Resolution No. R1-2013-0058
Attachment 2

California Regional Water Quality Control Board
North Coast Region

Resolution No. R1-2012-0013

Policy Statement

for

Implementation of the Water Quality Objective for Temperature in the North Coast Region

WHEREAS, the California Regional Water Quality Control Board, North Coast Region, (hereinafter the Regional Water Board) finds that:

Introduction

1. Elevated water temperature is a widespread water quality impairment in the North Coast Region. The purpose of this policy is to describe the range of tools available for protection against anthropogenically elevated water temperatures to remediate, restore, and protect temperature-impaired waterbodies and to control the cumulative impacts of elevated water temperature on other waterbodies. It attempts to describe in one cohesive document the Regional Water Board's efforts to date in implementing temperature objectives and guidance on the range of implementation tools for temperature protection in future programs and permits, including coordination with other state, local and federal agencies to the extent possible. It affirms the need to address water temperatures region-wide, but on a case-by-case basis in the context of a given permit or other action to reduce impairments and prevent further impairment. It directs staff to continue implementing temperature Total Maximum Daily Loads (TMDLs) through regional nonpoint source programs and individual permits, waivers, and enrollments as appropriate, and to work with other agencies to address elevated water temperatures.

2. The prevention of water quality impacts from temperature related factors has been a high priority in the North Coast Region for many years. The Regional Water Board has ranked the control of temperature impacts as a high priority under the Triennial Review process since 2001. The Triennial Review also included two other high priority issues that are relevant in the development of a region-wide temperature control program: the stream and wetlands system protection policy and instream flow objective (also referred to as the watershed hydrology objective).

Basin Plan Temperature Standards

3. The Water Quality Control Plan for the North Coast Region (hereinafter the Basin Plan) identifies the beneficial uses of waterbodies within the North Coast Region.

These uses include, but are not limited to, municipal and domestic water supply (MUN); cold freshwater habitat (COLD); warm freshwater habitat (WARM); estuarine habitat (EST); migration of aquatic organisms (MIGR); support of habitats necessary, at least in part, for the survival and successful maintenance of rare, threatened, or endangered plant or animal species (RARE); and spawning, reproduction, and early development of fish (SPWN). The Basin Plan also establishes water quality objectives, including water temperature objectives, for the protection of these beneficial uses. The beneficial uses of waterbodies, water quality objectives, and anti-degradation policies, together, constitute water quality standards.

4. The Basin Plan defines the cold freshwater habitat (COLD) beneficial use as: "*Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.*" In the North Coast Region, the iconic cold water species are salmon and steelhead. In addition, there are many other organisms, such as frogs, salamanders, aquatic insects, and resident fish species that require a cold freshwater ecosystem for survival.

5. The Basin Plan defines the intrastate water quality objective for temperature as:

   "The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.

   At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature.

   At no time or place shall the temperature of any WARM water be increased by more than 5°F above natural receiving water temperature."

6. Natural receiving water temperatures are those that result when the factors that drive water temperatures are consistent with natural conditions. The most prominent factors are hydrology, solar radiation (the inverse of shade), air temperature, and channel geometry.

7. The Basin Plan defines the interstate water quality objective for temperature as:

   "Elevated temperature waste discharges into COLD interstate waters are prohibited," and,

   "*Thermal waste discharges having a maximum temperature greater than 5°F above natural receiving water temperature are prohibited*," and,

> "*Elevated temperature wastes shall not cause the temperature of WARM interstate waters to increase by more than 5°F above natural temperature at any time or place.*"

TMDL Development

8. Section 303(d) of the Clean Water Act requires states to address impaired waters by developing a total maximum daily load (TMDL) or implementing another program that will result in the attainment of water quality standards. TMDLs establish the maximum load of a pollutant that can be assimilated without exceeding the applicable water quality standards. Temperature TMDLs include a source analysis, interpretation of water quality objectives, and load allocations that divide the allowable loading among the sources in a way that results in attainment of the water quality standards.

