Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

#### List of Commenter's:

Comment Reference	Organization	Representative
1	California Farm Bureau Federation (CFBF)	n/a
2	Pacificorp Energy	Tim Hemstreet
3	Friends of the Van Duzen	Sal Steinberg Paul Trichilo Mark Sherwood
4	The Buckeye Conservancy and Forest Landowners of California	Claire Adams Larry Camp
5	n/a	Jason Poburko

The comments received have been categorized as general (G), CEQA-related (C), or economic-related (E).

## Response to General Comments:

No.	Author	Comment	Response
G1.1	CFBF	Reasonableness in light of authority, impacts	The Regional Water Board responds to this comment in
	Poburko	to forestry and ag resources, and burdens	several locations. It is clear that the Policy contemplates
		and costs of the regulated community.	additional balancing and proper consideration of relevant
		The Temperature Implementation Policy,	factors in any site-specific determination. Since the Policy
		especially its prescription to "restore and	does not specify any prescriptions for any land use activity,
		maintain site potential shade conditions"	comments that the Policy will have unavoidable impacts on
		(Temperature Implementation Policy, p. 2), is	agriculture and timber resources, and imposes unreasonable
		unreasonable as it expands the regulatory reach	costs and burdens on the regulated community are
		of the Regional Board beyond discharges of	premature. The Regional Water Board appears to be
		waste, creates unavoidable impacts to forestry	committed to being thoughtful, careful and reasonable in its
		and agricultural resources, and imposes	efforts to address temperature impacts. The Regional Water

unreasonable burdens and costs on the	Board responses are fully adequate. The first is articulated in
regulatory community.	the General Approach description in the response document:
	Any specific temperature requirements or other actions will be developed (if not already developed) in a site-specific public process, and will allow for additional input from the regulated community and the public. The Policy does not dictate any specific management measure that must be imposed, and contains a clear reservation of authority and discretion to develop measures for a specific land use, activity or geographic area.
	The Policy is meant to be comprehensive, and thus describes a full range of temperature implementation actions, both within the Regional Water Board's permitting jurisdiction, and actions outside of the Regional Water Board's permitting jurisdiction. This includes voluntary measures, restoration grants, and actions that other agencies may take.
	The Policy is intended to provide clear direction regarding the activities and situations that must be assessed for compliance with the temperature objectives, and identifies the factors that are the focus of concern that the Regional Water Board must analyze.
	Again in General Comment #2:
	Regulatory programs under development or contemplated for development, such as the Agricultural Lands Discharge Regulatory Program or Basin Planning exercises to establish flow objectives, are subject to extensive public involvement processes including hearings and public input. These processes have and will continue to provide

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

the regulated community with certainty through participation in the public processes associated with them.

General Comment #10 responds to the regulation of controllable factors and in that response, the Regional Water Board agrees that regulation of controllable factors through permitting by the Regional Water Board must be in the context of a discharge of waste. Water Code section 13263 provides that the regional water board prescribe waste discharge requirements with relation to the conditions of the receiving waters. Requirements shall implement any relevant control plans, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and provisions of section 13241. Water Code section 13241 provides that the Regional Water Board establish objectives that will ensure the reasonable protection of beneficial uses. Factors to be considered include, interalia, water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area. The Policy and various accompanying documents describe how riparian buffers also control sediment and other pollutant discharges, and provide bank stabilization and other ecological benefits. See also G.1.2.

In addition, the Regional Water Board made changes in its Policy and accompanying Staff Report that are responsive. In its summary of proposed changes document, the Regional Water Board provides detailed and helpful instruction on the term "site-specific potential effective shade.

This policy is not intended to predetermine precise

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

parameters for achieving potential effective shade for a specific location or land use, and does not necessarily preclude management in riparian areas. There are circumstances in which management actions within riparian areas that reduce effective shade conditions in the near- and short- term are necessary and appropriate in order to achieve potential effective shade in the long-term.

