

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

**In the Matter of Permits 12947A, 12949, 12950, and 16596
(Applications 12919A, 15736, 15737, 19351)**

Sonoma County Water Agency

**AMENDED ORDER APPROVING TEMPORARY URGENCY CHANGE
WITH MODIFICATIONS DATED OCTOBER 11, 2022**

(bold-underline) text indicates additions and **~~bold-strikeout~~** indicates deletions)

SOURCE: Dry Creek, Russian River, and East Fork Russian River

COUNTIES: Sonoma and Mendocino Counties

BY THE DEPUTY DIRECTOR:

1.0 SUBSTANCE OF TEMPORARY URGENCY CHANGE PETITIONS

On May 26, 2022, Sonoma County Water Agency (Sonoma Water) filed Temporary Urgency Change Petitions (TUCPs) with the State Water Resources Control Board (State Water Board), Division of Water Rights (Division) requesting approval of changes to the subject permits pursuant to California Water Code section 1435. The TUCPs requested temporary reductions to the Russian River instream flow requirements that are conditions of the subject permits to address the current dry conditions in the Russian River Watershed and the extreme low storage conditions in Lake Mendocino and Lake Sonoma. In addition, the changes are proposed to avoid potential violations of the Incidental Take Statement contained in the 2008 National Marine Fisheries Service (NMFS) Biological Opinion on the water supply, flood control, and channel maintenance operations for the Russian River conducted by the U.S. Army Corps of Engineers, Sonoma Water, and the Mendocino County Russian River Flood Control District (hereafter, 2008 Biological Opinion). The TUCPs seek the following changes:

- (a) From the date of approval of the TUCPs through a term of 180 days, the minimum instream flow requirements will be set to the *Critical* water

supply classification criteria of 25 [cubic feet per second (cfs)] in the Upper Russian River^[1] and 35 cfs in the Lower Russian River^[2];

- b) The minimum instream flow requirement will be implemented as a 5-day running average of average daily stream flow measurements with instantaneous minimum instream flows being no less than 10 cfs below the minimum.

2.0 BACKGROUND

2.1 Sonoma Water's Water Right Permits

The TUCPs involve the following water right permits held by Sonoma Water:

- Permit 12947A (Application 12919A), which authorizes direct diversion of 92 cfs from the East Fork Russian River and storage of 122,500 acre-feet (AF) per year in Lake Mendocino from January 1 through December 31 of each year;
- Permit 12949 (Application 15736), which authorizes direct diversion of 20 cfs from the Russian River from January 1 through December 31 of each year;
- Permit 12950 (Application 15737), which authorizes direct diversion of 60 cfs from the Russian River from April 1 through September 30 of each year; and
- Permit 16596 (Application 19351), which authorizes direct diversion of 180 cfs from the Russian River from January 1 to December 31 of each year and storage of 245,000 AF in Lake Sonoma, located on Dry Creek, from October 1 of each year to May 1 of the succeeding year.

2.2 Requirements of State Water Board Decision 1610

Sonoma Water controls and coordinates water supply releases from Lake Mendocino (Coyote Valley Dam) and Lake Sonoma (Warm Springs Dam) to implement the minimum instream flow requirements in State Water Board Decision 1610 (1986) (hereafter, Decision 1610). Decision 1610 set minimum instream flows in the Russian River to “preserve the fishery and recreation in the river and in Lake Mendocino to the greatest extent possible while serving the needs of the agricultural, municipal, domestic, and industrial uses which are dependent upon the water.” (Decision 1610, p. 21.)

Decision 1610 established water year classifications of *Normal*, *Dry*, and *Critical*, which are based on cumulative inflow into Lake Pillsbury (in the adjacent Eel River

¹ For purposes of this Order, Upper Russian River refers to the mainstem Russian River from its confluence with the East Fork Russian River to its confluence with Dry Creek.

² For purposes of this Order, the Lower Russian River refers to the mainstem Russian River from its confluence with Dry Creek to the Pacific Ocean.

Watershed) beginning October 1 of each year.^{3]} Decision 1610 further identifies two variations of the *Normal* water supply condition, *Dry Spring 1* and *Dry Spring 2*. These conditions provide for lower required minimum flows in the Upper Russian River during times when the combined storage in Lake Pillsbury and Lake Mendocino on May 31 is unusually low.

From October 1, 2021 to June 1, 2022, the cumulative inflow into Lake Pillsbury was 224,000 AF. Pursuant to Decision 1610, the water supply condition would be categorized as *Normal-Dry Spring 2* for the remainder of the year, however up until June 8, 2022, Sonoma Water was managing the Russian River based on a *Critical* water supply condition as authorized by the State Water Board's December 2021 TUCP Order. Subsequent to the expiration of that Order, the following conditions apply, among others:

- Term 20 of Sonoma Water's Permit 12947A requires Sonoma Water to pass through or release from storage at Lake Mendocino sufficient water to maintain instream flows of 75 cfs for the Upper Russian River^{4]} and 85 cfs for the Lower Russian River.
- Terms 17 of both Permit 12949 and Permit 12950 require Sonoma Water to allow sufficient water to bypass the points of diversion on the Russian River to maintain 85 cfs to the Pacific Ocean.
- Term 13 of Permit 16596 requires Sonoma Water to maintain 85 cfs in the Lower Russian River unless the water level in Lake Sonoma is below elevation 292 feet with reference to the National Geodetic Vertical Datum of 1929, or unless prohibited by the United States Government.

2.3 2008 Biological Opinion

Central California Coast (CCC) steelhead (*Oncorhynchus mykiss*), CCC coho salmon (*O. kisutch*), and Central Coast (CC) Chinook salmon (*O. tshawytscha*) in the Russian River Watershed are listed as threatened or endangered species under the federal Endangered Species Act (16 U.S.C § 1531 et seq.). In accordance with the requirements of section 7 of the federal Endangered Species Act (16 U.S.C. § 1536), NMFS, Sonoma Water, and the U.S. Army Corps of Engineers (USACE) participated in a consultation process involving studies to determine whether the water supply, flood control, and channel maintenance operations of the Russian River, including the operations authorized under the subject permits, are likely to harm the survival and recovery of these listed fish species. The 2008 Biological Opinion includes summaries of the studies, analyses of the project impacts, and a determination that summer flows in the Upper Russian River and Dry Creek, as required by Decision 1610, are too high for optimal juvenile salmonid habitat within the Russian River system. According to the

³ Permits 12947A, 12949, 12950, and 16596 use the same water-year classification definitions. (Decision 1610, pp. 47-48, 53, 57-58, 60.)

2008 Biological Opinion, two types of issues are associated with the summer flows required by Decision 1610^[45]: (1) the flows create current velocities that limit the amount of freshwater rearing habitat available to salmonids; and (2) the flow release requirements deplete the cold water pool in Lake Mendocino, contributing to relatively high water temperatures, which reduce the quality of available rearing habitat.

