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

DIVISION OF WATER RIGHTS

ORDER WR 2021-0056-EXEC

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 22, 2021

(<u>bold-underline</u> 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 EXECUTIVE DIRECTOR:

1.0 SUBSTANCE OF TEMPORARY URGENCY CHANGE PETITION

On May 14, 2021, 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 the following temporary reductions to the Russian River instream flow requirement terms 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 to avoid potential violations of the Incidental Take Statement contained in the 2008 National Marine Fisheries Service (NMFS) Biological Opinion (hereafter, 2008 Biological Opinion)¹:

¹ No changes to the instream flow requirements for East Fork Russian River or Dry Creek are requested pursuant to the TUCPs.

- (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^[2] and 35 cfs in the Lower Russian River^[3];
- 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 15 cfs on the Upper Russian River and no less than 25 cfs on the Lower Russian River^[4].

Sonoma Water indicated in its TUCPs that it may file amendments requesting additional changes that may be warranted to address the uncertainty of effectiveness of the proposed temporary changes and other regional response measures in the Upper Russian River to prevent Lake Mendocino from declining to unsafe levels to meet human health and safety needs.

Sonoma Water's TUCPs were granted with conditions on June 14, 2021. Pursuant to Water Code section 1440, this Order modifies the Order issued on June 14, 2021. Revisions are shown using underline for additions and strikethrough for deletions.

2.0 BACKGROUND

2.1 Sonoma Water's Water Right Permits

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

² 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.

³ 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.

⁴ Sonoma Water also stated in a footnote: "These changes will allow Sonoma Water to improve its efforts to optimally manage flows in the Russian River. Sonoma Water does not control, and is not able to predict the timing and magnitude of diversions by Russian River water users downstream of the reservoirs. Consequently, the implementation of a 5-day running average will allow for river operations with a reduced frequency of reservoir release changes intended to respond to transitory flow reductions due to large diversions that may occur simultaneously. Implementation of minimum instream flow requirements will allow Sonoma Water to manage stream flows with smaller operational buffers, thereby conserving water supply in Lake Mendocino and Lake Sonoma."

- 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 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 Watershed) beginning October 1 of each year.⁵ From October 1, 2020 to June 1, 2021, the cumulative inflow into Lake Pillsbury was 85,727 AF. Consequently, pursuant to Decision 1610, the water supply condition is categorized as *Dry* for the remainder of the year, and 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 River⁶ 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

⁵ Permits 12947A, 12949, 12950, and 16596 use the same water-year classification definitions. (Decision 1610, pp. 47-48, 53, 57-58, 60.)

⁶ Sonoma Water is operating Lake Mendocino for releases to maintain a minimum stream flow of 25 cfs for the Upper Russian River per the State Water Board's TUCP order issued in February 2021 for Permit 12947A.

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 and flood control 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 2008 Biological Opinion, two types of issues are associated with the summer flows required by Decision 1610⁷: (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 the ability of Sonoma Water to release additional water from Lake Sonoma through Dry Creek to offset reduced releases from Lake Mendocino for maintaining 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 during the period the 2008 Biological Opinion is effective. 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 release from Lake Sonoma based on monthly median daily release in June through October in the first 12 years in which the 2008 Biological

⁷ 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 May 27, 2021 and June 2, 2021, respectively, NMFS and CDFW reiterated their support for the need to maintain the flows required in *Critical* water year types.

Opinion is effective⁸. Detailed information of the Allowance Tiers and expended exceedances are as follows:

- Allowance Tier for monthly median release of 105 cfs to 120 cfs has 34 allowable exceedances (18 accumulative exceedances have occurred).
- Allowance Tier for monthly median release of 120 cfs to 140 cfs has 16 allowable exceedances (2 accumulative exceedances have occurred).
- Allowance Tier for monthly median release of 140 cfs to 160 cfs has 5 allowable exceedances (0 accumulative exceedance has occurred).
- Allowance Tier for monthly median release higher than 160 cfs has 1 allowable exceedance (0 accumulative exceedance has occurred).

