# 2022 Upper Russian River Voluntary Water Sharing Program Implementation Report (January 31, 2023)

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#### I. EXECUTIVE SUMMARY

The Western United States has been in a persistent dry hydrologic cycle for more than two decades now, and this cycle continues to impact us today in numerous ways. This repetition of extreme dry years has resulted in a pronounced reduction of historical precipitation levels in the Russian River Watershed, as well as the nearby Eel River Watershed which has been supplementing Russian River uses since at least 1908 via the Potter Valley Project ("PVP"). These historical water supply reductions are expected to continue for decades as our region continues to be impacted by climate change, which will be further exacerbated by the continued evolution of operational changes at the PVP and PG&E's decision to not re-license PVP. With these continued uncertainties to our local water supplies in the Russian River Watershed, it is particularly important for our community to have alternative programs that can help sustain our local economy, agriculture, municipalities, and environment in future dry years.

Starting in 2020, Russian River users were asked to begin voluntary efforts to reduce water demands to preserve storage in both Lake Mendocino and Lake Sonoma. Unfortunately, the continued pattern of reduced precipitation proved these efforts insufficient. As a result, Governor Newsom issued a State of Emergency, Drought Proclamation for the Russian River Watershed in 2021, and the State Water Resources Control Board (the "SWRCB") subsequently adopted Emergency Regulations and orders of curtailment for both appropriative and riparian water right holders. These emergency regulations were readopted in 2022.

Due to the impact of curtailments, the SWRCB began speaking with various stakeholder groups to find a feasible alternative solution. This ultimately resulted in a multi-month collaboration between the Division of Water Rights staff and stakeholders, including municipalities, tribes, agriculture, and independent water system operators, and final adoption of the Upper Russian River Voluntary Water Sharing Program (the "Program"). The Program agreement was adopted by the SWRCB on June 7, 2022 as an alternative to curtailment actions within the Upper Russian River Watershed and via the Emergency Regulation process. Working within existing water regulations Section 877.4 of the Program provided a mechanism where senior water right holders could voluntarily forbear a portion of their water allocation to benefit the greater community by opening up that forborne water to junior water right holders that would have otherwise been under curtailment. Through this voluntary process, those that might have otherwise had no surface water supply were able to avoid some of the more drastic impacts resulting from a full curtailment.

Unfortunately, the 2022 implementation of this Program was limited to a five-week period due to factors outside the control of the Program's Steering Committee. Namely, the delayed operational variance request by PG&E and the subsequent order by the Federal Energy Regulatory Commission ("FERC") which resulted in a reduction in PVP diversions from 75 cfs to 5 cfs. PG&E's initial request proffered a diversion reduction from 75 cfs to a range of 25–5 cfs. It is likely that if PG&E's operational variance request and subsequent FERC approval had happened in earlier sequence the reduced diversion would have been closer to 20 or 25cfs, and the Program could have likely continued further into 2022.

As stakeholders in both the Russian River and Eel River basins continue to grapple with the impacts of reduced water supply to our respective communities, water users, and ecosystems, it is important that broad regional input continues so that additional innovative solutions like the Program can be developed.

Although the Program only existed for a short period in the summer of 2022, the impact of the Program was significant in the following respects:

- Water was made available to junior water rights holders for four weeks longer than when under curtailment in the summer of 2021, saving crops, supporting the economy, and providing for health and human needs.
- Senior water right holders were able to satisfy minimum demands, while retaining value
  in their water infrastructure investments to help meet communal, economic, and health
  and safety imperatives.
- The Program forced a sophisticated review of water supply and demand on the Russian River.
- The Program demonstrated the power of regional collaboration for creating resilience.
- The Program created a foundation for improving water sharing in future dry conditions, such as those resulting from continued climate change and operational changes to the Potter Valley Project.
- The Program continues to solidify regional understanding of all water resources available for Russian River beneficial uses (e.g., agriculture, municipalities, and environment) and water right types.
- The Program demonstrates that it is possible for our institutions and citizenry to adapt, innovate, change behaviors, and invest in our water future in a collaborative manner.
- The Program provides a model for use in other watersheds.

This Implementation Report details the establishment of the Program, how the Program functioned, and discusses future innovative improvements to the Program. Necessary improvements include: determining how to better incorporate stored appropriative water into the Program; closing data gaps to help make the Program run both more efficiently and timely; capturing and analyzing the Program's impacts to diverters, communities, and the environment; and perfecting a contingency procedure to help the Program better adapt to projected water supply changes stemming from FERC modification of PVP inter-basin diversions from the Eel River. Though a reduced implementation period in 2022 impacted the Steering Committee's ability to fulfill the programmatic requirement to collect information on the Program's impacts to the local ecology, economy, and community of the Upper Russian River, the Steering Committee remains committed to completing this analysis to inform future decisions on curtailments and reduced PVP imports.

The Steering Committee wishes to thank all the participating water rights holders, including the senior diverters for their willingness to participate in this regional economic resilience and

conservation program. We thank staff at the Division of Water Rights, who generously contributed their time and expertise to listen to the concerns of diverters and help craft a viable solution. We are grateful for the leadership and vision of the members of the State Water Resources Control Board in approving this pilot program. The Steering Committee also appreciates the engagement of the entire steering team in this long, multi-year conversation, tackling these difficult issues.

#### II. PROGRAM INTRODUCTION: BACKGROUND

#### A. A Hydrologic Perspective of the Russian River Watershed

#### **General Overview**

California has historically prospered due to its predictable climate of dry summers and mild, wet winters. Our infrastructure, our economy, and our day-to-day lives were largely built around this once reliable weather pattern. Every few years, La Niña and El Niño would impact this pattern, but there was still enough reliability that we could weather these changes without much disruption to our everyday being. However, climate change has greatly impacted these historical patterns in recent years and is now causing widespread disruptions throughout the State—our State is not prepared for the increasingly prolonged hot, dry periods we have been having, nor is our State prepared to adapt to fewer and more intense precipitation events. The Russian River Watershed in particular has had to adapt to these changing extremes at a faster rate than some other watersheds due to its unique geographic placement.

Traveling through more than half-a-dozen microclimates (e.g., Redwood rain forests, coastal marine, and dry uplands) and several land uses (e.g., agricultural lands and urban areas), the 110-mile Russian River mainstem begins its journey near Redwood and Potter Valleys, in Mendocino County, before entering the Pacific Ocean at Jenner in Sonoma County. Encompassing about 1,500 square miles, the watershed has at least 238 streams and creeks that feed the mainstem from nearby Coastal and Mayacmas Mountain ranges. Unlike many other watersheds within our state, these ranges do not receive regular snowfall, and thus, do not provide stored summer flows in the form of snowmelt to help sustain late season demands. However, due to the presence of both large and small alluvial valleys where stream flow processes are largely defined by interactions between surface water and groundwater, there remains a range of naturally dry and intermittent creek conditions while others have perennial flows.

These same ranges also isolate the Russian River Watershed area from large State and Federal Water Projects that benefit other parts of the State. As a result, all beneficial uses within the Russian River Watershed are completely reliant on precipitation to replenish surface flows, storage reserves at Lake Mendocino and Lake Sonoma, and recharge our groundwaters.

Also, unlike other areas of the State, the two main reservoirs have a significantly smaller capacity and are not able to store as much carryover between dry years, especially at Lake Mendocino. This means that our beneficial uses are put at risk more quickly in times of repetitive dry years, and as such, our region has been placed under curtailment orders and other conservation requirements since 2021. As our climate continues to change, these dry periods are becoming ever more impactful to the well-being of our region and causing record storage lows to occur. This puts us at risk for insufficient water supplies to meet human health and safety needs, let alone provide for the health of our environment or to sustain our agricultural economy.

A vital resource, the Russian River provides water for a variety of beneficial uses, including more than 700,000 residents in Marin, Sonoma, and Mendocino Counties, and over 200,000 acres of agriculture; while also providing summer relief to over a million visitors each year and key habitat for a wide variety of species, including three listed salmonids: Chinook salmon, Coho

salmon, and Steelhead trout. With so many valuable beneficial uses at risk, it is important that all feasible measures are taken to improve our long-term sustainability and reduce both the direct and cumulative impacts of climate change in our region.

Combined with reduced annual precipitation percentages, we are also seeing hotter temperatures, longer heatwaves, drier soils, and higher evapotranspiration rates. All of which are leading to changes in how and when water is used throughout the year. Not to mention the reality of multiple, devastating wildland fires impacting both Mendocino and Sonoma County in the past six years, and the continued fire risks we now face with more extreme dry periods and reduced water supplies. Our current way of operating is not sustainable long-term and especially not in the face of climate change.

With our beneficial uses governed and protected by a range of laws and regulations, water uses within our watershed are not only subject to traditional water rights law, but also the Russian River Biological Opinion, Decision 1610 ("D-1610"), and more recently Temporary Urgency Change Petitions.

In 1986 the State Water Resources Control Board Division of Water Rights issued D-1610 that set minimum instream flow requirements for the Russian River. At that time, up to 160,000 acrefeet of water was regularly diverted to the Russian River from the Eel River through the Pottery Valley Project. This diversion assisted in supplying adequate water resources to meet most *Normal* water year minimum instream flow requirements, as well as the demands of most appropriative water right permits and licenses. However, due to ongoing climate change impacts to the Endangered Species Act ("ESA") listed salmonids on the Eel River the annual diversion has been reduced substantially to closer to 60,000 acre-feet and in flow variance years, closer to 40,000 acre-feet.

In the late 1990's National Marine Fisheries Service ("NMFS") listed Russian River salmon and Steelhead as threatened under the ESA. The Russian River Biological Opinion, issued in September 2008 by NMFS, requires Sonoma Water to file for permanent changes in the minimum instream flow requirements, which are established in Sonoma Water's water rights permits and State Water Board, Decision 1610 ("D-1610"), within a year of issuance of the Biological Opinion. The flow reductions were due to concerns that higher flows negatively impacted ESA listed species. Currently up for its 15-year review process, the Russian River Biological Opinion is meant to protect listed species and requires certain prudent measures be taken to ensure that listed species are not further harmed and are instead, hopefully placed on a trajectory towards recovery.

In 2009, and again in 2016, Sonoma Water filed new petitions for revised permanent changes to the D-1610 minimum instream flow requirements, revised time extensions, and modifications to the hydrologic index that assesses hydrologic water supply conditions in the watershed. That project is referred to as the Russian River Fish Flows Project. In the interim, and until D-1610 is revised, Sonoma Water has utilized the Temporary Urgency Change Petition process to modify the hydrological index and modify streamflow within the Russian River Watershed. NMFS is currently updating the 2008 Biological Opinion for the Russian River which will likely set up new minimum flow targets intended to protect habitat for ESA listed species. Once the updated

Biological Opinion is issued, it will likely lead to updates in the Russian River Fish Flows project to change D-1610 and replace it with an updated decision on minimum instream flows.

#### **Potter Valley Project**

The Potter Valley Project ("PVP") is a hydropower project that has provided an inter-basin water transfer between the Eel River and Russian River watersheds since 1908. In 1922, with the completion of Scott Dam and Lake Pillsbury, a year-round water supply began to be diverted from the Eel River to the Russian River Watershed. The State Water Resources Control Board has since appropriated the use of this water to numerous water rights holders in the Upper Russian River Watershed, which is identified as the River north of the Dry Creek confluence in Sonoma County.

PVP has been owned and operated by Pacific Gas and Electric Company ("PG&E") since 1930. As a hydropower project, the Federal Energy Regulatory Commission ("FERC") provides the oversight related to the licensing and operation of the Potter Valley Project. Under the current FERC license, PG&E is required to follow stringent requirements related to water that is transferred from the Eel River to the Russian River for power production and related operations.

In 2019, PG&E renounced its interest in the continued operation of the Potter Valley Project and did not seek to renew its license application. In July 2021, the transformer was taken offline for repair and it remains unclear if it will be brought back online due to unexpected costs. In July 2022, PG&E submitted their proposed decommissioning timeline for the Potter Valley Project to FERC. Impacts of PVP on the 2022 Program are expanded upon later in this Report.

#### B. Bringing Stakeholders Together to Address Effects of Drought in the Russian River Watershed

In July 2020, Division of Water Rights Deputy Director Erik Ekdahl and his team met with a group of regional water managers from the Upper Russian River, and invited them to create a locally designed approach to the ongoing water supply shortages. This group of regional stakeholders from Sonoma and Mendocino Counties continued to meet regularly, first formalizing themselves as the Russian River Drought Response Group ("RRDRG"). Early meetings of RRDRG helped identify the specific water supply concerns for various stakeholder groups as targets to address within any local or regional water management program.

Starting in April 2021, the RRDRG evolved into a more formal Steering Committee format that was tasked with the development and implementation of a regionally derived water management program to address ongoing drought conditions. Weekly two-hour meetings were held for Steering Committee members, plus dozens of additional working group meetings were held with property owners and stakeholders that rely on water from the Upper Russian River watershed. Although time-intensive, these meetings provided local stakeholders ample opportunity to provide input on how their watershed is managed. The result of these efforts is the "Upper Russian River Voluntary Water Sharing Program" ("the Program").

#### C. Purpose of Implementation Report

As required by the 2022 Program's Agreement language, this "Implementation Report" ("Report") has been prepared by the Steering Committee and is to be presented to the State

Water Board by January 31<sup>st</sup>, 2023. The Steering Committee created an ad-hoc committee to help facilitate in this process.

The Program language states the following may be addressed in this Report and we plan to expand future Reports to incorporate more of these issues:

Recommendations may address such issues as defining baseline water use, increasing gauge monitoring to accurately understand the water losses from diverters, the structure of conservation stages, the extent to which instream needs should be included, local options for administration of the program, and improved methods for determining water availability. Identified impacts may include categories such as: impacts to listed species and designated critical habitat; agricultural impacts such as crop yields or losses; economic impacts such as lost tax revenue, local and regional business closures; immigration and emigration data; housing data; communal impacts such as community events and programs.

Due to an abbreviated implementation period for the 2022 Program, there is unfortunately insufficient information available for the Steering Committee to fully address each of these identified areas. Going forward, the Steering Committee hopes to see more robust implementation periods that will help garner a better understanding for each of these issues.

Therefore, while the Program Agreement identifies a range of issues that may be discussed in this Report, the primary focus is how the Program itself was established, how the Program functioned, and what the Steering Committee should do to improve any future Program iterations. By reflecting on the 2022 Program in this Report, the Steering Committee was able to identify lessons learned, document impacts, note informational gaps, and provide recommendations to improve any future Program implementation.

As a novel approach to sharing finite water resources—in not only a region facing an ever-increasing amount of climate change induced impacts, but also throughout the entire state—the Steering Committee hopes this Program will help work as a model for other drought-stricken watersheds. Preparing this Implementation Report annually will help share our collective learned knowledge so that other areas may experience fewer bumps in the road during initial implementation stages. Water is a finite resource, and we must learn to share it more equitably amongst all of its life-sustaining uses.

#### D. Stakeholder and Water Right Survey

#### **Survey Description**

In preparation of this Report, committee members thought it would be best to also include actual input from Program Participants and regional stakeholders.

To obtain this input, the Steering Committee put together a survey and sent it to all Russian River Drought LYRIS recipients, a State Water Board run listserv. This mode of conveyance was chosen for two different reasons: 1. This same list was already used throughout the Program to make reporting, notice, and other informational announcements to participants; and 2. With the

idea that the Steering Committee wants to implement and grow this Program in future years, we wanted to be sure that input was received from other water right holders and stakeholders that were not directly involved or enrolled in the 2022 Program.

While drafting the survey the Steering Committee kept these intended audiences in mind and aimed to incorporate questions that would be applicable to each, while still getting to the nuances within each group. In particular, the Steering Committee wanted to ask questions that we did not otherwise have clear answers to, but would be extremely helpful in identifying lessons learned and making recommendations for future years. To achieve this, the Steering Committee broke the survey into four sections—1. A basic introduction section that included questions applicable to all interests; 2. A section directed specifically at Municipal and Domestic Users; 3. A section for Agricultural users; and 4. A section for stakeholders (i.e. future Program participants, non-enrollee water right holders, and non-water right holders).

For example, Program participants included agricultural, municipal, and domestic water right holders, which means that once assigned a threshold, each was likely to take different measures to meet those thresholds. To learn more about what these measures may have been and what the impact of those choices were across use types, the survey asked questions that were directed towards each user case type.

As the main purpose of this survey was to inform Steering Committee recommendations for future years, it was particularly important that responses received were honest and candid. To facilitate this need, the Steering Committee collectively decided to ensure complete anonymity of survey respondents unless they otherwise opted to voluntarily provide their information. The Steering Committee also worked to ensure questions were written as neutrally as possible to prevent any biases, and that answer choices were broad, but still informative to processes. In some cases, this meant including additional instructions for respondents and adding in text boxes for further expansion. The number of questions for each section was also limited to ten or fewer to help increase likelihood of survey completion.

This information was then used to inform the Steering Committee recommendations throughout this Report.

#### **Survey Responses**

On November 4<sup>th</sup>, 2022 the Steering Committee sent out the finalized survey to all Russian River Drought LYRIS recipients in order to capture further understanding on how the public perceives the Program. The State Water Board sent out two reminder emails on the Program's behalf as well. The Steering Committee accepted survey response results through November 23<sup>rd</sup>, 2022.

Ultimately, the survey was sent out to about 470 individuals that had enrolled with the LYRIS and 45 responses were received, which is about a 10% response rate. Response rates across each identified interest group was fairly equal: 12 respondents identified as municipal and domestic users; 19 respondents identified as agricultural users; and 15 respondents identified as stakeholders.

**RECOMMENDATION:** In reviewing responses to the survey, the Steering Committee noticed that there were some questions and answer choices that could have been written more clearly. There were also some general survey formatting choices that could have been refined to improve

clarity for respondents. Responses were also fewer than preferred, but still considered acceptable. With this in mind, the Steering Committee would recommend the following:

- Draft and send out surveys earlier in reporting process.
- Use the same LYRIS service again to disperse the survey, but also utilize the Steering Committee network to share survey links.
- Do one individual survey per respondent type (i.e. one survey link for agricultural uses, a different link for stakeholders, etc.).
- Be explicit in all instructions.
- Shorter, less interpretive questions and answer choices are preferred.
- Continue to offer the choice of anonymity, with identifying information optional.
- Give more consideration to who may be filling out the survey and draft additional questions accordingly (e.g., many water right holders use a contractor or outside company to manage the right and they may have a different perspective than the water right holder themselves).
- Draft questions meant to help identify and close key informational gaps.
- Incorporate the survey questions themselves, or at least a subset, into the Program's monthly reporting requirements.

#### III. 2022 PROGRAM DISCUSSION

This section focuses on the adopted Program itself, including Program Governance, Program Implementation, and Program Accountability.

#### A. Program Governance, Administration, Structure, and Functionality

This section focuses on the role of the Steering Committee and the State Water Board in this Program. This includes a review and analysis of actions taken, processes, and reasoning behind these decisions.

#### Water Sharing Program Steering Committee

As the drought situation within the Russian River Watershed progressed, several local entities and individuals began to discuss with State Water Board staff in 2021 what possible alternatives to curtailment may look like. This initial group of participants and a few others then began to refine the basic concepts of what the Program may look like going into additional dry years. For reasons expanded upon below, due to time constraints, the Program concept did not progress to a state of implementation until 2022.

As the Program concept continued to evolve over the last two years, the "Steering Committee" template was further refined as well. When the Program was formally adopted by the State Water Board in May/June 2022, the below member groups were participating in the Steering Committee—some of these groups were involved from the beginning talks, while others joined once the Program was more flushed out and closer to adoption.

