STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2022-0025

TO AMEND AND READOPT AN EMERGENCY REGULATION THAT PROVIDES CURTAILMENT AUTHORITY IN THE KLAMATH RIVER WATERSHED, AND ESTABLISHES MINIMUM INSTREAM FLOW REQUIREMENTS AND INFORMATION ORDER AUTHORITY IN THE SCOTT RIVER AND SHASTA RIVER WATERSHEDS

WHEREAS:

- 1. California and most of the western United States continue to face a significant drought in the wake of one of the driest periods on record, driven by climate change and unprecedented hydrologic conditions. Water supply in many parts of California, including the Klamath River watershed, is insufficient to meet demands and requires urgent and continued action to ensure the protection of health, safety, and the environment.
- 2. On April 21, 2021, Governor Gavin Newsom issued a Proclamation of a State of Emergency for Mendocino and Sonoma counties, in response to drought conditions in the Russian River watershed. On May 10, 2021, Governor Newsom issued an expanded Proclamation of a State of Emergency for 41 counties, including those in the Klamath River watershed (May 2021 Proclamation), in response to drought conditions. The May 2021 Proclamation finds that it is necessary to act expeditiously to mitigate the effects of drought conditions in the Klamath River watershed, both to ensure the protection of health, safety, and the environment and to prepare for potential sustained drought conditions. On July 8, 2021, the Governor expanded the emergency declaration to nine additional counties and called upon Californians to voluntarily reduce their water use by 15 percent.
- 3. The May 2021 Proclamation directs the State Water Resources Control Board (State Water Board or Board) to consider adopting an emergency regulation to curtail water diversions when water is not available at water right holders' priority of right in the Klamath River watershed. For purposes of approving an emergency regulation pursuant to this directive, the May 2021 Proclamation also suspends the California Environmental Quality Act (CEQA) in Public Resources Code, Division 13 (commencing with section 21000) and regulations adopted pursuant to that Division.
- 4. The May 2021 Proclamation further directs the Board and California Department of Fish and Wildlife (CDFW) to evaluate minimum instream flows and other actions to protect salmon, steelhead, and other native fishes in critical systems in the state and work with water users and other parties on voluntary measures to implement those actions. To the extent voluntary actions are not sufficient, the State Water Board, in coordination with CDFW, is to consider emergency regulations to establish minimum drought instream flows.

- 5. In past years, the State Water Board, CDFW, diverters, and other stakeholders have undertaken efforts to protect the fish in the Scott River and Shasta River watersheds, short of curtailments for minimum instream flows. These efforts include: sending notices of water unavailability in the Scott River watershed; distributing educational materials to promote voluntary conservation efforts; providing information on funding availability at public meetings; making planting decisions for a dry year; contracting to cease diversions earlier in the year; coordination of diversions to protect redds and juvenile salmon; dedication of water to instream use; and groundwater substitutions to improve water temperatures. Such efforts have improved the availability of water, including for instream uses, but have not resulted in meeting levels necessary to adequately protect fish in this extreme drought situation. Without the ability to protect instream flows or to provide greater incentives for voluntary action and cooperation, these voluntary efforts have not yet been sufficient to adequately support important fisheries in the Scott River and Shasta River watersheds.
- 6. The Scott River and Shasta River watersheds, which are tributaries to the Klamath River, have had three consecutive years of below-average precipitation. The current water year (2021-2022) represents one of the severest droughts on record for both watersheds. Streams that provide habitat and migration corridors for fall-run Chinook salmon, coho salmon and steelhead will not maintain the minimum flows for these species unless water diverters substantially reduce or curtail water use. There is a continued urgent need to address severe water shortages in the Scott River and Shasta River watersheds to protect minimum flows for critical fish species, as well as to meet human health and safety needs, and preserve minimum water supplies for livestock watering.
- 7. The Southern Oregon/Northern California Coast (SONCC) coho salmon is listed as a threatened species under both the federal and state Endangered Species Acts (ESAs) and are identified as being at high and moderate risk of extinction in the Shasta River and Scott River, respectively. The species spawns, hatches, and rears in tributaries to the Klamath River, including the Scott River and Shasta River, and is divided into three run-years or "cohorts." The Scott River and Shasta River coho salmon are both "core, functionally independent" populations of the SONCC Evolutionarily Significant Unit under the federal ESA, indicating that the Scott River and Shasta River have a critical role in the continuation and recovery of SONCC coho.
- 8. The Scott River and Shasta River are key streams in the Klamath Basin for the culturally and commercially significant fall-run Chinook salmon. The fall-run Chinook is a fish species of high commercial importance, as the major salmon stocks targeted by ocean fisheries south of Cape Falcon are Sacramento River fall-run Chinook and Klamath River fall-run Chinook salmon. For most of the past three decades, Klamath River fall-run Chinook has been more constraining on the troll fishery than the Sacramento River fall-run Chinook, and low returns of Klamath fall-run Chinook have resulted in a complete closure of hundreds of miles of the coast to commercial fishing multiple times in the past 15 years.