2.4 Current Drought Conditions and Response

The Russian River Watershed has experienced extremely dry conditions since 2020. with Water Year 2021 being the 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 into 2021, Lake Mendocino and Lake Sonoma are at their lowest levels for this time of the year since they began storing water in 1959 and 1984, respectively. As of May 3, 2021, the water supply storage levels were 36,883 AF in Lake Mendocino and 149,766 AF in Lake Sonoma. In addition, on April 23, 2021, Pacific Gas & Electric (PG&E) filed a request with Federal Energy Regulatory Commission (FERC) for a temporary variance to reduce its minimum instream flow requirements for the East Fork Russian River under 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. On May 5, 2021, FERC approved PG&E's temporary variance request to reduce PVP's minimum instream flow requirements for the East Fork Russian River below the Potter Valley Powerhouse, from 25 cfs to 5 cfs. Although FERC has only approved the variance through June 21, 2021, and reserves the authority to modify the terms of its approval based on new information, PG&E has requested that the variance remain in place until Lake Pillsbury storage exceeds 36,000 AF "following October 1, 2021." Accordingly, Sonoma Water staff have forecasted that "transfers from the Eel River to the East Fork Russian River through PVP will be reduced by 90 AF per day between May 5, 2021 and December 31, 2021, with little or none of the transferred Eel River water being conveyed to Lake Mendocino."

The current critical water supply shortage in the Russian River Watershed, particularly the Upper Russian River, resulting from two consecutive extremely dry years, has been recognized by both the state and local governments. On April 21, 2021 Governor Gavin

⁸ 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.

Newsom proclaimed a regional drought emergency for the Russian River Watershed in Mendocino and Sonoma counties. 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. Sonoma Water has filed two previous sets of TUCPs over the past year 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 lower the minimum instream flow requirement in 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. According to an analysis by Sonoma Water engineering staff, the February TUCP order helped preserve approximately 4,000 AF of storage in Lake Mendocino between February 4 and May 3 of this year. However, a recent analysis prepared by Sonoma Water engineering staff indicated that the water level in Lake Mendocino is projected to decline to their reservoir model's dead pool storage level before October 1 unless additional mitigation measures are taken. Even with the requested changes in the current TUCPs, Sonoma Water projects the water level in Lake Mendocino would decline to below 10,000 AF by October 1, 2021.

Sonoma Water's January 2021 TUCP did not request changes to lower the instream flow requirements in Dry Creek or the Lower Russian River, but Sonoma Water had stated that it might file additional TUCPs depending on water supply conditions during the spring. Sonoma Water engineering staff's recent analysis indicated that levels in Lake Sonoma are projected to decline to 100,000 AF by October 1 of this year unless additional mitigation measures are taken.

These extremely low projected storage levels in Lake Sonoma and the possible elimination of 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. 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. 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. Therefore, 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, in addition to preserving reservoir storage for water supplies to meet human health and safety needs in Sonoma and Marin counties.

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. In conjunction with approving this Order, the State Water Board will add the activities approved under this Order to its list of suspended projects on its website.

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 13, 2021. 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 2022. 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." (*Id.*, § 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." (*Id.*, § 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 May 19, 2021, 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 published the notice in *Ukiah Daily Journal* and *The Press Democrat* on May 19, 2021. In addition, the State Water Board posted the notice of the TUCPs on its website and distributed the notice through its electronic notification system. Any interested person may file an objection to a temporary urgency change. (*Id.*, subd. (d).) The State Water Board must promptly consider the objection and may hold a hearing on any objection. (*Id.*, subd. (e).)

As of June 4, 2021, the State Water Board had received eight 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, 3) the California Department of Fish and Wildlife (CDFW), 4) the Russian Riverkeeper (RRK), 5) the City of Santa Rosa, 6) the Marin Municipal Water District, 7) the Russian River Watershed Association, and 8) the Technical Advisory Committee (TAC)⁹. Mendocino County RRFC, the TAC, the City of Santa Rosa, the Marin Municipal Water District, and the Russian River Watershed Association all urge the State Water Board to immediately approve Sonoma Water's TUCPs to address the severe drought conditions in the Russian River Watershed.

NMFS and CDFW also urge 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. To assist NMFS, CDFW, the North Coast Regional Water Quality Control Board (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, NMFS and CDFW 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. 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.