## 2022 Program Steering Committee Members

- · City of Cloverdale
- · City of Healdsburg
- · City of Ukiah
- · Cal Am Water/Town of Geyserville
- Cal Indian Environmental Alliance
- Covote Valley Band of Pomo Indians
- Dry Creek Rancheria Band of Pomo
- Fish Friendly Farming
- Federated Indians of Graton Rancheria
- Hopland Band of Pomo Indians
- Jackson Family Wines
- · Lytton Band of Pomo Indians
- Mendocino County & Sonoma County Farm Bureaus

- Middletown Rancheria
- Pinoleville Pomo Nation
- Russian River Confluence
- Russian River Flood Control & Water Conservation Improvement District
- Russian Riverkeeper
- · Redwood Valley Little River Band of Pomo Indians
- Sonoma Water
- Sonoma Resource Conservation District
- State Water Resources Control Board
- Willow County Water District (representing 6 water suppliers)

<u>Image 1.</u> List of those participants that started the RRDRG, as well as those that later joined in what became known as the 2022 Upper Russian River Voluntary Water Sharing Program Steering Committee.

To this point, the Steering Committee has acted as the main public facing entity for this Program. This has included taking on a mix of roles and responsibilities in relation to the implementation of the 2022 Program. As the Program is still in its infancy, governance structures and operational administration are still under review, but are being actively discussed in the Program's bi-weekly meetings. Until decisions are finalized, existing Steering Committee members and State Water Board staff are filling in where needed to assist. The Steering Committee's goal is to continue engaging local parties to assist with Program implementation so that it can remain a primarily locally managed Program.

During the initial drafting phases, the Steering Committee met weekly with State Water Board staff and an experienced facilitator, before shifting to a bi-weekly schedule in February 2022. These meetings offered opportunities for discussion of Program language development, and the editing and finalization of the language prior to Program adoption by the State Water Board in May/June of 2022. The time following Program adoption allowed for planning for correspondence with Program participants, planning the monthly participant meetings, working with State Water Board staff, and for drafting the annual implementation report.

Over the course of 2022 implementation, the Steering Committee acted as an intermediary between voluntary participants and the State Water Board. This included a primary focus in educating the community and conducting outreach to encourage Program participation. Committee members also assisted State Water Board staff with drafting the enrollment and reporting forms related to the Program. However, because the Program did not have its own digital infrastructure in 2022, the submission of these enrollment and reporting forms were received by the State Water Board. In future Program implementation years, it is the Steering Committee's goal to have an approved administrative system in place. Not only would this help the Steering Committee have a more direct interface with participants, but it would also help the Committee itself ensure enrollment, reporting, and water use within the Program is in compliance with the Program Agreement.

Since the 2022 Program was successfully implemented for only five weeks in the Summer of 2022, the Steering Committee hopes to take the experience from this year and move forward with refining the needs of the Program for any future implementation. This includes better defining the governance and administrative roles and responsibilities for the Program.

The Program relied heavily on Program Participants self-reporting compliance with their respective Forbearance Thresholds, however, there was no formal mechanism to validate these self-reports. Though there is currently no reason to believe these self-reports were inaccurate, it is important to the long-term success of this Program that the Steering Committee be able to objectively demonstrate both compliance and accuracy in reporting. While the State Water Board did perform spot inspections on Participants, these inspections were not universal, and there is room for improvement going forward. The Steering Committee acknowledges that a key component to any Program's sustainability is its ability to prove-out in the end, and that adaptations must be made going forward to address this need in future implementation years.

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<sup>&</sup>lt;sup>1</sup> The State Water Board generously funded this facilitator for the benefit of the Program.

#### **LESSONS LEARNED:**

During implementation of the 2022 Program, the Steering Committee was comprised of a large number of stakeholders and tried to be an inclusive body. The makeup of the Steering Committee itself evolved organically, with no set structures in place defining the Committee or guiding who may join. Allowing for this more flexible and evolutionary process eventually proved to be successful in obtaining a diverse representation of perspectives.

Over multiple months of meeting, and as the Program itself became more developed, the direction and mission of the Steering Committee gained clarity. One such key role that emerged was the importance in having Steering Committee members work with local constituent bases to help explain the Program's intent, answer questions, and encourage Program participation. Related to this direct community involvement was the importance and outward showing of support by local leaders on the Steering Committee demonstrating how local efforts can benefit the region as a whole. This role will continue to be important to retain local oversight and investment in the Program.

One key takeaway to address in future Program implementation is the issue of time dedication by Committee members. The creation and implementation of the Program took a significant amount of Committee time, and while it is anticipated that time commitment may reduce in future years, it is impossible to know when that will actually occur or how significant any reductions may be. The Program's time commitment is an important factor for the Committee to acknowledge and improve upon going forward, as this impacts not only who, but also how much a member may be able to participate in the Steering Committee. During the 2022 implementation, most members were able to participate due to the support of the stakeholder entities they represented on the Committee.

To improve efficacy of Steering Committee tasks, several sub-committees were established to work on specific issues and make recommendations to the full Committee to consider. This format should continue to be useful in future years.

The Steering Committee did not have direct access to Participants' reports or the tools to ensure compliance. Therefore, the Steering Committee can only have a medium confidence-level that the Program netted out in terms of water usage and on the future salience of Program implementation. In any future implementation years, the Steering Committee aims to improve this confidence level significantly.

#### **RECOMMENDATIONS:**

• It is anticipated that in the short-term, Steering Committee members will either need to plan to donate their personal time to the process and/or stakeholder interests will continue to support the time costs of Steering Committee member participation. As the Committee settles into its role and obtains Program specific funding, the Committee should work to further refine and reduce the time commitment needs and help encourage broader stakeholder participation.

- To improve the Committee's internal administrative processes, it is recommended that the Committee continue to discuss how to best improve things like: meeting notices, agendas, minutes, email communications, etc. as these were all handled by the State Water Board provided facilitator. Things for the Committee to consider going forward are:
  - Explore and identify sources of future funding. Additional resources would not only assist in streamlining time commitments from Steering Committee members, but would also help improve communications within the Committee, Program participants, and the public.
  - The establishment of a joint resource for document retention (e.g., meeting agenda, meeting notes, important resources, and Steering Committee decisions) to help maintain internal organization, but to also ensure all members on Committee have access to the same resources and a record of past decisions.
  - Adopt standing committees (i.e. funding or administrative committees) to assist in various administrative processes.
  - Further refine communications and Program requirements by creating an easy to
    use, online interface for participant enrollment and required reporting. This would
    assist in determining Program compliance more efficiently so that enforcement
    actions can be determined and taken timelier.
  - o Develop a mechanism to validate Participant reporting and aggregate that data to ensure Program compliance, success, and future salience.

#### **Creating the Voluntary Water Sharing Agreement**

On April 21, 2021, Governor Gavin Newsom declared a State of Emergency in Mendocino and Sonoma Counties due to drought conditions in the Russian River Watershed ("April 2021 Proclamation"). Following the April 2021 Proclamation, the State Water Board adopted an emergency regulation for the Russian River Watershed on June 15, 2021 that curtailed all but two water right holders on the Upper Russian River.

During development of the 2021 Regulation, State Water Board staff convened weekly meetings to address questions, provide updates, and eventually, provide a means for supporting local discussions around a possible voluntary agreement. These discussions culminated in a section being added to the emergency regulation in 2022 that provided a pathway for a locally developed program.

On May 10, 2022, the State Water Board readopted the Russian River Drought Emergency Regulation for the 2022–2023 water year ("the Regulation").

Section 877.4 of the readopted Regulation authorized Russian River water users to propose a voluntary water sharing agreement that, if approved by the State Water Board, could operate as an authorized exception to curtailment for signatories diverting in accordance with that agreement.

Section 877.4 further provided that approval of a voluntary water sharing agreement requires that the State Water Board find (a) that the agreement will not adversely affect the availability of

water for non-signatories, and (b) that the proposed agreement includes support from prospective signatories in both Mendocino and Sonoma Counties. Section 877.4, subdivision (c), authorizes the Deputy Director for the Division of Water Rights ("Deputy Director") to notify signatories that the exception to curtailment no longer applies if, at any time after State Water Board approval of the voluntary water sharing agreement, stream gage data and other relevant information indicate that the agreement is adversely affecting or threatens to adversely affect the availability of water for non-signatories.

Section 877.2 of the Regulation described the process, data, and calculations of water availability that will be relied upon by the Deputy Director to curtail water rights pursuant to the Regulation. The methodology for establishing water available to water right holders is further described in the Finding of Emergency supporting the Regulation. The methodology involves applying a Water Rights Allocation Tool ("Allocation Tool") to match water rights demands with available supplies based on the location and priority of water rights associated with those demands.

In effect, water rights demands are based on monthly average values reported through annual reports of water diversion and use for the calendar years 2017, 2018, and 2019. These average demands represent the most recent non-drought years. Board staff applied the analyses described in the Water Rights Demand Data Analysis Methodology to improve the quality of the reported data and ensure locations of diversions were accurate.

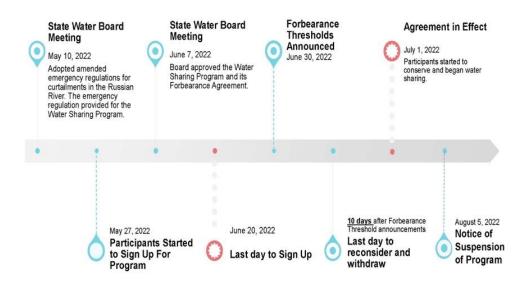
Ultimately, the continued discussions amongst Russian River watershed stakeholders resulted in the Upper Russian River Voluntary Water Sharing Program. The Program provides an adaptive local alternative to curtailment through managing water demand with limited water supply.

Russian River stakeholders have developed the Program as a locally driven approach for managing water demand under dry climate conditions. Given uncertainties regarding potential curtailments of water right holders in the Watershed, there is a desire from water users in the Watershed to achieve, where possible, an organized effort to conserve water in the Watershed to ensure that no participant is unable to divert sufficient water to satisfy minimum needs through the current water year; and to avoid curtailments imposed due to reduced water supplies. Participation in the Program is a voluntary effort to balance rights to water under existing law with the various needs for water in the Watershed.

The Program is designed to realize the sharing of water supplies by more senior water right holders that continue to have water available under their water rights with those that no longer do. Enrollment in the 2022 Program was made available to all water right holders (i.e. both riparian and appropriative water right holders) in the Upper Russian River Watershed. The Program includes a series of recitals establishing the basis for the agreement and identifies a series of commitments that signatories must undertake to participate in the Program. These commitments include water use reductions, described in the Program as Forbearance Thresholds. These Forbearance Thresholds provide the basis for calculating the amounts of water available to Program signatories and the extent to which that available water is being shared.

After months of planning, the vision finally came to fruition in 2022 and the Voluntary Water Sharing Program was implemented as outlined in the timeline below. Participants in the Program were required to submit monthly water use reports by the 10<sup>th</sup> of each following month of implementation. The Program ran through the month of July and part of August 2022.

### **Voluntary Program Implementation Timeline**



<u>Image 2.</u> Timeline of 2022 Program implementation starting with the adoption of emergency regulations in May 2022.

#### **LESSONS LEARNED:**

Through the Steering Committee's collaborative efforts, the Committee learned that it is possible, and often more beneficial, to work with our fellow community members and to think outside of the box for more equitable water solutions. While we still have a long way to go towards achieving long-term sustainability for all beneficial uses within our Watershed, the Steering Committee has demonstrated over the last two years that it is possible to work together to find solutions that can work for all of us. As climate change continues to negatively impact the region's local water supplies via less predictable annual precipitation rates, increased evapotranspiration rates, and reduced soil moisture content, the Russian River community is going to have to continually work to find a sustainable balance between water use and water availability. The more collaboratively this can be done between the various water users and stakeholder interests, the better.

Part of the reason we largely succeeded in coming up with a program that worked for 2022 was the involvement of an experienced facilitator provided by the State Water Board who assisted the Steering Committee in focusing on difficult issues, helped guide the Committee to agreement on issues, and kept the process on a feasible timeline. Having a facilitator also helped to ensure the meetings were a safe space to bring up issues that might otherwise be more contentious points outside of this venue.

It is important to note that the 2022 Program was adopted and formally implemented through 2022 State Emergency Regulation and was limited to the Upper Russian River. These Emergency Regulations will not be in place for all dry years, despite there still being a potential

need for the Program. There have also been several conversations about expanding this Program throughout other areas of the watershed and what that may look like. These two issues both require additional research and consideration.

**RECOMMENDATIONS:** Based on this year's experiences, the Steering Committee makes the following recommendations:

- Not all years will have an Emergency Declaration in place, which means that the Steering Committee must continue to research whether and how it may be able to operate in nonemergency years. Identifying ways to be more proactive in the face of water shortages by reducing our water use may help improve conservation of storage pools and help defer the need for curtailments.
  - o Consult with the State Water Board on what potential options may look like.
- The Steering Committee should continue to research what an expanded Program into the Lower Russian River Watershed may look like.

#### **Supply, Demand & Threshold Determinations**

The fundamental basis of the Program is that more senior water right holders forbear diverting water they are otherwise legally entitled to divert so that junior water right holders may divert water they would otherwise not be legally entitled to divert due. To get to a functioning program though, a better understanding of what water was available and for what uses was essential.<sup>2</sup> The curtailments in 2021 made it clear that the State Water Board lacked the necessary data to curtail water right holders in order of priority, to ensure compliance with emergency regulations, and to ensure efficient management of the Russian River Watershed. Initial discussions, in Summer of 2021 and looking toward 2022, helped further illuminate the need for increased and improved data on both the supply and demand sides.

On the supply side, the State Water Board utilized its Water Rights Allocation Tool ("WRAT") for the 2022 Program. This model better showed what water was available in the system than the method used in 2021. Through the WRAT, the Steering Committee and the State Water Board were better able to identify and distinguish between natural flows, imported water (e.g., Potter Valley Project flows) and stored water (e.g., stored water releases from Lake Mendocino).

On the demand side, the group took a deep look at eWRIMS, pulling information from reports filed with the State Water Board by water right holders in the Upper Russian River. This was to both help identify the potential population of participants and to identify demand. With the State Water Board's assistance, the Steering Committee was able to create classes of water right holders from the total population based on the type of right (i.e. riparian or appropriator) and priority of right. Through successive iterations, the Steering Committee, with extensive help from the State Water Board, was able to refine these classes to best approximate concentrations of demand by year.

<sup>&</sup>lt;sup>2</sup> The Steering Committee is continually working to improve this understanding.

The result was the identification of ten classes of potential Participants in the Upper Russian River Watershed:

- Riparians
- Pre-1914 Appropriators
- 1914–1949 Appropriators
- the Russian River Flood Control District (with a priority date of 1949)
- 1950–1952 Appropriators

- 1953–1954 Appropriators
- 1955–1956 Appropriators
- 1957–1959 Appropriators
- 1960–1970 Appropriators
- 1971–2022 Appropriators

To determine demand, the Steering Committee decided to use an average of the reported use between 2017 and 2019. The Steering Committee believed that averaging three years of reported use would provide the most useful approximation of what actual demand may be, as opposed to using the face value of the right itself.

Once the Steering Committee understood how much of what type of water may be available to these respective classes and the demand of each of these classes, it explored options for sharing that water across the community of potential Participants. While several options were discussed, with a variety of permutations, two primary options were considered. The first option was that all water right holders be subjected to an equal reduction in diversion. This option was suggested, and largely favored, by more junior appropriators and stakeholder groups. The second option was more of a tiered approach with senior water right holders asked to reduce less than junior water right holders. This option had the State Water Board calculate the necessary monthly reductions for each participant class while still ensuring sufficient water was forfeited to make available for more junior water right holder participants. This second option is the one that was ultimately chosen for the 2022 Program year.

These reductions were ultimately defined as "Forbearance Thresholds" in the Agreement, though this term is a bit of a misnomer as applied to junior water right holders who would otherwise be curtailed and not directly forbearing for Program benefit. Two challenges then presented themselves:

First, the Upper Russian River does not have a significant number of very senior water right holders. Both in terms of pure number of rights, but also as a proportion of the total water right demand on the system. Therefore, the Steering Committee had to analyze whether it was possible for those few senior diverters to forbear water diversions sufficient to meet junior needs above minimum health and safety (which the Emergency Regulations and resulting curtailment provided for regardless).

Second, assuming and eventually discovering it was so possible, what was the appropriate forbearance threshold for each respective class of water right holder in order to provide enough water for the Program to "work." Part of the Steering Committee's intent with the Water Sharing Program was to provide water right holders with more water than just minimum health and safety needs. If that could be accomplished, then the Steering Committee believed the 2022 Program "worked."

To address these challenges, and to adapt to the changing amount of supply through the year, the Program anticipated the need to make monthly Forbearance Threshold determinations and

subsequent announcements to Program participants. This proved more challenging than initially envisioned for reasons discussed elsewhere in this report.

#### **LESSONS LEARNED:**

- State Water Board staff were essential to success.
- Through careful analysis of water rights on eWRIMS, the Steering Committee was able to create more refined classes of Participants, grouping those classes in clusters.
- Clustering water right holders into classes balanced efficiency and the priority system of California water law.
- Changes to the Potter Valley Project flows in 2022 reduced the Program's ability to be fully implemented.
- Determining Forbearance Thresholds such that Program needs and California Water Rights law were both satisfied was a complicated task.
- WRAT proved to be an effective tool in comparison to previous methods in identifying available water, though improvements are still needed.
- Determining monthly Forbearance Thresholds in time to implement proved challenging for two primary reasons: 1. Hydrology continued to quickly change from late Spring into Summer; and 2. Staff at the State Water Board were in a time crunch to receive, digest, and interpret the hydrological data and apply that data to the Forbearance Thresholds.

#### **RECOMMENDATIONS:**

- Continue to improve understanding of available waters in the Upper Russian River Watershed. In particular, surface and groundwater interactions, losses, and accretions.
- Better understand what, if any, other regimes should be considered as part of the demand-supply equation. Including, but not limited to, the Water Rights Decision-1030's 10,000 af reservation for Sonoma County and the pre-1949 protection for uses of water in Mendocino County, each of which is discussed further elsewhere in this report.
- Encourage and support the continued expansion of State Water Board staff and resources via the Water Rights Fund to enable quicker anticipation of hydrology and available water determinations.
- Improve access to real-time data on surface water flows throughout the system; such real-time data can be used not only to validate and calibrate existing models, but enables quicker determination of future Forbearance Thresholds in any future adopted Program iterations.

#### **Communications**

Communication throughout the development, and eventually implementation, of the Program has been key to reaching water right holders throughout the Upper Russian River, as well as key stakeholder groups. To date, these communications have largely included workshops and corresponding notices, monthly threshold determinations, reporting reminders, and survey requests. With so many different users and interests in the Program it is important that

communications are clear and effective. Additional details on some of these communications are below.

Through the end of 2022 and for the foreseeable future, the Steering Committee will continue to utilize the State Water Board's Russian River Drought LYRIS service for communications. The Steering Committee has also been coordinating with State Water Board staff to maintain the Russian River Drought webpage with relevant documents, threshold listings, and other key information. This is for practical reasons right now as the Program does not yet have a funding source to help facilitate alternative modes of communication.

In addition to the communication modes directly facilitated by the State Water Board, several Steering Committee members have taken it upon themselves to share communications within their own networks, and set up presentations for various community, regional, and state groups. These methods in particular have been helpful in sharing the Program beyond the Russian River Watershed, and in clarifying misconceptions that may exist.

Considering the limited availability of resources for this year's communications, the Program was still able to reach and enroll 135 water rights with a wide range of water right seniority. Hopefully through review of lessons learned and implementation of our recommendations we will be able to continue growing this number until the Program is in place Watershed wide, and we are managing our limited water resources more effectively, sustainably, and equitably. Improving our communications and establishing a single voice for the Program as noted below will help us achieve this goal.

#### **Monthly Update Meetings**

As part of the Program, monthly meetings were held for participants and other interested parties to provide current updates on Program components and related Upper Russian River water issues. The topics and agendas for these monthly meetings were established through conversations with the Program Steering Committee and State Water Board staff. Notices for these monthly meetings were sent out via the State Water Board LYRIS system.