- Coastal ocean fishing-dependent communities have suffered severe economic impacts due to decreases in fish numbers and related harvest limitations. The species also supports commercial and tribal river fishing. The river fisheries have also been closed multiple times in the past decade when the numbers of returning fall-run Chinook are low.
- 9. Steelhead in the Scott River and Shasta River watersheds are part of the federally-designated Klamath Mountains Province (KMP) Distinct Population Segment (DPS). Listing of this DSP under the federal ESA was determined not to be warranted by the National Marine Fisheries Service on April 4, 2001. KMP steelhead are a United States Forest Service Sensitive species, and Summer-run steelhead in this DPS are a CDFW recognized species of special concern.
- 10. The coho and Chinook salmon and steelhead in the Klamath River watershed are of particular cultural and spiritual significance to many Klamath Basin tribes, including but not limited to the Karuk Tribe, the Yurok Tribe, the Hoopa Valley Tribe, the Quartz Valley Indian Reservation, the Shasta Nation, and the Shasta Indian Nation, which have all raised concerns regarding these species in with the State Water Board in recent years. The Quartz Valley Indian Reservation's land base is on the Scott River. Traditionally used fish resources of the Scott River include Chinook and coho salmon, steelhead, and Pacific lamprey. The Quartz Valley Indian Reservation relies on these fish for sustenance and their spiritual well-being.
- 11. Because of the fragile nature of the coho and Chinook salmon and steelhead in the Scott River and Shasta River watersheds, continued regulatory action to protect this public trust resource is warranted. Drought conditions present particular risks to steelhead and the SONCC coho and the fall-run Chinook, which require sufficient cold water to provide migration passage, adequate spawning areas, egg incubation, rearing, juvenile redistribution, and juvenile outmigration. During the 2014-2016 drought, localized efforts to manage the coho salmon fishery were insufficient to address the impacts of low flows and high temperatures associated with ongoing diversions and extreme dry conditions. The prior drought resulted in a significant population drop in the strongest coho cohort, from which the cohort has still not recovered. In fall and winter of 2020, coho and Chinook salmon both faced significant migration barriers from reduced flows. It is not yet clear the degree of impact this delay had on the species. Repeated stress events, such as drought conditions affecting multiple cohorts or affecting the same cohort in short succession, can reduce the resilience of a species.
- 12. On June 15, 2021, in response to emergency drought conditions persisting throughout the Shasta River and Scott River watersheds, and insufficient water supply to meet the needs of all water uses, CDFW requested that the State Water Board consider adoption of a drought emergency regulation to protect coho and Chinook salmon and provided drought minimum instream flows for the