The 2008 Biological Opinion sets limits on releases from Lake Mendocino and Lake Sonoma during the summer months to maintaining suitable habitat for CCC steelhead, CCC coho salmon, and CC Chinook salmon and avoid take under the Endangered Species Act. These limitations are relevant to the TUCPs because the limitations on higher releases from Lake Sonoma restrict Sonoma Water's ability to release additional water from Lake Sonoma to offset reduced releases from Lake Mendocino and maintain instream flows in the Lower Russian River. The Incidental Take Statement from the 2008 Biological Opinion set limits on how many months from June through October Sonoma Water may operate a monthly median daily release above 105 cfs from Lake Sonoma. These criteria are set to avoid jeopardizing listed salmonids and their habitat in Dry Creek. The 2008 Biological Opinion establishes four tiers of Incidental Take Allowance for reservoir releases from Lake Sonoma based on monthly median daily release in June through October in the first 12 years in which the 2008 Biological Opinion is effective.^[56]

2.4 Current Drought Conditions and Response

California is experiencing severe to exceptional drought conditions across the state. Water Year 2020-2021 was a second consecutive dry year with record-breaking high temperatures. In response to California's severe drought conditions in 2021, Governor Gavin Newsom proclaimed a regional drought state of emergency on April 21, 2021 for the Russian River Watershed, and on May 10, 2021, he signed a proclamation expanding the drought state of emergency to the Klamath River, Sacramento-San Joaquin Delta, and Tulare Lake Watersheds. On July 8, 2021, Governor Newsom signed a proclamation further expanding the regional drought state of emergency to include nine counties where drought effects are increasingly severe or where state emergency response may be needed. The Governor's drought

⁴⁵ The 2008 Biological Opinion focused on the flows required by Decision 1610 under *Normal* water year types. No changes to the flows for *Critical* water year types under Decision 1610 were recommended. By letters dated June 3, 2022 and June 7, 2022, respectively, NMFS and CDFW reiterated their support for the need to maintain the flows required in *Critical* water year types.

⁵⁶ Sonoma County continues to operate within these Incidental Take Statement "Allowance Tiers" despite the first 12 years of the 2008 Biological Opinion having passed. The Dry Creek Habitat Enhancement projects have not yet been completed as assumed in the 2008 Biological Opinion to support increasing releases and flows in year 13, and Sonoma Water has not yet expended its exceedance allowances.

proclamations brought a total of 50 of the state's 58 counties under the drought state of emergency.

The Russian River Watershed has experienced extremely dry conditions since 2020, with Water Year 2021 being the second driest year in the Ukiah Valley during the past 127 years of record, and Water Year 2020 being the fourth driest. As the drought continues, Lake Mendocino and Lake Sonoma are at or near their lowest levels for this time of the year since they began storing water in 1959 and 1984, respectively. As of June 9, 2022, the water supply storage level in Lake Mendocino was 50,627 AF, the second-lowest storage level for this time of year since Lake Mendocino first filled in 1959. Similarly, the storage level in Lake Sonoma was 137,661 AF on June 9, 2022, the lowest storage level for this time of year since Lake Sonoma first filled. In addition, on May 16, 2022, Pacific Gas & Electric (PG&E) filed a request with Federal Energy Regulatory Commission (FERC) for a temporary variance to reduce PG&E's minimum instream flow requirements for the East Fork Russian River under the FERC license for the Potter Valley Project (PVP) due to critically low water storage in Lake Pillsbury and the need to maintain minimum flows in the Eel River below Lake Van Arsdale and the Cape Horn Dam, including for threatened Chinook salmon and steelhead trout. If approved, PVP's minimum instream flow requirements for the East Fork Russian River below the Potter Valley Powerhouse would be reduced from 25 cfs to 5 cfs and be redefined as a flow target, thereby eliminating a 5 cfs buffer. Accordingly, Sonoma Water staff have forecasted that transfers from the Eel River to the East Fork Russian River through PVP will be reduced by approximately 20,000 AF between June 1, 2022 and October 1, 2022.⁶⁷

On April 20, 2021, Mendocino County declared a local emergency and imminent threat of disaster in Mendocino County due to drought conditions. On April 27, 2021, Sonoma County also adopted a resolution proclaiming a local drought emergency due to drought conditions in Sonoma County, with the most recent being approved by the Sonoma County Board of Supervisors on May 3, 2022. In response, Sonoma Water has filed four previous sets of TUCPs over the past two years to address dry conditions in the Russian River Watershed and low reservoir storage in Lake Mendocino. On July 28, 2020, the State Water Board approved Sonoma Water's TUCPs to temporarily reduce the minimum instream flow requirements in the Russian River. After the 2020 TUCP order expired on December 27, 2020, Sonoma Water filed another TUCP for Permit 12947A in January 2021 to request an alternative hydrologic index be used for the Upper Russian River. The State Water Board issued an order approving the TUCP on February 4, 2021, and approved clarifying amendments to the order on February 11, 2021. A May 14, 2021 TUCP request was approved on June 14, 2021 to reduce minimum instream flows, followed by a November 2021 TUCP request, approved on December 10, 2021, temporarily changing the hydrologic index. A recent

⁶⁷**On July 27 2022, FERC approved the flow variance request, effective immediately.**

analysis prepared by Sonoma Water engineering staff indicated that the water level in Lake Mendocino is projected to decline to less than 15,000 AF of storage before October 1 unless additional mitigation measures are taken. **Reservoir storage at Lake Mendocino was 41,305 af and 111,190 af at Lake Sonoma as of September 27, 2022, indicating that storage levels remain low, but improved as a result of operation pursuant to this Order approving the TUCP.**

Extremely low projected storage levels in Lake Sonoma and the extremely low water storage in Lake Mendocino could cause serious impacts to human health and safety, and harm listed and threatened fish species in the Russian River Watershed. The risks of currently low storage are of particular concern should drought conditions persist into 2023; if the winter of 2022 and early 2023 is similar to 2021, there is significant risk to the quality and availability of stored water for meeting human health and safety and listed and threatened species needs in the summer of 2023. Therefore, Sonoma Water requested changes to the minimum instream flow requirements on both the Upper and Lower Russian River to maintain water in storage in Lake Mendocino and Lake Sonoma at levels necessary to meet water supply demands and maintain instream flows.

In addition to preserving reservoir storage for water supplies to meet human health and safety needs in Sonoma and Marin counties, Sonoma Water proposes to reduce the minimum instream flow requirements for the Lower Russian River to avoid the need for increased release rates from Lake Sonoma in excess of the flows authorized by the 2008 Biological Opinion. Upon approval of the variance filed by PG&E, reduced instream flows on the Upper Russian River will result in significantly less contribution to instream flows in the Lower Russian River. Increased releases from Lake Sonoma into Dry Creek would be necessary for Sonoma Water to maintain Decision 1610 minimum instream flow requirements for the Lower Russian River while meeting water contractor, purchaser, and customer water supply demands. However, releases into Dry Creek in addition to those necessary to meet water supply demands are likely to violate the Incidental Take Statement in the 2008 Biological Opinion, which restricts releases from Lake Sonoma into Dry Creek to prevent flows that are too high to maintain habitat for juvenile salmonids.

3.0 COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT

Ordinarily, the State Water Board must comply with applicable requirements of the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) (CEQA) prior to issuance of any order approving a TUCP. (Cal. Code Regs., tit. 23, § 805.) However, the Governor's April 21, 2021 Drought Emergency Proclamation, ordering paragraph 7 suspended CEQA and regulations adopted pursuant to CEQA in Mendocino and Sonoma Counties, to the extent necessary for the State Water Board to address drought-related impacts through "[m]odifying requirements for reservoir releases or diversion limitations" in the Russian River Watershed "to ensure adequate, minimal water supplies for critical purposes." Sonoma Water's requests to temporarily

lower instream flow requirements in the Russian River due to historically dry conditions are eligible for suspension under the Governor's April 21, 2021 Drought Emergency Proclamation. The State Water Board will add this Order to the list of approvals on its website for which CEQA was suspended.

