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

ORDER APPROVING PETITIONS FOR TEMPORARY URGENCY CHANGES TO PERMIT TERMS AND CONDITIONS

SOURCES: (1) East Fork Russian River tributary to Russian River
(2) Dry Creek tributary to Russian River
(3) Russian River thence the Pacific Ocean

COUNTIES: Sonoma and Mendocino

BY THE DEPUTY DIRECTOR FOR WATER RIGHTS:

1.0 SUBSTANCE OF TEMPORARY URGENCY CHANGES

On April 19, 2017, Sonoma County Water Agency (SCWA) 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 Water Code section 1435. The TUCPs request modification to State Water Board Decision 1610 (D1610) Russian River minimum instream flow requirements due to operational constraints placed on SCWA pursuant to the September 24, 2008, National Marine Fisheries Service (NMFS) Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers (Corps), SCWA, and the Mendocino County Russian River Flood Control and Water Conservation Improvement District in the Russian River watershed (Biological Opinion). The requested changes to D1610 minimum instream flows are as follows:[1]

- From May 1 through October 15, 2017, reduce instream flow requirements for the upper Russian River[2] from 185 cubic feet per second (cfs) to 125 cfs.
- From May 1 through October 15, 2017, reduce instream flow requirements for the lower Russian River[3] from 125 cfs to 70 cfs.

The changes also requested that the minimum instream flow requirement for the upper Russian River will be implemented as a 5-day running average of average daily stream flow measurements, with the stipulation that instantaneous stream flows on the upper Russian River will be no less than 110 cfs and on the lower Russian River no less than 60 cfs.

---

[1] No changes to the instream flow requirements for Dry Creek are requested pursuant to the TUCPs.
[2] The upper Russian River refers to the river from the confluence with the East Fork of the Russian River to its confluence with Dry Creek.
[3] The lower Russian River refers to the river downstream of its confluence with Dry Creek to the Pacific Ocean.

This will allow SCWA to manage stream flows with a smaller operational buffer, thereby facilitating the attainment of the flow conditions that the Biological Opinion has concluded are conducive to the enhancement of salmonid habitat. The TUCPs also request changes to specific terms in SCWA's permits, which are described in the next section.

2.0 BACKGROUND

2.1 WATER RIGHT PERMITS

The TUCPs involve the following water right permits held by SCWA:

- 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 at the Wohler and Mirabel Park Intakes near Forestville from January 1 through December 31 of each year;
- Permit 12950 (Application 15737), which authorizes direct diversion of 60 cfs from the Russian River at the Wohler and Mirabel Park Intakes 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 afa in Lake Sonoma from October 1 of each year to May 1 of the succeeding year.

2.2 REQUIREMENTS OF D1610

The State Water Board adopted D1610 in 1986. D1610 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 at p. 21.) The State Water Board also concluded in D1610 that additional fishery studies should be done. (D1610 at pp. 26-27.)

D1610 established water year classifications of *Normal*, *Dry*, and *Critically Dry*, which are based on cumulative inflow into Lake Pillsbury (in the Eel River Watershed) beginning October 1 of each year.[4] D1610 further specifies two variations of *Normal*, known as *Dry Spring 1* and *Dry Spring 2*, which provide lower minimum flows in the upper Russian River during times when combined storage in Lake Pillsbury and Lake Mendocino is unusually low. The Cumulative inflow into Lake Pillsbury from October 1, 2016 to April 17, 2017 was 771,787 af. Consequently, the water supply condition will be categorized as *Normal* for the remainder of the year. As such, the following conditions are required pursuant to D1610:

- Term 20 of Permit 12947A requires SCWA to pass through or release from storage at Lake Mendocino sufficient water to maintain specified instream flows for the protection of fish and wildlife, and for the maintenance of recreation in the Russian River. The flows vary depending on river reach and water supply conditions. For *Normal* water supply conditions, the minimum flow requirements are 185 cfs for the upper Russian River and 125 cfs for the lower Russian River.
- Term 17 of both Permits 12949 and 12950 requires SCWA to allow sufficient water to bypass the points of diversion at the Wohler and Mirabel Park Intakes on the Russian River to maintain 125 cfs to the Pacific Ocean during *Normal* water supply conditions.
- Similarly, Term 13 of Permit 16596 requires SCWA to maintain 125 cfs in the lower Russian River during *Normal* water supply conditions, unless the water level in Lake Sonoma is below elevation 292.0 feet with reference to the National Geodetic Vertical Datum of 1929, or unless federally prohibited.

[4] Permits 12947A, 12949, 12950, and 16596 use the same water-year classification definitions.

2.3 Biological Opinion

Under the federal Endangered Species Act, 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. In accordance with the requirements of section 7 of the Endangered Species Act, NMFS, SCWA, and the Corps 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 Biological Opinion includes summaries of the studies, analyses of the project impacts, and a determination that the flows set by D1610 no longer benefit both fishery and recreational uses. More specifically, the Biological Opinion indicated that summer flows in the upper Russian River and Dry Creek as required by D1610 are too high for optimal juvenile salmonid habitat within the Russian River system. According to the Biological Opinion, two types of issues are associated with the summer flows required by D1610: (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 Biological Opinion also concluded that the historical practice of breaching the sandbar at the mouth of the Russian River during the summer and fall adversely affects the estuarine rearing habitat for listed species. NMFS concluded that management of the estuary as a seasonal freshwater lagoon could improve conditions for juvenile salmon and steelhead and required SCWA to adopt adaptive management practices in the estuary. Additionally, the minimum instream flows required by D1610 were found to result in flows into the estuary that make it difficult to maintain a freshwater lagoon while preventing flooding of adjacent properties.

The Biological Opinion states that the D1610 minimum instream flow requirements in the Russian River will continue to jeopardize the recovery of CCC coho salmon and CCC steelhead unless the flows are modified. The Biological Opinion requires SCWA to file a petition for change with the State Water Board to improve conditions for listed species by seeking long-term, permanent reductions in the Russian River minimum instream flow requirements contained in SCWA's existing water rights permits.[5] The Biological Opinion also contains the following requirement:

> "To help restore freshwater habitats for listed salmon and steelhead in the Russian River estuary, SCWA will pursue interim relief from D1610 minimum flow requirements by petitioning the State Water Board for changes to D1610 beginning in 2010 and for each year prior to the permanent change to D1610. These petitions for change will request that minimum bypass flows of 70 cfs be implemented at the US Geological Survey (USGS) gage at the Hacienda Bridge between May 1 and October 15, with the understanding that for compliance purposes SCWA will typically maintain about 85 cfs at the Hacienda gage. For purposes of enhancing steelhead rearing habitats between the East Branch [Fork] and Hopland, these petitions for change will request a minimum bypass flow of 125 cfs at the Healdsburg gage between May 1 and October 15. NMFS will support SCWA's petitions for these changes to Decision 1610 in presentations before the State Water Board."

Coho salmon are also listed under the California Endangered Species Act (CESA). The California Department of Fish and Wildlife (CDFW) has issued a consistency determination, in which it determined that the incidental take statement issued to SCWA by NMFS in connection with the Biological Opinion was consistent with the provisions and requirements of CESA.

2.4 Long Term Water Rights Change Petitions

SCWA has also been progressing with petitioning for long term water right changes from the State Water Board as required in the Biological Opinion. SCWA submitted petitions for change and extensions of time filed under Permits 12947A, 12949, 12950, and 16596 (Applications 12919A, 15736, 15737, and 19351). The petitions, initially filed in 2009 and revised on August 17, 2016, request the following modifications to permit terms and conditions: (1) modification of the Russian River minimum instream flow requirements in Permits 12947A and

---

[5] On September 23, 2009, SCWA filed a petition for change with the State Water Board and the petition for change is pending. A revised petition was filed on August 17, 2016.