- two watersheds, and emphasized the importance of providing flows for coho and Chinook salmon during this drought emergency.
- 13. On August 17, 2021, the State Water Board adopted a drought emergency regulation that went into effect on August 30, 2021, when it was approved by the Office of Administrative Law and filed with the Secretary of State (Cal. Code Regs., tit. 23, §§ 875–875.9, "August 2021 Drought Emergency Regulation"). The August 2021 Drought Emergency Regulation provides the State Water Board with curtailment authority to protect minimum instream flows, establishes minimum health and safety and livestock watering exceptions, and limits inefficient diversions for livestock during the September through January timeframe. On September 9 and 10, 2021, the State Water Board issued curtailment orders in the Scott River and Shasta River watersheds to protect minimum instream flows. Since that time, curtailment of water rights has been managed adaptively to maintain minimum instream flows while maximizing water right diversions.
- 14. Monitoring of salmonid populations is ongoing to understand how implementation of the minimum flow requirements and associated curtailments have affected salmonid populations, but it is clear that adult migration was successful in both the Scott and Shasta watersheds and that sufficient water for successful juvenile rearing and outmigration was achieved. Since adoption, the August 2021 Drought Emergency Regulation has resulted in multiple benefits including significant groundwater conservation that is anticipated to improve fall flows in the Scott River in 2022, increased community engagement on water conservation and drought actions, improved understanding of area water use, improved water data, and better gaging.
- 15. The August 2021 Drought Emergency Regulation includes provisions for individual, tributary, or watershed local cooperative solutions in lieu of curtailments, and was crafted to build on, support, and allow for expansion of voluntary efforts. A pathway for groundwater local cooperative solutions was built into the August 2021 Drought Emergency Regulation to both encourage early reductions in groundwater use and also allow for greater economic certainty to the agricultural community around water availability during curtailments. To date, 57 percent of the acres identified as being irrigated with groundwater in the Scott River watershed are operating under an approved 30 percent water use reduction plan, with an additional 32 percent of the total groundwater-irrigated acreage in the Scott River watershed under review or pending approval. Opportunities exist in the Shasta River watershed for similar groundwater local cooperative solutions to be formed. The amended regulation supports continued development and implementation of a range of local cooperative solutions among water right holders and claimants in the Scott River and Shasta River watersheds. When approved, such agreements are expected to achieve the overall objectives that would otherwise be served by curtailment. Landowners may enter into local cooperative solutions to conserve water and perform "equal or better" actions in lieu of potential curtailment. Local cooperative solutions are

- required to demonstrate "equal or better" protections or include verifiable water conservation actions. Common water conservation actions include dedication of water to instream use, planting crops that require less water, reducing irrigation, improving efficiency of irrigation technology, and fallowing.
- 16. In light of the vital importance of water for all uses during an extreme drought, the August 2021 Drought Emergency Regulation includes a provision for CDFW, after coordination with the National Marine Fisheries Service, to notify the Deputy Director if lower alternative flows at the compliance gage provide equal or better protection for the pertinent species' relevant life stages. Based on new analyses performed after the adoption of the August 2021 Drought Emergency Regulation, CDFW provided the Deputy Director with lower flows in letters dated December 17, 2021 (reduced Shasta River flows from 150 cfs to 135 cfs for the remainder of December), March 15, 2022 (reduced Shasta River flows from 135 cfs to 105 cfs for the last seven days of March), and June 3, 2022 (reduced Scott River flow from 125 cfs to 90 cfs for last seven days of June).
- 17. On April 20, 2022, in response to continued emergency drought conditions persisting throughout the Shasta River and Scott River watersheds (tributaries to the Klamath River) and insufficient water supply to meet the needs of all water uses, CDFW requested that the State Water Board consider readoption of the August 2021 Drought Emergency Regulation to protect coho and Chinook salmon and steelhead, and provided recommended updates. In its letter, CDFW provided updated drought emergency minimum flows that reflect minimum flows during this drought emergency, based on the best available science, including new analyses undertaken since August 2021. CDFW also notes in its letter that in providing updated flows to the Deputy Director during the past year, CDFW and the Board staff have applied the Board's direction in Item No. 6 of State Water Board Resolution No. 2021-0029, which states:

The State Water Board directs staff to continue to work with CDFW to evaluate and refine the drought minimum instream flows adopted in this regulation if new scientifically-defensible information becomes available, and to continue to engage with affected stakeholders and other experts in on-going and longer term efforts to establish instream flows, including consideration of what is achievable in the watersheds, for the Scott River and Shasta River watersheds beyond this drought emergency.