⁹ The TAC is comprised of eight Sonoma Water contractors (including the City of Cotati, City of Petaluma, City of Rohnert Park, City of Santa Rosa, City of Sonoma, Town of Windsor, North Marin Water District, and Valley of the Moon Water District) and Marin Municipal Water District, which also purchases water from Sonoma Water.

RRK appears to support Sonoma Water's TUCPs to modify minimum instream flow requirements, but also recommends that the State Water Board impose additional conditions. RRK states that it supports "the need for temporary modification of flows within the Russian River so that water storage supplies are protected." RRK also recommends that the State Water Board "go beyond" the requested temporary urgency changes with additional actions to manage water diversion and use within the Russian River Watershed.

As relates to Sonoma Water's TUCPs, whereas Sonoma Water has committed to a 20% reduction in diversions between July 1 and October 31 compared to the same time period in 2020, RRK urges the State Water Board to instead require and enforce a 40% mandatory reduction. The State Water Board is not prepared to impose a steeper mandatory reduction at this time without better understanding the corresponding benefits for instream flows and storage and the corresponding impacts on Sonoma Water and its contractors, purchasers, and customers who rely on the water supplies. Furthermore, Sonoma Water has implemented a Water Shortage Contingency Plan that will, in certain water shortage circumstances, require a 30%, 40%, or greater percentage reduction in diversions. This plan has reportedly been incorporated into Section 3.5 of the Restructured Agreement for Water Supply with its contractor and customer agencies and so may accomplish the same or similar diversion reduction mandates as RRK's proposal under an established, contractual framework if water shortage conditions warrant. On October 19, 2021, the Governor issued an additional drought emergency proclamation that, among other actions, directs urban water suppliers statewide to update, if necessary, and execute their Water Shortage Contingency Plans (WSCPs) "at a level appropriate to local conditions that takes into account the possibility of a third consecutive dry year." While amended Condition 11 allows Sonoma Water to increase deliveries to its contractors, it also requires that recipients of deliveries continue their implementation of their WSCPs consistent with the Governor's drought emergency proclamation.

Although RRK appears to support Sonoma Water's TUCPs, it also, paradoxically, appears to assert that approving and implementing the very same TUCPs would violate CEQA and the Water Code section governing temporary urgency water right changes, particularly regarding the petitioner's diligence. These assertions are adequately addressed in Sections 3.0 and 5.1, respectively, of this Order.

As of June 4, 2021, the State Water Board received 48 comments objecting to Sonoma Water's TUCPs from Richard Morat, the North Coast Stream Flow Coalition (NCSFC)¹⁰.

¹⁰ NCSFC states that its member organizations include: Community Clean Water Institute; Forest Unlimited; Friends of Del Norte; Friends of the Eel River; Friends of Green Valley Creek, Friends of the Gualala River; Friends of the Navarro Watershed; Institute for Conservation Advocacy, Research and Education; Institute for Fisheries

the Russian River Watershed Protection Committee (RRWPC), Monte Rio Recreation & Park District (MRRPD), and residents from communities near the Lower Russian River.

Mr. Morat objected the TUCPs based on concerns about adverse impacts on aquatic resources. Similar to RRK, Mr. Morat raised concerns that Sonoma Water has filed TUCPs almost annually in the past and argued that better environmental analysis is needed to evaluate the long-term and cumulative impacts of the requested changes. Mr. Morat indicated that the State Water Board should perform a programmatic environmental review to address Sonoma Water's TUCPs until such requests are addressed as long-term changes and non-urgent. As relates to these TUCPs, Mr. Morat's concerns regarding environmental review are addressed in part in Section 3.0 of this Order. As also discussed in Section 5.1 of this Order, Sonoma Water has previously filed petitions seeking long-term changes to its water right permits, including modification to the Decision 1610 hydrologic index relative to the minimum instream flow requirements as requested in the TUCPs. Sonoma Water is preparing a revised draft Environmental Impact Report (EIR) in response to feedback previously provided by stakeholders. The State Water Board's consideration of the long-term changes will proceed once Sonoma Water has completed the revised EIR and other related actions.