9. The Regional Water Board has adopted temperature TMDLs for the Salmon, Scott, Shasta, and Klamath rivers. The U.S. Environmental Protection Agency (EPA), Region IX, has established temperature TMDLs for the following waterbodies in the North Coast Region: the Eel River (six reaches), Mattole River, and Navarro River. Each of these TMDLs includes a temperature source analysis, TMDL calculation, load allocations, and a margin of safety.

10. EPA did not adopt plans of implementation for its TMDLs because it lacks implementation authority over nonpoint source pollution. EPA did include specific implementation recommendations for achieving the temperature load allocations. Those recommendations include the use of the timber harvest permitting process to protect and restore shade, implementation of the *United States Forest Service (USFS) Northwest Forest Plan* and associated standards and guidelines, and the control of sediment to achieve temperature standards.

11. Under Clean Water Act section 303(d)(2), the state must incorporate EPA TMDLs into its Water Quality Management Plan after they are approved. Clean Water Act section 303(e) requires EPA approval of a state's continuing planning process, which includes Basin Plans, regulatory programs, monitoring and quality assurance programs, nonpoint source management programs, and funding assistance programs. Similar to the *Total Maximum Daily Load Implementation Policy Statement for Sediment Impaired Receiving Waters in the North Coast Region (Sediment Policy)* discussed below (finding 26), this policy is intended to implement temperature TMDLs, including EPA temperature TMDLs in compliance with Clean Water Act section 303(d)(2).

12. Under state law, TMDLs are adopted with programs that implement correction of the impairment. The *Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options* (*Impaired Waters Policy*) is a statewide policy that describes the process for developing and adopting TMDLs. TMDLs

may be adopted in any of the following ways:

1. TMDLs and TMDL implementation strategies may be adopted with a Basin Plan amendment or another regulation or policy for water quality control that is designed to guide the Regional Water Board in correcting the impairment.

2. TMDLs and TMDL implementation strategies may be adopted with a permitting action, enforcement action, or other single regulatory action.

3. TMDLs and TMDL implementation strategies may be adopted with a resolution that certifies either that (1) a regulatory program has been adopted and is being implemented by another state, regional, local, or federal agency; or (2) a non- regulatory program is being implemented by another entity. (State Water Board Resolution No. 2005-0050, at p.8.)

If adopted under 2 or 3 above, the TMDLs must be referenced in the relevant Basin Plan before or during the next triennial review. (*Id.* at p. 9.)

13. To date, the Regional Water Board has adopted three peer-reviewed temperature TMDLs as Basin Plan amendments, each with accompanying plans of implementation, generally titled "action plans" that contain various implementation measures. All of the existing temperature TMDL action plans encourage and direct parties responsible for the management of riparian areas to implement riparian management measures that meet the riparian shade allocations and water quality standards. Temperature TMDLs developed in watersheds also impaired by sediment rely on the implementation of sediment TMDLs to achieve sediment reductions that are also necessary to achieve the temperature TMDLs.

14. In 2009, the Sierra Club, Friends of the Eel River, Friends of the Navarro Watershed, Environmental Protection Information Center, Northcoast Environmental Center and Klamath Riverkeeper filed a lawsuit alleging that the Regional Water Board violated mandatory duties under the Porter-Cologne Water Quality Control Act, Water Code section 13000 et seq., section 303(d) of the federal Clean Water Act, 33 U.S.C. section 1313(d), in failing to adopt a program of implementation for TMDLs for certain water quality-impaired waterbodies within the North Coast Region of California. Under section 303(d)(2), once EPA approves or issues a TMDL, the state must incorporate the TMDL into its water quality management plan (Basin Plans are one part of the water quality management plan). The Regional Water Board maintains that it has met all obligations for implementing TMDLs; however, it has not consolidated all of its temperature TMDL implementation efforts into a single document that could serve as an "implementation plan" for meeting the statutory requirements.

15. In February 2011, the Executive Officer entered into a settlement with petitioners

in the form of a stipulated agreement. Regional Water Board staff agreed to develop a Temperature Implementation Policy for the Regional Water Board's consideration. That rulemaking process to consider a Basin Plan amendment will follow adoption of this policy statement. As per the terms of the agreement the proposed Basin Plan amendment will be submitted to the Regional Water Board for consideration no later than December 31, 2013.