The CDFW letter notes that "Since adoption, the SWB [State Water Board] and CDFW have implemented Resolution 6 from the regulation as a good faith effort to evaluate and refine the drought emergency minimum flows. CDFW is grateful to have been able to exercise this resolution. It is critical that Resolution 6 continue to be available."

18. Governor Newsom signed an <u>executive order</u> acknowledging the continued drought conditions throughout the state on March 28, 2022, extending the authorities and directives of the 2021 proclamations, and calling for increased conservation efforts. The August 2021 Drought Emergency Regulation expires in

- August 2022. The State Water Board is amending and readopting the emergency regulation due to severe emergency drought conditions and the need for continued action.
- 19. There continues to be a need to ensure that continued minimum human health and safety needs are met, notwithstanding the water shortage conditions. The California Water Code declares water supplies for consumption, sanitation, and cooking as a human right (Wat. Code, § 106.3); identifies domestic use as the highest water use (Wat. Code, § 106); and provides water suppliers with authority to declare a water shortage emergency to allow sufficient water for human consumption, sanitation, and fire protection (Wat. Code, § 350). In light of the dry conditions and the need to curtail other uses of water in order to ensure drought emergency minimum flows to support fish in the Shasta River and Scott River watersheds, additional efforts are needed in the Klamath River watershed this year to ensure that water right holders and claimants without other means to access water for basic human health and safety, and fire prevention and recovery efforts are able to continue to access water for these uses under critical drought conditions.
- 20. Further, there is a need to ensure that water remains available for minimum livestock watering purposes, notwithstanding the drought conditions. Cattle ranching is a primary economic activity in the Scott River and Shasta River watersheds, with pasture and growing of alfalfa comprising the predominant manner of land cultivation. California law recognizes the obligation to provide sufficient water for livestock (see Penal Code, section 597, subdivision (b)), and the State Water Board regulation provides for reasonable amounts of water for livestock watering. (See Cal. Code Regs., tit. 23, section 697, subdivision (c).) In light of the dry conditions and the need to curtail other uses of water in order to ensure drought emergency minimum flows to support fish in the critical Shasta River and Scott River watersheds, additional efforts continue to be needed in the Klamath watershed this year to ensure that minimum livestock watering needs continue to be met under these critical drought conditions.
- 21. A number of diversions in the Scott River and Shasta River watersheds involve surface diversions of water through long, unlined ditches in order to provide for relatively small amounts of water for livestock. This can result in removing orders of magnitude greater amounts water from the stream than is actually used for livestock at the time when the water is required throughout the watershed to enable adult salmon migration, as well as rearing, incubation, and juvenile migration. Water is needed in the adult salmon migration periods as pulses of water provide cues to the salmon that it is time to migrate upstream, as well as ensure there are adequate flows for fish to move upstream and access tributaries where the salmon will rear. Water is needed during and after the adult salmon migration period to ensure redds are not dewatered and tributaries remain connected so juvenile salmon can move within the system. Additionally, in extreme drought years such as this one, inefficient livestock diversions have the

