Water			0	2	59	49	30	9	75
Dry Creek Net Reach Loss/Gain			+5	+8	-17	+10	+4	+4	+7
WSD Project Water Release to Meet Min Flow Requirement									
Net Reach Loss/Gain to Controlling Gage			+0	+0	-17	+0	+0	+0	+0
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			8	15	0	0	33	64	33
Natural Flow			179	164	170	175	150	128	168
Dry Creek Flow (Mouth Gage)									
L. Sonoma Project Water			80	75	16	26	45	66	0
Natural Flow			5	11	42	59	34	12	82
Russian River d/s of Confluence Flow			272	265	228	260	262	271	283
L. Mendocino Project Water + Import Water			8	15	0	0	33	64	33
L. Sonoma Project Water			80	75	16	26	45	66	0
Natural Flow			184	175	212	234	184	140	250

VII. Lower Russian River Reach

Minimum Instream Flow Requirement			85	85	85	85	85	85	85
Controlling Compliance Gage									
Min Gage Flow			260	248	232	246	249	256	262
Controlling Gage			Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda	Hacienda
All Compliance Gages		Rvr mi.							
Windsor	(USGS 11465390)	26.6	-	-	-	-	-	-	-
Hacienda	(USGS 11467000)	21.8	260	248	232	246	249	256	262
Confluence to Windsor Reach Analysis									
Net Reach Loss/Gain to Windsor Gage			-	-	-	-	-	-	-
L. Mendocino Project Water + Import Water			3	10	0	0	29	59	29
L. Sonoma Project Water			80	75	16	26	45	66	0
Natural Flow			184	175	207	230	184	140	250
Confluence to SCWA Wohler Production Facility Reach Analysis									
Approx. Flow u/s of Wohler			329	310	299	307	307	321	330
Net Reach Loss/Gain			+57	+45	+71	+47	+45	+51	+47
L. Mendocino Project Water + Import Water			8	15	0	0	33	64	33
L. Sonoma Project Water			80	75	16	26	45	66	0
Natural Flow			241	220	283	281	229	191	297
Confluence to Hacienda (Guerneville) Reach Analysis									
Net Reach Loss/Gain			-12	-17	+4	-14	-13	-15	-21
L. Mendocino Project Water + Import Water			0	0	0	0	0	0	0
L. Sonoma Project Water			19	28	0	0	20	65	0
Natural Flow			241	220	232	246	229	191	262

Production and Water Rights Diversions

Water Production under Agency Rights (ac-ft)								
Lower Russian River								
Sonoma Water Total		137.6	122.5	133.5	121.4	114.9	129.2	135.7
	Wohler	81.6	81.8	76.8	62.2	45.5	71.8	59.5
	Mirabel	56.0	40.7	56.7	59.2	69.4	57.4	76.2
Town of Windsor River Wellfield		4.8	5.0	4.9	4.5	4.5	4.7	4.6
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