The first monthly virtual meeting was held on July 11, 2022, from 3:30-4:30 PM. Topics included an overview of the Program operation and conservation percentage (forbearance threshold) calculations, upcoming unknowns with the potential for a Pottery Valley Project flow variance reducing expected water diversions to the Russian River, a review of monthly Program reporting requirements, a discussion about the Program Steering Committee, and other general reminders.

The second monthly virtual meeting was held on August 8, 2022, from 3:30-4:30 PM. Topics included a review of the Program's reporting website, a reminder that July water use data for the Program was due by August 10<sup>th</sup>, and how Program forbearance thresholds may change depending on when FERC approved a variance reducing flows from the Potter Valley Project to the East Fork of the Russian River. It was also mentioned that the approval of a variance will very likely cause the Program to be suspended until supply conditions improve.

The third monthly virtual meeting was held on September 12, 2022, 3:30-4:30 PM. Topics included a review of the July water use reporting process with requests for feedback on the process, a reminder that any water use through the Program in August was required to be

reported by September 10<sup>th</sup>, a review of the Potter Valley Project variance, and updates on the current Program suspension status.

No meeting was held in October as there were no significant updates to provide.

The fourth and final virtual meeting was held on November 7, 2022, 3:30-4:30 PM. Topics included an update on the annual implementation report compilation by the Steering Committee that is due to the State Water Board by January 31, 2023, an introduction to a voluntary survey for Program participants and interested parties to submit to provide feedback on the 2022 Program, an update on the Potter Valley Project variance, and a basic review of conceptual timelines for potential implementation of the Program in 2023.

#### **Program Operational Notices**

Once enrollment closed, State Water Board staff worked to look at the participating water rights to determine overall water demand for the Program. The demand, in comparison to supply, was the basis of the calculations for the determination of the monthly forbearance thresholds. Once the thresholds were determined for the month of July 2022, these thresholds were posted to the Program website<sup>3</sup> on June 30, 2022, and an email notification was also sent out via the State Water Board LYRIS program.

With the announcement of the forbearance thresholds, Program participants were then allowed to proceed with continued water use within their assigned limit for each participating water right for the month of July.

On July 22, 2022, Program participants were notified of the August forbearance thresholds via a LYRIS notification. However, on July 27, 2022, FERC approved the PG&E request for a flow variance for the operation of the Potter Valley Project that significantly reduced the water supply availability in the Upper Russian River and for the Program.

The water supply change led to a second LYRIS notice being sent out on August 5, 2022. The notice stated that given the insufficient supplies available for sharing as indicated by stream gage data from the USGS gage near Calpella, the Division of Water Rights determined that continued diversions under the Program threatened to adversely affect the availability of water for non-participants. Accordingly, exceptions to curtailment under the Program were temporarily suspended.

It was also stated that within 14 days of the notice (the timeline specified in the emergency regulation), Program participants must reduce or cease diversions in accordance with the curtailment status for their right, as identified on the Curtailment Status List posted on the Russian River Drought Response webpage.<sup>4</sup> In addition, the Division of Water Rights would continue to monitor conditions and assess whether curtailment exceptions for Program participants could resume.

On August 9, 2022, the previously released August threshold numbers were updated on the Program website. There was no LYRIS notice sent out for this change, which did lead to confusion for Program participants who were not otherwise aware of this update.

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<sup>&</sup>lt;sup>3</sup> https://www.waterboards.ca.gov/drought/russian river/voluntary program.html

<sup>&</sup>lt;sup>4</sup> https://www.waterboards.ca.gov/drought/russian\_river/

Program participants ceased water use under the Program by August 19<sup>th</sup>, 14 days after the August 5<sup>th</sup> notice, or sooner. Additional LYRIS notices were sent out to Program participants and interested parties in the months following the suspension to invite participation in the ongoing monthly Program update meetings.

#### LESSONS LEARNED:

The Program is in its inaugural state, and both the State Water Board and Steering Committee are learning on the go. As all parties learn more about what works and doesn't work, communication efforts will naturally become more cohesive and more frequent. Until we get there, the Steering Committee is aware of several instances where communications could have been clearer and timelier. In some instances though, circumstances were out of the Steering Committee's control.

One example of this is the Order issued by FERC approving PG&Es flow variance request to reduce Eel River diversions and minimum instream flow requirements in the East Fork Russian River via the Potter Valley Project. While we knew it was coming in some form and could guess what it would look like based on previous years, we did not know on what kind of timeline or what the exact parameters of it would be. Unfortunately, the inability to prepare for the variance conditions led to the Program being suspended before being fully tested. While on hold, curtailments were reinstated in accordance with Program terms. The communication of thresholds and notices about these changes were all done in quick succession and led to some confusion from participants.

While the Steering Committee is working internally to improve clarity on roles, the Committee is also aware that there is always room to expand upon and improve communications within the community. This recognition was further enforced by survey responses that indicated there was still quite a bit of confusion amongst participants, non-participants, and stakeholder groups regarding the Program, what it does, and how it fits within the existing regulatory system.

**RECOMMENDATIONS:** Based on this year's experiences, the Steering Committee makes the following recommendations:

- Adopt a standardized logo and branding materials for presentations and non-State Water Board facilitated communications. This will assist in immediate recognition of Program materials and provide consistency in overall representation of the Program, such that communications are not as easily missed and all presenters are aligned in messaging.
- Coordinate with and expand relationships with agencies working on the Potter Valley Project (e.g., FERC, PG&E, etc.) where possible so there is more lead time to respond to diversion flow changes in the Russian River.
- As the Potter Valley Project license surrender and decommissioning process continues to evolve, and diversion amounts and timing change, it would be prudent to be more proactive in water supply analysis such that the Program is set up for reduced flows and may later receive an unexpected boost, as opposed to not being prepared for those reductions and having to put the Program on hold indefinitely.

- Increase the number of available workshops and the different topics offered at each. Increase the number of communications around each of these events. This will provide further clarity to Program participants.
- Press release/statement prior to the 2023 Program enrollment process.
  - o Consider releasing in conjunction with a press briefing.
- Conduct education workshops on key issues relating to and impacting the need for the Program to help inform the community and watershed stakeholders.
  - Areas in need of further clarity and education for participants include: determination and use of the 10,000 acre-feet reservation pool in Lake Mendocino; what rules and/or regulations apply to non-participants (i.e. curtailments); how water transfers may or may not be done within the Program; methodology around determining supply and demand; Program reporting processes; and how the Program benefits users.
  - o Improve clarity for water rights reporting for water used/transferred under the Program.
  - o Hold a meeting to present Implementation Report findings and receive feedback.

#### **B.** Program Implementation

#### 2022 Program Enrollment

#### **Parameters & Process**

Based on the timeline listed above, individual diverters in the Upper Russian River Watershed voluntarily determined if they wanted to enroll their water right(s) to participate in the Program. To keep the enrollment process simplified, State Water Board staff worked with stakeholders to develop an online form, the "Voluntary Water Sharing Agreement Form," that allowed for the enrollment of single or multiple water rights on one form. This was appreciated by enrollees, however there was some confusion about which water right login information was needed to access the enrollment forms. Further refinement of the enrollment process is something to consider for future implementation of the Program.

The enrollment form introduced the Program and included a website link to the text of the Upper Russian River water sharing agreement. The text specifically highlighted sections related to forbearance thresholds, the Program fact sheet, instructions for navigating the form, and State Water Board contact information for assistance if needed.

The next section included the ability to enroll up to ten water rights by entering application or statement IDs. Alternative water sources were also required to be listed for each participating water right if applicable. Finally, participants were requested to enter an email address to be used to contact them if needed.

If participants chose to reduce their participating water right diversions more than required in the forbearance thresholds for the purposes of 1) to facilitate another participant meeting their forbearance thresholds, or 2) to increase the forbearance percentage on one participating water

right to provide additional water to another participating water right under the same ownership, then a separate form titled, "Voluntary Sharing Agreement-Exhibit C Transfers" was required to be submitted following the submittal of the initial enrollment form.

The enrollment form also required the water right holder, or agent, to sign the form to warrant that the individual submitting the form has read and commits to the terms within the Upper Russian River Voluntary Water Sharing Agreement. Finally, there was a required check box that certified, under penalty of perjury, that all the information entered on the form was true and correct to the best knowledge of the submitter.

Following the submittal of the enrollment form, participating water right holders had the option to submit the additional form, Exhibit C Transfers, as described above. This form once again introduced the Program with the same background information as included on the enrollment form. For water rights that were enrolled for additional water sharing/transfer considerations, it was required to identify which rights would have forbearance thresholds reduced and which rights would be receiving the benefit of this additional reduction if applicable. The receiving box could be left blank if the additional reduction was going for the benefit of all other Program participants.

The months of July through October were listed, and the applicant was required to submit the amount of water in acre feet for each month that would be used for sharing/transfer. Since Exhibit C was required to be submitted prior to the first forbearance thresholds being announced, water right holders had to look at their water use from 2017-2019 by month and determine what their average reported use was. This information could then be used by the water right holder to calculate rough sharing/transfer numbers to submit on Exhibit C. Due to the need for clarification, the form also included an additional comment box so that further explanation could be provided. Exhibit C also had the same signature and check box requirements as described for the initial enrollment form.

#### **LESSONS LEARNED:**

Encouraging enrollment in the Program was a challenge at times due to misunderstandings and misconceptions in what the Program was doing, as well as the Committee's limited ability to condense complex forms into a more digestible method. In particular, it was a challenge explaining how the Exhibit C transfer form options worked prior to the "Forbearance Thresholds" actually being finalized. This is because several participants were hesitant to enroll without first having a better idea of what water may be available through the Program on a monthly basis. Then, for those that were interested in using Exhibit C to transfer water allocations, there was an extra level of assistance required to explain the analysis needed to report water use from 2017–2019, and determine what percentage of this use the diverter wanted to transfer to the general benefit of the Program or to another specific right. In spite of some of these confusions, participants strongly supported the efficient ability to transfer water under the Program and assist with improving water access as needed.

Despite these initial hiccups, Program participants did appreciate the ability to use one enrollment form for multiple water rights versus having to enroll each individual right with a separate form. However, there was still some confusion with which water right login should be selected to access the form for reporting participation of multiple rights.

**RECOMMENDATIONS:** Based on this year's experiences, the Steering Committee makes the following recommendations:

- Going forward, the Program should continue to be open to all water right holders (i.e. riparian and appropriative right holders) in the Upper Russian River (i.e. the mainstem and tributaries). The Steering Committee should continue to engage with the State Water Board staff to understand and refine the supply/demand assumptions that are relevant to the Program models so that this information can be relayed to potential participants on the mainstem and tributaries.
- Prior to the start of 2023 enrollment, it would be beneficial to have members of the Steering Committee confer with potential participants on how to improve and clarify the enrollment processes.
- Start the outreach and enrollment processes as early as feasible to ensure the Committee is not inadvertently hindering maximum participation, and that there is sufficient time available to answer clarifying questions and assist with enrollment.
- Finalize any Program changes as early as possible so that the Steering Committee can begin outreach and host educational workshops for the community ahead of the enrollment period opening, as well as during the enrollment process.

#### **Numbers**

As indicated in the timeline above, enrollment for the Program began on May 27, 2022. This early enrollment period, a little over a week before the State Water Board approved the Program, was implemented so that the State Water Board members could see that there was valid interest in the Program. Following the approval of the Program by the State Water Board on June 7<sup>th</sup> 2022, additional outreach efforts were made to water right holders in the Upper Russian River Watershed to encourage participation and enrollment prior to June 20, 2022.

At the close of the enrollment period, which was less than a month long, a total of 135 water rights were enrolled into the Program. The makeup of these 135 water rights can be seen below as well as within the Appendix B/C Calculations for the Program:<sup>5</sup>

- 43 were riparian claims of right
- 4 were pre-1914 water rights
- 16 were pre-1949 +1949 appropriative water rights
- 1 was the Mendocino County Russian River Flood Control and Water Conservation Improvement District 1949 right
- 13 were 1950-1952 appropriative water rights
- 9 were 1953-1954 appropriative water rights
- 5 were 1955-1956 appropriative water rights
- 6 were 1957-1959 appropriative water rights
- 17 were 1960-1970 appropriative water rights
- 21 were 1971-present appropriative water rights

<sup>&</sup>lt;sup>5</sup> https://www.waterboards.ca.gov/drought/russian river/docs/2022/20220805-exhibit-bc-calculations.xlsx

The 135 rights enrolled in the program were representative of 52 water right holders.

On July 22, 2022, the State Water Board LYRIS system notification stated that there was one withdrawal from the program that occurred within the ten-day withdrawal period.

Since one of the Program goals was to balance rights to water under existing law (priority of right) with the various needs for water in the Upper Russian River Watershed during a time of limited water supply, the water right priority periods listed above were selected to determine the water supply and demand analysis for the Program as well as monthly forbearance thresholds.

#### **LESSONS LEARNED:**

Despite the limited timeline, conditions, and opportunity for the Steering Committee to educate and enroll participants in the 2022 Program being less than ideal, the Program was still able to enroll 42% of water right holders' water use in the Upper Russian River Watershed. This was a huge feat and goes to the willingness of water right holders to come together in a collaborative manner to assist others in the community.

With extended implementation of the Program (beyond the one month in 2022), there is an increased likelihood of demonstrating Programmatic value to participating users via presentation of a more proactive and collaborative solution than standard curtailment actions.

**RECOMMENDATIONS:** Based on this year's experiences, the Steering Committee makes the following recommendations:

- Begin implementation of Report recommendations to continue increasing awareness and confidence in the Program.
- Continue to explore possible modes of Program authorization so that implementation is not delayed more than necessary and the Program can begin sign ups as soon as a water shortage is determined.

### Russian River VSA Enrollees (Water Right Priority Class)



<u>Image 3.</u> Map showing location and type of all water rights enrolled in the 2022 Program. Enrollees were across both Mendocino and Sonoma Counties, and included all water right types and years.

#### **Modes of Participant Implementation**

Similar to other conservation-based programs, this Program relied on participants to implement necessary measures to achieve their assigned thresholds—the Program did not prescribe certain actions to be taken by participants. As a result, there was some variability in how each use type chose to reduce their use to meet their forbearance thresholds. To better understand what methods were used by participants the Steering Committee dedicated survey questions to this exact issue.

For example, the below image was asked of Municipal and Domestic User respondents. A similar question was also asked of Agricultural User respondents, but with answer choices that were more relevant to agriculture practices.

14. What methods did you use to achieve your allocated thresholds? (select all that apply)
Reduce water use demands by increasing conservation requirements
Spending on new technology
Use and/or timing changes to increase efficiency and reduce evaporation
Recycled water expansion
Other

Through this survey, as well as various communications with participants, the Committee learned that Program participants reduced their water use by the below methods, amongst other methods.

#### **Municipal & Domestic Users**

- Reduce water use demands by increasing conservation requirements
- Expanding use of recycled waters
- Directing funding towards new technologies meant to help improve efficiency
- Relying on supplemental water sources to help compensate for losses
- Behavioral (e.g., use and/or timing) changes to increase efficiency and reduce evaporation

#### **Agricultural Users**

- Increasing water conservation
- Expanding use of recycled waters
- Directing funding towards new technologies meant to help improve efficiency
- Relying on supplemental water sources to help compensate for losses
- Behavioral (e.g., use and/or timing) changes to increase efficiency and reduce evaporation
- Fallowing and/or crop thinning

- Increasing use of drip irrigation
- Educating vineyard management companies to be more mindful of conservation and looking at alternative strategies

Through the survey and participant communications, the Committee also learned that many water right holders supplemented their surface water rights with other sources to help achieve their thresholds. These sources included:

#### **Municipal & Domestic Users**

- Expanded use of recycled waters
- Storage ponds
- Reported and used a portion of the available 10,000 acre-foot reservation stored in Lake Mendocino for qualified Sonoma County water users
- Increased groundwater pumping
- Relied on contract water from the Russian River Flood Control and Water Conservation Improvement District

#### **Agricultural Users**

- Increased use of recycled waters
- Relied on contract water from the Russian River Flood Control and Water Conservation Improvement District
- Reported and used a portion of the available 10,000 acre-foot reservation stored in Lake Mendocino for qualified Sonoma County water users
- Increased groundwater pumping
- Water hauling
- Other water rights that were not impacted by curtailment
- Storage ponds

#### **LESSONS LEARNED:**

Though this Program is geared towards surface water rights and surface water use, it is extremely important to view this Program as a piece of the whole to fully understand available resources and potential impacts elsewhere in the Watershed. These impacts are particularly important to understand within our Watershed because there are no alternative water supplies, like state and federal water projects or snowpack, to fall back on. We want the Program to be a success, but we must be careful that it is not causing even more harm elsewhere—to our other available water resources, to other water users within our watershed, or to our environment.

There was a wide array of conservation measures taken by Program participants and it was great to see the collective efforts taken by participants to help others in their community that would have otherwise been under curtailment. That being said, it would be helpful to know what measures were most effective in reducing water demands and why participants chose to implement certain measures over others so that the Steering Committee can better assist others that are thinking about joining the Program, but unsure on where they can further reduce

demands. Times of need frequently result in new innovative solutions that could be worth sharing with others in the Program such that even more water can be made available to meet all the water uses in our Watershed.

In addition to conservation measures meant to reduce demands, many participants also turned to alternative water sources to help close the gaps in their available supply. Unfortunately, the Steering Committee does not know the amount or type of alternative water used to help supplement surface water supplies under the Program in most instances. This means that the Committee is unfortunately unable to fully understand this Program as a piece to our Watershed's overall water management. The Steering Committee is also unable to fully understand the degree of water conserved in this Program. For instance, it is known that direct surface water diversions were reduced, but was that reduction in use satisfied elsewhere by stored surface waters, increased groundwater pumping, or was it done by further reducing overall demands via conservation measures? Or for those participants that would have otherwise been under curtailment, did the sharing of surface waters actually help them reduce reliance on one of those alternative sources? As the Program progresses, this information will be important to learn because we do not want to cause harm elsewhere and it will help the Steering Committee better understand how to evolve the Program going forward.

This Program is meant to assist water users and provide a collaborative way to work through our region's climate change impacts; and we want the Program to be a success. To be a success, the Steering Committee must have more information to better inform the Program's evolution and role within the Watershed.

**RECOMMENDATIONS:** Based on this year's experiences, the Steering Committee makes the following recommendations:

- Improve the reporting process.
  - To capture more information on conservation and other measures taken to meet threshold determinations.
  - o To capture more information on utilization of alternative water sources.
- Establish a forum or other community resource base for participants to communicate with each other and share conservation ideas with each other.
- Increase emphasis on available conservation measures as a way to achieve threshold determinations, instead of merely supplementing with alternative water resources.
  - o For example, reconnecting and restoring historical floodplains is known to assist in groundwater recharge and helps increase soil moisture, delaying irrigation needs. This type of project helps reduce water demands later in the season, while restoring key environmental functions and overall health.
  - Another example is scientifically based groundwater recharge projects and State recognition of the importance of expediting certain processes to get approved projects implemented in a timely manner.
  - o Incentives to implement more conservation measures are important to reducing water demands throughout the watershed; however, it is important that any

incentives result in a measurable and quantifiable benefit without causing harm elsewhere.

#### **Realized Benefits of Program Implementation**

Through the survey and participant communications, the Steering Committee also learned of several ways that the Program may or may not have benefited participants in 2022. Some of these benefits included:

#### **Municipal & Domestic Users**

- Some participants were able to reduce conservation requirements for their users and relieve use pressures
- Improved water availability for fire suppression purposes
- Improved water availability for community and regional services
- Transferring benefits of additional supply to the consumer by lifting some conservation requirements

#### **Agricultural Users**

- Increased ability to bring crops to market
- Fewer impacts to harvest size compared to past drought and curtailment years
- Increased flexibility to transfer water between water rights
- Able to retain normal staffing needs (e.g., because harvest size was not as impacted, did not have to reduce staffing needs)

#### LESSONS LEARNED & RECOMMENDATIONS:

Despite these benefits, it is also important to note that not all participants and use types realized benefits under the 2022 Program. While this is likely at least partly due to the short 2022 Program duration, it is something to continue evaluating going forward. From the survey and participant communications, the Steering Committee has initially observed fewer benefits to municipal and domestic users, as well as some possible variations across crop type. Though these observations are not fully representative of all participants they are still potential issues that will require further observation. The Steering Committee also does not have any information on how the Program may have impacted our environmental resources—this informational gap is addressed further below.