- potential to interfere with seasonal storage needed to support human health and safety needs and the environment.
- 22. Alternatives exist to provide water for livestock more efficiently and many people in both watersheds have developed other methods for livestock water delivery in the recent decades. While it can be costly over the long term, it is possible for those who do not currently have such an alternatives system to divert water to trucks for delivery to livestock on a short-term basis. Ranchers may also implement long-term water conservation solutions for post-irrigation-season livestock watering, such as developing groundwater wells, purchasing heated troughs, lining ditches, or switching to piped diversions. There are financial resources available to assist ranchers in finding alternative water during the drought emergency.
- 23. While large diversions of water through inefficient ditches may in some circumstances provide for some amount of recharge of groundwater for later beneficial use, such recharge is uncertain, context-specific, and has not been quantified. Some landowners in the Scott River watershed have obtained temporary groundwater recharge permits from the Board and are working with researchers to better understand the potential for managed groundwater recharge in the basin. Such projects and the associated data obtained from such efforts will provide information that can be used to understand the potential for such projects in the watershed and to tailor groundwater recharge efforts in the most effective manner possible.
- 24. In light of the severe drought, the fisheries need, the importance of assuring at least minimum amounts of storage, and the alternatives available, it is generally not reasonable to divert more than 10 times the amount of water livestock require for drinking, as described in the reasonable water quantities for water rights applications, during the September through March period.
- 25. Building on the local cooperative solutions in the August 2021 Drought Emergency Regulation, proposed amendments to the existing regulation provide a new local cooperative solution option for livestock diversions during the prohibition period. This local cooperative solution provides for continued diversions for livestock via inefficient methods (i.e., greater than the 10 times livestock require) where such diversions will not impact the attainment of the drought emergency regulation's minimum instream flow requirements or unreasonably harm salmon Specifically, this local cooperative solution option allows for diversions for livestock during the prohibition when diverters on a tributary can demonstrate that such diversion will not: (1) require curtailment; (2) unreasonably inhibit adult or juvenile salmonid migration, incubation, or rearing, or (3) unreasonably impact competing uses.
- 26. The updates to the regulation also include several minor updates to improve the administration of the regulation, including (a) a provision to ensure existing curtailment orders, local cooperative solutions, and petitions remain in effect and

- orders do not need to be reissued with readoption of the regulation; (b) identification of de minimis groundwater users not subject to curtailment; (c) updating minimum human health and safety definition; and (d) clarifications to the groundwater local cooperative solution.
- 27. Division of Water Rights staff are currently working with University of California at Davis to update the Scott Valley Integrated Hydrologic Model (SVIHM) which was initiated by the North Coast Regional Water Quality Control Board and built on by Siskiyou County's groundwater sustainability agency as part of the Sustainable Groundwater Management Act with input and data from local landowners and other contributors. Division of Water Rights staff plan to run additional drought and curtailment scenarios, and develop tools to inform water management and drought planning in the Scott River watershed. As part of this modeling effort, staff will be evaluating the effectiveness of local cooperative solutions (e.g., 30 percent reduction in groundwater use) and other non-curtailment strategies (e.g., groundwater recharge projects) to improve instream flow.
- 28. Division of Water Rights staff are currently working on a hydrology modeling effort in the Shasta River watershed to help inform long-term instream flow and water management planning. As part of this effort, Division of Water Rights implemented a memorandum of understanding with Siskiyou County to coordinate on the development and refinement of hydrology models for the Shasta Valley. These Shasta Valley hydrology models will help inform instream flow and other water management strategies in the watershed.
- 29. During the dire drought conditions currently being experienced in the Klamath River watershed, it is imperative that water right holders and claimants who do not have water available at their priority of right and do not have a need or obligation to provide water for minimum human health and safety or minimal livestock watering uses cease diversions of water that is needed for the minimal protection of fisheries resources and more senior water rights.
- 30. Water Code section 1058.5 provides the State Water Board the authority to adopt emergency regulations in certain drought years or when the Governor proclaims a drought state of emergency in order to prevent unreasonable use, require curtailment of diversions when water is not available under the diverter's priority of right, and require reporting of diversion or use or the preparation of monitoring reports.
- 31. Article X, section 2 of the California Constitution declares that the water resources of the state must be put to beneficial use to the fullest extent possible and the unreasonable use of water be prevented. Relevant to the current drought conditions, the California Supreme Court has clarified that "[w]hat may be a reasonable beneficial use, where water is present in excess of all needs, would not be a reasonable beneficial use in an area of great scarcity and great need. What is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time." (*Tulare Irr. Dist. v. Lindsay-Strathmore*)

Irr. Dist. (1935) 3 Cal.2d 489, 567.) The reasonable use doctrine applies to the diversion and use of both surface water and groundwater, and it applies irrespective of the type of water right held by the diverter or user. (Peabody v. City of Vallejo (1935) 2 Cal.2d 351, 367.) Further, the reasonable use doctrine extends to the adoption of drought emergency minimum instream flows under Water Code, section 1058.5 to protect specific species in critical watersheds, and to implementation of these through curtailment of diversions based on water rights priority. (Stanford Vina Ranch Irrigation Co. v. State of California (2020) 50 Cal.App.5th 976.) This regulation is in furtherance of article X, section 2 during this drought emergency.