NCSFC objected to Sonoma Water's TUCPs for the following stated reasons: 1) Sonoma Water and the State Water Board "failed to prepare for drought conditions and should not be bailed out at the expense of stream ecosystems"; 2) granting the TUCPs will result in the "take" of coho salmon in violation of the federal and state Endangered Species Acts; 3) granting the TUCPs will "harm those who depend on the Russian River and transfer income from those who depend on the River to irrigators above [Lake Mendocino] and in Sonoma County"; 4) granting the TUCPs "would constitute environmental injustice"; and 5) the State Water Board "should take action to secure the enforcement staffing needed to adequately enforce water rights and water right cutbacks in response to drought." The State Water Board has considered NCSFC's comments and addresses similar points, including regarding public trust resources, beneficial uses of water, and public interests, in Section 5 of this Order. In addition to requiring continued compliance with the state and federal Endangered Species Acts, this Order specifically requires Sonoma Water to frequently and consistently consult with CDFW and NMFS—which both conditionally supported the flow reductions and reservoir storage conservation proposed in Sonoma Water's TUCPs—regarding hydrology and fishery and water quality conditions in the watershed.

In their comments, RRWPC, MRRPD, and residents from communities near the Lower Russian River objected to the lowering of instream flow requirements in the Lower

Resources; Klamath Forest Alliance; Living Rivers Council, Maacama Watershed Alliance; Pacific Coast Federation of Fishermen's Associations; Save Mark West Creek; Sonoma County Water Coalition; Sonoma Willits Environmental Center; and Willets/Outlet Creek Watershed Group.

Russian River to, and potentially at times below, 35 cfs. These comments raised similar issues, which include:

- Stream flows as low as 50 cfs can result in adverse water quality impacts related to algal blooms and cyanobacteria that can cause beach closures and result in health impacts to humans, pets, and wildlife; the State Water Board should consider approving a minimum stream flow of 60 cfs and above for the Lower Russian River;
- 2) The reduced stream flows will cause potential impacts to fisheries and "loss of juvenile salmonid habitat";
- 3) Stream flows as low as 35 cfs would ruin tourism and recreation in the Lower Russian River;
- 4) Low instream flows in the Lower Russian River could cause harm to river supply for fire protection;
- 5) Sonoma Water should release flows much higher than required by the 2008 Biological Opinion from Lake Sonoma to meet instream flow requirements;
- 6) Voluntary conservation is not sufficient considering increased demand from new housing developments.

The State Water Board has considered these comments and objections in this Order. More detailed discussions are included in the Section 5 of this Order in response to the above comments (1), (2), (3), (5), and (6) 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. With regard to commenters' concerns about impacts to fire protection due to the reduced stream flows, it is not clear how an increased release rate from Lake Sonoma would benefit water supplies needed for fire protection. The State Water Board exercises continuing supervision over temporary urgency change orders and may modify the terms and conditions in this Order at any time to increase stream flow requirements to meet water supply needs for protection purpose if there is a fire emergency.

Although 35 cfs is the minimum instream flow established by Decision 1610 for *Critical* water year conditions, a majority of the comments requested that minimum instream flows instead be set at 60 cfs, between the minimum instream flow requirements for the Lower Russian River during *Dry* (85 cfs) and *Critical* (35 cfs) years under Decision 1610. The State Water Board has considered these comments and objections in adopting this Order. As noted above, Decision 1610's hydrologic index—the classification of water year type as *Normal*, *Dry*, or *Critical*—is based on cumulative inflow to Lake Pillsbury, adopted under the presumption that water stored in Lake Pillsbury would flow into the Russian River watershed. However, in addition to existing hydrologic conditions within the Eel River Watershed and competing demands for the water stored in Lake Pillsbury, FERC issued a variance for the PVP, and may issue an extension of that variance beyond June 21, 2021, that will likely result in little or no

water flowing from Lake Pillsbury through East Fork Russian River into Lake Mendocino and the downstream Russian River. According to Mendocino County RRFC, the FERC variance will likely result in approximately 5,000 fewer AF of water flowing into Lake Mendocino over the next five months. Based on historically dry conditions and historically low reservoir storage levels, the Russian River Watershed is by all accounts currently experiencing highly *Critical* water supply conditions. Sonoma Water's TUCPs propose minimum instream flows accordingly but also request more explicit flexibility in the maintenance of these minimum instream flows.