In addition to the Governor's suspension of CEQA covering the activities proposed and approved under this Order, Sonoma Water determined that the requested water right changes are categorically exempt under CEQA's emergency statutory exemption and Class 1, 7, and 8 categorical exemptions. Sonoma Water filed a Notice of Exemption on May 26, 2022. The State Water Board has reviewed the information submitted by Sonoma Water and has made its own independent finding that the requested changes are statutorily and categorically exempt from CEQA. The changes sought by the TUCPs are consistent with the following statutory and categorical CEQA exemptions for the following reasons:

- 1) As mentioned above, on April 21, 2021, the Governor proclaimed a drought emergency in Mendocino and Sonoma counties due to drought conditions in the Russian River Watershed. The Governor's Drought Emergency Proclamation ordered the State Water Board to consider specific actions to "ensure adequate, minimal water supplies for critical purposes." Information provided by Sonoma Water demonstrates that continued releases of water to maintain minimum instream flows required by Sonoma Water's current water right permit terms could cause storage levels in Lake Mendocino and Lake Sonoma to decline to unsafe levels. As discussed in this Order, if storage in Lake Mendocino is depleted, there will be serious water supply impacts to human health and safety, and water will not be available to protect aquatic life, including threatened and endangered species in the Russian River. Furthermore, increasing Lake Sonoma releases to maintain instream flow requirements under current permit terms could harm critical endangered species habitat in Dry Creek, and the resulting depletion of Lake Sonoma could also affect drinking water supplies and other critical water uses if dry conditions persist into 2023. Approval of the TUCPs is therefore necessary to prevent and mitigate loss of, or damage to, the environment, fishery resources, property, public health and safety, and essential public services. Accordingly, the project is statutorily exempt from CEQA because it is necessary to prevent or mitigate an emergency—in this case, a proclaimed drought emergency—that poses a clear and imminent danger. (Pub. Resources Code, §§ 21060.3 & 21080, subd. (b)(4); Cal. Code Regs., tit. 14, § 15269, subd. (c).)
- 2) A Class 1 categorical exemption "consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use." (Cal. Code Regs., tit. 14, § 15301.) The proposed action consists of the operation of existing facilities

involving negligible or no expansion of use beyond that existing, and accordingly is categorically exempt from CEQA under a Class 1 exemption.

- 3) A Class 7 categorical exemption “consists of actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment.” (Cal. Code Regs., tit. 14, § 15307.) The proposed action will ensure the maintenance of a natural resource (i.e., the instream resources of the Russian River) by increasing availability and improving the quality of salmonid rearing habitat in the Russian River and more closely mimicking natural inflow to the estuary, thereby enhancing the potential for maintaining a seasonal freshwater lagoon that could support increased production of juvenile steelhead. Accordingly, these changes are categorically exempt from CEQA pursuant to a Class 7 exemption.
- 4) A Class 8 categorical exemption “consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment.” (Cal. Code Regs., tit. 14, § 15308.) The proposed action will ensure the maintenance of the environment (i.e., the instream environment of the Russian River) in the same way as stated for the Class 7 categorical exemption, and the proposed temporary changes are also therefore categorically exempt under Class 8.

4.0 PROCEDURAL REQUIREMENTS CONCERNING THE TEMPORARY URGENCY CHANGE PETITION

On June 8, 2022, the State Water Board issued and delivered to Sonoma Water a notice of the temporary urgency change order pursuant to Water Code section 1438, subdivision (a). Pursuant to Water Code section 1438, subdivision (b)(1), Sonoma Water is required to publish the notice in a newspaper having a general circulation, and that is published within the counties where the points of diversion lie within 20 days from the date of issuance of the notice by the State Water Board. Pursuant to Water Code section 1438, subdivision (a), the State Water Board may issue a temporary urgency change order in advance of the required notice. In this case, however, Sonoma Water published the notice in *Ukiah Daily Journal* and *The Press Democrat*. In addition, the State Water Board posted the notice of the temporary urgency change (and accompanying materials) on its website and distributed the notice through its electronic notification system. **Interested persons had the opportunity to file an objection to the temporary urgency change petitions during the duration of the public notice period, which extended until 4:30 pm on July 23, 2022.** ~~**(Wat. Code, § 1438, subd. (d).) Any interested person may file an objection to a temporary urgency change (Wat. Code, § 1438, subd. (d).)**~~

The State Water Board must promptly consider and may hold a hearing on any objection. (*Id.*, § 1438, subd. (e).) The State Water Board exercises continuing supervision over temporary urgency change orders and may modify or revoke temporary urgency change orders at any time. (*Id.*, §§ 1439, 1440.) **The authorization to divert and use water under temporary urgency change orders automatically expires 180 days after issuance, unless they are revoked, an earlier expiration date is specified, or they are renewed. (*Id.*, §§ 1440, 1441.) The 180-day period does not include any time required for monitoring, reporting, or mitigation. (*Id.*, § 1440.)**

As of ~~June 16~~**August 31**, 2022, the State Water Board had received three letters in support of Sonoma Water's TUCPs from 1) Mendocino County Russian River Flood Control and Water Conservation Improvement District (Mendocino County RRFC), 2) NMFS, and 3) the California Department of Fish and Wildlife (CDFW). **In addition, the Russian River Keeper (RRK) submitted a comment that generally supported the need for temporary modification of flows to protect water supplies, the ecosystem and human health and safety needs. RRK also recommended a number of other actions to aid in management of the Russian River.**

NMFS and CDFW urged the State Water Board to conditionally approve Sonoma Water's TUCPs as early as possible to preserve water stored in Lake Mendocino and Lake Sonoma to meet the needs of federal and state listed salmonids in the Russian River later in the fall, as well as to maintain Dry Creek flows consistent with the requirements and actions under the 2008 Biological Opinion. NMFS and CDFW also proposed terms and conditions that would require Sonoma Water to conduct continuous water quality and fisheries monitoring in the Russian River, ongoing consultation with NMFS, CDFW, and the North Coast Water Board, and ongoing reporting of monitoring measurements to assist NMFS, CDFW, the North Coast Water Board, and the State Water Board in overseeing the effects of the TUCPs on conditions in the Russian River and determining if additional actions are required. The State Water Board has considered and incorporated the terms and conditions from the support letters of NMFS and CDFW into Conditions 2-7 of this Order.

RRK stated that it supports “the need for temporary modification of flows within the Russian River so that water storage supplies are protected.” RRK also expressed support for long-term changes to the hydrologic index in Decision 1610 to more accurately reflect hydrologic conditions in the Russian River watershed. RRK requested the State Water Board to add requirements to ensure Sonoma Water continues to diligently pursue its obligations under its pending change petition to modify the hydrologic index and minimum instream flows under its Russian River water rights. RRK requested further that the 5-day running average flow requirement used in the minimum instream flow permit terms be modified to allow no less than 5 cfs below the required minimum flow.

RRK also recommended that the State Water Board take additional actions to manage water diversion and use within the Russian River Watershed, including the recommendation for stricter (20-40 percent) water use reductions and increased enforcement of required water reductions and curtailments. RRK also recommended various measures for intra-watershed management such as the requirement for water users to forecast diversions to aid in real-time flow management, as well as the development of demand management plans and “river audits” to ensure water is being put to reasonable and beneficial use.

As of ~~June 15~~ **August 31**, 2022, the State Water Board has **also** received **nine** comments on Sonoma Water’s TUCPs from the Russian River Watershed Protection Committee (RRWPC). **Forest Unlimited (late)** and **eight twenty** residents **or interested parties, most of which are** located near the lower Russian River.

The RRWPC expressed concern over the impacts of reduced river flows on water quality and recreation in the lower river and its associated impacts to the local economy and questioned the reasonableness of the ongoing development of housing in the local area. Additionally, RRWPC asserted the Environmental Impact Report (EIR) related to the long-term petitions to change the hydrologic index and associated instream flows for the Russian River has suffered too many delays. Finally, RRWPC stated that releases into Dry Creek have not been consistent with requirements under the 2008 Biological Opinion. RRWPC supports the inclusion of a term requiring Sonoma Water and its contractors achieve a 20 percent reduction in water diversions.

The **eight twenty** comment letters received from residents near the lower Russian River expressed concern over the health of the river at lower flows and its impacts to recreation and the economy, as well as the continuing **agricultural and** urban development upstream that threatens an already-limited water supply.

