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 TEMPORARY URGENCY CHANGE

SOURCE: Dry Creek and Russian River

COUNTIES: Sonoma and Mendocino Counties

BY THE DEPUTY DIRECTOR FOR WATER RIGHTS:

1.0 SUBSTANCE OF TEMPORARY URGENCY CHANGE PETITION

On August 14, 2014, Sonoma County Water Agency (SCWA) filed a Temporary Urgency Change Petition (TUCP) with the State Water Resources Control Board (State Water Board), Division of Water Rights (Division) requesting approval of a change to the subject permits pursuant to California Water Code section 1435. The TUCP requests the following temporary reductions to the Russian River instream flow requirements to address low storage conditions in Lake Mendocino:

- (1) From August 15, 2014 through February 10, 2015, reduce instream flow requirements for the upper Russian River (from its confluence with the East Fork of the Russian River to its confluence with Dry Creek) from 75 cubic feet per second (cfs) to 50 cfs.
- (2) From August 15, 2014 through February 10, 2015, reduce instream flow requirements for the lower Russian River (downstream of its confluence with Dry Creek) from 85 cfs to 60 cfs.

The TUCP requests that compliance with these minimum instream flow requirements be measured based on a 5-day running average of average daily stream flow measurements, provided that instantaneous flows on the upper Russian River shall be no less than 40 cfs and on the lower Russian River shall be no less than 50 cfs. These 5-day running average provisions will allow SCWA to reduce the operational buffers needed to manage these stream flows, thereby allowing the SCWA to conserve more water in Lake Mendocino.

No changes to the instream flow requirements for Dry Creek are requested.

The request for the upper Russian River is intended to prevent significant depletion of storage in Lake Mendocino and potential elimination of water supplies for 2015. Such depletion in storage and reduction to or elimination of water supplies would cause serious impacts to human health and welfare and reduce water supplies needed for fishery protection and stable flows in the upper Russian River. The request for the lower Russian River is intended to protect fishery resources in Dry Creek.

2.0 BACKGROUND

2.1 Water Right Permits

SCWA's TUCP involves the following permits:

- Permit 12947A for direct diversion of 92 cubic feet per second (cfs) from the East Fork Russian River and storage of 122,500 acre-feet per annum (afa) in Lake Mendocino from January 1 through December 31 of each year.
- Permit 12949 for year-round direct diversion of 20 cfs from the Russian River at the Wohler and Mirabel Park Intakes near Forestville.
- Permit 12950 for 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.
- Permit 16596 for year-round direct diversion of 180 cfs from the Russian River and storage of 245,000 afa in Lake Sonoma from October 1 of each year to May 1 of the succeeding year.

Term 20 of SCWA's 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. The current minimum instream flow requirements are for dry water supply conditions. The requirements are 75 cfs for the upper Russian River (between the confluence of the East and West Forks of the Russian River and the confluence of the Russian River and Dry Creek) and 85 cfs for the lower Russian River (between its confluence with Dry Creek and the Pacific Ocean).

Term 17 of both Permit 12949 and Permit 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 85 cfs to the Pacific Ocean during dry water supply conditions.

Similarly, Term 13 of Permit 16596 requires SCWA to maintain 85 cfs in the lower Russian River during dry 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 prohibited by the United States Government. Permits 12947A, 12949, 12950, and 16596 use the same water-year classification definitions. The water year classifications (Normal, Dry or Critically Dry) were established in Decision 1610 and are based on cumulative inflow into Lake Pillsbury beginning October 1. Although Lake Mendocino storage is critically low, cumulative inflow into Lake Pillsbury during this water year has been of a sufficient volume such that under Decision 1610, 2014 is currently classified as a Dry year.

2.2 Information Concerning the Temporary Urgency Change Petition

A Supplement to the TUCP indicates that on August 12, 2014, the water supply storage level in Lake Mendocino was 36,052 acre-feet. This storage level was 32 percent of the available summer water supply pool. Since its completion in 1958, this is the lowest level in Lake Mendocino on this date, except for August 12, 1977, when reservoir storage was 21,982 acre-feet. The low storage level is the result of a severe drought that began in the region in January 2013.