The State Water Board will separately consider parties' recommendations for additional drought response actions beyond the scope of Sonoma Water's TUCPs. Based upon the unprecedented, extremely dry drought conditions within the Russian River Watershed, specifically including the dire current and anticipated storage levels within Lake Mendocino and unavailability of water to meet demands, the State Water Board is considering emergency regulations that would authorize the curtailment of other users' diversions when water is unavailable under their water rights while also protecting human health and safety and public trust resources.

The State Water Board exercises continuing supervision over temporary urgency change orders and may modify or revoke temporary urgency change orders at any time. (Wat. Code, §§ 1439, 1440.) Temporary urgency change orders automatically expire 180 days after issuance, unless they are revoked, an earlier expiration date is specified, or they are renewed. (*Id.*, §§ 1440, 1441.)

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 second consecutive year of extremely dry conditions, with Water Year 2021 being the driest year and Water Year 2020 being the fourth driest in the Ukiah Valley since 1893. 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 merely *Dry* instead of *Critical*. Based upon the TUCP granted by the State Water Board on February 4, 2021, 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 would expire on July 26, 2021. 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 has projected that Lake Mendocino would drain to its reservoir model's dead pool storage level by October 1, 2021, without its additional proposed temporary changes. 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 elimination of water supplies for human health and safety during the fall or winter for water users in Mendocino County and the northern part of Sonoma County (above the confluence with Dry Creek). Such depletion or possible elimination of stored water supplies would risk serious impacts to human health and safety and fishery protection and could possibly result in the Upper Russian River becoming a series of disconnected pools. There are 20 public water supply systems, in addition to other smaller diversions for domestic purposes, whose intakes are adjacent to the Upper Russian River that would be impacted if the river became discontinuous and unable to support their diversions. The letters of support received from CDFW and NMFS also emphasized the importance of

maintaining river connectivity and avoiding the river becoming a series of disconnected pools due to the impacts it would have on fishery habitat conditions.

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 below 100,000 AF by October 1, 2021, without additional mitigation measures. 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 may 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 is currently releasing above 170 cfs (with an average daily release rate of 183 cfs for the week of May 28 to June 3 of 2021) 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 at 170 cfs or above at Lake Sonoma for the rest of this year, resulting in violation of the Incidental Take Statement contained in the 2008 Biological Opinion.

Furthermore, Sonoma Water is under an additional constraint due to coho salmon habitat restoration construction and stocking projects required under the 2008 Biological Opinion that will continue in Dry Creek this summer. These ongoing projects require stream flows to be less than 150 cfs for stability of the constructed habitat. NMFS also reiterated that higher flows would violate the existing Dry Creek maximum instream flow objectives and requirements of the 2018 Biological Opinion. Therefore, although a number of comments were received by the Board requesting to increase water releases from Lake Sonoma to meet higher minimum instream flow requirements in the Lower Russian River, the flow limitations in the 2008 Biological Opinion and the current construction activities 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 to act on its long-term change petitions. In its report dated April 1, 2021, Sonoma Water has stated that it plans to submit amended petitions for long-term water right changes in Fall 2021, to recirculate a draft EIR for the proposed project in December 2021, and to both certify a final EIR and approve a final project in September 2022. Sonoma Water staff states, "[G]iven the current and anticipated workloads in response to continuing dry conditions into 2021, the milestones described provide a realistic timeframe for completion of a CEQA document and project that is technically rigorous and legally defensible." 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 its stated course of action, as outlined in its report and schedule, but there is also an urgent need now, during 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 rediversion 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 where feasible. (*National Audubon Society v. Superior Court* (1983) 33 Cal. 3d 419 [189 Cal. Rptr. 346].) 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 this petition, 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 protects public trust resources to the extent feasible. The State Water Board will continue to evaluate conditions in the watershed throughout the duration of this Order and consider other actions that may further the protection fish, wildlife, and other instream beneficial uses.

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 twelve North Bay water utilities in Sonoma and Marin counties that have joined to provide regional solution for water use efficiency.