16. In 2004 the Regional Water Board adopted a Sediment Policy statement which provides for the control of sediment pollution by using existing permitting and enforcement tools. This temperature implementation policy statement is similar but broader in describing an approach that, where possible and if appropriate and necessary, encourages the combination of TMDL requirements with region-wide nonpoint source programs for efficiency and to avoid duplicative regulation.

17. Temperature TMDL analyses completed to date have consistently found the same factors to be responsible for elevated water temperatures: increased exposure to solar radiation due to loss of stream shade, physical stream channel alteration in response to elevated sediment loads, and in some cases agricultural tail water, impoundments, and water diversions.

18. Temperature impairments are predominantly associated with nonpoint source pollution, which is generally defined as pollution that is not a "point source discharge" requiring a National Pollution Discharge Elimination System (NPDES) permit under the federal Clean Water Act.[1] Under the state Porter-Cologne Water Quality Act, nonpoint source discharges of waste are regulated under waste discharge requirements (WDRs), waivers of WDRs, prohibitions, or a combination thereof. Temperature is also addressed in water quality certifications issued pursuant to section 401 of the Clean Water Act. As explained in more detail below, the Regional Water Board has been implementing temperature controls in its region-wide nonpoint source pollution programs and in individual permits on a case-by-case basis, often in the context of sediment discharges. Elevated temperature is also caused by factors outside the core regulatory programs of the Regional Water Board that may be addressed by other public agencies, for example water diversions under the jurisdiction of the State Water Resources Control Board (State Water Board), Division of Water Rights.

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[1] The discharge of waste associated with storm water drainage system-related point sources has the potential to increase water temperature in a receiving waterbody. However, storm water discharges predominantly occur during periods of rainfall, when water temperatures generally support beneficial uses. Discharges not associated with rainfall events (non-storm water discharges) are sometimes discharged through storm water conveyance systems, thus the possibility of water temperature impacts associated with storm water systems must be considered. The discharge of waste associated with other point sources also has the potential to increase water temperatures in the receiving waterbody. However, point source discharges are generally not permitted in any North Coast watersheds except the Russian and Eel river watersheds, where winter time discharges are permitted at high dilution ratios. These discharges, as permitted, do not exceed the water quality objective for temperature.

19. Implementation of temperature protection measures in the context of region-wide nonpoint source programs, particularly riparian management, is discussed in more detail below, followed by a discussion of implementation options for sources not within the Regional Water Board's core regulatory jurisdiction.

Riparian Management

20. The removal of vegetation that provides shade to a waterbody is a controllable water quality factor.

21. Temperature TMDL load allocations for solar radiation in North Coast TMDL analyses are expressed in terms of site-potential effective shade. Site-potential effective shade is equal to the shade provided by topography and full potential vegetation conditions at a site, with an allowance for natural disturbances such as floods, wind throw, disease, landslides, and fire. The Regional Water Board has discretion on how to implement load allocations on a case-by-case basis. This policy is not intended to predetermine precise parameters for effective shade for a specific location or land use.

22. Compliance with the temperature TMDL load allocations for solar radiation is generally achieved by not removing or hindering vegetation that provides shade to a waterbody. To accomplish this, responsible parties are encouraged to delineate a separate management area for riparian vegetation that has the potential to shade a waterbody, and manage these riparian areas differently than the surrounding land. These areas are often referred to variously as a riparian management zone, streamside buffer area, or a watercourse and lake protection zone.

23. Shade controls effective at correcting temperature impairments also operate to prevent impairments, as well as provide other water quality protections. Riparian management may also impact waterbodies not currently listed as impaired for temperature.

24. The establishment of riparian buffers for temperature protection is an effective and important management measure for the control of some types of sediment discharges. Maintenance of a vegetated buffer provides a control on the discharge of sediment mobilized by surface erosion. Also, the retention of mature trees (and their roots) along a stream bank provides bank stability, reducing the discharge of sediment associated with stream bank landslides and debris flows. Maintenance of a vegetated buffer along streams also can ensure a supply of large woody debris to the stream channel, which is critical for metering of sediment, channel forming processes, and fish habitat.