The State Water Board has considered these comments in this Order. Section 5 of this Order addresses comments regarding the potential impacts of reduced minimum instream flows on water quality (algal blooms and cyanobacteria), fisheries, and tourism and recreation; requests for stricter conservation measures, and requests for increasing releases of stored water from Lake Sonoma to provide higher flows in the Lower Russian River. Further, State Water Board staff have been monitoring conditions through review of stream flows measured at United States Geological Survey (USGS) gages and weekly monitoring reports submitted by Sonoma Water. Many of the comments were focused on the possibility of flows of 25 cfs in the Lower Russian River, however all available data indicate the Lower Russian River has consistently had flows above 35 cfs, with flows measured near Hacienda bridge averaging 58 cfs since the TUCPs were approved on June 17, 2022.

The State Water Board has also considered parties' recommendations for additional drought response actions beyond the scope of Sonoma Water's TUCPs. Based upon extremely dry conditions within the Russian River Watershed and low storage levels within Sonoma Water's reservoirs, the State Water Board adopted an emergency regulation authorizing the curtailment of specified water users' diversions when water is unavailable under their water rights while also protecting human health and safety and public trust resources.

5.0 CRITERIA FOR APPROVING THE PROPOSED TEMPORARY URGENCY CHANGE

Water Code section 1435 provides that a right holder who has an urgent need to change the point of diversion, place of use, or purpose of use from that specified in the water right may petition for a conditional temporary change order. The State Water Board's regulations set forth the filing and other procedural requirements applicable to TUCPs. (Cal. Code Regs., tit. 23, §§ 805, 806.) The State Water Board's regulations also clarify that requests for changes to permits or licenses other than changes in point of diversion, place of use, or purpose of use may be filed, subject to the same filing and procedural requirements that apply to changes in point of diversion, place of use, or purpose of use. (*Id.*, § 791, subd. (e).)

Before approving a TUCP, the State Water Board must make the following findings: (1) the right holder has an urgent need to make the proposed change; (2) the proposed change may be made without injury to any other lawful user of water; (3) the proposed change may be made without unreasonable effect upon fish, wildlife, or other instream beneficial uses; and (4) the proposed change is in the public interest. (Wat. Code, § 1435, subd. (b)(1-4).)

A temporary change order does not result in the creation of a vested right, even of a temporary nature, but shall be subject at all times to modification or revocation in the discretion of the Board. (Wat. Code, § 1440.)

5.1 Urgency of the Proposed Change

Under Water Code section 1435, subdivision (c), an "urgent need" means "the existence of circumstances from which the board may in its judgment conclude that the proposed temporary change is necessary to further the constitutional policy that the water resources of the state be put to beneficial use to the fullest extent of which they are capable and that waste of water be prevented . . ."

In this case, an urgent need exists for the proposed change in minimum instream flow requirements on the Upper Russian River. As indicated above in Section 2.4 of this Order, the Russian River Watershed is experiencing a third consecutive year of drought conditions. In April 2021, the state and local governments declared a drought

emergency for the Russian River Watershed in Mendocino and Sonoma counties. However, because Decision 1610's hydrologic index is based on cumulative inflow to Lake Pillsbury, the water supply condition is categorized as *Normal-Dry Spring 2* instead of *Critical*. Pursuant to the State Water Board's December 10, 2021 approval of a TUCP, the hydrologic index applicable to the instream flow requirements for the Upper Russian River under Permit 12947A was temporarily changed to be based on Lake Mendocino storage levels, such that applicable minimum instream flows for the Upper Russian River have been 25 cfs, consistent with Decision 1610's requirements for *Critical* water supply conditions. That temporary urgency change expired on June 8, 2022. The Decision 1610 hydrologic index has continued to require Sonoma Water's maintenance of higher instream flows under Sonoma Water's other water rights (Permits 12949, 12950, and 16596), despite the critical dry conditions in the Russian River Watershed.

Sonoma Water stated in the TUCPs that without the proposed changes it would need to release additional stored water from Lake Mendocino to maintain instream flow requirements per Decision 1610, which would lead to critically low water supply during the fall or winter for water users in Mendocino County and the northern part of Sonoma County (above the confluence with Dry Creek) and could severely impact listed and threatened fish species in the Russian River. Sonoma Water has projected that Lake Mendocino would reach a storage level of only 15,000 AF by October 1, 2022, without the proposed temporary changes.

Sonoma Water and Mendocino County RRFC signed an agreement titled Memorandum of Understanding Concerning Lake Mendocino Storage Planning and Russian River Management (MOU). The MOU details important information to be jointly developed by Sonoma Water and Mendocino County RRFC regarding the observed and projected amounts of water in Lake Mendocino available to both parties, as well as the availability of stored water necessary for maintaining Sonoma Water's instream flow obligations downstream of Lake Mendocino. The information developed through the MOU will support the State Water Board's ongoing oversight of the changes approved by this Order to ensure that the water resources of the Russian River are put to beneficial use to the fullest extent of which they are capable. Therefore a condition has been added requiring Sonoma Water to submit the relevant data and information to the State Water Board.

An urgent need also exists for the proposed change in minimum instream flow requirements on the Lower Russian River. Lake Sonoma is at its lowest storage level since it began storing water in 1984. Sonoma Water predicted Lake Sonoma could decline to less than 100,000 AF by October 1, 2022, without changes to instream flow requirements. In addition, reductions in the Upper Russian River flows would require an increase in Lake Sonoma releases into Dry Creek to meet Lower Russian River flow requirements as well as water supply demands. Higher releases from Lake Sonoma could cause Sonoma Water to violate the Incidental Take Statement contained in the 2008 Biological Opinion and reduce the suitability of habitat for threatened and

endangered fish species in Dry Creek. Sonoma Water has been releasing over 160 cfs since June 8, 2022 at Lake Sonoma to meet the instream flow requirements per Decision 1610, which puts reservoir operations above the 160 cfs maximum threshold established in the Incidental Take Statement of the 2008 Biological Opinion. Without modification to the current instream flow requirement for the Lower Russian River, Sonoma Water would have to continue releases that would likely result in violation of the Incidental Take Statement contained in the 2008 Biological Opinion.

Therefore, although requests to increase water releases from Lake Sonoma to meet higher minimum instream flow requirements in the Lower Russian River have been received by the Board, the flow limitations in the 2008 Biological Opinion restrict this option. Absent the proposed changes to the minimum instream flow requirements in the Lower Russian River, Sonoma Water would have to choose between either exacerbating the depletion of Lake Mendocino storage levels or increasing Lake Sonoma releases such that they would violate the Incidental Take Statement contained in the 2008 Biological Opinion.

Water Code section 1435, subdivision (c) also states that the State Water Board shall not find a petitioner's need to be urgent if it concludes that the petitioner has not exercised due diligence either in petitioning for a change pursuant to provisions other than a TUCP or in pursuing that petition for change. As noted in the State Water Board's February 2021 order approving Sonoma Water's TUCP for Permit 12947A, a number of factors have hindered action on Sonoma Water's long-term change petitions to modify Decision 1610 and Permits 12947A, 12949, 12950, and 16596. As required as a condition of that order, Sonoma Water has provided a schedule of milestones and completion dates for further actions necessary for action on its long-term change petitions. Since submittal of that schedule, progress has been hindered by two additional significant issues: 1) the severity of the ongoing drought since February 2021 and 2) the ongoing uncertainty regarding the future of transfers of water from the Eel River watershed through the PVP. As described above, drought response has been a significant effort over the past two years and has necessitated the diversion of resources at both Sonoma Water and the Board that otherwise could have been dedicated to making progress on the long-term change petitions. With the expiration of the PVP FERC license on April 14, 2022 and the failure to secure new ownership of the project, the process to abandon the PVP will soon commence. Until the nature and duration of the abandonment process proposed by PG&E and approved by FERC is known, progress on the long-term petitions and the related supporting environmental analyses will be hindered. The Order includes a condition that requires an updated schedule and identification of potential pathways forward given the uncertainty associated with the PVP. In light of these circumstances and representations, the State Water Board finds that Sonoma Water has exercised due diligence. Sonoma Water must continue to diligently pursue the long-term petitions in accordance with its updated report and schedule. In the interim, an urgent need exists now, due to the current critical water conditions and ongoing drought emergency, to grant Sonoma Water's TUCPs.