To address the current drought and reduce diversions from the Russian River, Sonoma Water's contractors and Marin Municipal Water District adopted a resolution in its May 3, 2021 Water Advisory Committee (WAC) meeting urging a 20% reduction in customer water use in support of water saving efforts of the Partnership. Sonoma Water's contractors have already taken water conservation actions, and, Sonoma Water indicates, will continue to implement their respective agencies' Water Shortage Contingency Plans to meet the reduction goal. Additionally, to achieve a 40% reduction in water use, Marin Municipal Water District has adopted mandatory water use

restrictions for its service area on April 20, 2021. The TUCPs stated that Sonoma Water and its retail water customers will commit to a 20% reduction in total diversions across all downstream points of diversion or rediversion authorized under Sonoma Water's water rights from July 1 through October 31 of this year compared to the same period in 2020. As of October 17, 2021, Sonoma Water had reduced its total diversions by 22.6%.

This Order is amended to reflect that as of October 19, 2021, significant precipitation has been forecasted by the National Weather Service for the Russian River watershed. Maintaining a 20% reduction in diversions and rediversions when there is sufficient supply to meet instream needs, all other water right holders, and improve storage conditions at Lake Sonoma and Lake Mendocino would preclude Sonoma Water from maximizing the beneficial use of water consistent with the state's constitutional policy to put the water resources of the state "to beneficial use to the fullest extent of which they are capable."

(Cal. Const., Art. X, § 2; Wat. Code, § 1435, subd. (c).) Therefore, Condition 11 is amended to allow increases in diversions and rediversions of water during suspension or rescission of curtailment orders pursuant to the emergency regulations for Curtailment of Diversions to Protect Water Supplies and Threatened and Endangered Fish in the Russian River Watershed adopted by the State Water Board on June 15, 2021 (Cal. Code Regs. tit. 23, § 876.1 et seq.).

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. The campaign started as a paid social media campaign in winter and expanded in spring to become a broader multi-media effort. The Partnership has spent \$50,000 in winter and spring advertisements, with Sonoma Water spending an additional \$100,000 for advertising and \$150,000 for staff time. Sonoma Water's contractors also spent additional funds for outreach beyond what is being coordinated by the Partnership and through Sonoma Water. Sonoma Water stated the drought outreach campaign would continue through the end of summer, or longer if drought conditions persist through the fall.

In addition, Sonoma Water has been actively meeting with Upper Russian River water managers to share water saving materials and staff resources to help addressing water reduction needs in the Upper Russian River. Sonoma Water indicated it would continue to coordinate with the Mendocino County RRFC through the summer. Partly as an outcome of the coordination efforts, the City of Cloverdale adopted a resolution on April 14, 2021 authorizing its city manager to negotiate and execute a memorandum of understanding to join the Partnership. Once approved, Cloverdale will become a member of the Partnership by July 1, 2021.

To ensure continuation of these conservation activities, this Order includes a condition that requires Sonoma Water and its water contractors to achieve the committed 20% reduction in total diversions under Sonoma Water's water rights compared to the same period of 2020 from July 1 through the end of this Order. Sonoma Water is also required

to submit to the Deputy Director for Water Rights monthly reports documenting Sonoma Water's reductions in diversions and provide updated water storage projections of Lake Sonoma and Lake Mendocino through the end 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 the 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 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. 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. 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 have a potential of being drained by October 1, 2021, without the proposed TUCPs. 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. In addition, as discussed in Section 5.1 of this Order, Sonoma Water is currently releasing more than 170 cfs from Lake Sonoma to meet the current minimum flow requirements in the Lower Russian River. Without the proposed temporary changes, Sonoma Water would have to continue releases at 170 cfs and above from Lake Sonoma for the rest of this year, which may cause Sonoma Water

to violate the Incidental Take Statement contained in the 2008 Biological Opinion and would reduce the suitability of habitat for threatened and endangered fish species in Dry Creek.

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 will serve to inform the State Water Board's continuing supervision of the diversion and use of water under this temporary urgency change order pursuant to Water Code section 1439. In addition, 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 clyindrospermopsin) 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.

As of 2021, 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. These pathogens often pose a threat to public health and have resulted in public health advisory postings on the Russian River in recent years. 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 in 2020 and 2021, 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.