Incorporating Riparian Management and Other Temperature Controls into Region- Wide Permitting

25. Completed sediment and temperature TMDLs identify and assign load allocations to similar categories of land uses that generate nonpoint source discharges of waste and pollution, such as timber harvest, roads, agriculture, and grazing. Implementation actions taken to achieve load allocations should be consistent with the Porter-Cologne Water Quality Control Act, as described in the *Statewide Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program*, which requires nonpoint sources be regulated under WDRs, waivers of WDRs, a Basin Plan prohibition, or some combination of these tools.

26. Often, the same management measures can address nonpoint source water quality concerns regardless of whether or not the waterbody is impaired. In addition, often several pollutants can be addressed by the same management measure, particularly sediment and temperature, and sometimes nutrients. In the past, the Regional Water Board has included conditions that ensure compliance with TMDL load allocations and the intrastate water quality objective for temperature under one permitting structure (i.e. waiver or WDR) where possible. Incorporating TMDL implementation into a broad-based nonpoint source approach increases efficiency and avoids overlapping water quality regulation.

27. Certain nonpoint source activities may be subject to regulatory or nonregulatory actions of other entities that provide temperature protections. If the Regional Water Board determines that those actions will result in attainment of water quality standards, the Regional Water Board may include those actions as implementation measures in a permit. The Regional Water Board can, and often does, rely on existing non-Water Board programs for permit measures, adding new requirements only as necessary to provide adequate water quality protection. (See e.g. finding 32 [discussion of the USFS Waiver].)[2] When addressing compliance with the temperature objective, the geographic location, existing regulatory and nonregulatory programs, and other relevant factors should be evaluated in determining appropriate and necessary shade controls.

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[2] In some cases, an aquatic Habitat Conservation Plan (HCP) contains requirements that meet or are even more protective than necessary to meet the temperature objectives. An example of this is the Green Diamond Aquatic HCP, which includes retention and recruitment measures that exceed the Anadromous Salmonid Protection (ASP) rules in density and geographic location. The HCP riparian management standards call for high levels of canopy retention within 150 feet of fish-bearing streams and 100 feet on all other streams supporting aquatic life. These measures are being considered and are expected to be relied upon for TMDL and temperature objective compliance in the development of property-wide WDRs.

This policy in no way limits the State Water Board or Regional Water Board's authority and discretion to develop riparian management measures as appropriate for a specific land use or geographic area.

28. In 2004, the Regional Water Board adopted Resolution R1-2004-0087, the *Sediment Policy*, which directs staff to use existing authorities to strengthen regulatory controls of nonpoint source discharges of sediment. Implementation of that *Sediment Policy* also partially implements the intrastate water quality objective for temperature insofar as the control of sediment discharges partially addresses elevated water temperatures. Sediment conditions interact with water in many ways that can affect water temperatures. Therefore, practices implemented to prevent and minimize elevated sediment discharges can also help control elevated water temperatures. This policy directs staff to implement the *Sediment Policy* as a means of addressing elevated water temperature associated with excess sediment discharges.

29. The Regional Water Board has made the most progress to date in implementing comprehensive nonpoint source permit coverage for timber harvest activities. Timber harvest activities have the potential to impact water temperature, depending on how the activities are conducted. For timber harvest activities on private lands, the Regional Water Board incorporates the California Board of Forestry's *Forest Practice Rules* into water quality permits for ease of reference, for consistent terminology, and to avoid duplicative processes to the degree possible. The California Department of Forestry and Fire Protection (CAL FIRE), as the lead agency in approving timber harvest activities on private lands, convenes a multi-agency team that includes CAL FIRE, the California Department of Fish and Game, the California Regional Water Quality Control Boards, the California Geological Survey, and other agencies as needed, to conduct a review of a timber harvest plan (THP). Each agency may recommend incorporating mitigating measures into the THP to reduce adverse impacts of the operation on timberland resources, including the beneficial uses of water. Through this process, Regional Water Board staff have an opportunity to make specific THP recommendations and clarify Basin Plan requirements, if needed, so that the final THP is eligible for enrollment in the timber GWDRs or waivers. Under the *Forest Practice Rules*, timber operations within designated watercourse and lake protection zones must adhere to canopy retention standards to address stream temperature issues, sediment and nutrient loading, and recruitment of large woody debris. Recent modifications to the *Forest Practice Rules* to address anadromous fish habitat (Anadromous Salmonid Protection rules) have resulted in canopy retention standards that are generally protective of shade and water temperatures in the areas where they apply. Compliance with the intrastate water quality objective for temperature may in some instances require additional canopy protections, particularly in areas outside the range of anadromy.