According to the Supplement, using 2013 hydrology, Lake Mendocino storage is expected to decline to approximately 20,000 acre-feet by November 1, 2014, due to releases required to meet downstream water demands and minimum instream flow requirements on the Russian River. If dry conditions continue, storage levels could be as low as 14,000 acre-feet on January 1, 2015. The projected storage analysis was completed using SCWA's Russian River Water System Model with the following assumptions: (1) the current upper Russian River minimum instream flow requirement of 75 cfs; (2) 2013 hydrology; (3) 2013 upper

Russian River observed reach losses; and (4) Potter Valley Project operations based on the 2004 amended license issued by the Federal Energy Regulatory Commission. These extremely low projected storage levels and possible elimination of water supply in Lake Mendocino could cause serious impacts to human health and welfare, threatened Russian River fish species, and water-supply in Mendocino County and the Alexander Valley in Sonoma County, as well as harm Lake Mendocino and Russian River recreation. Therefore, SCWA proposes to reduce the instream flow requirements on the upper Russian River, which are maintained by reservoir releases, to preserve water in Lake Mendocino.

As of August 12, 2014, the water supply storage level in Lake Sonoma was 159,781 acre-feet. This storage level is 65 percent of the available water conservation pool. This storage level is the lowest seen since March 1991. However, the much larger water supply pool of Lake Sonoma provides multiple years of carry over storage. Consequently, SCWA has not requested any changes to the current minimum instream flow requirements for Dry Creek at this time.

SCWA is requesting changes to the minimum instream flow requirements on the lower Russian River, downstream of its confluence with Dry Creek to the Pacific Ocean. These changes are requested because the reduced minimum instream flows being requested on the upper Russian River will provide significantly less contribution to meet minimum instream flow requirements in the lower Russian River. Consequently, increased releases from Lake Sonoma into Dry Creek could be necessary to maintain Decision 1610 minimum instream flow requirements on the lower Russian River. However, increased releases into Dry Creek are limited by the Incidental Take Statement contained in 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, SCWA, and the Mendocino County Russian River Flood Control and Water Conservation Improvement District in the Russian River watershed (Biological Opinion). The Incidental Take Statement restricts releases from Lake Sonoma into Dry Creek because they can result in flows that are too high for optimal habitat for juvenile salmonids. Therefore, SCWA proposes to reduce the minimum instream flow requirements for the lower Russian River to protect fishery resources in Dry Creek.

3.0 COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT

Ordinarily, 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 pursuant to Water Code section 1435. (See Cal. Code Regs., tit. 23, § 805.) However, on January 17, 2014 Governor Edmund G. Brown, Jr. declared a State of Emergency, due to drought conditions, which concluded that strict compliance with CEQA would "prevent, hinder, or delay the mitigation of the effects of the emergency." Accordingly, as authorized by Government Code section 8571, item 9 of the Governor's Proclamation suspends CEQA, and the regulations adopted pursuant to it, to the extent that CEQA would otherwise apply to specified actions necessary to mitigate the effects of the drought, including the actions described in item 8 of the Governor's Proclamation. Item 8 requires the State Water Board to consider modifying requirements for reservoir releases or diversion limitations that were established to implement a water quality control plan. The subject instream flow requirements implement the Water Quality Control Plan for the North Coast Region because they protect instream beneficial uses that are designated in the plan, including recreation, cold and warm freshwater habitat, and wildlife habitat. Accordingly, CEQA is suspended to the extent that it would otherwise apply to the TUCP and subsequent modifications thereto.

In addition, the changes requested in the TUCP are consistent with the following Statutory and Categorical CEQA exemptions for the following reasons:

 As of August 12, 2014, the water supply storage level in Lake Mendocino was 32 percent of the available summer water supply pool. Information provided by SCWA demonstrates that continued releases of water pursuant to permit term requirements could cause storage levels in Lake Mendocino to decline to unsafe levels. If storage in Lake Mendocino is depleted there will be serious impacts to human health and welfare and water will not be available to protect aquatic life, including threatened and endangered species in the Russian River. Approval of the TUCP is therefore necessary to prevent and mitigate loss of, or damage to, the environment, fishery resources, property, public health, and essential public services. Accordingly, the project is statutorily exempt from CEQA because it is necessary to prevent or mitigate an emergency. (Pub. Resources Code, § 21080, subd. (b)(4); Cal. Code Regs., tit. 14, § 15269, subd. (c).)