5.2 No Injury to Any Other Lawful User of Water

Sonoma Water is required to maintain specified flows in the Russian River from its most upstream point of diversion to the Russian River's confluence with the Pacific Ocean. Under this Order, minimum flows are required to be maintained consistent with the critically dry conditions in the Russian River Watershed. Under present conditions, Lake Mendocino storage releases comprise virtually all water flowing in the Upper Russian River. What little natural flow exists, if any, will not be sufficient to support even the most senior water rights. In the Lower Russian River, hydrologic conditions are similarly dry, and it is anticipated that limited flows may only be sufficient to protect senior water right holders and public trust resources. Other legal users of water will not be injured by reduction in releases of previously stored water because water released from storage is not available for diversion by downstream users with an independent basis of right. (See, e.g., *North Kern Water Storage Dist. v. Kern Delta Water Dist.* (2007) 147 Cal.App.4th 555, 570 [when the stored water is released for use, it is not part of the river's natural flow and redirection of this water does not count toward the appropriator's current allocation of river water]; *State Water Resources Control Bd. Cases* (2006) 136 Cal.App.4th 674, 737-745 [a riparian or appropriator has no legally protected interest in other appropriators' stored water or in the continuation of releases of stored water].)

In conjunction with other actions in response to the current drought state of emergency within the Russian River Watershed, the State Water Board will supervise diversion and use of water under this temporary urgency change order for the protection of all other lawful users of water pursuant to Water Code section 1439.

5.3 No Unreasonable Effect upon Fish, Wildlife, or Other Instream Beneficial Uses

Prior to approval of a TUCP, the Board must find that the proposed change may be made without unreasonable effect upon fish, wildlife, or other instream beneficial uses. In addition, the State Water Board has an independent obligation to consider the effect of approval of Sonoma Water's petitions on public trust resources and to protect those resources to the extent feasible and in the public interest. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419.) Public trust resources may include, but are not limited to, wildlife, fish, aquatic dependent species, streambeds, riparian areas, tidelands, and recreation in navigable waterways, as well as fisheries located in non-navigable waterways. It is also the policy of this state that all state agencies, boards, and commissions shall seek to conserve endangered species and threatened species and shall use their authority in furtherance of the purposes of the California Endangered Species Act (Fish & G. Code, § 2050 et seq.). State agencies should not approve projects that would jeopardize the continued existence of any endangered species or threatened species if there are reasonable and prudent alternatives available consistent

with conserving the species or its habitat that would prevent jeopardy. (Fish & G. Code, §§ 2053 & 2055.)

Although flows in the Russian River will be reduced upon approval of the TUCPs, maintenance of stored water in Lake Mendocino and Lake Sonoma for subsequent release is crucial for ensuring sufficient water supplies for human health and safety use and maintaining habitat for threatened and endangered fish species during the critical life stages that occur during the fall. With the conditions imposed by this Order, including ongoing efforts to support water conservation and regular monitoring and reporting of conditions by Sonoma Water, the State Water Board finds that granting the proposed temporary changes will not have an unreasonable effect on fish, wildlife, or other instream beneficial uses and public trust resources will be protected to the extent feasible and in the public interest. The State Water Board will continue to evaluate conditions in the watershed throughout the effective period of this Order and consider other actions that may further the protection of fish, wildlife, and other instream beneficial uses.

This Order required Sonoma Water to conduct site visits to six reaches on a biweekly basis between the confluence of the East Fork and West Fork of the Russian River and the confluence of Dry Creek and the Russian River. This requirement was originally included in an Order issued on June 14, 2021, acting on temporary urgency change petitions submitted by Sonoma Water. The requirements were recommended by NMFS to address conditions in 2021; the requirement was not included in the letter from NMFS in its letter supporting approval of the May 26, 2022 TUCPs. Given that the tasks described by the requirement were completed in October 2021, the requirement is being removed from this Order.

5.3.1 Conservation

Sonoma Water is actively engaged in water conservation to reduce demands on water stored in Lake Mendocino and Lake Sonoma for municipal supply. Sonoma Water and its water contractors have implemented water use efficiency programs to comply with the California Water Conservation Act since the establishment of the Sonoma-Marin Water Saving Partnership (Partnership) in 2010. The Partnership represents thirteen North Bay water utilities in Sonoma and Marin counties that have joined to provide regional solutions for water use efficiency.

To address the current drought and reduce diversions from the Russian River, Sonoma Water's contractors adopted a resolution in its May 3, 2021 Water Advisory Committee (WAC) meeting urging a 20 percent reduction in customer water use in support of the water saving efforts of the Partnership. Sonoma Water's contractors have already taken water conservation actions, and Sonoma Water indicates that they will continue to implement their respective agencies' Water Shortage Contingency Plans to meet the reduction goal. The TUCPs stated that Sonoma Water and its retail water customers

will commit to a 20 percent reduction in total diversions across all downstream points of diversion or redirection authorized under Sonoma Water's water rights from July 1 through October 31 of this year compared to the same period in 2020.

As stated in the TUCPs, Sonoma Water, its water contractors, and other members of the Partnership began implementing an aggressive water saving outreach campaign in winter 2020. Sonoma Water, its contractors, and the other member agencies of the Partnership continue to run a multimedia drought outreach campaign to maintain customer awareness of low reservoir levels and the need for continued water savings due to a third consecutive dry year. The campaign emphasizes reducing water waste by adhering to statewide water waste prohibitions and local restrictions on irrigation and other non-essential uses of water.

In addition, on May 24, 2022, the State Water Board adopted a new emergency regulation for urban water conservation. The regulation requires urban water suppliers to submit preliminary supply and demand assessments to the Department of Water Resources by June 10, 2022. Urban water suppliers also must implement all conservation actions in their locally adopted plans meant to address at least a water shortage level of 10 to 20 percent (Level 2) by June 10, 2022, and owners and managers of commercial, industrial, and institutional properties must not use potable water for irrigating non-functional turf. The regulation remains in effect for one year unless the State Water Board determines that it is no longer necessary due to changed conditions or unless the State Water Board renews the regulation due to continued drought conditions.

To ensure continuation of these conservation activities, this Order includes a condition that requires Sonoma Water and its water contractors to fulfill their commitment to reduce total diversions under Sonoma Water's water rights by 20 percent compared to the same period of 2020 from July 1 through the end of October, unless natural flow conditions in the watershed improve earlier. Sonoma Water is also required to submit to the Deputy Director for Water Rights monthly reports documenting Sonoma Water's reductions in diversions and to provide updated water storage projections of Lake Sonoma and Lake Mendocino during the effective period of this Order.