In the Addendum for Item 2 dated November 2013, changes were made to the Policy and Action Plan in regard to shade:

As stated in the adopting Resolution No. RB1-2013-0058, the term "site [specific] potential effective shade" illustrates a general concept, but should not be construed as a hard and fast standard. Load allocations are not automatically enforceable; rather, they must be translated and implemented through some sort of permitting mechanism and for the Regional Water Board this is generally through implementation of best management practices for nonpoint source land use activities. Compliance is generally achieved by not removing or hindering vegetation that provides shade to a waterbody. This is accomplished by managing riparian areas differently than the surrounding land. Riparian buffers are also important for controlling sediment and other pollutants. The Policy Statement for the Implementation of the Water Quality Objective for Temperature (Policy Statement Resolution; Order No. R1-2012-0013) makes clear that relevant factors should be evaluated when determining shade controls and preserves the Regional Water Board's discretion to develop management measures as appropriate for a specific land use or geographic area. The Policy Statement Resolution and the Staff Report provides more detail on how this term

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

can be applied in a site- or activity-specific context. The Policy Statement Resolution states in its description of site [specific] potential effective shade that the "policy is not intended to predetermine precise parameters for effective shade for a specific location or land use.

Due to expressed concerns about the application of the Policy for the Implementation of the Water Quality Objectives for Temperature (Policy) as it relates to shade, changes to the Action Plans are proposed to ensure consistency with the approach articulated in the Policy, Policy Statement Resolution, and Staff Report. Staff propose the following revisions to the implementation actions that apply to parties conducting timber harvest activities on non-federal lands contained in the Action Plans, as follows:

Implement the riparian shade allocations and water quality standards through riparian management measures that meet the riparian shade allocations and water quality standards. Where the Forest Practice Rules are not sufficient to meet the TMDL allocations or water quality standards, implement additional measures, as appropriate and necessary as directed by Regional Water Board staff during the timber harvest review process.

Similarly, the implementation actions that apply to parties conducting activities associated with agriculture on non-federal lands have been revised, as follows:

"Implement the riparian shade allocations and water quality standards through riparian management measures that meet the riparian shade load allocations and water

			quality standards."
G1.2	CFBF Poburko	Regulation of Controllable Factors. General Comment #10 fails to address the Regional Board's statutory authority to regulate non-wastes through waste discharge requirements and conditional waivers of waste discharge requirements.	The Policy properly addresses the limits of the Regional Water Board's planning and implementation authority. Riparian shade can be an important factor for the reasonable protection of beneficial uses. Although the original response misquotes Water Code section 13263 in part, this provision provides some latitude for the Regional Water Board to include certain conditions in its waste discharge permits that relate to the activity generating the discharge. In the context of land use activity that discharges waste, the "nature" of a discharge includes controllable water quality factors associated with that activity. Further, requirements shall implement any relevant control plans, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and provisions of section 13241. Water Code section 13241 provides that the Regional Water Board establish objectives that will ensure the reasonable protection of beneficial uses. Factors to be considered include, <i>inter alia</i> , water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area. If the Regional Water Board has authority to prohibit the discharge of waste, it follows that it can authorize the discharge conditioned on the discharger's ability to control other water quality factors associated with the discharge, including water quality impacts of shade removal. (Water Code section 13242 [regional board may specify certain conditions or areas where the discharge of waste, or certain types of waste will not be permitted]; see also Water Code section 13247 [state offices, departments, and boards, in carrying out activities which may affect water quality, shall

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

comply with the Basin Plan.) The Resolution contains a detailed discussion of temperature protection measures in the context of region-wide nonpoint source programs including riparian management. The Resolution describes how in many instances the same management measures can address multiple sources of pollution, and how incorporating TMDL implementation into broad-based nonpoint source programs can increase efficiency and avoid overlapping water quality regulation. To construe Water Code section 13263 too narrowly would frustrate the broad intent of the Porter-Cologne Water Quality Control Act, which declares that "the quality of all the waters of the state shall be protected for use and enjoyment by the people of the state." (Wat. Code, § 13000.) "[A]ctivities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible." (ld.) The authority is not without bounds, and as articulated above in response G1.1, additional balancing and proper consideration of relevant factors is required in any sitespecific determination under Water Code section 13263. Resolution R1-2011-0069 explores this topic in detail starting with Finding 17: Temperature impairments are predominantly associated with nonpoint source pollution, which is generally defined as pollution that is not a "point source discharge" requiring an NPDES permit under the federal Clean Water Act.

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

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 regionwide 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.

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 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.

Often, the same management measures can address nonpoint source water quality concerns regardless of whether or not the waterbody is impaired. In addition,

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

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.