16596; (2) modification of the required bypass flows in Permits 12949 and 12950, consistent with the requested minimum instream flows; (3) modification of the hydrologic index used to classify water supply conditions in Permits 12947A, 12949, 12950, and 16596; and (4) extension of the deadline for full application of water in Permits 12949, 12950 and 16596. The Draft Environmental Impact Report (DEIR) for the Fish Habitat Flows and Water Rights Project was also completed in 2016 and included a public review period from August 19, 2016 to October 17, 2016. The State Water Board and North Coast Regional Water Quality Control Board provided comments to the DEIR in a March 10, 2017 comment letter, which included significant requests for additional clarification and analysis of the project's impacts in the final EIR, which when considered with other agency and public comments, could result in modifications to the long term Fish Habitat Flows and Water Rights Project.

3.0 COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

The State Water Board must comply with any applicable requirements of the California Environmental Quality Act (CEQA) prior to issuance of any order approving a TUCP. (Cal. Code Regs., tit. 23, § 805.) SCWA determined that the requested change is categorically exempt under CEQA as the change meets the Class 1, 7, and 8 exemption criteria. SCWA filed a Notice of Exemption on April 19, 2017. The State Water Board has reviewed the information submitted by SCWA and has made its own independent finding that the requested changes are categorically exempt from CEQA.

The changes sought by the TUCPs are consistent with the following Categorical CEQA exemptions for the following reasons:

1) 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. (Cal. Code Regs., tit. 14, § 15301.) The proposed action will be within the range of minimum instream flows established by D1610.

2) A Class 6 exemption "consists of basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These [activities] may be . . . part of a study leading to an action which a public agency has not yet approved, adopted or funded." (*Id.*, § 15306.) The water quality and fishery information and data collected during the period that the proposed action is in effect will assist with the study and development of future long-term changes to D1610 instream flow requirements, for which a separate petition for change is pending.

3) A Class 7 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 upper 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 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 exemption.

4.0 PROCEDURAL REQUIREMENTS CONCERNING THE TUCPS

Pursuant to Water Code section 1438, the State Water Board may issue a temporary urgency change order in advance of the required notice. The State Water Board will issue and deliver to SCWA, as soon as practicable, a notice of the temporary urgency change order pursuant to Water Code section 1438(a). Pursuant to Water Code section 1438(b)(1), SCWA 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 are located. In addition, the State Water Board will post

the notice of the temporary urgency change order on its website, along with the TUCPs and accompanying materials. The State Water Board will also distribute the notice through an electronic notification system. The State Water Board issued, and delivered to SCWA, public notice of the temporary urgency change on May 1, 2017. The public comment period ends on June 1, 2017.

Any interested person may file an objection to a temporary urgency change. (*Id.*, subd. (d).) State Water Board Resolution 2012-0029 delegates to the Deputy Director for Water Rights the authority to act on a TUCP if there are no objections. (Resolution 2012-0029, ¶ 4.4.1.) To date, one objection was received from the Russian River Watershed Protection Committee. This objection will be reviewed and addressed separately from the Order.

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 from the date the authorization takes effect, unless revoked or an earlier expiration date is specified. (*Id.*, § 1440.) The State Water Board may renew temporary urgency change orders for a period not to exceed 180 days. (*Id.*, § 1441.)

5.0 Criteria for Approving the Proposed Temporary Urgency Changes

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 (Wat. Code, § 1435, subd. (b)(1-4).): (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.

5.1 Urgency of the Proposed Changes

Under Water Code section 1435(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 . . . ." The changes requested by SCWA for conformance with the Biological Opinion would improve habitat for listed salmonids by reducing flows and enabling increased storage for later fishery use, without unreasonable effects on other beneficial uses. Moreover, given the status of salmonids under the federal Endangered Species Act, there is a need for prompt action. In this case, there has been an extensive analysis of the needs of the fishery and experts have agreed that instream flows appear to be too high. The change will not affect the ability of SCWA to deliver water for approved beneficial uses in its service area.