5.3.2 Recreation

Reduced flows in the Russian River could impair recreational uses by lowering flows below those necessary for recreational boating and reducing opportunities for other recreational activities such as swimming. Given the extremely low projected storage in Lake Mendocino and Lake Sonoma and the potential impacts to the environment, fishery resources, and essential human health and safety needs that could occur if the temporary changes are not approved, these impacts to recreation are reasonable under the circumstances. Maintenance of flows in excess of those required by this Order risks elimination of water storage in Lake Mendocino should drought conditions persist into 2023 and reduction of water storage in Lake Sonoma to levels that may not be sufficient

to meet human health and safety needs in Mendocino, Sonoma, and Marin counties, or provide minimum flows during the fall that are necessary for threatened and endangered fish species. Additionally, as described in Section 2.3 of this Order, releases from Lake Sonoma are limited by the 2008 Biological Opinion; and maintenance of higher flows in the Lower Russian River could adversely affect rearing habitat for protected salmonids and result in expending additional Incidental Take Allowances. Given the conflicting demands on limited water supplies, the need to maintain minimum storage levels to protect public water supplies and threatened and endangered species, and the implementation of conservation measures by Sonoma Water, this Order protects recreational interests in the Russian River to the extent feasible and in the public interest. ~~Additionally, as described in Section 2.3 of this Order, releases from Lake Sonoma are limited by the 2008 Biological Opinion; maintenance of higher flows in the Lower Russian River may result in expending additional Incidental Take Allowances.~~ Should changes in water supply conditions allow for enhanced flows that would further recreational interests, the Board retains the authority to amend or revoke this Order as appropriate.

5.3.3 Water Quality and Availability of Aquatic Habitat

The Russian River sustains an annual run of adult Chinook salmon that depend on the release of stored water from Lake Mendocino during October, November, and early December. Reduced minimum flows in the Russian River would probably have some immediate adverse impacts to water quality and the availability of aquatic habitat for anadromous fish and other species in the Upper and Lower Russian River. These impacts are, however, expected to be offset by improvements to water quality and aquatic habitat by preventing Lake Mendocino from being drained and allowing continued minimum releases through the fall. As discussed in Section 2.4 of this Order, Sonoma Water predicted that Lake Mendocino would potentially have only 15,000 AF of water remaining by October 1, 2022, without the proposed TUCPs. In addition to impacting flows in the Lower Russian River, elimination of water storage in Lake Mendocino would result in catastrophic impacts to human health and safety and survival of fish and wildlife in the Upper Russian River and the lake itself.

Both NMFS and CDFW support the TUCPs to conserve water storage in Lake Mendocino and Lake Sonoma for the benefit of listed salmonids, conditioned upon ongoing monitoring, reporting, and consultation requirements. These proposed terms and conditions have been included in this Order. To allow for adaptive management of releases from Lake Mendocino and Lake Sonoma, this Order requires Sonoma Water to provide weekly updates to the State Water Board, CDFW, NMFS, and the North Coast Water Board regarding the current hydrologic and water quality conditions on the Russian River and updates on fishery conditions. This information will assist the State Water Board in determining whether additional actions or modifications to this Order are necessary. All monitoring activities will be summarized in annual reports intended to evaluate whether and to what extent the reduced flows may have caused any impacts to water quality and availability of

aquatic habitat for salmonids. This information may be used to assist the study and development of future long-term- changes to Decision 1610 instream flow requirements for which separate petitions are pending.

5.3.4 Cyanobacteria

Cyanobacteria are present in most freshwater and marine aquatic environments. When conditions are favorable, including abundant light, elevated water temperature, elevated levels of nutrients, and lack of water turbulence and velocity, cyanobacteria can quickly multiply into a bloom. Not every bloom is toxic; however, harmful algal blooms of cyanobacteria (cyanoHABs) are a concern as some species of cyanobacteria produce toxins that have the potential to impact drinking water, recreation, and fish and wildlife. Cyanotoxins were present in the Russian River in 2015, 2016, 2017, and 2018, which led to warning signs being posted by Sonoma County Department of Health Services.

There are currently no federal water quality criteria or regulations for cyanobacteria or cyanotoxins. However, some toxins (microcystins and cylindrospermopsin) have been added to the contaminant candidate list under the Safe Drinking Water Act. In addition, the Clean Water Act sets ambient water quality standards and requires that the Environmental Protection Agency develop management strategies for assessing and managing algal toxins.

Currently, there is no regulation in the State of California specifically regarding cyanobacteria or cyanotoxins in drinking water or recreational waters. However, there has been an increase in cyanoHABs in California. The North Coast Water Board has noted concerns about cyanoHABs and elevated pathogen concentrations that occur when low stream flow conditions coincide with warm weather in the Russian River and its tributaries. The Russian River is listed as impaired on the 303(d) list for pathogen conditions, leading to the North Coast Water Board's adoption of the Action Plan for the Russian River Watershed Pathogen Total Maximum Daily Load in August 2019. The North Coast Water Board notes that past streamflow monitoring in the Lower Russian River indicates that high rainfall following a dry year is not adequate to restore baseflows in the late summer. Given the extremely dry conditions since 2020, the upcoming critically low late summer baseflows support the rationale for ongoing monitoring and coordination among Sonoma Water, the North Coast Water Board, and the State Water Board.

5.4 The Proposed Change Is in the Public Interest

Approval of the TUCPs to temporarily reduce minimum instream flows will help conserve stored water in Lake Mendocino and Lake Sonoma to meet human health and safety needs, and to protect endangered and threatened species in the Russian River. Without the proposed changes, the resulting elimination of stored water in Lake Mendocino and the depletion of stored water in Lake Sonoma to unsafe levels will put residents in the counties of Mendocino, Sonoma, and Marin at risk should dry

conditions persist into 2023. Fisheries and wildlife will be also at risk of running out of water in the Upper Russian River in the fall. In addition, without modification to the current instream flow requirement for the Lower Russian River, Sonoma Water would have to continue releases from Lake Sonoma, which could result in violation of the Incidental Take Statement, and would be detrimental to the fisheries in Dry Creek for the rest of this year. It is in the public interest to preserve water supplies for these beneficial uses given the extreme hydrologic circumstances and reduced water supplies.

Should the conditions that support the approval of this Order change, whether in alterations to water supply or identification of additional impacts to aquatic habitat, water quality, or other matters within the public interest, the State Water Board has the authority to revoke this approval or modify the terms and conditions of this Order as necessary to promote the interests of the public.

6.0 CONCLUSIONS

The State Water Board has adequate information in its files to make the evaluation required by Water Code section 1435. The findings of this Order are based on unique circumstances created by drought and are independent from any findings to be made in connection with the related change petitions filed by Sonoma Water in 2009 and revised in 2016 pursuant to Chapter 10 of Division 2 of Part 2 of the Water Code.

I conclude that, based on the available evidence:

1. The right holder has an urgent need to make the proposed change;
2. The proposed change will not operate to the injury of any other lawful user of water;
3. The proposed change will not have an unreasonable effect upon fish, wildlife, or other instream beneficial uses and public trust resources will be protected to the extent feasible and in the public interest; and
4. The proposed change is in the public interest.

ORDER

NOW, THEREFORE, IT IS ORDERED THAT: the petitions filed by Sonoma Water for a temporary urgency change in Permits 12947A, 12949, 12950, and 16596 are approved effective from the date of this Order for a period of 180 days.