In addition, the Regional Water Board adequately responded to these comments as follows:

The Regional Water Board's planning jurisdiction is broader than its permitting jurisdiction. "Water Quality Control" means the regulation of any activity or factor which may affect the quality of the waters of the state...." (Wat. Code, § 13050, subd. (i).) The Policy applies to activities subject to permitting by the Regional Water Board as well as activities that impact temperature that are outside of the Regional Water Board's permitting authority.

Regional Water Board staff agrees that regulation of controllable factors through permitting by the Regional Water Board must be in the context of a discharge of waste. The Staff Report states on page 29: "The Regional Water Boards regulate the thermal impacts associated with increased solar radiation loads and the shade provided by riparian vegetation in the context of other types of discharges." The language has been edited to

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

The North Coast Basin Plan is very clear that controllable factors are those actions, conditions, or circumstances resulting from anthropogenic activities that may influence the quality of the waters of the State and that may be reasonably controlled. Furthermore, section 13263 of the Water Code directs Regional Water Boards to implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected [and] the water quality objectives reasonably required for that purpose.... This provision [Wat. Code, § 13263] provides authority for the Regional Water Board to place conditions on controllable water quality factors related to an activity that discharges waste. The Policy acknowledges other controllable water quality

remove the words "of other types" for clarity.

Heat is not considered a waste in Porter-Cologne for the purpose of the Regional Water Board's waste discharge permitting authority. However, Porter-Cologne does not limit the Regional Water Board's planning authority to address pollution not associated with waste discharges, or ability to condition controllable factors associated with an activity that does discharge waste. Further, heat is recognized as a pollutant under federal law. Section 502 of the Clean Water Act [33 U.S.C. 1362], General Definitions, states that the term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial,

factors where it lacks permitting authority, and directs staff

to use other tools/approaches for these sources.

			municipal, and agricultural waste discharged into water (emphasis added).  The Policy contemplates actions to be undertaken through the Regional Water Board's authority as well as the authorities of other state agencies such as the Coastal Commission, CalFire, and State Water Resources Control Board's Division of Water Rights. The Regional Water Board has no permitting authority that pertains to the permitting, licensing, and administration of water rights. However, the Regional Water Board has authority to establish and amend water quality control plans, which other state agencies are required to comply with unless otherwise directed or authorized by statute (see section 13247 of the Water Code). The Regional Water Board's basin planning authority includes authority to establish flow objectives necessary for the support of beneficial uses.
G1.3	CFBF	Reasonableness in light of all beneficial uses. The Temperature Policy favors the protection of one beneficial use (Cold Freshwater Habitat) over all the rest, and fails to adequately consider the needs of or impacts to other beneficial uses. The Regional Water Board's response is inadequate because they don't justify evaluation of the "most sensitive beneficial use present" and is silent on how the use of such a "standard" fails to balance beneficial uses and create the reasonable regulation of water quality.	The Regional Water Board adequately responded to the comment. The Water Boards are charged with protecting all beneficial uses of water and will sometimes need to balance beneficial uses of water in a given circumstance. This Policy does not direct the Regional Policy to favor one beneficial use over another. The issue is premature, as any determination of balance and reasonableness would properly occur through one of the many implementation mechanisms identified in the Policy. See also Response G1.1.
G1.4	CFBF	The Scientific Basis for the Temperature Implementation Policy and Action Plans is	The scientific discussion contained in the staff report is extensive, and the cited papers support the basis of the