Some possible reasons as to why benefits may not have been realized for certain participants include the short duration of the Program itself, varying crop schedules, timing and seasonality of the 2022 Program, and the need for more robust Programmatic measures. As the Program continues to evolve, the Steering Committee hopes to address many of these outstanding issues so that additional benefits are realized.

It is recommended that the Steering Committee prepare a document with a range of benefits identified they hope to observe via Program implementation and then use that as a way to measure progress each year. These benefits could include a range of things: curtailment deferment and achieving regular harvest size to more equitable dispersion of conservation requirements and an option to donate water to environmental flows.

#### **Potter Valley Project Variance and Effects on Program Implementation**

Based on the 2022 water year and inflows into Lake Pillsbury, PVP operational requirements were identified as "normal" despite the ongoing drought impacts in the Eel River Watershed. To address this discrepancy PG&E filed an operational variance request with FERC on May 13<sup>th</sup> that included a request to reduce water transfers into the Russian River. Ultimately this request was approved by FERC on July 27<sup>th</sup> and went into effect immediately, reducing PVP diversions from 75cfs to 5cfs, along with other measures, to ensure necessary water storage in Lake Pillsbury would be available for endangered Eel River fisheries.

While the Steering Committee and State Water Board staff were aware a variance would eventually be put in place, there was little indication provided by PG&E or FERC on what the final variance would look like, timing of the variance filing, or when it would go into effect. Multiple attempts were made through available avenues to get more information in advance of the final adoption to no avail. As a result, when the State Water Board adopted the emergency regulation and Program structure on May 10<sup>th</sup> certain water supply assumptions had to be made. The Steering Committee recognized reduced PVP transfers would affect the Program's viability, but felt that the potential benefits, while only temporary, were sufficient justification to proceed with implementation.

With the Program scheduled to go to the State Water Board for final approval on June 7<sup>th</sup> 2022, the Steering Committee planned to move forward with implementation knowing that the FERC approval of the variance request could lead to significant reductions in water supply availability and the need to reevaluate the ability to continue to 2022 Program Implementation. At that point in time, FERC had still not approved PG&E's variance request so the flows coming into the Russian River were increased from 35 cfs to 75 cfs starting May 15<sup>th</sup> 2022 in accordance with a "normal" water year designation.

On July 1<sup>st</sup> when the Program participants started to conserve and move forward with participation in the Program, the PVP was still diverting 75 CFS into the East Fork of the Russian River. On July 22<sup>nd</sup> 2022, Program participants were notified of the August forbearance thresholds via a LYRIS notification. However, FERC's approved variance was released five days later causing further reductions to water supply availability in the Upper Russian River.

With the release of the variance approval by FERC, the State Water Board sent out a LYRIS notice to update the overall curtailment status list for the Upper Russian River watershed on July 28th 2022, that would go into effect on August 1st 2022. On August 5th 2022, a separate LYRIS notice was sent out to Program participants stating that there were insufficient water supplies to continue the Program as indicated by stream gauge data collected at USGS Calpella without adversely affecting availability of water for non-participants. The notice further stated that within 14 days all Program participants would have to cease or reduce diversions based on the curtailment status of their water right(s) in accordance with the Program Agreement. This determination was consistent with the analyses described in Exhibit B to the Program which showed there was insufficient supply available for sharing within the range of minimum and maximum forbearance thresholds identified by the agreement. As such, the Program and the related exception to curtailment from participation were suspended until further notice.

On August 9<sup>th</sup> 2022, the previously released August threshold numbers were updated on the Program website. There was no LYRIS notice sent out for this change, which did lead to

confusion for Program participants who were not aware of this update. Additional LYRIS notices were sent out to Program participants and interested parties in the months following the Program suspension.

Since approval of the PVP variance on July 27<sup>th</sup> 2022, there were no changes in the amount of water diverted into the Russian River watershed. PG&E did hold several Drought Working Group (DWG) meetings in subsequent months with Russian River interests and State Water Board staff included. However, there was never any unanimous agreement by the DWG members to increase the flows in the Russian River above 5 cfs to the maximum 25 cfs allowed for in the approved variance language. With the flows remaining at 5 cfs, the Program remained in a state of suspension for the remainder of 2022.

#### LESSONS LEARNED & RECOMMENDATIONS:

When PG&E filed the variance, they did not consult all parties in the same manner they had done so previously, via the PVP Drought Working Group. While several Russian River interests submitted comments to FERC expressing concern over PG&Es lack of communication around the variance request, this was largely done to no avail.<sup>6</sup> As a result, the Program had to make certain assumptions regarding implementation and were limited in how informed certain decisions could be. Unfortunately, this was not to the Program's benefit and the Steering Committee ultimately had to suspend the Program due to insufficient water supplies. Going forward, the Committee agrees that efforts to increase communications with PG&E and FERC will be important for the Program to be able to respond to ongoing changes with PVP such that the Program can adapt instead of being placed on hold. As our region continues to face climate change impacts and as PVP progresses through its own evolution, it is important that the Program also look at more additional, proactive measures so that the Program is able to be implemented for longer periods of time going forward.

Further, despite being active for less than two months, the Program was able to offer Russian River diverters access to water that would otherwise be unavailable for diversion and demonstrated that community collaboration is actually feasible and to everyone's benefit.

#### C. Program Accountability

#### **Determining Program Compliance**

This section looks at how accountability has been built into the Program and how it can be improved upon. To ensure the Program is successful and receives buy-in from stakeholders, there must be accountability, transparency, and other methods of ensuring programmatic actions are occurring as intended. These methods are necessary to ensure water right holders, non-participants, and stakeholders have confidence in the Program and want to support continued investment.

It is recognized that there is a need to continue to further understand the various supplies and demands within the Upper Russian River system, and how they impact each other—especially as the Steering Committee continues to consider expansion to the entire Russian River Watershed. In 2022, the Steering Committee made efforts to learn more about one such nuance unique to our

<sup>&</sup>lt;sup>6</sup> Note: While some Steering Committee members also submitted comments on this issue, not all members joined in this effort.

Watershed—the 10,000 af stored water reservation in Lake Mendocino for Sonoma County water right holders. Before this effort, there was significant confusion around how this reservation operated and was to be utilized. Additional unknowns, like the future of the Potter Valley Project and real-time uses, remain outstanding for the Steering Committee to learn more about and adapt to in future years. Though there are several complexities in the system, the Program has the potential to add to the solution of improved water distribution within the watershed. As the region continues to move forward and adapt, the Steering Committee will continue learning how to best achieve the needs of all beneficial uses, while recognizing the limitations imposed by a voluntary program.

One of the most common responses from the "Stakeholder and Water Right Survey"—and across all respondent types—was that there needs to be increased transparency and improved modes of accountability to ensure that the Program is doing what it claims to be doing. This point has also been made in workshops, during regulatory comment periods, by Steering Committee members, and in conversations with various interests throughout the Watershed.

Most important to fulfilling these needs is to be able to verify water use within the Program. Program participants want to know that if they are giving up water to others in the Program it is going where it is supposed to; non-participants want to know they are not being adversely harmed by Program participants; beneficial water users want to ensure harm is not occurring elsewhere in our water system or within our environment; regulators want to know that the Program is complying with all applicable laws; and everyone wants to know the degree of benefits that stem from the Program itself. Plus, having more accurate and more regular use information will make determining thresholds significantly easier and more accurate which is to everyone's benefit.

That water demand information can then be used to determine Program compliance in a transparent manner. Being able to demonstrate clear compliance, Program benefits, or other impacts to the public is necessary to garner public support and ensure that the Program can expand throughout the Russian River Watershed and beyond to other watersheds. Without broad public support, the Program will struggle to evolve to its full potential.

All interested parties recognize that out-of-the-box solutions, like this Program, are helpful in times of increased periods of climate change induced drought and that it will require some balancing of interests. However, when working with such a precious and simultaneously finite resource like water, it is in everyone's best interest to have improved supply and demand information available. Further, in addition to assuring Program compliance and being able to determine more accurate thresholds in a timelier fashion, the Steering Committee's access to real-time usage will likely allow for improved Program enforcement. The Program language is very clear in that non-compliance will result in immediate exclusion from the Program and a return to curtailments based on seniority—participation in this Program is a privilege, not a right. To ensure this privilege is not abused requires the Steering Committee to be able to identify and refer enforcement needs to the State Water Board in a timely manner, so that effective enforcement actions can be taken as needed.

#### Accounting for Water Availability: Sonoma County's 10,000 acre-foot Reservation

D-1030 provides for a 10,000 acre-foot reservation for water in Lake Mendocino for post-1949 appropriative water right holders in Sonoma County. Accounting for the use of this 10,000 acrefoot reservation to date has proven difficult, and it became clear through the emergency

regulations and the Program that more information is needed to better understand and implement this provision for Sonoma County water right holders.

## Accounting for Water Availability: Mendocino County's Protection for Pre-1949 Water Uses

In D-1030, the State Water Board established protection for uses in Mendocino County occurring prior to 1949. This was done in recognition that Potter Valley Project imports had been occurring since around 1907 and that water users in the region have been operating in reliance on those additional diversions for several decades. According to D-1030, including Water Rights Order 74-30 and other documents, the State Water Board estimated these uses to be around 8,100 acrefeet a year and found that only water in surplus to these Pre-1949 uses was to be diverted to storage at Lake Mendocino. The 2022 Program did not account for this Pre-1949 protection and requires the Steering Committee to get a better understanding of the parameters of this provision, so that it can better understand whether and how to best incorporate it into future Program iterations.

#### **RECOMMENDATIONS:**

- The Steering Committee should look for funding opportunities to assist with closing informational gaps that are necessary to long-term Program success.
- The Steering Committee should work with the State Water Board staff to further refine understanding of the various surface water supplies in the Russian River system, how those supplies have been allocated for use, and how they are used throughout the year.
- The Steering Committee should look at ways to increase the amount of information (e.g., water use, timing of use, projected uses, conservation methods, alternative water sources, etc) collected from participants so that more informed decisions can be made.
- The Steering Committee should work to improve access to participant reports and participant information so that Committee members can follow-up with individual participants on an as needed basis.

#### INFORMATIONAL GAPS THAT NEED ADDRESSED:

- Accurate use data for participants (i.e. real-time metering and reporting) to faciliate and make threshold determinations more efficient, accurate, and timely.
  - This information is also necessary to confirm thresholds are being met, as well as to free up additional Program supply when demand is below determined threshold.
- Analysis of direct and indirect impacts to other water uses (e.g., environmental uses, domestic uses, and agricultural uses).
  - For the Program to evolve and adapt fully, the Steering Committee must be aware of how Program benefits are being felt proportionally across all participant types.

#### IV. CONCLUSION

Though 2022 Program implementation was short, the Steering Committee was still able to learn a significant amount about how to draft, implement, and run the Program. From these many lessons, the Steering Committee is now better positioned to help evolve the Program for future implementation years and to address potential issues before they arise. By reflecting on and incorporating the many recommendations made in this Report, the Steering Committee will help ensure that local community members can continue to come together and help Russian River water users adapt to our changing climate in a collaborative manner. With each year of Program implementation, the more the Steering Committee will learn and be able to apply in future Program iterations.

### V. APPENDICES

**Appendix A: 2022 Steering Committee List** 

**Appendix B: 2022 State Water Board Emergency Regulation** 

**Appendix C: 2022 Program Language** 

#### **Appendix A: 2022 Steering Committee List**

Russian River stakeholders and the State Water Resources Control Board have been working together for almost two years now to develop the Voluntary Water Sharing Program.

Steering Committee Participants include:

- City of Cloverdale
- City of Healdsburg
- City of Ukiah
- Cal Am Water/Town of Geyserville
- Cal Indian Environmental Alliance
- Coyote Valley Band of Pomo Indians
- Dry Creek Rancheria Band of Pomo
- Fish Friendly Farming
- Federated Indians of Graton Rancheria
- Hopland Band of Pomo Indians
- Jackson Family Wines
- Lytton Band of Pomo Indians
- Mendocino County & Sonoma County Farm Bureaus

- Middletown Rancheria
- Pinoleville Pomo Nation
- Russian River Confluence
- Russian River Flood Control & Water Conservation Improvement District
- Russian Riverkeeper
- Redwood Valley Little River Band of Pomo Indians
- Sonoma Water
- Sonoma Resource Conservation District
- State Water Resources Control Board
- Willow County Water District (representing 6 water suppliers)

## **Appendix B: 2022 State Water Board Emergency Regulation**

## State of California Office of Administrative Law

In re:

**State Water Resources Control Board** 

**Regulatory Action:** 

Title 23, California Code of Regulations

Adopt sections:

879.3

Amend sections: 875.5, 875.6, 876.1, 877.1,

877.2, 877.3, 877.4, 877.5, 878, 878.1, 879, 879.1,

879.2

Repeal sections: 877.6 NOTICE OF APPROVAL OF EMERGENCY

**REGULATORY ACTION** 

Government Code Sections 11346.1 and

11349.6

OAL Matter Number: 2022-0518-01

OAL Matter Type: Emergency Readopt (EE)

In this action the State Water Resources Control Board ("SWRCB") re-adopts emergency regulations regarding water use in the Russian River Watershed, originally promulgated in OAL Matter No. 2021-0630-01.

OAL approves this emergency regulatory action pursuant to sections 11346.1 and 11349.6 of the Government Code.

This emergency regulatory action is effective on 5/31/2022 and will expire on 6/1/2023. The Certificate of Compliance for this action is due no later than 5/31/2023.

Date:

May 31, 2022

Sam Micon

**Attorney** 

Laffell

For:

Kenneth J. Poque

Director

Director

Original: Eileen Sobeck, Executive

Copy: Andrew Deeringer

STATE OF CALIFORNIA-OFFICE OF ADMINISTRATI For use by Secretary of State only NOTICE PUBLICATION STD. 400 (REV. 10/2019) NOTICE FILE NUMBER OAL FILE **NUMBERS** For use by Office of Administrative Law (OAL) only ENDORSED - FILED in the office of the Secretary of State of the State of California MAY 3 1 2022 OFFICE OF ADMIN. LAW 1:50 PM 2022 MAY 18 PH12:04 NOTICE REGULATIONS AGENCY WITH RULEMAKING AUTHORITY AGENCY FILE NUMBER (If any) State Water Resources Control Board A. PUBLICATION OF NOTICE (Complete for publication in Notice Register) TITLE/S FIRST SECTION AFFECTED 2. REQUESTED PUBLICATION DATE Drought Curtailment, Russian River Watershed 23 875.5 4. AGENCY CONTACT PERSON TELEPHONE NUMBER Notice re Proposed FAX NUMBER (Optional) Other Andrew Deeringer (916) 539-2132 Regulatory Action **ACTION ON PROPOSED NOTICE** OAL USE NOTICE REGISTER NUMBER **PUBLICATION DATE** Approved as Submitted Approved as Modified Disapproved/ B. SUBMISSION OF REGULATIONS (Complete when submitting regulations) 1a. SUBJECT OF REGULATION(S) 1b. ALL PREVIOUS RELATED OAL REGULATORY ACTION NUMBER(S) Emergency Curtailment Regulation to Protect Water Supplies in the Rus 2021-0630-01E 2. SPECIFY CALIFORNIA CODE OF REGULATIONS TITLE(S) AND SECTION(S) (Including title 26, if toxics related) ADOP' SECTION(S) AFFECTED Section 879.3 (List all section number(s) AMEND individually. Attach Sections 875.5, 875.6, 876.1, 877.1, 877.2, 877.3, 877.4, 877.5, 878, 878.1, 879, 879.1, 879.2 additional sheet if needed.) TITLE(S) Title 23 Section 877.6 per agency 3. TYPE OF FILING Regular Rulemaking (Gov. Certificate of Compliance: The agency officer named Emergency Readopt Code §11346) Changes Without below certifies that this agency complied with the (Gov. Code, §11346.1(h)) Regulatory Effect (Cal. Resubmittal of disapproved provisions of Gov. Code §§11346.2-11347.3 either Code Regs., title 1, §100) or withdrawn nonemergency before the emergency regulation was adopted or within the time period required by statute. filing (Gov. Code §§11349.3, File & Print Print Only 11349.4) Emergency (Gov. Code, Resubmittal of disapproved or withdrawn §11346.1(b)) Other (Specify) emergency filing (Gov. Code, §11346.1) 4. ALL BEGINNING AND ENDING DATES OF AVAILABILITY OF MODIFIED REGULATIONS AND/OR MATERIAL ADDED TO THE RULEMAKING FILE (Cal. Code Regs, title 1, §44 and Gov. Code §11347.1) 5. EFFECTIVE DATE OF CHANGES (Gov. Code, §§ 11343.4, 11346.1(d); Cal. Code Regs., title 1, §100) Effective January 1, April 1, July 1, or Effective on filing with §100 Changes Without Effective other October 1 (Gov. Code §11343.4(a)) Secretary of State Regulatory Effect (Specify) 6. CHECK IF THESE REGULATIONS REQUIRE NOTICE TO, OR REVIEW, CONSULTATION, APPROVAL OR CONCURRENCE BY, ANOTHER AGENCY OR ENTITY Department of Finance (Form STD, 399) (SAM §6660) Fair Political Practices Commission State Fire Marshal Other (Specify) 7. CONTACT PERSON TELEPHONE NUMBER FAX NUMBER (Optional) Andrew Deeringer E-MAIL ADDRESS (Optional) (916) 539-2132 Andrew.Deeringer@waterboards 8. I certify that the attached copy of the regulation(s) is a true and correct copy For use by Office of Administrative Law (OAL) only of the regulation(s) identified on this form, that the information specified on this form ENDORSED APPROVED is true and correct, and that I am the head of the agency taking this action, or a designee of the head of the agency, and am authorized to make this certification. SIGNATURE OF AGENCY HEAD OR DESIGNEE MAY 8 1 2022 Eileen Sobeck, Executive Director Digitally signed by Eileen Sobeck, Executive Director Date: 202205.17 16.1125-0700' May 17, 2022 TYPED NAME AND TITLE OF SIGNATORY Office of Administrative Law Eileen Sobeck, Executive Director

# Emergency Curtailment Regulation to Protect Water Supplies in the Russian River Watershed

Revise Sections 875.5 and 875.6 within Title 23, Division 3, Chapter 2, Article 23.5 of the California Code of Regulations, and Sections 876.1, 877.1, 877.2, 877.3, 877.4, 877.5, 878, 878.1, 879, 879.1, and 879.2 within Title 23, Division 3, Chapter 2, Article 24 of the California Code of Regulations, add Section 879.3 to Title 23, Division 3, Chapter 2, Article 24, and repeal Section 877.6 within Title 23, Division 3, Chapter 2, Article 24 to read:

#### Article 23.5. Klamath River Watershed Drought Emergency Requirements

#### 875.5 Priority for Curtailments in the Scott River and Shasta River Watersheds

- (a) Scott River
  - (1) Regarding curtailment orders in the Scott River watershed:
    - (A) Curtailment orders in the Scott River watershed to meet drought emergency minimum fisheries flows in the Scott River shall be issued taking into account water right priority, in groupings from lowest to highest priority, as follows:
      - (i) All post-Scott River Adjudication appropriative water rights.
      - (ii) Surplus Class Rights in all schedules of the Scott River Adjudication.
      - (iii) All Post-1914 Appropriative water rights in the Scott River Adjudication, Shakleford Shackleford Adjudication, and French Creek Adjudication, collectively.
      - (iv) Diversions in Schedule D4 of the Scott River Adjudication.
      - (v) Diversions in Schedule D3 of the Scott River Adjudication.
      - (vi) Diversions in Schedule D2 of the Scott River Adjudication.
      - (vii) Diversions in Schedule D1 of the Scott River Adjudication.
      - (viii) Diversions in French Creek Adjudication, the Shakleford Shackleford Adjudication, and Schedule B of the Scott River Adjudication, collectively.
      - (ix) Diversions in Schedule C of the Scott River Adjudication, and overlying groundwater diversions not described in the Scott River Adjudication.