- 2) 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 Decision 1610. The proposed action does not request and will not expand the water supply available to SCWA for consumptive purposes.
- 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." (Cal. Code Regs, tit. 14, § 15307.) The proposed action on the upper Russian River will assure the maintenance of a natural resource, i.e., the instream resources of the Russian River, by reserving water in Lake Mendocino to prevent harm to, and protect habitat for listed Russian River salmonid fisheries. The proposed action on the lower Russian River will also assure the maintenance of a natural resource, i.e., the instream resources of Dry Creek, by avoiding impacts to salmonids consistent with the Incidental Take Statement. 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." (Cal. Code Regs., tit. 14, § 15308.) The proposed action will assure 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 TEMPORARY URGENCY CHANGE PETITION

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, subdivision (a). Pursuant to Water Code section 1438, subdivision (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 lie. In addition, the State Water Board will post the notice of the temporary urgency change order on its website, along with the TUCP (and accompanying materials). The State Water Board also will distribute the notice through an 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 and may hold a hearing on any objection. (*Id.*, subd. (e).) State Water Board Resolution 2012-0029 delegates to the Deputy Director for Water Rights the authority to act on a temporary urgency change petition if there are no objections to the petition. (Resolution 2012-0029, ¶ 4.4.1.)

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 expire automatically 180 days after issuance, unless they are revoked or an earlier expiration date is specified. (*Id.*, § 1440.)

5.0 CRITERIA FOR APPROVING THE PROPOSED TEMPORARY URGENCY CHANGE

Water Code section 1435 provides that a permittee or licensee who has an urgent need to change the point of diversion, place of use, or purpose of use from that specified in the permit or license may petition for a conditional temporary change order. The State Water Board's regulations set forth the filing and other procedural requirements applicable to TUCP's. (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 temporary urgency change, the State Water Board must make the following findings:

- 1. the permittee or licensee 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).)

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 because, as described in the Supplement to the TUCP, Lake Mendocino reservoir levels are projected to reach extremely low conditions that may prevent SCWA from continuing to make the reservoir releases that are necessary to support the various beneficial uses that rely on these releases in the Russian River. If upcoming dry conditions persist and significant storm events are delayed or do not occur in Water Year 2015, then carryover storage in Lake Mendocino will be crucial for the continued protection of the Russian River salmonid fishery and water supply reliability. Specifically, at a storage level below 20,000 acre-feet, there would be greater risks that there would be insufficient water supplies to support: (a) survival of ESA-listed Russian River salmonid species, (b) agricultural and municipal uses that depend on the Russian River, and (c) river-based recreation. Without the proposed changes, the current minimum instream flow requirements would require releases of water from Lake Mendocino at levels that would risk significant depletion of storage and potential elimination of water supplies for water uses in Mendocino County and northern Sonoma County (above the confluence with Dry Creek). Such depletion in storage and reduction in or elimination of water supplies would cause serious impacts to human health and welfare, and reduce water supplies needed for fishery protection and stable flows in the upper Russian River.

An urgent need also exists for the proposed change in minimum instream flow requirements on the lower Russian River because reductions in the upper Russian River flows could require an increase in Lake Sonoma releases into Dry Creek to meet lower Russian River flow requirements. The 2008 NMFS Biological Opinion found that high Dry Creek flows from June through October result in sub-optimal habitat conditions for juvenile salmonids and issued an Incidental Take Statement restricting releases from Lake Sonoma to Dry Creek from June through October each year. Therefore, higher Dry Creek flows could be detrimental to the fisheries in Dry Creek and result in violations of the Incidental Take Statement. In addition, reductions in the lower Russian River minimum instream flow requirements will conserve storage in Lake Sonoma during drought conditions. Considering the severe drought conditions and the Governor's Emergency Drought Proclamation, conservation of water in Lake Sonoma is prudent.