		Incomplete. Two scientific papers were identified for consideration. "This is a very significant issue because these studies indicate that the significant burden of protecting "site specific potential effective shade" is unreasonable where the studies show active management reducing that standard can be sufficiently protective of beneficial uses." The Regional Water Board's response is inadequate because it doesn't acknowledge this point.	Policy, but do not suggest the Policy is overly protective. The Regional Water Board made modifications to both the Policy language and supporting staff report describing situations and conditions in which reductions in shade resulting from active management may be appropriate (e.g., fuels reduction, thinning to accelerate growth, addition of large wood to streams, short-term impacts for long-term restoration benefits, etc.). The Regional Water Board incorporated the conclusions of one of the cited papers (Wilzbach et al. 2005) into the scientific discussion contained in the staff report supporting the Policy.
G2.1	Hemstreet	The Policy should clarify that it applies to PacifiCorp and its facilities only to the limited extent that the Regional Board will coordinate with the State Water Board in any 401 certification for the Project.  The NCRWQCB did not directly address the comment because the Policy and Staff Report inappropriately describe prior analyses related to the effects of the Project and the effects of large scale dam removal, despite the fact that Klamath River dam removal is not an action that would occur as a result of the Regional Board's implementation of this Policy.	The description of the "prior analyses related to the effects of the Project and the effects of large scale dam removal" does not imply any particular regulatory process would be implemented. The Policy correctly identifies Regional Water Board coordination with the State Water Board's Division of Water Rights on FERC-related matters as an appropriate mechanism for implementation of the Policy.
G2.2	Hemstreet	The Policy improperly focuses on implementation of the intrastate water quality objectives and should acknowledge that there can be allowable temperature increases if those increases are demonstrated to be protective of a balanced, indigenous population of shellfish, fish, and wildlife.	The Policy implements the intrastate and interstate water quality objectives for temperature. The balanced indigenous population concept is from the Clean Water Act and is not a water quality objective for temperature. The Policy acknowledges that the intrastate water quality objective for temperature allows for temperature increases less than 5 °F if it can be demonstrated to the satisfaction of the Regional

			Water Board that such an increase will not adversely affect beneficial uses.
G2.3	Hemstreet	The Policy improperly points to the Klamath River TMDL and its flawed temperature model as an example of a method to estimate natural temperatures.  The responses do not address this comment because PacifiCorp's concems regarding the Klamath River TMDL temperature model are not only relevant to the TMDL process since the Board is using the model in the development of this Policy. The points raised by PacifiCorp regarding specific aspects of the modeling have not been previously addressed in the TMDL process, and the model remains flawed and is a bad example of how natural temperatures should be estimated.	The Regional Water Board responses adequately responded to the comment:  Pacificorp submitted a number of comments on issues previously addressed in the Klamath TMDL process, or issues that are only relevant to established TMDLs. Those comments are not relevant to this process because they address issues specifically related to the Klamath TMDL, 401 processes, or general TMDL approaches such as the establishment of margins of safety. This Policy does not dictate the manner that TMDLs are developed, nor does it modify the Klamath TMDL. Other comments submitted by Pacificorp are relevant to this process and are addressed below.  The points raised by Pacificorp regarding specific aspects of the modeling have been previously addressed in the TMDL process. The models used in the development of the Klamath TMDL are cited to describe how temperature impacts associated with changes in hydrodynamics are evaluated, and natural temperatures are estimated in complex situations. The Regional Water Board agrees that temperature considerations should be incorporated into project-specific regulatory requirements on a site-specific basis, with consideration of all available information. Regional Water Board staff agree that models evolve as information improves.
G2.4	Hemstreet	The Staff Report Does Not Accurately Characterize Thermal Conditions and Effects	The Regional Water Board adequately addressed the comment by correcting the citation. The other citations

	I	in the Manath Bires	attended while related to the constants of each of the first
		in the Klamath River.	offered, while related to the same topic, do not refute the
		The staff report incorrectly implies that the	statement in the staff report.
		effects of the Project's reservoirs on water	
		temperatures in the Klamath River may extend	
		downstream to the Pacific Ocean under certain	
		conditions and cite Bartholow et al. (2005) to	
		support this statement. The staff report appears	
		to incorrectly cite Bartholow et al. (2005). This	
		journal article does not make conclusions	
		regarding the extent of effects from Iron Gate	
		dam to the Pacific Ocean. An earlier article by	
		Bartholow et al. (2004) titled "Predicting the	
		Thermal Effects of Dam Removal on the Klamath	
		River" (Environmental management 34 (6): 856-	
		874), which the Staff Report may have meant to	
		cite, indicates that "Dam removal might affect the	
		river's thermal regime during certain conditions	
		for over 200 km of the mainstem" (200 km equals	
		about 124 mi). Other citations are provided that	
		further document the downstream temperature	
		effects of Iron Gate Reservoir. The response	
		does not address the comment because the Staff	
		Report does not cite the substantial information	
		reported elsewhere on this topic or modify its	
		conclusions with respect to the temperature	
		effects of the Project to accurately reflect the	
		citation.	
G2.5	Hemstreet	The Staff Report Does Not Accurately	It appears the staff report included the discussion of
		Characterize the Biological Implications of	biological impacts of thermal alterations associated with the
		Thermal Conditions and Effects in the	Klamath River reservoirs to illustrate the manner in which
		Klamath River. Pacificorp provided additional	altered temperatures caused by impoundments can affect