- (B) Surface diversions from the Scott River, Big Slough, Etna Creek, or Kidder Creek and described in Scott River Adjudication Schedules D2, D3, D4, B18, B23, and B26 that have moved from surface water to groundwater diversions as permitted under Scott River Adjudication, Paragraph 44, will be curtailed in priority grouping (a)(1)(A)(ix), rather than under (a)(1)(A)(iv), (a)(1)(A)(v), (a)(1)(A)(vi), or (a)(1)(A)(viii).
- (C) Domestic and Livestock Water Uses during the non-irrigation season by diverters in Scott River Adjudication Schedules A, B, C, and D, under paragraph 36 shall follow the priority groups under (a)(1)(A)(iv) through (a)(1)(A)(viii), as applicable.
- (D) To the extent that curtailment of fewer than all diversions in the groupings listed in (a)(1)(A)(i) and (a)(1)(A)(iii) through (a)(1)(A)(viii) would reliably result in sufficient flow to meet drought emergency minimum fisheries flows, the Deputy Director shall maintain the authority to issue, suspend, reinstate, or rescind curtailment orders for partial groupings based on the priorities in the applicable adjudication or through the appropriative right priority date, as applicable. Any partial curtailment of groups (a)(1)(A)(ii) and (a)(1)(A)(ix) shall be correlative, except that the Deputy Director may issue curtailments to groundwater diverters in (a)(1)(A)(ix) first to diversions closest to surface waterbodies, or use other reliable information to determine which diversions have the highest potential impact on surface flows.
- (E) Diversions under Paragraph 39 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A) that corresponds to the schedule in which the diversion would be placed if the right were defined in the adjudication. If partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights will be subordinated to the other rights in that schedule.
- (F) Diversions under paragraph 41 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A) that corresponds to the schedule in which the diversion would be placed if the right were defined in the adjudication. If partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights shall be treated as subordinate to first priority rights in the schedule, and senior to second priority rights in that schedule.
- (G) Diversions under paragraph 42 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A) that corresponds to the schedule in which the diversion would be placed if the right were defined in the adjudication. If partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights shall be treated as first priority rights compared to downstream rights in that schedule, and subordinate to all upstream rights in that schedule.

- (H) Diversions under paragraph 43 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A) that corresponds to the schedule in which the diversion would be placed if the right were defined in the adjudication. If an order for partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights shall be treated as first priority rights in that schedule.
- (I) Diversions under paragraphs 49 and 61 of the Scott River Adjudication shall be curtailed with the group defined in (a)(1)(A)(viii). If an order for partial curtailment of the group is issued, suspended, reinstated, or rescinded under (a)(1)(D), these rights will be treated as first priority rights in the schedule for the appropriate tributary.
- (2) Curtailment orders in the Scott River watershed for lack of water availability at a diverter's priority of right shall be issued:
  - (A) First to appropriative rights that were initiated after the relevant adjudication, in the Shakleford Shackleford Creek watershed, the French Creek watershed, and the Scott River Stream System as defined in paragraph 2 of the Scott River Adjudication,
  - (B) Then in accordance with the priorities set forth in the Scott River, Shakleford Shackleford Creek, and French Creek Adjudications, as applicable, and
  - (C) Then correlatively to unadjudicated overlying groundwater diversions.

#### (b) Shasta River

- (1) Curtailment orders in the Shasta River Watershed to meet drought emergency minimum fisheries flows shall be issued taking into account water right priority, in groupings from lowest to highest water right priority, as follows:
  - (A) Appropriative diversions initiated after the Shasta Adjudication. Appropriative surface water diversions obtained after the Shasta Adjudication in priority of the issuance date specified in the permit or license by the State Water Board. Groundwater appropriations have a priority date from when the well was constructed and water first used. For the purposes of this article, an appropriative groundwater right is distinguished from an overlying groundwater right when the diverter: 1) does not own land overlying the basin, 2) owns overlying land but uses the water on non-overlying land, or 3) sells or distributes the water to another party.
  - (B) Post-1914 and pre-1914 water rights under the priorities and quantities set forth in the Shasta Adjudication. Groundwater appropriations initiated prior to the Shasta Adjudication in priority of when the well was constructed and water first used.

- (C) Riparian diversions and overlying groundwater diversions. The Deputy Director may limit overlying groundwater curtailment orders to larger diversions or diversions with the highest potential impact on surface flows.
  - (i) If there is insufficient natural flow to furnish all rights of equal priority, then the available natural flow in excess of the minimum instream flow established in section 875, subdivision (c)(2) shall be distributed proportionally among the rights of the priority in question.
  - (ii) Water released from storage or bypassed pursuant to a Water Code section 1707 Order is not available to downstream users.
- (c) Definitions: For the purposes of this section:
  - (1) "Scott River Adjudication" shall refer to the Decree entered on January 30, 1980 in Siskiyou County Superior Court Case No. 30662, In the Matter of Determination of the Rights of the Various Claimants to the Waters of Scott River Stream System, Except Rights to Water of Shackleford Creek, French Creek, and all Streams Tributary to Scott River Downstream from the U.S. Geological Survey Gaging Station, in Siskiyou County, California, and all supplements thereto.
  - (2) "Shakleford Shackleford Adjudication" shall refer to the Decree entered on April 3, 1950 in Siskiyou County Superior Court Case No. 13775, In the Matter of the Determination of the Rights of the Various Claimants to the Waters of Shakleford Shackleford Creek and its Tributaries in Siskiyou County, California, and all supplements thereto.
  - (3) "French Creek Adjudication" shall refer to the Judgement entered on July 1, 1959 in Siskiyou County Superior Court Case No. 14478, Mason v. Bemrod, and all supplements thereto.
  - (4) "Shasta Adjudication" shall refer to the Judgement and Decree entered on December 29, 1932 in Siskiyou County Superior Court Case No. 7035, In the Matter of the Determination of the Relative Rights, Based Upon Prior Appropriation, of the Various Claimants to the Waters of Shasta River and its Tributaries in Siskiyou County, California, and all supplements thereto.

Authority: Sections 101, 103,174, 186, Water Code

Reference: Sections 1058, 1058.5, Water Code; *Hudson v. Dailey* (1909) 156 Cal. 617; Shasta River Adjudication; Shackleford Adjudication; French Creek Adjudication; Scott River Adjudication; *Stanford Vina Ranch Irrigation. Co v. State of California* (2020) 50 Cal.App.5th 976.

#### 875.6 Curtailment Order Reporting

- (a) All water users or water right holders issued a curtailment order under this article are required, within the timeframe specified by the Deputy Director, but not less than seven (7) days, to submit under penalty of perjury a certification of one or more of the actions enumerated below, taken in response to the curtailment order. The Deputy Director may grant additional time for the submission of information regarding diversion and use of water upon a showing of good cause. The water user or water right holder shall certify, as applicable, that:
  - (1) Diversion under the identified water right(s) has ceased;
  - (2) Any continued use is under other water rights not subject to curtailment, specifically identifying those other rights, including the basis of right and quantity of diversion;
  - (3) Diversions under the identified water right(s) continue only to the extent that they are non-consumptive, for which a certification for continued diversion has been submitted as specified in section 875.1;
  - (4) Diversions under the identified water right(s) continue only to the extent that they are necessary to provide for minimum human health and safety needs as identified in section 875.2, a certification has been filed as authorized under Article 24, section 878.1, subdivision (b)(1), and the subject water right authorizes the diversion in the absence of a curtailment order;
  - (5) Diversions under the identified water right(s) continue only to the extent that they are necessary to provide for minimum livestock watering needs and a certification has been filed as identified in section 875.3, and the subject water right authorizes the diversion in the absence of a curtailment order.
  - (6) Diversions under the water right(s) continue only to the extent that they are consistent with a petition filed under Article 24, section 878.1, subdivision (b)(2) or (d) or under section 875.3, subdivision (d) and diversion and use will comply with the conditions for approval of the petition; or
  - (7) The only continued water use is for instream purposes.
- (b) All persons who are issued a curtailment order and continue to divert out of order of the priority established in section 875.5, as authorized under sections 875.1, 875.3, or Article 24, section 878.2, are required to submit, under penalty of perjury, information identified on a schedule established by the Deputy Director as a condition of certification or petition approval. The required information may include, but is not limited to, the following:

- (1) The water right identification number(s), well information, or, if not applicable, other manner of identifying the water right under which diversions continue. For wells, this includes the location (GPS coordinates) and depth to groundwater.
- (2) How the diverter complies with any conditions of continued diversion, including the conditions of certification under section 875.3 or Article 24, section 878.1, subdivision (b)(1).
- (3) Any failures to comply with conditions, including the conditions of certification under section 875.3 or Article 24, section 878. 1, subdivision (b)(1), and steps taken to prevent further violations.
- (4) Conservation and efficiency efforts planned, in the process of implementation, and implemented, as well as any information on the effectiveness of implementation.
- (5) Efforts to obtain alternate water sources.
- (6) If the diversion is authorized under an approved petition filed pursuant to section 875.3 or Article 24, section 878.1 , subdivision (b)(2), progress toward implementing the measures imposed as conditions of petition approval.
- (7) If the diversion is authorized under section 875.3, or <u>cannot be</u> <u>quantified on the basis of amount per person per day under Article 24, section 878.1, subdivision (4b):</u>
  - (A) The rate of diversion if it is still ongoing;
  - (B) Whether the water has been used for any other purpose; and
  - (C) The date diversion ceased, if applicable.
- (8) The total water diversion for the reporting period and the total population served for minimum human health and safety needs. The total population must include actual or best available estimates of external populations not otherwise reported as being served by a diversion, such as individuals receiving bulk or hauled water deliveries for indoor water use.
- (9) The total water diversion for the reporting period and the total population of livestock watered to meet minimum livestock watering needs identified in section 875.3.
- (10) Diversion amounts for each day in acre-feet per day, maximum diversion rate in cubic feet per second, pumping rate in gallons per minute, and anticipated future daily diversion amounts and diversion rates.

(c) The Deputy Director, or delegee, may issue an order under this article requiring any person to provide additional information reasonably necessary to assess their compliance with this article. Any person receiving an order under this subdivision shall provide the requested information within the time specified by the Deputy Director, but not less than five (5) days.

Authority: Sections 1058, 1058.5, Water Code

Reference: Sections 100, 187, 275, 348, 1051, 1058.5, 1841, Water Code

#### Article 24 Curtailment of Diversions Due to Drought Emergency

# 876.1 Emergency Curtailments Due to Lack of Water Availability in the Sacramento-San Joaquin Delta Watershed

- (a) This section applies to direct diversions and diversions to storage, of natural and abandoned flows, in the Delta Watershed as defined in section 877.1. This section also applies to the rediversion of water released from storage in the Delta Watershed, except to the extent authorized by a water right or contract.
- (b) After the effective date of this regulation, when flows are determined to be insufficient to support all diversions, the Deputy Director as defined in section 877.1 may issue curtailment orders as defined in section 877.1 to water right holders and claimants in the Delta Watershed in order of water right priority, requiring the curtailment of water diversion under designated water rights and claims, except as provided in sections 878, 878.1, and 878.2 and 879.1 subdivision (b). Before issuing curtailment orders to water right holders and claimants in the Legal Delta, the Deputy Director will consult with and obtain the concurrence of the Delta Watermaster.
- (c) Initial orders requiring curtailment or reporting will be mailed to each water right holder, claimant, or the agent of record on file with the State Water Board, Division of Water Rights within the Delta Watershed. The initial orders will require reporting in accordance with section 879, subdivision (dc)(1) and will either require curtailment or will instruct the water right holder, claimant, or agent of record regarding procedures for potential future curtailments. The water right holder, claimant, or agent of record is responsible for immediately providing notice of the orders to all diverters exercising the water right or claim covered by the orders. Communications regarding changes in water availability, including notification of when curtailments of water diversions are required and when curtailments are temporarily suspended or reimposed, will be provided by email to the State Water Board's Delta Drought email distribution list and by posting on the State Water Board's drought webpage. Notice provided by email and by posting on the State Water Board's drought webpage shall be sufficient for all purposes related to required curtailments and reporting pursuant to this section and section 879.

- (d) In determining whether water is unavailable under a water right holder or claimant's priority of right and whether to order curtailment of water diversions under specific water rights, the Deputy Director will consider:
  - (1) Relevant available information regarding date of priority, including but not limited to claims of first use in statements of water diversion and use, judicial and State Water Board decisions and orders, and other information contained in the Division of Water Rights' files. Absent evidence to the contrary, riparian water rights are presumed senior to appropriative water rights for the purposes of curtailments pursuant to this section.
  - (2) Monthly water right demand projections based on reports of water use for permits and licenses, or statements of water diversion and use, from calendar years 2018, 2019, or 2020.
  - (3) Monthly water right demand projections based on information submitted in response to an informational order issued under section 879, subdivision (4c).
  - (4) Water supply projections based on the following sources of forecasted supply data:
    - (A) Monthly full natural flow forecasts contained in the Department of Water Resources' California Cooperative Snow Surveys Bulletin 120 Water Supply Forecast, where available;
    - (B) Daily full natural flow forecasts from the California Nevada River Forecast Center, where data is not available in the Bulletin 120 Water Supply Forecasts; and
    - (C) Other available and reliable data on projected or actual precipitation and runoff events that may inform water availability at a monthly or sub-monthly scale.
  - (5) Relevant available information regarding stream system disconnection where curtailing diversions would not make water available to serve senior downstream water rights or claims, including seasonal or temporary disconnections.
  - (6) The Deputy Director may also consider any other pertinent, reliable, and publicly available information when determining water right priorities, water availability, water supply projections, and demand projections.
  - (7) Evaluation of available water supplies against demands may be performed using the Water Unavailability Methodology for the Delta Watershed, or comparable tools. The Water Unavailability Methodology for the Delta Watershed is described in the Water Unavailability Methodology for the Delta Watershed report dated July 23, 2021, which is

hereby incorporated by reference. Evaluation of available supplies against demands may be performed at the Hydrologic Unit Code level 4 Sacramento and Hydrologic Unit Code level 4 San Joaquin River watershed scale, or at the subwatershed scale. Subwatersheds within the Delta Watershed are defined in the Water Unavailability Methodology for the Delta Watershed report dated July 23, 2021, and were established based on Hydrologic Unit Code level 8 watersheds.

- (e) Upon receipt of an initial order pursuant to this section, a water right holder or claimant may submit information to the Deputy Director to: support a proposed correction to the water right priority date of the right for which the order was issued; or propose that curtailment may not be appropriate for a particular diverter or in a specific stream system as demonstrated by verifiable circumstances, such as a system that has been adjudicated and is disconnected and curtailment would not make water available to serve senior downstream water rights or claims. Any such proposals and all supporting information and analysis shall be submitted to the Deputy Director within 14 days of receipt of the initial order. Proposals, supporting information, and analyses submitted more than 14 days after receipt of an initial order may be considered to support corrections in advance of future curtailments. The Deputy Director will review timely-provided proposals and supporting information and analyses as soon as practicable, make a determination regarding the proposal, and inform the affected water right holder or claimant of any appropriate update for purposes of water diversion curtailment orders. Before making any determinations within the Legal Delta, the Deputy Director will consult with the Delta Watermaster.
- (f) Water right holders and claimants in the Delta Watershed must either subscribe to the Delta Drought email distribution list referenced in subdivision (c) or frequently check the State Water Board's drought webpage to receive updated information regarding water diversion curtailment and reporting orders and water unavailability.
- (g) The Deputy Director will temporarily suspend curtailments for some diverters, in order of water right priority, when water availability increases or is projected to increase due to precipitation and runoff events or due to reductions in demand, and the Deputy Director determines that such increased water availability warrants a suspension. The Deputy Director will consider the best available information, such as water supply forecasts from the California Department of Water Resources and other similarly reliable sources, to determine the geographic scope and duration of suspension. By no later than October 1, 2021, and by no more than every 30 days thereafter, the Deputy Director will consider reliable and publicly available information that supports suspension, extension of suspension, or reimposition of curtailments of water diversions, and will publicly issue an update explaining any decisions resulting from the consideration of that information.

(h) All curtailment orders issued under this section shall be subject to reconsideration under article 2 (commencing with section 1122) of chapter 4 of part 1 of division 2 of the California Water Code.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 275, 1058.5, Water Code; El Dorado Irrigation Dist. v. State Water Resources Control Board (2006) 142 Cal.App.4th 937; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463; Stanford Vina Ranch Irrigation Co. v. State of California (2020) 50 Cal.App.5th 976.

#### 877 [Reserved]

#### 877.1 Definitions

- (a) "Curtailment Order" refers to an order from the Deputy Director of the Division of Water Rights ordering a water right holder to cease diversions. A curtailment order may require the recipient to monitor and comply with a curtailment status list if curtailments are not required immediately upon issuance of the order.
- (b) "Deputy Director" refers to the Deputy Director of the Division of Water Rights, or duly authorized designee, at the State Water Resources Control Board. "Curtailment Status List" refers to a list published by the Deputy Director with the current status of curtailments noticed under a curtailment order.
- (c) "Flood Control District" refers to the Mendocino County Russian River Flood Control and Water Conservation Improvement District. "Delta Watermaster" has the same meaning as in Water Code section 85230.
- (d) "Lower Russian River" refers to the surface waters, including underflow and subterranean streams, of the Russian River downstream of the confluence of Dry Creek and the Russian River. "Delta Watershed" or "Sacramento-San Joaquin Delta Watershed" refers to the Hydrologic Unit Code level 4 San Joaquin subregions, as defined using the U.S. Geological Survey Hydrologic Units Dataset.
- (e) "Lower Russian River Watershed" refers to the area in Sonoma County that drains towards Dry Creek and the area downstream of the confluence of the Russian River and Dry Creek that drains towards the outlet of the Russian River to the Pacific Ocean. "Deputy Director" refers to the Deputy Director of the Division of Water Rights, or duly authorized designee, at the State Water Resources Control Board.
- (f) "Mainstem of the Upper Russian River" refers to the surface waters, including underflow and subterranean streams, of the Upper Russian River downstream of Lake Mendocino and upstream of the confluence of Dry Creek and the Russian River. "Informational Order" refers to an order issued by the

Deputy Director which orders reporting of water diversion and use information in the Delta Watershed to informwater unavailability determinations and to support the curtailment process described in section 876.1.

- (g) "Legal Delta" has the same meaning as the Sacramento-San Joaquin Delta, as defined in Water Code section 12220.
- (gh) "Minimum human health and safety needs" refers to the amount of water necessary for prevention of to prevent adverse impacts to human health and safety, for which there is no feasible alternate supply. "Minimum human health and safety needs" include:
  - (1) Indoor domestic Domestic water uses including water for human consumption, cooking, or sanitation purposes. For the purposes of this article, water provided outdoors Further, domestic water uses include incidental uses necessary for human consumption, cooking household animals or sanitation purposes, including but not limited to facilities for unhoused persons or campgrounds, shall be regarded as indoor domestic sustenance such as small vegetable gardens. As necessary to provide for indoordomestic water use, water diverted for minimum human health and safety needs may include water hauling and bulk water deliveries, so long as the diverter maintains records of such deliveries and complies with the reporting requirements of Section section 879 of this article, and so long as such provision diversion and use is consistent with a valid water right.
  - (2) For Urban Water Suppliers, water uses consistent with demand reduction actions required by the strictest stage of that supplier's adopted Water Shortage Contingency Plan, which actions must achieve at least a 50% reduction in water use, as part of its Urban Water Management Plan, as described by Water Code Section 10632.
  - (23) Water supplies necessary for energy sources that are critical to basic grid reliability, as identified by the California Independent System Operator, California Public Utilities Commission, California Energy Commission, or a similar energy grid reliability authority.
  - (34) Water supplies necessary to prevent tree die-off that would contribute to fire risk to residences, and for maintenance of ponds or other water sources for fire fighting, in addition to water supplies identified by the California Department of Forestry and Fire Protection or another appropriate authority as regionally necessary for fire preparedness.
  - (4<u>5</u>) Water supplies identified by the California Air Resources Board, a local air quality management district, or other appropriate public agency with air quality expertise, as necessary to address critical air quality impacts to protect public health.