All existing terms and conditions of the subject permits remain in effect, except as temporarily amended by the following terms:

1. The minimum instream flow requirements in the Russian River, as specified in Term 20 of Permit 12947A, Term 17 of Permit 12949, Term 17 of Permit 12950, and Term 13 of Permit 16596, shall be modified as follows:
 - a. Minimum instream flow in the Upper Russian River shall remain at or above 25 cfs, as measured on a five-day running average of average daily stream flow.
 - b. Minimum instream flow in the Lower Russian River shall remain at or above 35 cfs, as measured on a five-day running average of average daily stream flow.
 - c. Sonoma Water shall pass through or release sufficient water to maintain a continuous, instantaneous streamflow of no less than 15 cfs in the Upper Russian River and no less than 25 cfs in the Lower Russian River at all times.
2. Sonoma Water shall conduct the following water quality monitoring tasks to monitor habitat conditions and hydrologic connectivity at the following locations:

Upper Russian River Habitat:

- a. ~~From June 1 to October 1 of 2021, Sonoma Water shall visit six reach sites on a biweekly basis between the confluence of the East Fork Russian River and West Fork Russian River (the Forks) and the confluence of Dry Creek and Russian River in Healdsburg. Sonoma Water shall visit four reach sites (Ukiah, Hopland, Commisky Station, and Cloverdale) that have been used previously as flow/habitat study sites, and Sonoma Water shall establish two additional reach sites in Alexander Valley and Healdsburg. Each study reach site will be approximately 500 meters long. At each reach site, Sonoma Water shall document habitat conditions and flow connectivity via walking surveys, photo documentation, and measurement of width and depth at established cross-sections. Most reach sites shall be in close proximity to existing U.S. Geological Survey (USGS) stream gauges and Sonoma Water owned water quality data collection sites.~~
Sonoma Water shall supplement data collected at “permanent” water quality monitoring sites with temperature and dissolved oxygen measurements in up to a total of five deep pools in the Upper Russian River. Sonoma Water shall sample these sites opportunistically within and beyond the established habitat monitoring reaches.

Lower Russian River Habitat:

From October 1 through December 14, 2022, Sonoma Water shall visit at least one, and up to four critical riffle sites based on consultation with NMFS, in the Lower Russian River as conditions allow to assess adult salmonid passage opportunities. At each site, Sonoma Water staff shall

measure riffle length, width, and depth, and document the site with photographs.

3. Sonoma Water shall conduct monitoring to determine the effects of the changes in instream flows on water quality and availability of aquatic habitat for salmonids. Monitoring in the Russian River shall include continuous monitoring of temperature, dissolved oxygen, pH, and specific conductivity at multiple stations from Calpella to Jenner as follows for the date of this Order to December 14, 2022:
 - a. Monitoring on the East Fork Russian River shall occur at a seasonal water quality data sonde located approximately 1/3 mile (0.33 mi) downstream from Lake Mendocino and at the Russian River at the confluence with Pieta Creek; Sonoma Water shall record hourly measurements of water temperature, dissolved oxygen, specific conductivity, pH, and turbidity.
 - b. Monitoring on the Russian River shall occur at three, multi-parameter “permanent” water quality data sondes at USGS stream gages located at Hopland, Diggers Bend near Healdsburg, and Hacienda Bridge. These three data sondes are referred to as “permanent” as they are maintained as part of Sonoma Water’s early warning detection system in coordination with USGS on its “Real-time Data for California” website.
 - c. Monitoring on the Russian River shall occur at four seasonal data sondes with real-time telemetry in cooperation with USGS at USGS gages at East Fork Russian River at Calpella station, Cloverdale station (north of Cloverdale at Commisky Station Road), Jimtown (at the Alexander Valley Road bridge), and Johnson’s Beach (Guerneville). The data sonde at the Cloverdale gage shall collect dissolved oxygen and temperature; the data sonde at the Jimtown gage shall collect pH, temperature, dissolved oxygen, specific conductivity, and turbidity; and the data sonde at Johnson’s Beach shall collect pH, temperature, dissolved oxygen, specific conductivity, and turbidity.
 - d. Monitoring at Lake Sonoma and Lake Mendocino: Sonoma Water shall work with USACE to ensure the monitoring of vertical temperature profiles in Lake Sonoma and Lake Mendocino occurs on a biweekly basis from the date of this Order through December 14, 2022. This will inform adjustments to the outlet releases at each reservoir to ensure adequate cold water for fish hatchery operations, as well as the need for potential salvage/rescue operations for native fishes in the East Fork Russian River, or other necessary adaptive management. Monitoring at Lake Mendocino should be conducted near the outlet structure of the lake and will contribute to the assessment of water quality indicators and water column conditions, including vertical profiles for temperature, dissolved oxygen, turbidity, specific conductance, and pH on a biweekly basis. Water grab samples for nutrients, chlorophyll a, and turbidity shall also be collected on a biweekly basis in the hypolimnion, metalimnion, and epilimnion. Monitoring at Lake Mendocino will be dependent on access to

adequate safe boat launching sites at low reservoir water surface elevations. Monitoring at Lake Sonoma will contribute to the assessment of the volume of the coldwater pool based on vertical profile temperature data. Temperature monitoring at Lake Sonoma should be conducted near the outlet structure of the lake, and at several other locations (minimum of 4 sites/survey). For each survey, depth and temperature should be recorded at 10-foot depth intervals to characterize the change in temperature from the surface to deepest depth at each site within the reservoir. Monitoring on the mainstem Russian River shall include collection of water grab samples for nutrient, chlorophyll a, and turbidity at the East Fork Russian River at Calpella, East Fork Russian River approximately 1/3 mile (0.33 mi) downstream from Lake Mendocino, Hopland, Cloverdale, Jimtown, and near Syar Vineyards on a biweekly basis.

- e. Monitoring in the Russian River and its estuary shall contribute to assessing water quality indicators and water column conditions. By July 15, 2022, Sonoma Water shall develop a “Water Quality Monitoring Plan for the Russian River Estuary Management Project” (2022 Water Quality Monitoring Plan) in consultation with the North Coast Water Board.
 - f. Sonoma Water shall conduct the monitoring of the Russian River and its estuary in accordance with the 2022 Water Quality Monitoring Plan to evaluate cyanoHAB conditions and the risk co-factors contributing to nuisance blooms (e.g., flow, temperature, nutrients, etc.). Sonoma Water shall submit a copy of the final plan and any subsequent amendments to the State Water Board’s Deputy Director for Water Rights (Deputy Director) and the Executive Officer of the North Coast Water Board within two weeks of their completion.
 - g. Sonoma Water shall consult with the North Coast Water Board if any water quality issues of concern are observed from the continuous monitoring or water sampling required by this Order, if extremely low storage conditions in Lake Mendocino (less than 20,000 af) are forecasted, or if the Sonoma County Department of Health Services posts health advisories related to cyanotoxins or indicator bacteria in the Russian River. Sonoma Water shall submit a summary report of consultation details and a description of any proposed changes or additions to monitoring activities to the Deputy Director within one week of the consultation. Based on the report, the Deputy Director may revise this Condition to the extent necessary to evaluate the effects of reduced flows on water quality and instream beneficial uses.
4. Sonoma Water shall conduct the following Fisheries Monitoring as follows:

Upper Russian River:

Between June 1 and October 1 of 2022, if suitable water quality allows adequate visibility, Sonoma Water shall conduct two snorkel surveys in a pool/riffle

complex at the five reaches between the Forks and Cloverdale described in Condition 2 to document fish presence and species composition. The surveys shall be conducted in the early (July) and late (September) portion of the monitoring season.