5.2 No Injury to Any Other Lawful User of Water

Under this Order, SCWA will be required to maintain specific flows in the Russian River from its most upstream point of diversion to the river's confluence with the ocean. Therefore, because these minimum flows will be present, it is anticipated that all other lawful users of water will still be able to divert and use any water to which they may be legally entitled during the period specified in this Order. Accordingly, granting this TUCP will not result in any 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 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

Although flows in the mainstem Russian River will be reduced upon approval of this TUCP, prevention of the depletion of storage in Lake Mendocino is crucial for instream beneficial uses, including threatened and endangered fish species. Reductions in the minimum instream flow requirements will improve carryover storage in Lake Mendocino, which will provide significant benefit to all instream beneficial uses if dry conditions persist into Water Year 2015. Specifically, conserved storage will allow enhanced management of Russian River flows in the fall, winter and next spring for the benefit of salmon migration, spawning, and rearing. It is possible that the reduced flows may impair some instream beneficial uses, principally recreation, in the Russian River. However, any effects associated with such flow reductions would not be unreasonable, considering the potential catastrophic impacts to fish, wildlife and other instream beneficial uses that could occur with the current release levels, if the current release levels result in the draining of Lake Mendocino and the dewatering of the upper Russian River

SCWA has consulted with the California Department of Fish and Wildlife (CDFW), NMFS, and the Regional Water Quality Control Board (Regional Board) regarding filing the TUCP and the effects of the proposed changes. All three agencies support the changes requested in the TUCP. The Regional Board has requested continuous water quality monitoring on the mainstem Russian River and at the Russian River Estuary and associated reporting, which will be required. CDFW and NMFS concurred that the proposed flow reductions are prudent measures to protect aquatic resources, such as Chinook, steelhead, and coho migration and spawning, as well as salmon egg incubation. CDFW and NMFS recognize that flow reductions will support conservation of Lake Mendocino's water supply and avoid dewatering of the upper Russian River. In light of the potential for the effective period of this Order to continue into migration seasons for threatened and endangered anadromous fish species, CDFW and NMFS have requested continuation of ongoing consultation and reporting efforts with SCWA to determine monitoring efforts and appropriate flows for fish passage. CDFW and NMFS also requested an additional pulse flow release requirement. However, current data regarding timing and need for a pulse flow is limited at this time. Furthermore, it is unclear whether a pulse flow is necessary to mitigate for the impacts of the changes sought by SCWA's TUCP. This Order may not be an appropriate vehicle to require SCWA to implement a pulse flow, but these issues should be discussed in the consultations with CDFW and NMFS. This order includes requirements for consultation on: 1) flow increases after November 1 to support successful migration and spawning of Chinook, steelhead, and coho salmon and 2) the need for and appropriate methodology for monitoring salmonid species and other native fish species in the Russian River. This Order also includes a term limiting ramping rates below Lake Mendocino to avoid fish stranding.

To inform the review and approval of the TUCP and the State Water Board's continuing supervision of the diversion and use of water under this temporary change order pursuant to Water Code section 1439, this Order requires SCWA to report on consultations with CDFW, NMFS, and the Regional Board. In addition, to ensure beneficial use of water resources to the fullest extent possible and to prevent waste of water, SCWA is required to provide a weekly update to the Deputy Director, CDFW, NMFS, and the Regional Board regarding the current hydrologic and environmental conditions of the Russian River (Term 11). This information will assist the State Water Board in determining whether additional actions are necessary.

5.4 The Proposed Change is in the Public Interest

The proposed changes in the upper Russian River minimum instream flow requirements will help conserve stored water in Lake Mendocino so that, in the event drought conditions persist, water can be released to maintain instream flows for the benefit and protection of all uses of Russian River water, including the salmonid fisheries in the Russian River. It is in the public interest to preserve these water supplies for these beneficial uses under present severe drought hydrologic conditions.

The proposed changes in the lower Russian River minimum instream flow requirements will support ecological values in Dry Creek by preventing higher Dry Creek flows that could be necessary if the State Water Board were to approve only the requested changes in the upper Russian River requirements. As discussed above, such higher Dry Creek flows would impair habitat conditions for juvenile salmonids and deplete storage in Lake Sonoma. It is in the public interest to minimize impacts to salmonids and conserve water supplies in Lake Sonoma during drought conditions. Reductions in diversions at SCWA's facilities can also serve to increase flows in the lower Russian River and prevent the need for higher Dry Creek flows. Accordingly, inclusion of a term requiring SCWA and its contractors to conserve water is in the public interest. Pursuant to Term 17, SCWA will be required to implement a Water Demand Reduction Plan to reduce water demand by a minimum of 20 percent relative to baseline (pre-drought) water demand. In addition, SCWA will continue to implement water use efficiency programs that align with the California Urban Water Conservation Council's Best Management Practices (BMPs) and comply with SBx7-7.