- $(\underline{56})$  Water supplies necessary to address immediate public health or safety threats, as determined by a public agency with health or safety expertise.
- (67) Other water uses necessary for human health and safety which a state, local, tribal or federal health, environmental, or safety agency has determined are critical to public health and safety or to the basic infrastructure of the state. Diverters wishing to continue diversions for these uses must identify the health and safety need, include approval or similar relevant documentation from the appropriate public agency, describe why the amount requested is critical for the need and cannot be met through alternate supplies, state how long the diversion is expected to continue, certify that the supply will be used only for the stated need, and describe steps taken and planned to obtain alternative supplies.
- (i) "Upper Russian River" refers to the surface waters, including underflow and subterranean streams, of the Russian River upstream of the confluence of the Russian River and Dry Creek and includes both the East and West Forks of the Russian River "Russian River Watershed" refers to the area located in Mendocino and Sonoma Counties that drains towards the outlet of the Russian River at the Pacific Ocean.
- (j) "Upper Russian River Watershed" refers to the area located in Mendocino and Sonoma Counties that drains towards the confluence of Dry Creek and the Russian River. "State Water Board" refers to the State Water Resources Control Board.
- (k) "Delta Watershed" or "Sacramento-San Joaquin Delta Watershed" refers to the Hydrologic Unit Code level 4 Sacramento and the Hydrologic Unit Code level 4 San Joaquin subregions, as defined using the U.S. Geological Survey Hydrologic Units Dataset. "Urban Water Supplier" has the same meaning as defined in Water Code section 10617.
- (I) "Legal Delta" has the same meaning as the Sacramento-San Joaquin Delta, as defined in Water Code section 12220.
- (m) "Informational Order" refers to an order issued by the Deputy Director which orders reporting of water diversion and use information in the Delta Watershed to inform water unavailability determinations and to support the curtailment process described in section 876.1.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art., X § 2; Sections 100, 100.5, 104, 105, 106.3, 275, 1058.5, Water Code; *Environmental Defense Fund v. East Bay Muni. Util. Dist.* (1980) 26 Cal.3d 183.

# 877.2 Emergency Curtailments Determining Curtailment Statuses and Correlative Sharing Requirements Due to Lack of Water Availability in the Lower Russian River Watershed.

- (a) This section applies 877.2 and sections 877.3, 877.4, and 877.5 apply only to water diversion and use within the Lower Russian River Watershed.
- (b) After the effective date of this regulation, when flows in the Lower Russian River Watershed are insufficient to support all diversions, the Deputy Director may issue curtailment orders to water right holders requiring the curtailment limitation or cessation of water diversion. Curtailment orders shall be effective the day after issuance. Curtailment orders issued to a riparian claimant may establish a maximum allowable diversion in the form of an assigned water budget based on the information in subdivision (d), below. Such assigned water budgets will form the basis for correlative reductions in diversions pursuant to riparian claims of right.
- (c) The Deputy Director will publish and regularly update a curtailment status list showing all water rights for which diversions must cease or be reduced correlatively, either because flows in the Russian River Watershed are insufficient to support diversions or where, as informed by the National Marine Fisheries Service or California Department of Fish and Wildlife, the Deputy Director determines continued diversions would unreasonably interfere with augmented stream flows or releases made as part of Voluntary Drought Initiative projects in four priority tributaries to the Russian River (Dutch Bill Creek, Green Valley Creek, Mark West Creek, and Mill Creek). Updates to the curtailment status list shall be construed as binding orders from the State Water Board to cease or limit diversions accordingly and shall be effective the day after posting. The State Water Board finds that diversion of surface water where augmented stream flows or releases are occurring as part of Voluntary Drought Initiative projects in association with the National Marine Fisheries Service or the California Department of Fish and Wildlife constitute an unreasonable use of water.
- (ed) In determining When updating the curtailment status list to reflect the extent to which water is available under a diverter's water user's priority of right or when rescinding curtailment orders, the Deputy Director shall consider:
  - (1) Relevant available information regarding date of priority, including but not limited to claims of first use in statements of water diversion and use, judicial and State Water Board decisions and orders, and other information contained in the Division of Water Rights files;

- (2) Monthly water right demand projections based on reports of water diversion and use for permits and licenses, or statements of water diversion and use, from 2017 through 2019. Monthly water demand projections based on 2017 to 2019 data in reports of water diversion and use for permits and licenses and in statements of water diversion and use, or alternative information timely received from the water user in accordance with section 877.3, as applicable.
- (3) Water availability projections based on one or more of the following:
  - (A) Outputs from a United States Geological Survey's Precipitation Runoff Modeling System model, calibrated by State Water Board staff to estimate current or historical natural cumulative runoff throughout the watershed Russian River Watershed, as well as forecasts of monthly supplies:
  - (B) Climatic estimates of precipitation and temperature from the Parameter-elevation Regressions on Independent Slopes Model, commonly referred to as PRISM;
  - (C) Historical periods of comparable conditions with respect to daily temperatures, precipitation, or surface flows;
  - (D) Outputs from the Santa Rosa Plain Hydrologic Model developed by United States Geological Survey; or
  - (E) Stream gage data, where available.
- (4) The Deputy Director may also consider additional pertinent and reliable information when determining water right priorities, water availability, and demand projections.
- (5) Evaluation of available supplies against demands Final calculations of water availability may be performed at the downstream outlet of either the Upper Russian River or Lower Russian River, or at a smaller subwatershed scale using the Drought Water Rights Allocation Tool, or comparable tools. Use of the Drought Water Rights Allocation Tool will be in accordance with the formulations document for the Drought Water Rights Allocation Tool (March 2, 2020) and Drought Water Right Curtailment Analysis for California's Eel River (November 20, 2017), which are hereby incorporated by reference. The Water Rights Allocation Tool automates these calculations via mathematical formulation of subwatershed supplies; user demands and dates of priority; and maximization of water allocation, in accordance with the formulations document for the Water Rights Allocation Tool (January 2022), which is hereby incorporated by reference.
- (de) Water users and water right holders are responsible for checking the State Water Board's drought announcements website and signing up for the

email distribution list referenced in subdivision (ef)(2) to receive updated water supply forecasts. It is anticipated that forecasts of water supplies available to meet water rights demands will be updated on a monthly basis until cumulative rainfall of greater than 0.5 inches occurs as measured at Healdsburg, California. Following this precipitation event, it is anticipated that forecasts of supplies will be updated on a weekly basis until rescission of all curtailment orders under this section. updates to the curtailment status list.

- (1) Initial curtailment Curtailment orders will be sent to each water right holder, claimant, or the agent of record on file with the Division of Water Rights. The water right holder or agent of record recipient is responsible for immediately providing notice of the curtailment order(s) to all diverters exercising the water right(s) covered by the curtailment order(s).
- (2) The State Water Board has established an email distribution list for issuing drought notices, water supply forecasts, and updates regarding curtailments to the curtailment status list. Notice provided by email or by posting on the State Water Board's drought web page shall be sufficient for all purposes related to drought notices and updates regarding curtailment orders and the curtailment status list.
- (f) Rescission of curtailment orders shall be announced using the email distribution list and web page described in subdivision (e).

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 275, 1058.5, Water Code; National Audubon Society v. Superior Court (1983) 33 Cal.3d 419; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463; Stanford Vina Ranch Irrigation Co. v. State of California (2020) 50 Cal.App.5th 976.

877.3 Emergency Curtailment Where Insufficient Flows are Available in the Upper Russian River Watershed. Curtailments Affecting Water Users Claiming Riparian Rights in the Russian River Watershed

(a) This section applies to water diversions in the Upper Russian River Watershed.

<del>(b)</del>-

- (1) The Deputy Director may issue a curtailment order upon a determination that the conditions in subdivision (c) are occurring. Curtailment orders shall be effective the day after issuance.
- (2) If maintaining minimum flows required for the protection of minimum human health and safety needs, fish and wildlife, or further preserving stored water in Lake Mendocino for human health and safety needs would require curtailment of uses otherwise exempt from curtailment under this article, then the Deputy Director shall consider whether those uses should be allowed to continue based on the most current information available regarding fish populations, human health and safety needs, and the alternatives available to protect both human health and safety and threatened or endangered fish. Curtailment of water uses under this subdivision (b)(2) and any updates regarding such curtailments shall be noticed as described in subdivision (d).
- (c) When storage levels in Lake Mendocino are below those specified in section 877.4, and Sonoma County Water Agency is making Supplemental Storage Releases to satisfy Inbasin Uses, diversion of water within the Upper Russian River Watershed that does not meet an exemption identified in section 878 or section 878.1 constitutes an unreasonable use of water and is prohibited.
- (1) Inbasin Uses are defined as diversions from the Mainstem of the Upper Russian River to meet minimum human health and safety needs, Reach Losses, and minimum flows required for protection of fish and wildlife as required by a water right permit or license term, including any enforceable modifications of the foregoing. Export diversions, deliveries scheduled by the Flood Control District pursuant to License 13898, and Reach Losses associated with those exports and deliveries are specifically excluded from the definition of Inbasin Uses.
- (2) Supplemental Storage Releases are defined as water released from Lake Mendocino which is in excess of inflows to Lake Mendocino, as calculated on a daily basis, to satisfy Inbasin Uses.
- (3) Reach Losses are defined as water that is lost from the Mainstem of the Upper Russian River due to riparian habitat, evaporative losses, or percolation to groundwater.

<del>(d)</del>-

(1) Initial curtailment orders will be sent to each water right holder or the agent of record on file with the Division of Water Rights. The water right holder or agent of record is responsible for immediately providing notice of the curtailment order(s) to all diverters exercising the water right(s) covered by the curtailment order(s).

- (2) The State Water Board has established an email distribution list that water right holders may join to receive drought notices, water supply forecasts, and updates regarding curtailments. Notice provided by email or by posting on the State Water Board's drought web page shall be sufficient for all purposes related to drought notices and updates regarding curtailment orders.
- (a) Uncoordinated diversions of surface water under riparian claims of right within the Russian River Watershed during drought conditions constitute an unreasonable use of water. To prevent this unreasonable use, diversions of surface water pursuant to riparian claims of right shall be incorporated into the water availability analysis described in section 877.2 and riparian claimants may be issued curtailment orders accordingly. A water user claiming a riparian right who has been issued a curtailment order shall cease or reduce diversions correlatively in accordance with that curtailment order and the updated curtailment status list.
- (b) Water users claiming a riparian right who disagree with the assigned water budget provided in their curtailment order may, within 14 days of the effective date of the curtailment order, inform the Deputy Director of their actual planned diversion and use pursuant to the claimed riparian right. The Deputy Director may accept, accept with revisions, or reject a riparian claimant's submittal under this section. The information submitted must be in the form specified by the Deputy Director and must include, at minimum, the following items:
  - (1) Estimates of planned diversion quantities, by month, for the next twelve months.
  - (2) A summary of the uses of the water.
  - (3) Previous water usage data, which shall be used to evaluate the reasonableness of the proposed diversion amounts.
- (c) Water users claiming a riparian right who fail to inform the Deputy Director of their planned diversions and have failed to report diversion and use for 2017 through 2019 shall be subordinated to a junior-most priority while this regulation remains in effect. Nothing in this section 877.3 shall be construed as a basis for defining or circumscribing the existence or scope of a riparian right for purposes other than implementation of this regulation.
- (d) Until the Deputy Director renders a decision on a request submitted under subdivision (b), the water right holder shall remain subject to the curtailment order and updated curtailment status list.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 275, 1058.5, Water Code; *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419; *Light v. State* 

Water Resources Control Board (2014) 226 Cal.App.4th 1463; Stanford Vina Ranch Irrigation Co. v. State of California (2020) 50 Cal.App.5th 976.

# 877.4 Lake Mendocino Storage Levels Exceptions to Curtailment for Voluntary Water Sharing Agreements

Curtailment orders for diversions in the Upper Russian River Watershed shall not be issued unless storage levels in Lake Mendocino fall below the following levels prior to the specified dates:

- (a) 29,315 acre-feet before July 1.
- (b) 27,825 acre-feet before July 15.
- (c) 26,109 acre-feet before August 1.
- (d) 24,614 acre feet before August 15.
- (e) 22,745 acre-feet before September 1.
- (f) 21,251 acre-feet before September 15.
- (g) 20,000 acre-feet on any date while the regulation is in effect.

- (a) Water right holders in the Russian River Watershed may propose a voluntary water sharing agreement that, upon approval by the State Water Board and while said agreement remained in effect, would authorize an exception to curtailment for signatories in accordance with subdivision (b) of this section. Approval of the proposed agreement requires that the State Water Board find that it will not adversely affect the availability of water for non-signatories and that the proposed agreement includes support from prospective signatories in both Mendocino and Sonoma Counties. The State Water Board may, in its discretion, accept, accept with revisions, or reject a proposed voluntary water sharing agreement.
- (b) After an agreement described in subdivision (a) has been approved by the State Water Board, a signatory whose water rights are listed on the updated curtailment status list may continue to divert in compliance with the limitations and requirements of that agreement, provided the signatory indicates the water rights enrolled under that agreement using the online portal identified in their curtailment order.
- (c) If the Deputy Director determines, based on stream gage data and other relevant information, that an agreement approved under this section 877.4 is adversely affecting or threatens to adversely affect the availability of water for non-signatories, the Deputy Director will provide written notice to signatories that the exception to curtailment identified in section 877.4, subdivision (b), no longer applies. Within 14 days of the Deputy Director issuing such notice, signatories shall reduce or cease diversions in accordance with their curtailment orders and the updated curtailment status list.
- (d) Diversion by a non-signatory of water made available by a signatory pursuant to an approved agreement described in subdivision (a) is an unreasonable use of water and is prohibited.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 275, 1058.5, Water Code; National Audubon Society v. Superior Court (1983) 33 Cal.3d 419; City of Barstow v. Mojave Water Agency (2000) 23 Cal.4th 1224; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463; Stanford Vina Ranch Irrigation Co. v. State of California (2020) 50 Cal.App.5th 976.

# 877.5 Rescission of Curtailment Orders in Upper Russian River Watershed. Availability of 10,000 Acre-Foot Reservation for Water Previously Stored in Lake Mendocino

- (a) Following issuance of curtailment orders pursuant to section 877.3, the Deputy Director will notify water right holders of the extent to which curtailment orders will be rescinded following a determination by the Deputy Director that Sonoma County Water Agency is no longer making Supplemental Storage Releases to satisfy Inbasin Uses and natural or abandoned flows are available.
- (b) In determining the extent to which water is available under a diverter's priority of right when rescinding curtailment orders, the Deputy Director shall consider:
- (1) Relevant available information regarding date of priority, including but not limited to claims of first use in statements of water diversion and use, judicial and State Water Board decisions and orders, and other information contained in the Division of Water Rights files;
- (2) Monthly water right demand projections based on reports of water diversion and use for permits and licenses, or statements of water diversion and use, from 2017 through 2019.
- (3) Water availability projections based on one or more of the following:
- (A) Outputs from a United States Geological Survey's Precipitation Runoff Modeling System model, calibrated by State Water Board staff to estimate current or historical natural cumulative runoff throughout the watershed, as well as forecasts of monthly supplies.
- (B) Climatic estimates of precipitation and temperature from the Parameter elevation Regressions on Independent Slopes Model, commonly referred to as PRISM.
- (C) Historical periods of comparable conditions with respect to daily temperatures, precipitation, or surface flows.
- (D) Outputs from the Santa Rosa Plain Hydrologic Model developed by United States Geological Survey; or
- (E) Stream gage data, where available.
- (4) The Deputy Director may also consider additional pertinent and reliable information when determining water right priorities, water availability and demand projections.
- (5) Evaluation of available supplies against demands may be performed at the downstream outlet of either the Upper Russian River or the Lower Russian River, or at a smaller sub-watershed scale using the Drought Water Rights Allocation Tool, or comparable tool. Use of the Drought Water Rights Allocation Tool will be in accordance

with the formulations document for the Drought Water Rights Allocation Tool (March 2, 2020) and Drought Water Right Curtailment Analysis for California's Eel River (November 20, 2017), which are hereby incorporated by reference.

- (c) Water users and water right holders are responsible for checking the State Water Board's drought announcements website and signing up for the email distribution list referenced in section 877.3, subdivision (e)(2), to receive updated water supply forecasts. It is anticipated that forecasts of water supplies available to meet water rights demands will be updated on a monthly basis until cumulative rainfall of greater than 0.5 inches occurs as measured at Ukiah Municipal Airport precipitation stations within the watershed. Following this precipitation event, it is anticipated that forecasts of supplies will be updated on a weekly basis until rescission of all curtailment orders under this section.
- (d) Rescission of a curtailment order shall be announced using the email distribution list and web page described in section 877.3, subdivision (e)(2).
  - (a) Water users within Sonoma County may not redivert water previously stored in Lake Mendocino pursuant to the 10,000 acre-foot reservation described in Permit 12947A, Term 23, if any of the following conditions occurs:
    - (1) 25 cubic feet per second is the applicable minimum instream flow requirement upstream of the confluence of Dry Creek and the Russian River under Term 20 of Permit 12947A, including modifications from an approved temporary urgency change petition, and Lake Mendocino storage has fallen below the following levels prior to the specified dates:

(A) June 1: 39,000 acre-feet

(B) July 1: 35,000 acre-feet

(C) August 1: 29,000 acre-feet

(D) September 1: 24,000 acre-feet

(E) October 1 or thereafter: 20,000 acre-feet

(2) 75 cubic feet per second is the applicable minimum instream flow requirement upstream of the confluence of Dry Creek and the Russian River under Term 20 of Permit 12947A, including modifications from an approved temporary urgency change petition, and Lake Mendocino storage has fallen below the following levels prior to the specified dates:

(A) July 1: 44,000 acre-feet

(B) August 1: 35,000 acre-feet

(C) September 1: 27,000 acre-feet

#### (D) October 1 or thereafter: 20,000 acre-feet

(3) If an accounting report submitted to the Deputy Director by Sonoma County Water Agency and the Mendocino County Russian River Flood Control and Water Conservation Improvement District pursuant to their March 21, 2022 Memorandum of Understanding includes information indicating the stored water reserved by Term 23 of Permit 12947A has been depleted or must be retained to maintain instream flows, the Deputy Director may determine that rediversion of water pursuant to that reservation must cease. Such a determination will be announced on the State Water Board's website and via the State Water Board's email distribution list and shall take effect the following day.

(b) Water users who intend to redivert water previously stored in Lake Mendocino pursuant to the 10,000 acre-foot reservation described in Term 23 of Permit 12947A as an alternate water source must submit a claim using a form prescribed by the Deputy Director documenting their right to use the reserved stored water no later than 14 days from issuance of a curtailment order. A claim submitted under this subdivision is only required for rediversions pursuant to said 10,000 acre-foot reservation during the effective period of this regulation.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 275, 1058.5, Water Code; National Audubon Society v. Superior Court (1983) 33 Cal.3d 419; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463 Stanford Vina Ranch Irrigation Co. v. State of California (2020) 50 Cal.App.5th 976; State Water Resources Control Board Decisions 1030 (Aug. 1961) & 1610 (April 1986); State Water Resources Control Board Order WR 74-30.