30. In 2004, the Regional Water Board adopted Order R1-2004-0030: *General Waste*

Discharge Requirements for Discharges Related to Timber Harvest Activities on Non-Federal Lands in the North Coast Region (Timber GWDRs). The *Timber GWDRs* contain a provision that all water quality requirements must be met to qualify for enrollment in the *Timber GWDRs*. As defined, water quality requirements include water quality objectives (narrative or numeric), prohibitions, TMDL implementation plans, policies, or other requirements contained in a water quality control plan adopted by the Regional Water Board and approved by the State Water Board, and all other applicable plans or policies adopted by the Regional Water Board or State Water Board, including, but not limited to, the State Water Board Resolution No. 68-16: *Statement of Policy with Respect to Maintaining High Quality Waters in California*. Because TMDL load allocations are established as necessary conditions for achievement of water quality standards (i.e., water quality objectives in the context of beneficial uses), applicable load allocations should be incorporated into a THP to qualify for enrollment in the *Timber GWDRs*. This policy directs staff to continue implementing temperature load allocations through *Timber GWDRs* enrollments in areas subject to existing temperature TMDLs, including EPA-established temperature TMDLs. Staff should implement similar shade controls through *Timber GWDRs* enrollments in areas listed as impaired for temperature, as appropriate. Shade controls for *Timber GWDRs* enrollments region-wide, as appropriate and necessary, will prevent future impairments and ensure compliance with the intrastate water quality objective for temperature.

31. In 2009, the Regional Water Board adopted Order R1-2009-0038: *Categorical Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvest Activities On Non-Federal Lands in the North Coast Region (Non-Federal Timber Waiver).* The *Non-Federal Timber Waiver* includes conditions that implement TMDL load allocations and meet the Basin Plan intrastate temperature objective by requiring the protection of shade producing canopy. This policy directs staff to continue implementing the *Non-Federal Timber Waiver* as a mechanism for compliance with temperature TMDLs, including EPA-established TMDLs, and the intrastate water quality temperature objective.

32. In 2010, the Regional Water Board issued Order R1-2010-0029: *Waiver of Waste Discharge Requirements for Nonpoint Source Discharges Related to Certain Federal Land Management Activities on National Forest System Lands in the North Coast Region* (*USFS Waiver*), a conditional waiver addressing certain nonpoint source activities on United States Forest Service lands in the region, including timber, roads, and grazing. This permit, by virtue of its conditions, also implements sediment, temperature, and nutrient TMDLs, and meets the Basin Plan intrastate temperature objective. Implementation of the *USFS Waiver* and the temperature TMDL action plans meets temperature TMDL load allocations and achieves compliance with the water quality objective for temperature in over half of the North Coast Region. The *USFS Waiver* includes adequate temperature controls for livestock grazing. The *USFS Waiver* adopts the USFS program that manages and maintains designated riparian zones to ensure retention of adequate

vegetative cover that results in natural shade conditions. The USFS program requires retention of trees within 300 feet slope distance on each side of fish-bearing streams, 150 feet slope distance on each side of perennial streams, and 100 feet slope distance on each side of ephemeral / intermittent streams, or the site potential tree height distance on each side of the stream, whichever is greatest. The *USFS Waiver* provides for exceptions to these requirements if it can be demonstrated that the exception will result in a net long-term benefit to water quality and stream temperatures. This policy directs staff to continue implementing the *USFS Waiver* as a mechanism for compliance with temperature TMDLs, including EPA-established TMDLs, and the intrastate water quality temperature objective.