5.2 No Injury to Any Other Lawful User of Water

SCWA will be required by this temporary urgency change order to maintain specified flows in the Russian River from its most upstream point of diversion to the river's confluence with the Pacific Ocean. Therefore, because minimum flows will be present, it is anticipated that all other lawful users of water will still be able to divert and use the amounts of water that they are legally entitled to during the period specified in this temporary urgency change order. As a general rule, appropriative water right holders below Lake Mendocino and Lake Sonoma are only entitled to divert natural and abandoned flows, and riparian water right holders are only entitled to divert natural flows; appropriative and riparian right holders are not entitled to divert water previously stored by SCWA that is released for use downstream, including stored water that is released for purposes of meeting instream flow requirements. (*State Water Resources Control Board Cases* (2006) 136 Cal.App.4th 674, 738-743.) Accordingly, SCWA is not obligated to supply water stored in Lake Mendocino to other users of water, except to the extent the users hold permits issued under the Sonoma County reservation established in Decision 1030 and Order WR 74-30. However, the reservation only applies to the use of water within the Russian River Valley, as defined by a map prepared by the Corps (Decision 1030, pp. 9, 46-47), and SCWA is not obligated to release stored water to satisfy

demand under the reservation (to the extent that retention of stored water is necessary to ensure satisfaction of the minimum instream flows required under Permit 12947A (Order WR 74-30, p. 13)). For these reasons, other legal users of water will not be injured to the extent that SCWA releases less previously stored water as a result of the changes.

Based on the information available, granting the TUCPs will not result in injury to any other lawful user of water. Pursuant to Water Code section 1439, 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 and instream beneficial uses.

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

The TUCPs are based upon the analysis contained in the Biological Opinion, which was issued primarily for improving conditions for fishery resources in the Russian River. Improved conditions that result from the temporary urgency changes are threefold. First, the reduction in minimum instream flows will result in improved salmonid rearing habitat in the Russian River. Secondly, reducing instream flows will result in conservation of a cold water pool in Lake Mendocino which would allow for cooler water temperatures in the upper Russian River, improved freshwater rearing habitat quality, and enhanced management of the flows in early fall for the benefit of fish migration. Thirdly, the reduction in minimum flow requirements may encourage formation of a closed or perched lagoon at the mouth of the Russian River and therefore enhance estuarine rearing habitat for salmonids.

SCWA will continue to be required to report on consultations with CDFW, NMFS, and the North Coast Regional Water Quality Control Board (Regional Water Board). In addition, to ensure beneficial use of water resources to the fullest extent possible and to prevent waste of water, SCWA will also be required to provide weekly updates to the State Water Board, CDFW, NMFS, and the Regional Water Board regarding the current hydrologic and environmental (water quality and fishery) conditions of the Russian River. This information will assist the State Water Board in determining whether additional actions are necessary.

Upper and Lower Russian River flows should be able to be maintained at or above the requested minimum flows during the requested TUCP's period due to this year's higher than average precipitation, and higher reservoir storage levels in Lake Mendocino. This has not always been the case, including in recent drought years. Therefore, due to the favorable hydrologic conditions, the TUCP's requested change to provide greater operational flexibility with a 5-day running average minimum flow and reduced minimum instantaneous flow of 60 cfs in the lower Russian River and 110 cfs in the upper Russian River is not necessary this year.

5.3.1 Recreation

It is possible that reduced flows in the Russian River could impair some instream beneficial uses, principally recreational uses. However, since 2004, Russian River flows have frequently been managed at decreased levels, both under D1610 and under other temporary urgency change orders. Despite changing operations, the average daily lower Russian River flows from 2010 to 2016 have been above 90 cfs in the months of July and August, except 2015, which was a dry year. Although recreational uses may be minimally affected by flow reductions, given the analysis in the Biological Opinion and the potential impacts to fisheries that could occur if the temporary changes are not approved, any impact on recreation for this summer would be reasonable under the circumstances and with the operational buffer flows made by SCWA.