The State Water Board has considered the objections raised by members of the public regarding potential public health impacts from cyanobacteria or cyanotoxins in the Russian River. This Order includes conditions that require Sonoma Water to continue measuring and monitoring water quality in the Russian River to evaluate cyanoHAB conditions and factors contributing to nuisance blooms (e.g., flow, temperature, nutrients, etc.). Sonoma Water is required to consult with the North Coast Water Board and to complete development of the "Water Quality Monitoring Plan for the Russian River Estuary Management Project" (2021 Water Quality Monitoring Plan), which will address these and other water quality issues, no later than July 15, 2021. This Order also requires Sonoma Water to continue consultation with the North Coast Water Board on any water quality issues caused by the TUCPs during the period of this Order. The State Water Board reserves jurisdiction to revise terms and conditions in this Order if the Sonoma County Department of Health Services posts health advisories related to cyanotoxins or indicator bacteria and will consult with the North Coast Water Board regarding any health advisories.

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 threaten 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 2022. Fisheries and wildlife will be also at risk of running out of water in the Upper Russian River in the fall. Without modification to the current instream flow requirement for the Lower Russian River, Sonoma Water would have to continue releases from Lake Sonoma to the detriment of fisheries in Dry Creek for the rest of this year that would result in violation of the Incidental Take Statement contained in the

2008 Biological Opinion. 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
- 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 and effective from **the date of this Order June 14, 2021** through 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.
- 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:
 - a. <u>Upper Russian River Habitat</u>: From June 1 to October 1 of 2021, Sonoma Water shall visit six reach sites on a biweekly¹¹ 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, among which four reach sites (Ukiah, Hopland, Commisky Station, and Cloverdale) have been used previously as flow/habitat study sites and two additional reach sites will be established in Alexander Valley and Healdsburg. Each study reach site will be approximately 500 meter long. At each reach site, habitat conditions and flow connectivity shall be documented 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.
 - b. 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. These sites will be opportunistically sampled within and beyond the established habitat monitoring reaches.
 - c. <u>Lower Russian River Habitat</u>: From October 1 through the end of this Order, Sonoma Water shall visit at least one, and up to four critical riffle sites based on consultation with NMFS, in the Lower Russian River biweekly as conditions allow assessing adult salmonid passage opportunities. At each site, Sonoma Water staff shall measure riffle length, width, depth, and document the site with photographs.

¹¹ Biweekly means once every two weeks throughout this Order.

- 3. Sonoma Water shall conduct monitoring to determine the effects 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 duration of this Order:
 - 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 will collect dissolved oxygen and temperature; the data sonde at the Jimtown gage will collect pH, temperature, dissolved oxygen, specific conductivity and turbidity; and the data sonde at Johnson's Beach will collect pH, temperature, dissolved oxygen, specific conductivity and turbidity.
 - d. Monitoring at Lake Sonoma and Lake Mendocino: Sonoma Water shall work with CDFW and USACE to monitor the vertical temperature profiles in Lake Sonoma and Lake Mendocino near the outlet structure of each lake on a biweekly basis for the period of this Order. This will inform adjustments to the outlet release at Lake Mendocino to ensure adequate cold water for Coyote Valley 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 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.
 - e. Monitoring on the mainstem Russian River shall include collecting 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.
- f. Monitoring in the Russian River and its estuary shall contribute to assessing water quality indicators and water column conditions. By July 15, 2021, Sonoma Water shall develop a "Water Quality Monitoring Plan for the Russian River Estuary Management Project" (2021 Water Quality Monitoring Plan) in consultation with the North Coast Water Board.
- g. Sonoma Water shall conduct the monitoring of the Russian River and its estuary in accordance with the 2021 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.
- h. If any water quality issues of concern are observed from the continuous monitoring or water sampling required by this Order, or if the Sonoma County Department of Health Services posts health advisories related to cyanotoxins or indicator bacteria, Sonoma Water shall consult with the North Coast Water Board. Sonoma Water shall submit a summary report of consultation details and a description of proposed monitoring activities, if any, to the Deputy Director within one week of the consultation. Any necessary revisions to this Condition may be made following consultation with the North Coast Water Board and approval by the Deputy Director.
- 4. Sonoma Water shall conduct the following Fisheries Monitoring at the following locations:

<u>Upper Russian River:</u>

Between June 1 and October 1 of 2021, Sonoma Water shall conduct two snorkel surveys in the four 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 (June/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, 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 after a cumulative season total of 100 adult salmonids move past the counting station at the Mirabel fish ladder.