To further ensure preservation of Lake Mendocino water supplies in the public interest, SCWA has coordinated the filing of this TUCP with the filing of a separate TUCP by the Mendocino Russian River Flood Control and Water Conservation Improvement District (District). The District's TUCP requested the temporary incorporation of demand management terms into the District's permit (Permit 12947B), which authorizes storage in Lake Mendocino for use within Mendocino County. According to the Supplement to SCWA's TUCP, the District's TUCP should result in reduced diversions in the upper Russian River, which will further improve storage in Lake Mendocino and allow SCWA to manage Russian River flows more efficiently.

6.0 CONCLUSIONS

The State Water Board has adequate information in its files to make the evaluation required by Water Code section 1435.

I conclude that, based on the available evidence:

- 1. The permittee has an urgent need to make the proposed change;
- 2. The petitioned change will not operate to the injury of any other lawful user of water;
- 3. The petitioned change will not have an unreasonable effect upon fish, wildlife, or other instream beneficial uses; and,
- 4. The petitioned change, with the modifications described above, is in the public interest.

ORDER

NOW, THEREFORE, IT IS ORDERED THAT: the Petition filed by Sonoma County Water Agency (SCWA) for a temporary urgency change in Permits 12947A, 12949, 12950 and 16596 is approved and effective until 180 days from the date of this Order or Lake Mendocino storage reaches the top of the water supply pool (68,400 acre-feet), whichever is earlier.

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

- 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 (from its confluence with the East Fork of the Russian River to its confluence with Dry Creek) shall remain at or above 50 cubic feet per second (cfs).
 - b. Minimum instream flow in the lower Russian River (from its confluence with Dry Creek to the Pacific Ocean) shall remain at or above 60 cubic feet per second (cfs).
 - c. For purposes of compliance with this term, the minimum instream flow requirements shall be measured based on a 5-day running average of average daily stream flow measurements, provided that instantaneous flows on the upper Russian River shall be no less than 40 cfs and on the lower Russian River shall be no less than 50 cfs.
- 2. Beginning November 1 SCWA shall consult with the National Marine Fisheries Service (NMFS) and the California Department of Fish and Wildlife (CDFW) regarding increasing controlled instream flow, to allow successful migration and spawning of Chinook, steelhead, and coho, at the USGS gages at both Hopland (No.11462500) and Healdsburg (No. 11464000) to a level not to exceed 100 cfs and at the USGS Hacienda gage to a level not to exceed 135 cfs. Consultations shall occur every two weeks and SCWA shall submit a summary report of consultation details and any increases to the minimum flows to the Deputy Director within one week of each consultation meeting.
- 3. To protect against stranding of fish when releases from Lake Mendocino are reduced under this Order, flow in the East Fork Russian River immediately below Coyote Dam shall not be reduced by more than 25 cfs per hour. Ramping rates specified in this term may be revised upon consultation with NMFS and the CDFW. SCWA shall submit a summary report of consultation details to the Deputy Director within one week of each consultation meeting.
- 4. Within two weeks of the issuance of this Order, SCWA shall consult with NMFS and CDFW regarding the need for and appropriate methodology for monitoring salmonid species and other native fishes in the Russian River during the term of this Order. SCWA shall submit a summary report of consultation details and a description of any plans and methodologies for monitoring required by NMFS and CDFW to the Deputy Director within one week of the consultation.
- 5. SCWA shall monitor and record daily numbers of adult salmonids moving upstream past the life cycle monitoring station in Dry Creek (when operable) beginning no later than September 1, 2014, and continuing through the duration of the Order. SCWA shall include these numbers in the weekly reports required in Term 11.
- 6. SCWA shall report to NMFS and CDFW every two weeks or more frequently upon their request regarding the applicable fisheries monitoring activities specified in Terms 4 and 5 of this Order. Consistent with the Biological Opinion, SCWA shall consult with NMFS and CDFW regarding any necessary adaptations to the monitoring program including revisions to Terms 4 and 5. SCWA shall submit a summary report of consultation details to the Deputy Director within one week of each consultation meeting. Upon consultation with NMFS and CDFW, any necessary revisions to the terms and conditions of this order shall be made upon approval by the Deputy Director. Reporting of fisheries monitoring tasks described in Terms 4 and 5 shall be submitted to the Deputy Director by April 1, 2015 in accordance with NMFS and CDFW annual reporting requirements as more fully described in the Biological Opinion.