#### 877.6 Rediversion of Water Previously Stored in Lake Mendocino.

- (a) Rediversion by the Flood Control District of previously stored water released from Lake Mendocino shall be an unreasonable use of water and subject to the enforcement provisions described in section 879.2 unless such rediversion meets the requirements of this section.
- (b) The Flood Control District shall schedule all deliveries of water pursuant to License 13898 at least one week in advance of release of the water.
- (c) The timing of rediversion activities relative to release of water shall be based on a travel time of water along the Russian River agreed upon between the Flood Control District and Sonoma County Water Agency.
- (d) The Flood Control District shall provide a monthly schedule of rediversions by the first day of each month and shall confirm by noon on Friday of each week whether those diversions will occur in the following week or have changed.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 275, 1058.5, Water Code; National Audubon Society v. Superior Court (1983) 33 Cal.3d 419; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463; City of Barstow v. Mojave Water Agency (2000) 23 Cal.4th 1224.

#### 878 Non-Consumptive Uses

Diversion and use described in this section Non-consumptive uses under any valid basis of right may continue after issuance of a curtailment order without further approval from the Deputy Director, subject to the conditions set forth in this section. Diversions described in For the purposes of this section may not be required to curtail in response to, a curtailment order under this article if their non-consumptive use is one for which direct diversion and use of water does not decrease downstream flows or the availability of water for downstream water users. Any diverter wishing to continue diversion under this section must submit to the Deputy Director a certification, under penalty of perjury, which describes the non-consumptive use of water and explains, with supporting evidence, how the diversion and use do not decrease downstream flows in the applicable watershed. The Deputy Director may request additional information or disapprove any and may invalidate any non-consumptive use certification if the information provided is insufficient to support the statementeligibility or if more convincing evidence contradicts the claims in the certification. If a certification submitted pursuant to this section is disapproved invalidated, the diversions are subject to any curtailment order issued for that basis of right.

### This section applies to:

- (a) Direct diversions solely for hydropower if discharges are returned to the source stream or its tributaries and water is not held in storage.
- (b) Direct diversions dedicated to instream uses for the benefit of fish and wildlife pursuant to Water Code section 1707, including those that divert

water to a different location for subsequent release, provided the location of release is hydraulically connected to the source stream.

- (c) For Direct diversions subject to curtailment orders issued under sections 877.2 and 877.3 where the Deputy Director, the California Department of Fish and Wildlife, and the Executive Officer of the North Coast Regional Board have approved a substitution of releases of either stored water or groundwater into the Russian River or a tributary thereof for the benefit of fish and wildlife such that there is not ano net decrease in stream flow as a result of the diversion at the next USGS gage. The rate of releases made pursuant to this subdivision must be measured daily using a device or measurement method approved by the Deputy Director and provided to the Deputy Director on a monthly basis. Proposals involving the release of groundwater shall provide sufficient data and information to reasonably quantify any depletions of surface water caused by the groundwater pumping, the potential time lags of those depletions, and if additional groundwater releases beyond the diversion amounts are able to offset those depletions. The release of water does not have to be conducted by the owner of the water right proposed for the continued diversions, provided an agreement between the water right holder and the entity releasing the water is included in the proposal.
- (d) Other direct diversions solely for non-consumptive uses, if those diverters file with the Deputy Director a certification under penalty of perjury demonstrating that the diversion and use are non-consumptive and do not decrease downstream flows in the watershed or the availability of water for downstream water users.
- (e) Direct diversions located within the Legal Delta used exclusively to irrigate lands entirely below sea level when comparison of diversion and drainage records provide substantial evidence that continued irrigation of those lands does not increase net channel depletions.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 187, 275, 348, Water Code

### 878.1 Minimum Human Health and Safety Needs.

- (a) Diversions described in this section under any valid basis of right may be authorized to continue after issuance of anotwithstanding curtailment order of that right, subject to the conditions set forth in this section. A diversion that would otherwise be subject to curtailment may be authorized if:
  - (1) The diversion is necessary for minimum human health and safety needs; and therefore,

(2) The diversion is necessary to further the constitutional policy that the water resources of the state be put to beneficial use to the full extent they are capable, and that waste and unreasonable use be prevented, notwithstanding the effect of the diversions on more senior water rights or instream beneficial uses.

(b)

- (1) Diversions for minimum human health and safety needs under any valid basis of right of not greater than 55 gallons per person per day may continue after issuance of anotwithstanding curtailment order of that right without further approval from the Deputy Director, subject to the conditions set forth in this section. Any diverter wishing to continue diversion under this subdivision must submit to the Deputy Director certification, under penalty of perjury, of compliance with the requirements of subdivisions (b)(1)(A)-(E), below. The Deputy Director may request additional information or set additional requirements on continued diversion.
  - (A) Not more than 55 gallons per person per day will be diverted under all bases of right.
  - (B) The diversion is necessary to serve minimum human health and safety needs as defined in section 877.1, subdivision (gh), after all other alternate sources of water have been used. To the extent other water sources are available, those sources will be used first and the total used will not exceed 55 gallons per person per day.
  - (C) The diverter and all end users of the diverted water <u>have</u> <u>implemented all available conservation measures and</u> are operating under the strictest existing conservation <u>regimeplan</u> for that place of use, if such a plan exists for the area or service provider, or shall be eperating under such regime within 30 days. If additional approvals are required before implementation of the conservation regime, the diverter must certify that all possible steps will be taken immediately to ensure prompt approval.
  - (D) If the diverter is distributor or anyone using water under the diverter's basis of right of a public water is an Urban Water Code sections 350 et seq., that Supplier, it has declared a water shortage emergency condition and either already has adopted regulations and restrictions on the delivery of water or will adopt conservation and water delivery restrictions and regulations within a timeframe specified by the Deputy Director as a condition of certification.
  - (E) The diverter has either pursued steps to acquire other sources of water, but has not yet been completely successful, as described in an attached report, or the diverter will pursue the steps in an attached plan to identify and secure additional water.

- (2) To the extent that a diversion for minimum human health and safety needs requires more than 55 gallons per person per day, or cannot be quantified on the basis of gallons per person per day, continued diversion of water after issuance of anotwithstanding curtailment order for of the diversion applicable water right requires submission of a petition demonstrating compliance with the requirements of subdivisions (b)(1)(B)-(E) above and (b)(2)(A)-(F) below, and approval by the Deputy Director. The Deputy Director may condition approval of the petition on implementation of additional conservation measures and reporting requirements. Any petition to continue diversion to meet minimum human health and safety needs of more than 55 gallons per person per day must:
  - (A) Describe the specific circumstances that make the requested diversion amount necessary to meet minimum human health and safety needs, if a larger amount is sought.
  - (B) Estimate the amount of water needed.
  - (C) Certify that the supply will be used only for the stated need.
  - (D) Describe any other additional steps the diverter will take to reduce diversions and consumption.
  - (E) Provide the timeframe in which the diverter expects to reduce usage to no more than 55 gallons per person per day, or why minimum human health and safety needs will continue to require more water.
  - (F) As necessary, provide documentation that the use meets the definition of minimum human health and safety needs provided in subdivision (g) of section 877.1 section 877.1, subdivision (h). For water supplies necessary for fire prevention or firefighting purposes, substantiating documentation, such as guidance from the local fire department, local city or county ordinances, or equivalent local requirements, may be requested by the Deputy Director.
- (c) For public water systems with 15 or greater connections and small water systems of 5 to 15 connections, gallons per person per day shall be calculated on a monthly basis and the calculation methodology shall be consistent with the State Water Board's Percentage Residential Use and Residential Gallons Per Capita Daily Calculation (PRV and R-GPCD Calculation), dated September 22, 2020, which is hereby incorporated by reference.
- (d) Diversions for minimum human health and safety needs that cannot be quantified on the basis of an amount per person per day require a petition and approval from the Deputy Director. The Deputy Director may approve a such a petition under this subdivision or subdivision (b)(2) upon a finding that the petition demonstrates that the requested diversion is in furtherance of the

constitutional policy that the water resources of the state be put to beneficial use to the full extent they are capable, and that waste and unreasonable use be prevented, notwithstanding the effect of the diversion on senior water rights or instream beneficial uses, and may condition approval as appropriate to ensure that the diversion and use are reasonable and in the public interest.

- (e) For water supplies necessary for electrical power generation critical to grid reliability, substantiating documentation, such as a letter of support from California Independent System Operator, California Public Utilities

  Commission, California Energy Commission, or a similar energy grid reliability authority, must be provided.
- (e) To the extent necessary to resolve immediate public health or safety threats, a diversion subject to curtailment may continue while a petition under subdivision (b)(2) is being prepared and is pending. The Deputy Director may require additional information to support the initial petition, information on how long the diversion is expected to continue, and a description of other steps taken or planned to obtain alternative supplies.
- (f) Notice of certifications, petitions, and decisions under this section and section 878 will be posted as soon as practicable on the State Water Board's drought webpage. The Deputy Director may issue a decision under this article prior to providing notice.
- (g) Notwithstanding California Code of Regulations, Title 23, section 1064, a petition pursuant to Water Code section 1435 or 1725 solely for the provision of water for minimum human health and safety, as defined by section 877.1, subdivision (h), shall be accompanied by a filing fee of \$250.
- (gh) Diversion and use within the Russian River Watershed or Delta Watershed, including Mill Creek and Deer Creek, that deprives water for minimum human health and safety needs in 20212022, or which creates unacceptable risk of depriving water for minimum human health and safety needs in 20222023, is an unreasonable use of water. The Deputy Director shall prevent such unreasonable use of water by implementing the curtailment methodology described in section 877.2 for diversions in the Lower Russian River Watershed, sections 877.3, 877.4, 877.5, and 877.6 for diversions in the Upper Russian River Watershed, sections 877.2, 877.3, 877.4, and 877.5 for diversions in the Russian River Watershed, section 876.1 for diversions in the Delta Watershed, and section 876.5 for diversions in the Mill Creek and Deer Creek Watersheds.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 100, 100.5, 104, 105, 106.3, 275, 1058.5, Water Code; Environmental Defense Fund v. East Bay Muni. Util. Dist. (1980) 26 Cal.3d 183; Light v. State Water Resources Control Board (2014) 226 Cal.App.4th 1463; Stanford Vina Ranch Imagation Co. v. State of California (2020) 50 Cal.App.5th 976.

#### 879 Reporting

- (a) All water right holders issued a curtailment order under section 876.5, 877.2, or 877.3 are required, within seven calendar days of the date of the curtailment order, to submit under penalty of perjury a certification of one or more of the following actions taken in response to the curtailment order, certifying, as applicable, that:
  - (1) Diversions under the water right(s) identified have ceased;
  - (2) Any continued use is under other water rights not subject to curtailment, specifically identifying those other rights, including the basis of right and quantity of diversion;
  - (3) Diversions under the water right(s) identified continue only to the extent that they are authorized in accordance with section 878.4 or are non-consumptive uses for which a certification for continued diversion has been submitted as specified in section 878;
  - (4) Diversions under the water right(s) identified continue only to the extent that they are to provide for minimum human health and safety needs, a certification has been filed as authorized under section 878.1, subdivision (b)(1), and the subject water right authorizes the diversion in the absence of a curtailment order; or
  - (5) Diversions under the water right(s) identified continue only to the extent that they are consistent with a petition filed under section 878.1, subdivision (b)(2) or (d), and diversion and use will comply with the conditions for approval of the petition.
- (<u>ba</u>) All water users or water right holders whose continued diversion may be authorized under section 878.1 are required to submit, under penalty of perjury, information identified on a schedule established by the Deputy Director as a condition of certification or petition approval pursuant to section 878.1. The required information may include, but is not limited to, the following:
  - (1) The water right identification numbers under which diversions continue;
  - (2) The public water system identification number for any public water system served by the diversions.
  - (23) How the diverter complies with any conditions of continued diversion, including the conditions of certification under section 878.1, subdivision (b)(1);

- (34) Any failures to comply with conditions, including the conditions of certification under section 878.1, subdivision (b)(1), and steps taken to prevent further violations;
- (4<u>5</u>) Conservation and efficiency efforts planned, in the process of implementation, and implemented, as well as any information on the effectiveness of implementation;
- (56) Efforts to obtain alternate water sources;
- (67) If the diversion is authorized under an approved petition filed pursuant to section 878.1, subdivision (b)(2), progress toward implementing the measures imposed as conditions of petition approval;
- (78) If the diversion is authorized under section 878.1, subdivision (4)(b)(2):
  - (A) The rate of diversion if it is still ongoing;
  - (B) Whether the water has been used for any other purpose; and
  - (C) The date diversion ceased, if applicable.
- (89) The total water diversion for the reporting period and the total population served for minimum human health and safety needs. The total population must include actual or best available estimates of external populations not otherwise reported as being served by the water right holder, such as individuals receiving bulk or hauled water deliveries for indoor water use.
- (910) Diversion amounts for each day in acre-feet per day, maximum diversion rate in cubic feet per second, and anticipated future daily diversion amounts and diversion rates.
- (eb)The Deputy Director, or delegee, may issue an order under this article requiring any person to provide additional information reasonably necessary to assess their compliance with this article. Any person receiving an order under this subdivision shall provide the requested information within the time specified by the Deputy Director, but not less than five (5) ten (10) days after issuance.
- (dc) This subdivision applies to Delta Watershed curtailment orders and enhanced reporting to inform water unavailability determinations and the curtailment process described under section 876.1.
  - (1) All water right holders and claimants issued an initial order pursuant to section 876.1 are required, within the deadlines specified in the initial order but no sooner than seven calendar days following issuance of the order, to submit under penalty of perjury a certification that they have

and will continue to take actions needed to comply with section 876.1, including the following actions:

- (A) Regularly reviewing information posted on the State Water Board's drought webpage to determine when curtailments are required and when curtailments are suspended or reimposed, or subscribing to the State Water Board's Delta Drought email distribution list to receive updates directly; and
- (B) Ceasing diversions of natural and abandoned flow when curtailments are ordered, except to the extent that continuing diversions are authorized in accordance with section 878, 878.1, or 878.2879.1 subdivision (b), and ceasing rediversions of water released from storage, except to the extent authorized by a water right or contract.
- (2) In addition to the requirements identified under subdivision (&c)(1), the Deputy Director may require water right holders and claimants who have been issued an initial order under section 876.1 and whose water right or claim has a total authorized face value or recent annual reported diversion amount of one thousand acre-feet or greater to report the following information by the date specified by the Deputy Director, but no earlier than seven days after receipt of the reporting order and as specified thereafter:
  - (A) Prior diversions, unless otherwise reported in annual reports of water diversion and use, including direct diversions and diversions to storage. Diversion volumes shall be provided in a daily, weekly, or monthly format, as identified in the order.
  - (B) Demand projections for subsequent months through October 1, 20222023, including direct diversions and diversions to storage. Diversion volumes shall be provided in a daily, weekly, or monthly format, as identified in the order.
  - (C) Before issuing orders issued pursuant to subdivision ( $\frac{dc}{2}$ )(2) to water right holders and claimants in the Legal Delta, the Deputy Director will consult with and obtain the concurrence of the Delta Watermaster.
- (3) In order to inform curtailment decisions, the Deputy Director, or the Delta Watermaster for rights in the Legal Delta, may issue informational orders under subdivision (c) of this section requiring a water right holder, diverter, or user to provide additional information related to a diversion or use of water in the Delta Watershed, including but not limited to: additional reporting of water diversions and use; the basis of right with supporting documents or other evidence; property patent date for the place of use; the date of initial appropriation; anticipated or actual water transfer amounts; or any other information relevant to forecasting

demands and supplies and determining compliance with curtailment orders in the current drought year or in contingency planning for continuation of the current drought emergency. Informational orders may require reporting of diversions made in prior months and diversions anticipated during subsequent months on a recurring, monthly basis.

- (4) Any water right holder or claimant receiving an order under subdivision (&c) of this section shall provide the requested information within the deadlines specified therein, including any recurring deadlines associated with ongoing reporting requirements as applicable. The Deputy Director, or the Delta Watermaster for rights in the Legal Delta, may grant additional time for submission of information upon substantial compliance with the specified deadline and a showing of good cause. Information provided pursuant to subdivision (&c) of this section shall be submitted in an online form maintained by the State Water Board and accessible through its website, or in an electronic format as specified by the Deputy Director or Delta Watermaster.
- (5) Failure to provide the information required under subdivision (dc) of this section within the deadlines specified in the order or any time extension granted by the Deputy Director, or the Delta Watermaster for rights in the Legal Delta, is a violation subject to civil liability of up to \$500 per day for each day the violation continues pursuant to Water Code section 1846.
- (6) In determining whether to impose reporting requirements under subdivision (dc) of this section, the Deputy Director and Delta Watermaster will consider the need for the information for purposes of informing curtailment decisions and the burden of producing it, and will make reasonable efforts to avoid requiring duplicative reporting of information that is already in the <u>State Water</u> Board's possession.
- (7) All orders issued under subdivisions ( $\frac{\text{dc}}{\text{c}}$ )(2) and ( $\frac{\text{dc}}{\text{c}}$ )(3) shall be subject to reconsideration under article 2 (commencing with section 1122) of chapter 4 of part 1 of division 2 of the California Water Code.

Authority: Sections 1058, 1058.5, Water Code

Reference: Sections 100, 187, 275, 348, 1051, 1058.5, 1841 Water Code.

#### 879.1 Conditions of Permits, Licenses and Registrations.

(a) Compliance with this article, including any conditions of certification or approval of a petition under this article, shall constitute a condition of all water right permits, licenses, certificates and registrations for diversions from any watershed identified in this article.

(b) Diversions may continue after the issuance of a curtailment order to the extent the maintenance of a mechanism allowing for the bypass of natural or abandoned flow is not conditioned in a water right permit, license, stockpond certificate, or registration not exceeding a total authorized face value of ten acre-feet per year.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 275, 1253, 1058.5, Water Code; *National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.

## 879.2 Compliance and Enforcement.

- (a) A diverterwater user must comply with a curtailment order issued under this article, any updates to the curtailment status list, all conditions of certification or approval of a petition under this article, and anyall water right conditions under this article, notwithstanding receipt of more than one curtailment order. To the extent of any conflict between applicable requirements, the diverter must comply with the requirements that are the most stringent.
- (b) Diversion or use of water in the Upper Russian River Watershed or the Delta Watershed in violation of this article constitutes an unreasonable use of water and is subject to any and all enforcement proceedings authorized by law. When conducting an inspection to assess a diverter's compliance with this article, the State Water Board may obtain an inspection warrant pursuant to the procedures set forth in Title 13 (commencing with Section 1822.50) of Part 3 of the Code of Civil Procedure where access is not granted by the property owner.
- (c) Diversion or use of water in the Lower Russian River Watershed or the Delta Watershed in violation of this article is a trespass under Water Code section 1052 and shall constitute evidence of diversion or use in excess of a water user's rights. Failure to meet the requirements of this article or of any order issued thereunder constitutes a violation subject to civil liability pursuant to Water Code section 1846, and an infraction pursuant to Water Code section 1058.5, subdivision (d), each of which can carry a fine of up to five hundred dollars (\$500) for each day in which the violation occurs.
- (d) All violations of this article shall be subject to any applicable penalties under Water Code section 1058.5. Nothing in this section shall be construed as limiting the enforceability of or penalties available under any other applicable provision of law.

Authority: Sections 1058, 1058.5, Water Code

Reference: Cal. Const., Art. X, § 2; Sections 275, 1052, 1055, 1058.5, 1825, 1831, 1846, Water Code; Sections 1822.50 et al., California Code of Civil Procedure; National Audubon Society v. Superior Court (1983) 33 Cal.3d 419.