- b. Beginning no later than September 1, 2021 and continuing through the duration of this Order, 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.
- c. Beginning no later than October 1, 2021 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, up to three comprehensive Dry Creek surveys shall be conducted 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, 2021 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 representation reaches in Alexander Valley and the Upper Russian River. Monitoring shall occur on a biweekly basis during the period of this Order.
- e. By December 1, 2021, 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 135 cfs.
- 5. Sonoma Water shall continue to consult with NMFS, CDFW, and the North Coast Water Board on a weekly basis for fishery and water quality monitoring updates and any concerns relative to water quality and hydrologic condition of the Russian River. Sonoma Water shall submit a summary report of consultation details to the Deputy Director upon request.
- 6. Sonoma Water shall report to the Deputy Director, the North Coast Water Board, CDFW, and NMFS on a weekly 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, and 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.
- 7. By April 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.

- 8. 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.
- 9. 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.
- 10. 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.
- 11. Sonoma Water and its water contractors shall ensure a 20 percent reduction, as compared to the same period of the previous year, in total diversions across all downstream points of diversion or rediversion authorized under Sonoma Water's water rights from July 1, 2021 through the end of this Order, This 20 percent reduction requirement shall not apply to diversions and rediversions under Permits 12949, 12950, and 16596 when curtailment orders pursuant to California Code of Regulations, title 23, section 877.2 are suspended or rescinded. This 20 percent reduction requirement shall not apply to diversions and rediversions under Permit 12947A when curtailment orders pursuant to California Code of Regulations, title 23, section 877.3 are suspended or rescinded. Regardless of whether this 20 percent reduction requirement in diversion and rediversion applies, Sonoma Water shall require urban water supplier recipients of its water deliveries to implement the appropriate stage of their respective WSCPs, consistent with the Governor's October 19, 2021 emergency drought proclamation.

Sonoma Water shall submit a monthly report to the Deputy Director documenting Sonoma Water's reduction in diversions compared to the same period of the previous year, and provide updated projections of Lake Mendocino and Lake Sonoma storages through the end of this Order.

- 12. Sonoma Water shall submit a proposed accounting methodology to the Deputy Director that characterizes water flowing into (inflow) and released from Lake Sonoma, flows in the Lower Russian River, and the rediversion of water by Sonoma Water or its contractors. The accounting methodology shall be sufficient to define, distinguish, and quantify the following:
 - a. Inflows from water native to the watershed.
 - b. Releases from Lake Sonoma that constitute bypass of water, water released from storage for downstream deliveries, or water released from storage to maintain instream flows.
 - c. Releases from Lake Sonoma that are rediverted by Sonoma Water or its water contractors or purchasers.
 - d. Flows in the Lower Russian River that originate from Lake Mendocino releases.
 - e. Reach losses in Dry Creek and the Lower Russian River.
 - f. Sonoma Water may choose to include additional inflow or outflow categories not listed under a, b, and c in the accounting methodology. Explanations for each category and how it is defined shall be included in the proposed accounting methodology.

The proposed methodology shall be submitted by July 15, 2021, and any revisions requested by the Deputy Director regarding the accounting methodology developed pursuant to this Condition or Condition 13 shall be incorporated within 30 days of being provided to Sonoma Water. From July 15, 2021 through the end of this Order, Sonoma Water shall submit to the Deputy Director weekly reports of daily average release rates and characterize those releases based on the accounting methodology developed pursuant to this Condition. Sonoma Water shall also make each report available on a publicly accessible website.

- 13. Based upon the methodology for characterizing Lake Mendocino water inflows, releases, and rediversions specified by Condition 11 of the State Water Board's TUCP order dated February 11, 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.
- 14. Sonoma Water and its contractors and purchasers are prohibited from rediverting any releases of water from Lake Mendocino, as calculated using the accounting methodology described in Condition 12 and 13.

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15.	The order dated February 4, 2021, as amended February 11, 2021, approving temporary urgency changes to Permit 12947A, is revoked.	
OCT 22 2021		ORIGINAL SIGNED BY:
Dated		Eileen Sobeck, Executive Director