		information from the National Research Council of the National Academies' 2004 report, and other publications, relevant to the impacts of the Klamath River reservoirs on thermal conditions and the biological implications of those impacts.	beneficial uses. The content and approach of the Policy does not rest on this discussion and the discussion in the staff report does not modify the Klamath TMDL process.
G2.6	Hemstreet	The sensitivity testing discussion suggests that shade is a driving factor in North Coast streams. Certain streams systems respond well to riparian shade prescriptions that support temperature improvements/ management, and these are generally small streams. Other streams present considerable challenges, due to various factors, including those listed above.  Recommend identifying that each system should be examined for potential for shade restoration, including a quantification of such benefits. The response does not address the comment because it misinterpreted the comment as suggesting that a site-specific analysis be conducted in the staff report for this Policy, when actually the comment suggested that the Policy identify that each system should be examined, such as in a specific project context. The Policy does not clearly direct the Regional Water Board to quantify benefits, as the comment suggested, and should be revised to identify that each system should be examined for potential for shade restoration, including a quantification of such benefits.	The commenter and Regional Water Board are in substantial agreement regarding the importance of site-specific analysis. The Regional Water Board's original response adequately addressed the comment: This Policy directs the Regional Water Board to consider the benefits of any specific action to address elevated water temperatures, including shade restoration, on a site-specific, case-by-case basis. However, conducting such an analysis for every stream in the region without a specific project context is unnecessary and wouldn't allow for the same level of site-specific interpretation as occurs during a project-specific evaluation.
G2.7	Hemstreet	The Importance of Shade in the Context of Wide Stream Channels. "High-order streams	The commenter is confusing TMDLs with load allocations. The Klamath Temperature TMDL assigns load allocations for

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

are often too wide relative to the height of vegetation to provide levels of shade that have a substantial temperature effect. The Klamath and Eel River Temperature TMDLs recognize this phenomenon and do not assign riparian shade load allocations for the mainstems." This seems contradictory to statements on page 6: "The temperature TMDL analyses have consistently found that the shade provided by riparian vegetation has a dramatic beneficial effect on stream temperatures, and that achieving the intrastate water quality objective for temperature requires riparian shade consistent with natural conditions. This concept is the basis of TMDL load allocations prescribed in every north coast temperature TMDL." This sentence should be changed to "This concept is the basis of TMDL load allocations prescribed in most north coast temperature TMDLs." PacifiCorp maintains that the Staff Report's statement that the shading "concept is the basis of TMDL load allocations prescribed in every north coast temperature TMDL" is confusing. This is evidenced by the response by the NCRWQCB that "the Klamath TMDL contains load allocations for riparian shade, though they do not apply to the mainstem". Therefore, because a shade-based temperature TMDL is not applied to the mainstem Klamath River, shade-based TMDL load allocations are evidently not prescribed for every north coast temperature TMDL.

the Klamath River mainstem and tributaries separately. The Klamath Temperature TMDL assigns riparian shade allocations to the tributaries, but not the mainstem. Thus, the statement in the Staff Report is correct.