- 7. Monitoring shall be conducted to determine the water quality effects and the effects to availability of aquatic habitat for salmonids resulting from the approved temporary urgency change. Mainstem Russian River and estuary monitoring shall include continuous monitoring of temperature, dissolved oxygen (DO), pH, and specific conductance at multiple stations from Ukiah to Jenner.
 - a. For the duration of this Order, monitoring on the mainstem Russian River shall occur at three, multi-parameter "permanent" water quality sondes on the Russian River at USGS stream gages located at Hopland, Diggers Bend near Healdsburg, and Hacienda Bridge. These three sondes are referred to as "permanent" as they are maintained as part of SCWA's early warning detection system in coordination with the United States Geological Survey (USGS) on its "Real-time Data for California" website. As of March 2014, the sonde at SCWA's river diversion facility (RDS) at Mirabel was removed due to several construction projects; therefore it will not be included in the 2014 monitoring effort. SCWA, in cooperation with the USGS, shall also operate three seasonal sondes with real-time telemetry 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 sonde at the Cloverdale gage collects DO and temperature, the sonde at the Jimtown gage collects pH, temperature, DO, specific conductivity and turbidity. Data from these locations is available on the USGS "Real-time Data for California" website.
 - b. Monitoring in the mainstem Russian River Estuary shall include nine stations in the lower, middle, and upper reaches of the Estuary, including tributaries and areas upstream from the Estuary that become inundated during lagoon conditions (maximum backwater area). Seven stations shall be located in the mainstem Estuary between the mouth of the river at Jenner and Monte Rio and two stations shall be located in the Willow and Austin creek tributaries, in areas that are subject to tidal and/or lagoon inundation. These sondes shall be removed when/if flows reach 1000 cfs and high flows are sustained.

Sondes shall record hourly measurements of water temperature (Celsius), dissolved oxygen (milligrams per liter, mg/L), dissolved oxygen (percent saturation, % Sat), specific conductance (microsiemens), salinity (parts per thousand, ppt), and hydrogen ion (pH). All sondes shall be recalibrated following the manufacturer's manual and data downloaded every two weeks.

Monitoring sites include:

- i. Russian River Mouth at Goat Rock State Beach (2 YSI 6600 Datasondes)
- ii. Russian River at Patty's Rock upstream from Penny Island (2 YSI 6600 Datasondes)
- iii. Willow Creek at the first bridge (1 YSI 6600 Datasonde)
- iv. Russian River at Sheephouse Creek downstream of Sheephouse Creek (1 or 2 YSI 6600 Datasondes)
- v. Russian River at Freezeout Creek downstream of Freezeout Creek (2 YSI 6600 Datasondes)
- vi. Russian River at Brown's Pool downstream of Austin Creek (1 YSI 6600 Datasonde)
- vii. Austin Creek downstream of the first steel bridge (1 YSI 6600 Datasonde)
- viii. Russian River at Patterson Point in Villa Grande (1 YSI 6600 Datasonde)
- ix. Russian River at Monte Rio downstream of Dutch Bill Creek (1 YSI 6600 Datasonde)
- c. Monitoring on the East Fork Russian River, shall occur at a seasonal sonde approximately 1/3 mile (0.33 mi) downstream from Lake Mendocino, and shall record hourly measurements

of water temperature, dissolved oxygen, specific conductance, pH, and turbidity. The monitoring site will be accessed by foot.

8. SCWA shall monitor bacteria, nutrients, and algae at five surface-water sites in the Russian River Estuary. All samples shall be analyzed for nutrients (e.g. nitrogen, ammonia, and phosphorus), chlorophyll a, standard bacterial indicators (Total coliforms, E. coli, and Enterococcus), total and dissolved organic carbon, total dissolved solids, and turbidity. Nutrient/Bacterial/Chlorophyll a monitoring sites include: Russian River at the Jenner Boat Ramp; Russian River at Casini Ranch below Austin Creek; Russian River at Patterson Point in Villa Grande; Russian River at Monte Rio below Dutch Bill Creek; and Russian River at Vacation Beach below summer dam.