5.3.2 Water Quality and Availability of Aquatic Habitat

During the period that the flow reductions will be in effect, SCWA will collect water quality and fishery information data. The 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 will assist with the study and development of future long-term changes in D1610 instream flow requirements for which a separate petition is pending.

5.3.3 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 (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 and 2016, which led to Sonoma County Department of Health Services posting warning signs. The warning signs were removed on October 11, 2016, due to the weather and water conditions on the Russian River no longer being favorable for cyanobacteria growth.

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, under the Regulatory Determination Process. 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 2017, there is no regulation in the State of California regarding cyanobacteria or cyanotoxins. However, there has been an increase in cyanoHABs in California and a need for a statewide strategy. As a response, the Surface Water Ambient Monitoring Program (SWAMP) has developed a freshwater cyanoHAB assessment and a support strategy in coordination with other agencies to address assessment, response, and management of freshwater cyanoHABs.

The Regional Water Board, Sonoma County Department of Health Services, SCWA, and Sonoma County Department of Parks and Recreation formed a workgroup to coordinate a monitoring approach for assessing cyanobacteria in the Russian River during the summer of 2016 and ongoing as needed. SCWA has consulted with the Regional Water Board regarding monitoring activities related to the workgroup. As a result of the consultation, SCWA will make additional modifications to their existing Water Quality Monitoring Plan for the Russian River Estuary Management Project to include freshwater monitoring for the purpose of assisting in the evaluation of cyanoHAB conditions and the risk co-factors contributing to nuisance blooms (e.g., flow, temperature, nutrient, etc.).

5.3.4 Consultation

SCWA and the State Water Board consulted with CDFW, NMFS, and the Regional Water Board regarding the request to reduce minimum instream flow requirements in the Russian River. NMFS did not object to the proposed request and provided comments on the draft terms to the State Water Board which address fish monitoring sites and the ramping rate of release flows reductions from Lake Mendocino to protect against fish stranding. With the inclusion of the suggested comments, NMFS believes the terms and conditions included in this order are appropriate. CDFW and the Regional Board did not object to the proposed request and are in agreement with the terms and conditions.

5.4 The Proposed Change is in the Public Interest

As discussed above, the sole purpose of the TUCPs is to improve conditions for listed salmonids in the Russian River. Approval of the request to temporarily reduce minimum instream flows to benefit the fishery will also maintain storage levels in Lake Mendocino for a longer period of time so that water is available in the fall for fisheries purposes.

6.0 Conclusions

The State Water Board has adequate information in its files to make the findings required by Water Code section 1435(b).

I conclude that, based on the available evidence: (1) the right holder has an urgent need to make the proposed changes; (2) the proposed changes will not operate to the injury of any other lawful user of water; (3) the proposed changes will not have an unreasonable effect upon fish, wildlife, or other instream beneficial uses; and (4) the proposed changes are in the public interest.

ORDER

NOW, THEREFORE, IT IS ORDERED THAT: the TUCPs filed by SCWA for temporary urgency changes in Permits 12947A, 12949, 12950 and 16596 are approved and effective until October 15, 2017.

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 Permits 12949 and 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 125 cfs;

   b. Minimum instream flow in the lower Russian River shall remain at or above 70 cfs.

   For purposes of compliance with this term, the minimum instream flow requirements shall be based on instantaneous flow measurements.