# 879.3 Redelegation of Authorities

<u>Authorities delegated to the Deputy Director under this article may be redelegated.</u>

Authority: Sections 1058, 1058.5, Water Code

Reference: State Water Resources Control Board Resolution No. 2012-0029

# **Appendix C: 2022 Program Language**

#### **UPPER RUSSIAN RIVER 2022 VOLUNTARY WATER SHARING PROGRAM**

By signing this Voluntary Water Sharing Agreement (this "Agreement"), the participating water right holder (the "Participant") commits to undertake the commitments required for participation in the Upper Russian River 2022 Voluntary Water Sharing Program (the "PROGRAM") as described below.

#### WHEREAS:

- State Water Resources Control Board (the "State Water Board") staff and interested parties on the Russian River north of its confluence with Dry Creek (the "Upper Russian River Watershed") have been in discussions about water supply and demand projections since July 2020;
- Since July 2020, State Water Board staff have encouraged water right holders to pursue voluntary agreements to address water supply and demand conditions that the State Water Board expects to be present in the Upper Russian River;
- 3. Hydrologic conditions on the Upper Russian River have been well below normal for the past two years, as have conditions on the entire Russian River as consistent with the Western United States is in a Mega Drought cycle, which is expected to continue;
- 4. On April 21, 2021, Governor Newsom proclaimed a state of emergency to exist in Mendocino and Sonoma counties due to drought conditions in the Russian River Watershed, and on March 28, 2022, Governor Newsom issued Executive Order N-7-22 confirming that such state of emergency persists (https://www.gov.ca.gov/wpcontent/uploads/2022/03/March-2022-Drought-EO.pdf);
- 5. The Russian River Flood Control & Water Conservation Improvement District ("Flood Control") and Sonoma County Water Agency ("SCWA") are the only two water right holders which hold rights to divert water to storage behind Coyote Valley Dam ("Stored Water"), which dam creates Lake Mendocino;
- In 2021, the State Water Board adopted emergency regulations to protect water supplies and threatened and endangered fish in the Russian River watershed which were codified in Title 23 of the California Code of Regulations, beginning with section 877 (the "2021 Emergency Regulations");
- The regulatory effect of the 2021 Emergency Regulations was to curtail all water right holders in the Upper Russian River Watershed, except to allow water right holders in the Upper Russian River Watershed to divert the minimum amount of water needed to meet minimum human health and safety needs;
- 8. The State Water Board temporarily suspended the curtailments as of October 23, 2021, and continues to analyze water supply conditions to determine whether reimposition of curtailments is warranted;
- 9. The 2021 Emergency Regulations remain in effect, and State Water Board staff have strongly indicated that (a) water right holders in the Upper Russian River Watershed can

- expect curtailment orders to re-issue under the 2021 Emergency Regulations, and (b) that State Water Board staff plan to propose readoption of the regulation for implementation in 2022 (the "Russian River Emergency Regulations");
- 10. California Code of Regulations, Title 23, section 877.4, provides that, after State Water Board approval of this Agreement, participation in and compliance with the PROGRAM will operate as an exception to curtailment unless and until the Deputy Director for Water Rights announces such an exception no longer applies;
- 11. Given uncertainties regarding potential curtailments of water right holders in the Upper Russian River Watershed, there is a shared desire by the State Water Board and Participants in the PROGRAM to achieve, where possible, an organized effort to conserve water in the Upper Russian River to ensure that no Participant is unable to divert sufficient water to satisfy minimum needs through the current water year;
- 12. Participation in the PROGRAM is a voluntary effort on behalf of the State Water Board and Participants to balance rights to water under existing law with the various needs for water in the Upper Russian River Watershed during a time of limited water supply and a declared state of emergency due to drought, to drive toward improved regional water management and stewardship during such times, and to provide for an alternative form of water management that avoids complete cessation of diversions due to State Water Board curtailment actions;
- 13. The State Water Board and Participants intend the PROGRAM to provide Participants with water supply adequate to meet basic needs through the term of the PROGRAM, taking into account human health and safety needs, irrigation and agricultural needs, and regional economic concerns;
- 14. By entering this Agreement, the State Water Board and the Participants intend to create and participate in a voluntary program where certain Participants agree to forbear their respective diversion(s) of water to which they are legally entitled, thereby making available for other Participants water which would otherwise be unavailable for them to divert:
- 15. The State Water Board and the Participants acknowledge that effectiveness of the PROGRAM depends on participation by enough water right holders with water still available under their basis of right so that all Participants' minimum water needs can be met;
- 16. The PROGRAM does not abrogate the State Water Board's responsibilities and legal authorities, and does not operate to affect or change existing water rights or the water right priority system beyond the scope of the PROGRAM;
- 17. Water made available by reduced diversions pursuant to the PROGRAM would not be available but for the PROGRAM. Participants' diversion of water made available by the PROGRAM therefore will not impact the availability of water for non-participating water right holders;

- 18. PROGRAM participants shall have submitted to the State Water Board Annual Water Use Reports for the years of 2017, 2018, and 2019;
- 19. The State Water Board and the Participants recognize and acknowledge that the PROGRAM is preferable to water right enforcement actions, regardless of whether those actions are between water right holders or are brought by the State Water Board. The State Water Board and Participants intend the PROGRAM to inform future efforts to adaptively manage water and stewardship throughout the Russian River; and
- 20. Participation in the PROGRAM is an effort to avoid the contentious, expensive, and disruptive legal disputes over water rights in the Upper Russian River Watershed that could ensue in the PROGRAM's absence, and by participating, Participants intend not to challenge another Participant's water rights or exercise thereof for the duration of the PROGRAM.

### **NOW, THEREFORE:**

- 1. To participate in the PROGRAM, before June 20, 2022, (the "Enrollment Deadline"), Participants:
  - Shall provide the information identified in Exhibit A, which shall identify with specificity which water right(s) the Participant intends to dedicate to the PROGRAM; and
  - b. As may be necessary, shall provide the information identified in Exhibit A-1, which shall identify any sources of percolating groundwater or other alternate sources which the Participant intends to use to mitigate or offset the impacts of meeting Participant Commitments as defined in Paragraph 2 and Exhibit B, whether its own or those of another Participant; and
  - c. By signing and delivering this Agreement to the State Water Board, commit to reduce their surface water diversions for the water rights identified in Exhibit A and in accordance with the forbearance thresholds identified in Exhibit B (the "Forbearance Thresholds"), except for quantities of water necessary for minimum human health and safety needs as defined in California Code of Regulations, Title 23, section 877.1, using the monthly average of their diversions reported in their Annual Water Use Reports or Statements of Diversion and Use for the years 2017 2019 as a baseline. Nothing in this Agreement shall prejudice any Participant's or the State Water Board's position with respect to possible forfeiture, waiver, relinquishment, modification, or change in the Participant's water rights identified in Exhibits A and A-1, nor with respect to the applicability or authority of State Water Board emergency regulation actions on pre-1914 or riparian water rights.
- As used in this Agreement, "Participant Commitments" shall mean the specific monthly Forbearance Threshold and compliance criteria applicable to each priority class for the duration of the PROGRAM.
  - a. The Forbearance Thresholds identified in Exhibit B, and as may be amended, will be prepared on a monthly basis for the duration of the PROGRAM by the State Water Board with the advice of the Upper Russian River Drought Response Steering Committee, and will be based on the number of Participants in the PROGRAM, the water right priorities of participants, and the projected amounts

- of natural and Potter Valley Project ("PVP") supplies available to satisfy the water right priority classes identified in Exhibit B. The State Water Board will publish the Forbearance Thresholds no later than June 30, 2022. The Forbearance Thresholds will take effect July 1, 2022, and shall remain in effect at least through July 2022. Subsequently, any update to the Forbearance Thresholds will be published no later than the 25<sup>th</sup> of the month prior to the month any update to the Forbearance Thresholds is to take effect. Any update to the Forbearance Thresholds shall only take effect on the first day of a given month.
- b. Water available to a class of water right priority for the purpose of this Agreement will be based on the 2017 through 2019 average monthly demand relative to available supplies, as described in Exhibit B, as may be amended. Excepting the ability to divert water to meet minimum human health and safety needs as provided for in the 2021 and 2022 Emergency Regulations, any Participant of a priority class with insufficient supply to meet their demand may not divert except to the extent water is made available through the forbearance actions of other Participants. The Forbearance Thresholds identified in Exhibit B, as may be amended, reflect the extent to which water has been made available for those water right classes experiencing a supply shortage. The maximum water use reductions in Exhibit B shall not be amended. The availability of water identified in Exhibit B will be periodically reviewed and, as necessary, updated by the end of each month to reflect any projected changes in water supply, such as may be due to precipitation or PVP flows.
- 3. While the PROGRAM remains in effect, Participants shall provide monthly written reports (the "Monthly Program Report") through the reporting process included as a part of the same online form used to enroll in the PROGRAM by the 10<sup>th</sup> of the subsequent month, reporting the amount of water diverted under the respective water right for that month (for example, June's Monthly Program Report is due July 10<sup>th</sup>, 2022).
- 4. Participants may reduce their diversions more than required by their Forbearance Thresholds to facilitate another Participant meeting its Forbearance Thresholds and Participant Commitments. Any such arrangement shall be identified in accordance with Exhibit C, to include information explaining how the Participants are meeting their Commitments.
- 5. Participants agree not to challenge any water rights which a Participant has enrolled in the PROGRAM, or the Participant's exercise thereof, for the duration of the PROGRAM. Nothing in this Agreement shall modify or prejudice any right or claim of any Participant or the State Water Board relating to the nature and/or extent of any rights to water identified in Exhibits A and A-1, including, but not limited to, the applicability or authority of State Water Board emergency regulation actions on pre-1914 or riparian water rights. Nothing in this Agreement or any action taken under the PROGRAM may be construed or used as an admission of any issue, fact, wrongdoing, liability, or violation of any law, rule, or regulation whatsoever.
- 6. The Participant's failure to substantially comply with the Participant commitments in this Agreement may result in exclusion from the PROGRAM. A water supplier Participant shall be in substantial compliance with Participant Commitments so long as it has implemented a drought conservation program by the Enrollment Deadline and taken

reasonable steps to achieve the prescribed Forbearance Threshold. Upon being excluded from this Agreement, a Participant shall be subject to the requirement to curtail in accordance with any curtailment order it has received and the updated curtailment status list.

- 7. The State Water Board staff shall convene a virtual monthly meeting available to PROGRAM Participants in an effort to continue to report and analyze data on water supply and demand in the Upper Russian River. The monthly meeting may include discussions with State Water Board staff on the status of Monthly Program Reports and management strategies to adapt to any changed or unforeseen hydraulic or hydrologic conditions on the Upper Russian River Watershed.
- 8. Program participants will rely on a representative group titled The Upper Russian River Drought Response Steering Committee to prepare a final written report to be presented to the State Water Board by January 31<sup>st</sup>, 2023, (the "Implementation Report") that synthesizes information gathered during implementation. The Implementation Report will identify lessons learned, impacts, and information gaps, and will provide recommendations to improve future implementation of the program. Recommendations may address such issues as defining baseline water use, increasing gauge monitoring to accurately understand the water losses from diverters, the structure of conservation stages, the extent to which instream needs should be included, local options for administration of the program, and improved methods for determining water availability. Identified impacts may include categories such as: impacts to listed species and designated critical habitat; agricultural impacts such as crop yields or losses; economic impacts such as lost tax revenue, local and regional business closures; immigration and emigration data; housing data; communal impacts such as community events and programs.
- 9. Recognizing that participation in the PROGRAM is a voluntary effort on behalf of the State Water Board and Participants to balance rights to water under existing law with the various needs for water in the Upper Russian River Watershed in a time of limited water supply and declared emergency due to drought, to drive toward improved regional adaptive water management and stewardship, and to secure assurances regarding potential State Water Board curtailment actions, the Participants and the State Water Board commit to continue to move forward in good faith.
- 10. Each and every Participant agrees that their participation in the PROGRAM is essential to the PROGRAM's success and the ability of the PROGRAM to provide assurances to each Participant regarding the amount of water Participants may divert under the PROGRAM and the avoidance of curtailment. Each and every Participant therefore understands that every Participant is relying on every Participant's performance in the PROGRAM. Participants may withdraw from the PROGRAM; *provided*, that, and excepting the first 15 (fifteen) calendar days after the State Water Board publishes the initial Forbearance Thresholds during which time any Participant's withdrawal shall be effective immediately, withdrawal shall only take effect on the first day of any given month. For withdrawal to be effective, Participants shall provide written notice to the Deputy Director of the Division of Water Rights (the "Deputy Director") of the Participant's intent to withdraw from the PROGRAM; *provided*, that any such withdrawal shall not take effect any earlier than fifteen (15) calendar days of the date the Deputy

Director receives the notice of withdrawal. Participants understand and acknowledge that, upon withdrawal, any withdrawn Participant shall no longer benefit from the exemption from curtailment participation in the PROGAM provides in accordance with Paragraph 5 of this Agreement and California Code of Regulations, Title 23, section 877.4.

11. Participation in the PROGRAM shall automatically terminate upon a written determination by the Deputy Director of the existence of precipitation sufficient to alleviate all supply water shortages in the Upper Russian River, the rescission of the Drought Emergency Proclamations of April 21, 2021 and May 10, 2021, or any subsequently issued Drought Emergency Proclamations or December 31, 2022, whichever is earlier. Alternatively, the PROGRAM shall terminate upon a written determination by the Deputy Director either that the PROGRAM is adversely affecting or threatens to adversely affect the availability of water for non-Participants. Prior to terminating the PROGRAM, the Deputy Director will consider any recommendations or findings from the Upper Russian River Drought Response Steering Committee to the extent they are made available within a reasonable time.

Participating Water Right Holder (Name of Person or Entity):			
	they hold the water right(s) named above and commits they have the authority from the water right holder older to the terms of this Agreement.		
Signature:	Date:		
Printed Name of Signatory (If other than t	the Water Right Holder named above)		

# **Exhibit A: List of Rights Participant is Applying to the PROGRAM**

Water Right Statement / Application Number:	
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Water Right Statement / Application Number:	

# **Exhibit A-1: Identified Alternate Source(s)**

If you plan to use alternative sources (recycled water, contract water, percolating ground water, previously stored water, etc.) of water during the duration of the water sharing program, please identify the alternative source(s) by water right below.

(Yes / No)	
Groundwater	
Recycled Water	
Stored water on property	
Water available through contract	
Water available through the 10,000 acre-feet reservation in Lake Mendocino	

### **Exhibit B: Assumptions and Analysis for Thresholds**

### WATER RIGHTS DEMAND

- Demand includes all users in the Upper Russian River watershed except Potter Valley Irrigation District (PVID).
- Stage is analyzed at a monthly time step
- Monthly demand based on average of volumes reported through annual water right use reports from 2017 through 2019. Monthly demands for riparian users will be updated if new demand data is received by the State Water Board pursuant to regulation section 877.3.
- Reported diversion demand for Sonoma County Water Agency's (SCWA) Lake Mendocino permit is zero for 2017 to 2019. Diversions under SCWA's other permits occur in the Lower Russian River.
- Demand associated with (Russian River Flood Control District (RRFCD) license is included.
- PVID license demand from Powerhouse Canal is not part of the total demand. PVID's license is one of most upstream in system and is senior to RRFCD and SCWA. A significant portion of the available PVP flow is a result of return flows after diversion and use by PVID. This exclusion also allows evaluation of Potter Valley Project (PVP) availability as an inflow to Lake Mendocino, rather than parsing PVID contract diversions from PVID license diversions, and the associated return flows of each.
- Demand will be aggregated to the following priority levels:
  - 1. Riparian
  - 2. Pre-1914
  - 3. Pre-1949 and rights with a priority date in 1949
  - 4. RRFCD and SCWA
  - 5. 1950 to 1952
  - 6. 1953 to 1954
  - 7. 1955 to 1957
  - 8. 1958 to 1959
  - 9. 1960 to 1970
  - 10. 1971 to present

#### **AVAILABLE SUPPLY**

- Natural flow will be estimated using the PRMS hydrologic model being used to support implementation of the current emergency regulation. The model shall estimate natural flow accumulating across the Upper Russian River watershed.
- Natural flow can be forecasted as a monthly volume to compare against monthly demand.
- PVP flows forecast based on following assumptions:
  - Drought variance implemented starting July 1, resulting in a minimum instream flow requirement of either 5 to 25 cfs. Until variance is filed, PVP flow will be based on 75 cfs minimum instream flow plus a 5 cfs buffer (80 cfs).
  - PVID contract deliveries will be similar to 2020 monthly averages, resulting in an monthly average return flow of 10 cfs.
  - Available PVP flow would be inflows to Lake Mendocino from instream flow requirement plus return flows from PVID.

- Evaporative loss from the mainstem and riparian corridor will be removed from the available supply before comparing supply against water rights demand. Based on the following assumptions:
  - Evaporative volumes will be similar to 2021.
  - A riparian corridor width of 35 meters on either side of the mainstem, comprised of a 30-meter-wide Open Water area and a 40-meter-wide area of Riparian Vegetation. Evaporative losses will be based on values from Cal-SIMETAW, as described in the Informative Digest for the 2022 regulation. This results in monthly estimated losses of 1,250; 1,310; 1,100; 817; and 473 acre-feet per month for the months of June through October.
  - Evaporative loss will be reduced equally from the monthly natural supply, the PVP supply, and storage releases. If there is remaining evaporative loss after subtracting from the natural supply, it will be removed from the monthly PVP volume.
- A flow of three cfs will be reserved for minimum human health and safety based on amounts certified and petitioned (excluding fire protection needs, which are variable water demands) from implementation of the 2021 emergency regulation.

### ANALYSIS OF SUPPLY AND DEMAND TO DETERMINE SHORTAGE LEVEL

- Once natural supply, PVP supply, and total water rights demand for each month has been
  determined, the available supplies will be attributed to each level of water right priority until
  supply has been depleted to zero.
- Natural flows will first be available to riparian users then to appropriative water right holders in order of priority. PVP flows will not be available to riparian users.
- If there is any shortage within a priority level, then all water right holders in that level will be considered in shortage for the purposes of the agreement. For example, if in the 1950 to 1952 level there is enough water to support diversions a 1951 right holder but not a 1952 right holder, then the 1950 to 1952 level is in shortage.

### ESTABLISHING FORBEARANCE THRESHOLDS

- The percent reduction in water use will be a reduction from average monthly demand reported through water right annual use reports from 2017 to 2019.
- Except for pre-1914 water right holders, the maximum required percent water use reduction
  for a priority level that has water available (i.e., is not experiencing shortage) will be 30%.
  The maximum required water use reduction for pre-1914 water right holders will be 20%. All
  priority levels in shortage will have the same water use reduction percentage. Participants
  may elect to further reduce their water use under water rights identified through the process
  provided in Exhibit C.
- The minimum percent water use reduction for a priority level that does not have water available (i.e., is experiencing shortage) will be 40% and a maximum of percent water use reduction of 75%.
- 20% will be the default reduction threshold for all priority levels that have water available. The threshold will be reduced or increased by priority level in increments of 10%, in order of priority, if the threshold for those in shortage is less than 40% or greater than 75%.
- Forbearance thresholds will be in effect during any month where the Pre-1914 or the Pre-1949/1949 priority levels are experiencing a water supply shortage.

### **Exhibit C: Aggregated Forbearance Threshold Commitments**

Participants may reduce their diversions more than required by their Forbearance Thresholds to facilitate another participant meeting its Forbearance Thresholds and Participant Commitments. (Example A, a transfer agreement between participants).

Participants may reduce diversions under one participating water right to benefit another participating water right. (Example B: one participant could increase the forbearance percentage on one water right to provide additional water to another participating water right under the same ownership).

Any such arrangement shall be identified below to include information explaining how the participants are meeting their commitments. (For example, participant A has a water right with a forbearance threshold of 10% and they increase it to 20% to provide the additional water to identified participant(s)).

If you choose to participate in this option, please identify what percentage of your water right you are willing to forebear beyond the current program requirement and which other water rights(s) you are providing this additional water to.

Is participant planning to meet forbearance thresholds commitments through aggregating water use reduction across multiple water rights enrolled in the program? (Yes/No)