Additional focused sampling would occur under certain conditions and following specific river management and operational events, noted below, at the sites listed above:

- a. Removal of Johnson's Beach and/or Vacation Beach Dam 3 samples within 10 days after dam removal
- b. Sandbar Closure at the river mouth 3 samples within first 10 days (weekly thereafter)
- c. Sandbar Breach at the river mouth 3 samples within 10 days after breach
- d. Lagoon Outlet Channel implementation 3 samples within 10 days after implementation (weekly thereafter).

Bacteroides bacteria sampling shall be conducted at the three surface-water sites in the maximum backwater area: Patterson Point, Monte Rio, and Vacation Beach. Sampling for human-host Bacteroides bacteria shall be conducted at public freshwater beaches during periods of potentially heavy contact recreational use (i.e. following Labor Day and Veteran's Day holiday) and during river mouth closure and lagoon outlet channel implementation when freshwater beaches may become inundated.

Samples shall be collected weekly through the duration of the lagoon management period (May 1 - October 15). Measurements of water temperature, dissolved oxygen, specific conductance, pH, and turbidity shall be collected using a YSI 6600 datasonde and YSI 650MDS datalogger during water sample collection. The sonde will be calibrated before and after the collection of water samples.

Sampling frequency shall increase to daily at freshwater beach sites, including Patterson Point, Monte Rio and Vacation Beach, if bacteria indicators exceed North Coast Regional Water Quality Control Board (Regional Board) operative standards during the weekly sampling effort and shall continue daily until measurements are below operational standards. Measurements for E. coli (235 MPN/100mL) shall be used for a comparison to operational standards. Bacteria indicators and sampling effort shall be included in the weekly reports required in Term 11.

SCWA shall continue to collect Enterococcus samples and record and report the data, however, Enterococcus results will not be relied upon when coordinating with the Regional Board and Sonoma County DHS about potentially posting warning signs at freshwater beach sites or to discuss potential adaptive Estuary management actions including mechanical breaching of the sandbar to address potential threats to public health.

At the conclusion of any focused grab sampling event, regular weekly sampling shall resume, as described above.

9. SCWA shall provide the summary data from the permanent water quality sondes required in Term 7a and nutrient/bacterial/algal sampling in Term 8 (as data becomes available) to the Deputy Director for the State Water Board and the Executive Director for the Regional Board in the weekly hydrologic status report required in Term 11. If any water quality issues of concern are observed from the continuous monitoring network, SCWA or the Regional Board can initiate consultation. SCWA shall submit a summary report of consultation details to the Deputy Director within one week of each consultation meeting. If no consultation is necessary; SCWA shall submit an explanation to the

Deputy Director within one week after the conclusion of the effective period of this Order. Upon consultation with the Regional Board, any necessary revisions to Terms 7 and 8 shall be made upon approval by the Deputy Director.

- 10. SCWA shall summarize all water quality data collected pursuant to Terms 7 and 8 during the term 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 report shall be submitted to the Deputy Director by April 1, 2015.
- 11. SCWA shall report to the Deputy Director of Water Rights and the Executive Director of the North Coast Regional Board 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 Potter Valley, fish counts, and a summary of the available water quality data.
- 12. 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 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this Order, the permittee shall obtain authorization for an incidental take permit prior to construction or operation of the project. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the temporary urgency change authorized under this Order.
- 13. The State Water Board reserves jurisdiction to supervise the temporary urgency change 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.
- 14. SCWA shall immediately notify the State Water Board if Lake Mendocino storage reaches the top of the winter water supply pool (68,400 acre-feet).
- 15. SCWA shall immediately notify the State Water Board if any significant change in storage conditions in Lake Mendocino occurs that warrants reconsideration of this Order.
- 16. SCWA shall provide a written update to the Deputy Director by April 1, 2015, 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.
- 17. The temporary changes authorized by this Order are not effective unless SCWA is operating in accordance with a Water Demand Reduction Plan (Plan) satisfactory to the Deputy Director for Water Rights. The Plan shall be designed to ensure that all parties that beneficially use water diverted and/or stored under this right implement actions to meet a water demand reduction of a minimum of 20 percent of the baseline water demand. The Plan shall define baseline water demand as appropriate for SCWA's situation based on considerations such as weather, economy, wholesale supplier allocations or other relevant information. For the purpose of compliance with this term, if the Plan does not define baseline water demand, it is assumed to be the average water demand for the previous year (excluding drought years).