33. Staff should examine and address temperature when developing other permits for nonpoint source activities. Regional Water Board staff are actively developing region-wide permits for dairies, county road maintenance, and irrigated lands, and shade control is expected to be a component in each of these programs. At a minimum, any program or permit should implement temperature shade load allocations in areas subject to existing temperature TMDLs, including EPA-established temperature TMDLs. Any program or permit should implement riparian management measures in areas listed as impaired for temperature, and region- wide as appropriate and necessary to prevent future impairments and to comply with the intrastate temperature objective.

34. The use of riparian areas by livestock can lead to impacts that elevate water temperatures. However, the use of riparian areas by livestock can be conducted without these temperature impacts. The intensity, duration, and timing of livestock use are critical considerations that determine whether livestock use is or is not harmful to riparian areas. For non-USFS land, Regional Water Board staff is currently participating in a collaborative effort involving the State Water Board and multiple regions to develop a grazing regulatory program to address water quality impacts associated with livestock grazing in impaired waters. Given the potential for livestock use of riparian areas to elevate water temperatures, it is important that any program associated with grazing address factors that elevate water temperatures. This policy directs staff to participate in the grazing regulatory program development process to consider and address factors that elevate water temperatures or impact existing cold water resources.

35. The excess water diverted for flood irrigation and returned to streams (irrigation tailwater discharge) can elevate the temperature of the receiving stream. Depending on various factors, including time of year and day, the temperature of the irrigation tailwater discharge can be substantially higher than the receiving water temperature, thus elevating the temperature of the receiving water. Regional Water Board staff are currently developing an irrigated lands water quality program. Elevated water temperatures associated with irrigation tailwater discharges should be considered and addressed through the irrigated lands water quality program and watershed-

specific waivers.

Individual and Site-Specific Permitting

36. In addition to considering and addressing temperature impacts in the development of any nonpoint source region-wide programs, the Regional Water Board should continue to employ a range of available regulatory, executive, and enforcement tools to address elevated temperatures on a case-by case basis, as appropriate. These tools include, but are not limited to, investigative orders under Water Code section 13267; cleanup and abatement orders under Water Code section 13304; waste discharge requirements under Water Code section 13263; water quality certifications pursuant to section 401 of the Clean Water Act; time schedule orders under Water Code section 13300; cease and desist orders under Water Code sections 13301-303; administrative civil liabilities under Water Code section 13350 and 13375, and the grants and loans program. This policy directs staff to use all available regulatory, executive, and enforcement tools, as appropriate, to address elevated water temperatures, and preserve existing cold water resources.

37. The alteration of stream bed, banks, and floodplains has potential to elevate water temperatures. Such projects may involve removal of vegetation and/or channel alteration, and have potential to increase sediment loads. The Regional Water Board regulates these activities through the 401 water quality certification process or WDR program. This policy directs staff to address factors that contribute to elevated water temperatures when issuing 401 certifications or WDRs for projects that alter the bed, banks, and floodplains of waters of the state. At a minimum, any 401 certification or WDR should implement temperature shade load allocations in areas subject to existing temperature TMDLs, including EPA-established temperature TMDLs. If applicable, any 401 certification, WDR, or order should implement similar shade controls in areas listed as impaired for temperature, and region-wide as necessary and appropriate to prevent future impairments and to comply with the intrastate temperature objective.

38. Restoration is an important tool for achieving water quality conditions sufficient to protect and restore beneficial uses, and may be particularly necessary to address some temperature impairments. Watershed studies conducted to assess water quality and identify appropriate corrective measures in impaired watersheds have found restoration to be a critical component of any water quality attainment program. Staff should consider temperature benefits of restoration projects when reviewing and recommending grant and loan applications, and where appropriate, support implementation of restoration projects aimed to correct temperature impairments.

Other Agencies with Oversight of Activities Affecting Temperature

39. In some cases, activities contribute to temperature impairments but are outside the jurisdictional authority of the Regional Water Board. The Regional Water Board works with many agencies with jurisdiction or authority to address water quality issues.