2. SCWA shall conduct the following fisheries monitoring tasks and associated recording and reporting requirements. A summary report of the fisheries monitoring tasks described below shall be submitted to the Deputy Director for Water Rights by April 1, 2018, in accordance with the NMFS and CDFW annual reporting requirements as more fully described in the Biological Opinion.

   a. Beginning no later than September 1, 2017, and continuing through the duration of this Order, SCWA shall monitor and record daily numbers of adult salmon and steelhead moving upstream past the life cycle monitoring station in Dry Creek, at the Healdsburg fish ladder (when operable), and at Mirabel fish ladder. Mirabel fish ladder numbers shall be included in bi-weekly reports required in Term 7 (Dry Creek and Healdsburg numbers shall be reported as soon as they become available).

   b. Beginning October 1, 2017, if adult salmon and steelhead can enter the Russian River estuary and suitable water clarity allows snorkel surveys, SCWA shall monitor numbers of adult salmon and steelhead in representative deep pools in the lower Russian River downstream of the Mirabel inflatable dam. Monitoring shall occur on a weekly basis continuing through the duration of this Order or until sustained flows at the USGS gage at Hacienda (No.11467000) are above 135 cfs.

   c. Prior to October 15, 2017, or after a cumulative seasonal total of 100 adult salmon and steelhead move upstream past the counting station at the Mirabel fish ladder, whichever is earlier, SCWA shall consult 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. Consultations shall occur every two weeks and a summary report of consultation details and any increases to the minimum flows shall be submitted to the Deputy Director for Water Rights within one week of each consultation meeting.

   SCWA shall consult with NMFS and CDFW regarding any necessary revisions to this term. A summary report of consultation details shall be submitted to the Deputy Director for Water Rights within one week of any consultation meeting. Upon consultation with NMFS and CDFW, any necessary revisions to this term shall be made upon approval by the Deputy Director for Water Rights.

3. Monitoring shall be conducted 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 Ukiah to Jenner as described below for the duration of this Order.

   a. Monitoring on the East Fork Russian River shall occur at a seasonal water quality data sonde with real-time telemetry located approximately 1/3 mile (0.33 mi) downstream from Lake Mendocino, and SCWA 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 SCWA's early warning detection system in coordination with USGS on its "Real-time

Data for California" website. The data sonde at SCWA's river diversion facility at Mirabel was removed in March 2014 due to construction of fish screen/fish ladder facilities. Construction of the fish screen/fish ladder facility is now complete and SCWA staff is currently evaluating options for installing a data sonde at the fish screen/fish ladder facility and anticipate having it operational by the end of summer 2017. If this data sonde is operational within the Order time period, data from this location will be included in the 2017 monitoring effort.

c. Monitoring on the Russian River shall occur at three seasonal data sondes with real-time telemetry in cooperation with USGS at USGS gages at Cloverdale station (north of Cloverdale at Commisky Station Road), Jimtown (at the Alexander Valley Road bridge), and at Johnson's Beach (Guerneville). The data sonde at the Cloverdale gage collects dissolved oxygen and temperature, the data sonde at the Jimtown gage collects pH, temperature, dissolved oxygen, specific conductivity and turbidity, and the data sonde at Johnson's Beach collects pH, temperature, dissolved oxygen, specific conductivity and turbidity. Data from these locations is available on the USGS "Real-time Data for California" website.

SCWA shall consult with the Regional Water Board regarding any necessary revisions to this term. A summary report of consultation details shall be submitted to the Deputy Director for Water Rights and the Executive Officer of the Regional Water Board within one week of any consultation. Any necessary revisions to the terms and conditions shall be made upon approval by the Deputy Director for Water Rights.

4. Monitoring in the Russian River and its estuary shall include monitoring to contribute to the assessment of water quality indicators and water column conditions for the purpose of assisting in the evaluation of cyanoHAB conditions and the risk co-factors contributing to nuisance blooms (e.g., flow, temperature, nutrients, etc.). The monitoring shall be conducted in accordance with the "Water Quality Monitoring Plan for the Russian River Estuary Management Project" to be developed by June 30, 2017, in consultation with the Regional Water Board. Right holder shall submit a copy of the final plan to the Deputy Director for Water Rights and the Executive Officer of the Regional Water Board within two weeks of its completion.