The Plan shall include, at a minimum, the following components:

1) All parties that beneficially use water diverted and/or stored under these rights and/or parties otherwise subject to the temporary change(s) authorized by this Order (excluding SCWA's surplus customers, whom are curtailed, and parties found on the De Minimus list provided by

SCWA on August 22, 2014, whose diversions amount to less than one percent of SCWA's total water distributed);

- 2) Baseline water demand for all parties included in (1) above;
- 3) Existing actions and additional actions planned by each party included in (1) above to reduce water use in order to meet the water demand reduction required by this term, including a description of how such actions can be expected to meet the demand reduction. The Plan shall also identify additional actions to be implemented, in the event that SCWA does not attain the amount of water use demand reduction relative to baseline water demand.

Additional actions to be considered include, at a minimum, those recommended in any applicable Governor's Drought Proclamation as applicable to SCWA's operations, and determine if implementation of such action(s) may increase conservation of their water supply. If so, SCWA will either implement the recommendation(s) or provide documentation as to why such action is not reasonable for SCWA's situation. Actions to evaluate include, but are not limited to, 1) Avoid using water to clean sidewalks, driveways, parking lots and other hardscapes; 2) Turn off fountains and other decorative water features unless recycled or grey water is used for those water features, 3) Limit vehicle washing at home by patronizing local carwashes that use recycled water; 4) Limit outdoor watering of lawns and landscaping to no more than two times a week; 5) Recreational facilities, such as city parks and golf courses, and large institutional complexes, such as schools, business parks and campuses, should immediately implement water reduction plans to reduce the use of potable water for outdoor irrigation; 6) Commercial establishments such as hotel and restaurants should take steps to reduce water usage and increase public awareness of the drought through measures such as offering drinking water only upon request and providing customers with options to avoid daily washing of towels or sheets; 7) Professional sports facilities, such as basketball arenas, football, soccer, and baseball stadiums, and hockey rinks should reduce water usage and increase public awareness of the drought by reducing the use of potable water for outdoor irrigation and encouraging conservation by spectators.;

Additional actions to be considered include, but are not limited to, those associated with on farm conservation, such as irrigation scheduling, tailwater recovery systems, and irrigation system improvements, such as canal lining, canal structure improvements, and remote measurement, monitoring and control. SCWA shall determine if implementation of such action(s) may increase conservation of water supply. SCWA will either implement action(s) or provide documentation as to why such action is not reasonable for SCWA's situation;

- For parties included in (1) above over which SCWA has the authority or other ability to impose the listed water demand reduction actions, a list of such parties and a description of such authority or other ability over each party;
- 5) For parties included in (1) above over which SCWA does not have the authority or other ability to impose the listed water demand reduction actions, a list of such parties, a description of the efforts of SCWA to coordinate with each of the listed parties to ensure that each party take appropriate action to reduce water demand, and a description of such actions for each party;
- 6) A detailed schedule with planned completion dates for key events.

SCWA shall submit to the Deputy Director for Water Rights a written report within 15 days of the end of each month (monthly status update) that provides a summary of compliance with this term. The monthly status update shall, at a minimum, include a description of SCWA's actions to date to comply with the requirements of this term and the results of such actions, including but not limited to the amount of water demand

Permits 12947A, 12949, 12950 and 16596 Page 13 of 13

reduction relative to baseline water demand. The data submitted for the amount of water demand reduction shall include both monthly and aggregate annual to date information and shall be compared to baseline water demand. When the monthly status update reflects that SCWA is not achieving the minimum water demand reduction of this term, SCWA shall also include additional actions SCWA has adopted and/or implemented to meet the demand reduction and identify the date when such additional actions will be fully implemented as part of the monthly status update.

Failure to achieve demand reduction may result in modification of this Order to limit the extent of the approved action, at the discretion of the Deputy Director for Water Rights.

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STATE WATER RESOURCES CONTROL BOARD

ORIGINAL SIGNED BY:

Barbara Evoy, Deputy Director Division of Water Rights

Dated: AUG 25 2014