40. The diversion and storage of water has the potential to elevate water temperatures. The State Water Board's Division of Water Rights (Division of Water Rights) issues water right permits for the diversion of surface waters and Regional Water Board staff often work with Division of Water Rights staff to ensure Basin Plan requirements are reflected in water right permits and other water right orders. The *Policy for Maintaining Instream Flows in Northern California Coastal Streams* (May 4, 2010) specifically calls for involvement by Regional Water Boards to help ensure adequate consideration of water quality concerns. The Division of Water Rights also issues 401 water quality certifications for projects requiring a Federal Energy Regulatory Commission (FERC) license. Regional Water Board staff provide recommendations and identify water quality conditions that are necessary to ensure that the activity will comply with water quality standards. This policy directs Regional Water Board staff to continue to work with the Division of Water Rights to ensure that temperature and other water quality concerns are identified and addressed in the water right permitting process in all waterbodies.

41. Regional Water Board staff often submit water quality comments to cities and counties during the development of their ordinances and general plans. State guidelines require that local general plans should incorporate water quality policies from Basin Plans to the extent they are relevant. The planning and land use authorities entrusted to cities and counties include the authority to limit impacts from land uses to waters of the state and other natural resources. This policy directs staff to continue to provide cities and counties guidance and recommendations on compliance with the Basin Plan, and specifically the intrastate water quality objective for temperature.

42. Programs and activities implemented by other state and federal agencies often address or have the potential to affect conditions that influence water temperatures. The Regional Water Board routinely reviews financial and technical assistance programs, development activities, environmental impact statements, rule making, and monitoring programs developed and/or administered by agencies, such as the US Department of Agriculture, Natural Resource Conservation Service, US Army Corps of Engineers, US Bureau of Reclamation, USFS, FERC, Department of Defense, National Park Service, CAL FIRE, California Department of Fish and Game, and Bureau of Land Management. This policy directs staff to continue to provide state and federal agencies guidance and recommendations on compliance with the Basin Plan, and

specifically the intrastate water quality objective for temperature.

43. The Regional Water Board often supports and coordinates with the Natural Resource Conservation Service, Resource Conservation Districts, and the University of California Cooperative Extension on landowner outreach and agricultural nonpoint source reduction efforts, and relies on their landowner assistance programs for implementation of appropriate nonpoint source management practices on private lands. This policy directs staff to continue to work with the Natural Resource Conservation Service, Resource Conservation Districts, and the University of California Cooperative Extension to provide landowners guidance on compliance with the intrastate water quality objective for temperature, and assistance with implementation of actions that support water quality.

Monitoring

44. Monitoring is an important element of any regulatory program. Implementation and effectiveness monitoring are often incorporated into permits and grant agreements and reported through those processes. This policy directs staff to:
    - incorporate monitoring into permits and grant agreements as necessary and appropriate in order to confirm that management actions required to prevent or reduce elevated temperatures are implemented and effective; and
    - develop and implement a region-wide water temperature trend monitoring program to determine the long-term effectiveness of the *Temperature Policy*.

Other Findings

45. This policy is consistent with the provisions of the State Water Resources Control Board Resolution No. 68-16: the *Statement of Policy with Respect to Maintaining High Quality Waters in California*. Resolution No. 68-16 incorporates the federal Anti-degradation Policy.

46. This policy does not constitute a discretionary permit or regulation or other discretionary action constituting a "project" as that term is defined by the California Environmental Quality Act (CEQA). (14 Cal. Code Regs., tit. 14,§15378.) Thus, no environmental review is required under CEQA. Moreover, if this policy were construed as a project triggering CEQA review obligations, consistent with the CEQA Guidelines' Class 7 and Class 8 Exemptions, this policy is an action taken by a regulatory agency to "assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment." (14 Cal. Code Regs., tit. 14, §§15307 & 15308.)

THEREFORE, BE IT RESOLVED THAT:

1. A Temperature Implementation Policy shall be incorporated into the Basin Plan as soon as possible. The proposed Basin Plan amendment shall be submitted to the Regional Water Board for consideration no later than December 31, 2013.

2. The Regional Water Board has authority to implement temperature TMDLs through a combination of riparian management and other temperature controls as appropriate in nonpoint source control programs; individual permitting, grants and loans, and enforcement actions; support of restoration projects; and coordination with other agencies with jurisdiction over controllable factors that influence water temperature.

3. This policy in no way limits the State Water Board or Regional Water Board's authority and discretion to develop riparian management measures as appropriate and necessary for a specific land use or geographic area, and in consideration of existing regulatory and non-regulatory programs in place that provide temperature protections.