- 32. Both the Scott River and Shasta River watersheds have groundwater that is closely interconnected with surface flows. Because of this, it is necessary to address both groundwater and surface-water in a curtailment regulation. Where groundwater and surface waters are interconnected, the "common source" doctrine applies, integrating the water rights and applying priorities without regard to whether the diversion is from surface water or groundwater. (*Hudson v. Dailey* (1909) 156 Cal. 617, 627–628.).
- 33. Adoption of an emergency regulation is necessary to address ongoing dire water shortages in the Klamath River watershed. The amended emergency regulation will enable the State Water Board to continue to act in a timely manner to protect vital flows for fisheries, and to enforce the water right priority system with respect to all water right holders and claimants, including groundwater diversions, while assuring water remains available for minimum health and safety and livestock watering needs.
- 34. Emergency regulations adopted under Water Code, section 1058.5 may remain in effect for up to one year.
- 35. Pursuant to Water Code, section 7, the State Water Board is authorized to delegate authority to staff.

THEREFORE BE IT RESOLVED THAT:

- 1. The State Water Board readopts California Code of Regulations, title 23, Division 3, Chapter 2, Article 23.5, Sections 875, 875.1, 875.2, 875.3, 875.4, 875.5, 875.6, 875.7, 875.8, and 875.9, with amendments, as appended to this resolution as an emergency regulation;
- 2. State Water Board staff will submit the regulation to the Office of Administrative Law (OAL) for final approval;
- 3. If, during the approval process, State Water Board staff, the State Water Board, or OAL determines that minor corrections to the language of the regulation or supporting documentation are needed for clarity or consistency, the State Water Board Executive Director, the Deputy Director for the Division of Water Rights, or their designee, may make such changes;

- 4. This regulation shall remain in effect for one year after filing with the Secretary of State unless: (i) the State Water Board determines that it is no longer necessary due to changed conditions; (ii) the conditions specified in Water Code section 1058.5 subdivision (a)(2) are no longer in effect, in which case this regulation is deemed repealed; or (iii) the State Water Board renews the regulation due to continued drought conditions as described in Water Code section 1058.5;
- 5. The State Water Board directs staff to process as expeditiously as possible any proposals for local cooperative solutions which may be offered as alternatives to curtailments;
- 6. The State Water Board directs staff to continue to work with CDFW to evaluate and refine the drought minimum instream flows adopted in this regulation if new scientifically-defensible information becomes available, and to continue to engage with affected stakeholders and other experts in on-going and longer term efforts to establish instream flows, including consideration of what is achievable in the watersheds, for the Scott River and Shasta River watersheds beyond this drought emergency;
- The State Water Board directs staff to continue work with stakeholders this year and in future years on voluntary efforts to meet instream flow needs and avoid curtailments;
- 8. The State Water Board directs staff to continue to develop and use hydrologic modeling tools in the Scott River and Shasta River watersheds to better understand and support the planning and implementation of groundwater recharge projects, curtailments, local cooperative solutions, and other water management strategies; and

9. Except for purposes of enforcement of a curtailment order issued pursuant to this regulation, this regulation and any curtailment order issued hereunder shall not be cited as authority for, or evidence of, the validity or priority of any water right or claim affected or protected by this regulation. Given this, it would be inappropriate to consider compliance with the regulation to be an admission or waiver of any rights or claims of affected parties.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 21, 2022.

AYE: Chair E. Joaquin Esquivel

Vice Chair Dorene D'Adamo Board Member Sean Maguire Board Member Laurel Firestone Board Member Nichole Morgan

NAY: None ABSENT: None ABSTAIN: None

> Jeanine Townsend Clerk to the Board