   SCWA shall consult with the Regional Water Board regarding any necessary revisions to this term by June 15, 2017. A summary report of consultation details shall be submitted to the Deputy Director for Water Rights within one week of any consultation. Any necessary revisions to this term shall be made upon approval by the Deputy Director for Water Rights.

5. Before June 15, 2017, SCWA shall consult with the Regional Water Board to discuss possible water quality impacts of the reduced flows and water quality monitoring activities that will be required to document water quality conditions in the Russian River. SCWA shall submit a summary report of consultation details and a description of any modifications to the monitoring activities to the Deputy Director for Water Rights within one week of the consultation. Any necessary revisions to Terms 3 and 4 shall be made upon approval by the Deputy Director for Water Rights.

6. SCWA shall provide reports of the water quality monitoring tasks as detailed in Terms 3 through 5 as described below.

   a. Summary data from the permanent water quality data sondes required in Term 3 and the nutrient/bacterial/algal sampling data obtained in accordance with Term 4 (as data becomes available) shall be submitted to the Deputy Director for Water Rights and the Executive Officer of the Regional Water Board in the weekly hydrologic status report required in Term 7.

   b. All water quality data collected pursuant to Terms 3 and 4 during the term of this Order shall be summarized. 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 report shall be submitted to the Deputy Director for Water Rights and the Executive Officer of the Regional Water Board by April 1, 2018.

   c. If any water quality issues of concern are observed from the continuous monitoring or water sampling after June 15, 2017, SCWA or the Regional Water Board may initiate additional consultation. SCWA shall submit a summary report of consultation details to the Deputy Director for Water Rights within one week of each consultation meeting. If no additional consultation is

necessary; SCWA shall submit an explanation to the Deputy Director for Water Rights within one week after the conclusion of the effective period of this Order. Upon consultation with the Regional Water Board, any necessary revisions to Terms 3, 4, and 5 shall be made upon approval by the Deputy Director for Water Rights.

7. SCWA shall report to the Deputy Director for Water Rights, the Executive Officer of the Regional Water Board, the Environmental Program Manager of CDFW, and the Supervisory Fish Biologist of NMFS on a weekly basis regarding the current hydrologic condition of the Russian River system, including current Lake Mendocino reservoir level, the rate of decline for Lake Mendocino, a 16-day cumulative rainfall forecast, current inflow from the Potter Valley Project, and a summary of the available water quality data, including bacteria indicators. Fish counts shall be reported every two weeks.

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 and Game Code sections 2050 et seq.) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 et seq.). If a "take" will result from any act authorized under this Order, SCWA shall obtain authorization for an incidental take permit prior to operation of the project. SCWA 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. SCWA shall immediately notify the Deputy Director for Water Rights if any significant change in storage conditions in Lake Mendocino occurs that warrants reconsideration of this Order.

11. By April 1, 2018, SCWA shall provide a written update to the Deputy Director for Water Rights regarding activities and programs being implemented by SCWA and its water contractors to assess and reduce water loss, promote increased water use efficiency and conservation, and improve regional water supply reliability.

12. Due to favorable hydrologic conditions in 2017 and to protect against stranding of fish when flow in the East Fork Russian River immediately below Coyote Dam is less than 250 cfs and releases from Lake Mendocino are reduced, flow in the East Fork Russian River immediately below Coyote Dam shall not be reduced by more than 12 cfs per hour, up to a maximum 24 cfs per day. Down ramping rates specified in this term may be revised upon consultation with NMFS and CDFW and approval of the Deputy Director for Water Rights. SCWA shall submit a summary report of consultation details to the Deputy Director within one week of each consultation meeting.

STATE WATER RESOURCES CONTROL BOARD

Leslie F. Grober, Deputy Director
Division of Water Rights

Dated: MAY 19 2017