4. Staff should continue to implement the *Sediment Policy* as a means of addressing elevated water temperature associated with excess sediment discharges.

5. Staff should continue implementing the *Non-Federal Timber Waiver* and *USFS Waiver* as a mechanism for compliance with temperature TMDLs, including EPA- established TMDLs, and the intrastate water quality temperature objective.

6. Staff should continue to implement shade load allocations through *Timber WDR* enrollments in areas subject to existing temperature TMDLs, including EPA-established temperature TMDLs, based on existing legal authority. Staff should implement similar shade controls through *Timber WDR* enrollments in areas listed as impaired for temperature but lacking a TMDL, and region-wide as appropriate and necessary to prevent future impairments and to comply with the intrastate temperature objective.

7. Staff should examine and address temperature impacts when developing permits or programs for nonpoint source activities, including those for dairies, county road maintenance and construction, and irrigated agriculture. Staff should consider all available measures to prevent and control the elevation of water temperatures such as sediment best management practices and cleanups, riparian management including shade, and mitigation of tailwater and impoundments, as appropriate, in permit or program development. It is the intent of the Regional Water Board to address elevated water temperatures associated with irrigation tailwater discharges through existing TMDL action plans and a future region-wide irrigated lands water quality program.

8. Staff should participate in the State Water Board's statewide grazing program development process to ensure that factors that elevate water temperatures or preserve existing cold water resources are considered and addressed. Additionally, staff should address the water temperature impacts associated with livestock use in waivers of WDRs, as appropriate and necessary.

9. Staff should address factors that contribute to elevated water temperatures when issuing 401 certifications or WDRs (permits) for individual projects. Any permit should be consistent with the assumptions and requirements of temperature shade load allocations in areas subject to existing temperature TMDLs, including EPA- established temperature TMDLs, as appropriate. If applicable, any permit or order should implement similar shade controls in areas listed as impaired for temperature but lacking a TMDL and region-wide as appropriate and necessary to prevent future impairments and to comply with the intrastate temperature objective.

10. Staff should use other regulatory, executive, and enforcement tools, as appropriate, to address elevated water temperatures and preserve existing cold water resources.

11. The Regional Water Board supports and encourages restoration projects that are designed to eliminate, reduce, or mitigate existing sources of temperature impairments. Staff should continue to administer, encourage, and support the use of grant funds to facilitate projects that address elevated water temperature concerns. Staff should pursue non-regulatory actions with organizations, landowners, and individuals to encourage the control of elevated water temperatures, watershed restoration, and protection activities.

12. Staff shall continue to coordinate with the State Water Board's Division of Water Rights by participating in the water right application and petition process, providing monitoring recommendations, joint compliance inspections, submittal of data in support of 401 certifications related to water diversions and/or facilities regulated by the FERC, participation in instream flow studies, and any other appropriate means to help ensure that the terms of water right permits and licenses are consistent with the intrastate water quality objective for temperature.

13. Staff should continue to provide guidance and recommendations to cities and counties on compliance with the water quality objectives for temperature and work with local governments to develop strategies to address the prevention, reduction, and mitigation of elevated water temperatures, including, but not limited to, riparian ordinances, general plans, and other management policies.

14. Staff should continue to provide local, state, and federal agencies, landowners, and the public guidance and recommendations on compliance with the Basin Plan, and specifically the intrastate water quality objective for temperature.

15. Staff should continue to participate in the development of the stream and wetland system protection policy to ensure that policy and the policy direction provided herein are consistent and support each other, and in coordination with other state, local and federal policies and programs.

16. Where appropriate, staff should propose monitoring requirements for incorporation into permits, programs, and other orders to confirm that management actions required to prevent or reduce elevated temperatures are implemented and effective.

17. Staff should develop and implement a region-wide water temperature trend monitoring program to assist the Regional Water Board in determining whether this policy is effectively reducing and preventing elevated temperatures over the long-term.

CERTIFICATION

I, Catherine Kuhlman, Executive Officer do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, North Coast Region, on January 19, 2012.

Original Signed by

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Catherine Kuhlman
Executive Officer