Lower Russian River:

- a. From October 1 through the end of this Order, Sonoma Water shall conduct biweekly snorkel surveys in at least one, and up to six pools based on consultation with NMFS and CDFW, between Mirabel Dam and the estuary to document the presence of adult salmonids. Snorkel surveys shall start after adult salmonids have access to the river (i.e., when the sandbar at the mouth of the river is open) and shall end when determined by NMFS and CDFW.
- b. Beginning no later than September 1, 2022 and continuing through December 14, 2022, Sonoma Water shall monitor and record the daily numbers of adult salmon and steelhead moving upstream past the life cycle monitoring station at the Mirabel Dam fish ladder. Mirabel fish ladder numbers shall be included in the weekly reports required by Condition 6. If no fish are observed at the Mirabel Fish Ladder by October 1, then from October 1 through December 14, 2022, Sonoma Water shall conduct biweekly snorkel surveys in at least one, and up to six pools based on consultation with NMFS and CDFW, between Mirabel Dam and the estuary to document the presence of adult salmonids. Snorkel surveys shall start after adult salmonids have access to the river (i.e., when the sandbar at the mouth of the river is open) and shall end when determined by NMFS and CDFW.
- c. Beginning no later than October 1, 2022 and after a cumulative season total of 100 adult salmonids have moved past the Mirabel fish ladder, if adult salmon and steelhead can enter the Russian River estuary and suitable water clarity allows, Sonoma Water shall conduct spawning ground surveys in Dry Creek. Based on consultation with NMFS, Sonoma Water shall conduct up to three comprehensive Dry Creek surveys by boat along the 14-mile reach between Warm Springs Dam and the confluence of the Russian River and Dry Creek in Healdsburg.
- d. Beginning no later than November 1, 2022, and after a cumulative season total of 100 adult salmonids have moved past the Mirabel fish ladder and flows at the USGS gauge in Healdsburg exceed 100 cfs, Sonoma Water shall monitor numbers of adult salmonids in representative reaches in Alexander Valley and the Upper Russian River. Monitoring shall occur on a biweekly basis until December 14, 2022.
- e. Prior to December 1, at the onset of the Coho Salmon run, Sonoma Water shall consult weekly with NMFS and CDFW to evaluate conditions and discuss the need to implement temporary increases to instream flow (i.e., pulse flows) to attract fish into the respective fish facilities. By December 1, 2022, or after a cumulative seasonal total of 100 adult salmonids have moved upstream past the Mirabel fish ladder, whichever is earlier, Sonoma Water shall consult weekly with NMFS and CDFW regarding

the possibility of increasing the instream flow at the gage at Hacienda to a level not to exceed 110 cfs.

5. To protect against stranding of fish when releases from Lake Mendocino are reduced under this Order, flow in the East Fork Russian River immediately below Coyote Dam shall not be reduced by more than 12 cfs per hour, with a minimum of 4 hours between the end of each flow reduction. Flow reduction shall not exceed 24 cfs per day. NMFS Santa Rosa Office (North Coast team) and CDFW shall be notified by email 48 hours in advance of ramping events that will reach 24 cfs per day. Ramping rates specified in this term may be revised upon consultation with NMFS and CDFW and notification to the Deputy Director. Sonoma Water shall submit a summary report of consultation details to the Deputy Director within one week of each consultation meeting. If flow reductions of 12 cfs per hour or 24 cfs per day are made, Sonoma Water shall conduct an in-stream survey on the East Fork Russian River below the fish ladder to the Coyote Valley Fish Facility downstream to the confluence of the Mainstem Russian River and note any regions of the stream that are disconnected or any areas of isolated pools. Sonoma Water shall provide locations of disconnection and isolated pools to CDFW and NMFS on the following business day.
6. Sonoma Water shall continue to consult with NMFS, CDFW, and the North Coast Water Board on a biweekly basis until December 14, 2022 to discuss fishery and water quality monitoring updates and any concerns relative to water quality and the hydrologic condition of the Russian River. Temperature plots for Lake Sonoma should be taken in the week prior to the biweekly meeting and processed and released within 3 days of collection so that the agencies may utilize this information in adaptive management of the water supply to maintain in-stream and in-hatchery conditions. Sonoma Water shall provide materials to be discussed during these meeting to the resource agencies by 1:00 p.m. of the day prior to the meeting. Sonoma Water shall send notes of those meetings to the resource agencies and State Board within one week after their occurrence. Sonoma Water shall submit a summary report of consultation details to the Deputy Director upon request.
7. Sonoma Water shall report to the Deputy Director, the North Coast Water Board, CDFW, and NMFS on a biweekly basis regarding the current hydrologic condition of the Russian River system, including current reservoir levels in Lake Mendocino and Lake Sonoma, the rates of decline for Lake Mendocino and to Lake Sonoma, a 16-day cumulative rainfall forecast, current inflow from the Potter Valley Project, available data for Mirabel fish ladder numbers, and a summary of the available water quality data. Sonoma Water shall also make each report available on a publicly accessible website.
8. By December 1, 2022, Sonoma Water shall submit to the Deputy Director, CDFW, NMFS, and the North Coast Water Board a summary report of water

quality monitoring activities required by Condition 3 of this Order and the fishery monitoring activities required by Condition 4 of this Order. The summary report shall include an evaluation of whether, and to what extent, the reduced flows authorized by the Order caused any impacts to water quality, including any water quality impacts affecting recreation or the availability of aquatic habitat for salmonids. The summary report shall also include a discussion of the conditions that contribute to cyanoHAB toxicity events and address the potential for minimizing cyanoHAB outbreaks during the current and future water years under similar environmental conditions to those experienced during the period of this Order.

9. This Order does not authorize any act that results in the taking of a candidate, threatened, or endangered species, or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, § 2050 et seq.) or the federal Endangered Species Act (16 U.S.C. § 1531 et seq.). If a “take” will result from any act authorized under this Order, Sonoma Water shall obtain authorization for an incidental take permit prior to operation of the project. Sonoma Water shall be responsible for meeting all requirements of the applicable Endangered Species Act for the temporary urgency changes authorized under this Order.
10. The State Water Board reserves jurisdiction to supervise the temporary urgency changes under this Order, and to coordinate or modify terms and conditions, for the protection of vested rights, fish, wildlife, instream beneficial uses and the public interest as future conditions may warrant.
11. Sonoma Water shall immediately notify the Deputy Director if any significant change in storage conditions in Lake Mendocino or Lake Sonoma occurs that warrants reconsideration of this Order.
12. Sonoma Water and its water contractors shall ensure a 20 percent reduction, as compared to the same period of 2020, in total diversions across all downstream points of diversion or rediversion authorized under Sonoma Water’s water rights from July 1, 2022 through October 31, 2022, or until natural flows at the Hacienda gage are greater than 125 cfs.

Sonoma Water shall submit a monthly report to the Deputy Director documenting Sonoma Water’s reduction in diversions compared to the same period of 2020.

13. By September 15, 2022, Sonoma Water shall submit a report detailing an updated schedule of proposed milestones and completion dates for additional activities related to the State Water Board’s consideration of, and potential action on, Sonoma Water’s pending petitions to permanently change Permit 12947A, and other interrelated water rights. Sonoma Water shall propose alternate options, if available, for expediting components of the proposed permanent

changes or the related environmental analyses. The report shall also describe potential impediments to completion of the schedule, sources of uncertainty related to the schedule, and how Sonoma Water plans to address these impediments and uncertainties.

14. Based upon the methodology for characterizing Lake Mendocino and Lake Sonoma water inflows, releases, and rediversions developed pursuant to Condition 11 of the State Water Board's TUCP order dated February 4, 2021, and Condition 12 of the State Water Board's TUCP order dated June 14, 2021, Sonoma Water shall submit weekly reports of daily average release rates and characterization of those releases. Sonoma Water shall also make each report available on a publicly accessible website. Any amendments to either methodology requested by the Deputy Director shall be implemented within 15 days.
15. **Sonoma Water shall continue to conduct the activities described in Planning and Management Terms of the March 21, 2022 Memorandum of Understanding Concerning Lake Mendocino Storage Planning and Russian River Management (MOU). By December 14, 2022, Sonoma Water shall submit to the Deputy Director for Water Rights the "Tech Memo" described in Planning and Management Term 1, including identification of the extent to which water stored in Lake Mendocino is available for use to meet items (A) through (D) of section 1.3 of the MOU. Projections of Lake Mendocino storage and the extent to which storage will be available for the uses described in items (A) through (D) shall be provided to the Deputy Director for Water Rights by March 1, 2023.**

STATE WATER RESOURCES CONTROL BOARD

ORIGINAL SIGNED BY
JULÉ RIZZARDO, for

*Erik Ekdahl, Deputy Director
Division of Water Rights*

Dated: October 11, 2022