G2.8	Hemstreet	Benefits of Shade Related to Thermal Refugia.  "However, in these cases the shade provided by riparian vegetation may still be important for the maintenance of thermal refugia." Please clarify how vegetation is important to refugia maintenance. PacifiCorp maintains that the Staff Report overstates the importance of riparian shading for maintaining thermal refugia. Even in the response by the NCRWQCB, a thermal refugia fed by hyporheic flow is likely much more dependent on the hyporheic flow for the refugia's maintenance. PacifiCorp recommends that a more detailed explanation (with quantification) and references be provided in response to our original comment.	The Regional Water Board adequately responded to the original comment.  One example of how shade can benefit thermal refugia is where a refuge is provided by a shallow back-watered channel fed by hyporheic flow. Where the refuge is shallow, slow moving, and near the streambank, solar radiation can have a significant impact on temperatures that can be greatly reduced by the presence of shade.
G2.9	Hemstreet	Addressing Effects of Other Reservoirs The staff report calls out Klamath River reservoirs to illustrate temperature effects, but there are a multitude of reservoirs in the North Coast region that have local effects on temperature and would be better examples to draw from since they may be subject to actions of the Regional Board. The staff report should clarify how temperature effects at other impoundments will be addressed. The Regional Water Board's response does not address the comment because the water quality certification for the Klamath Hydroelectric Project will be issued by the Division of Water Rights, not through coordination with the Division of Water	The Regional Water Board's original response correctly identifies the State Water Board's Division of Water Rights regulatory process, including the coordination with the Regional Water Board, as the process identified in the Policy for addressing issues related to water-rights and projects under the Federal Energy Regulatory Commission's (FERC) jurisdiction.  The regulatory process for addressing Klamath reservoirs is essentially the same as any other reservoir: coordination with the Division of Water Rights. The Division of Water Rights is the primary administrator of the regulatory process for reservoirs regardless of whether the reservoir is a FERC facility, or simply a water supply reservoir. (See e.g. State Water Board Order No. WQ 89-18 [Central Valley Regional Water Board issued WDRs to

		Rights in the Regional Board's issuance of a WDR. The staff report should clarify how temperature effects at other impoundments will be addressed by the Regional Board, as PacifiCorp suggested.	the Bureau of Reclamation for its high temperature releases from Shasta dam; however, the State Water Board opted to address water quality issues using its water rights authority to better coordinate water supply issues].)
G2.10	Hemstreet	Margin of Safety Page 58, Margin of Safety: PacifiCorp recommends moving away from the "conservative assumptions" approach, and move towards a more quantitative margin of safety approach. The Regional Water Board response does not address the comment because this is not an issue that was previously addressed in the TMDL process nor is it only relevant to TMDLs.	The Regional Water Board's response addressed the original comment, which was specifically about margins of safety included in TMDL analyses.  Pacificorp submitted a number of comments on issues previously addressed in the Klamath TMDL process, or issues that are only relevant to established TMDLs. Those comments are not relevant to this process because they address issues specifically related to the Klamath TMDL, 401 processes, or general TMDL approaches such as the establishment of margins of safety. This Policy does not dictate the manner that TMDLs are developed, nor does it modify the Klamath TMDL.
G3.1	Steinberg Trichilo & Sherwood	Van Duzen River Temperature Impairment The Friends of the Van Duzen letter requests the State Water Board to list the Van Duzen River on the 303(d) list of impaired water bodies for temperature impairment, and provides data supporting their request.	This comment requesting a 303(d) listing is outside the scope of the Policy. Any party wishing to submit data for consideration in the next integrated report cycle should sign up for the Integrated Report e-mail notification list to be notified when the data solicitation period for the next Integrated Report cycle occurs and to receive information on the data submittal process and requirements including data quality assurance requirements, site location information requirements, formatting, and submittal of data to the California Environmental Data Exchange Network (CEDEN).  The website for the State Water Board's Integrated Report Email Notification list is:

			http://www.waterboards.ca.gov/resources/email_subscription s/swrcb_subscribe.shtml -Select "Water Quality" -Check the Box for "Integrated Report – 303(d)/305(b)" The website for the North Coast Region's Integrated Report E-Mail Notification list is: http://www.waterboards.ca.gov/resources/email_subscription s /reg1_subscribe.shtml -Check the box for "Integrated Report – 303(d) List and 305(b) Report".  The State Water Board recommends that interested parties sign up for both e-mail subscription lists to receive all
G4.1	McAdams & Camp	"Potential Shade" The Basin Plan Amendment regarding Temperature, as written, is dangerous to the economic viability of forest, ranch, and farm owners because the overly-general term "potential shade" can be interpreted so broadly/differently that landowners could be forced to keep a static amount of shade canopy in their landscape. The Buckeye Conservancy and Forest Landowners of California request that the terminology "potential shade" be replaced with language which has more specificity of meaning, and thus less chance for being misconstrued by future regulatory actors.	The term "potential shade" is not a term that is incorporated into the Policy. Staff acknowledges that "site-specific potential effective shade" is a key concept referred to in the Policy. This concept, and the exact terminology to describe it, was thoroughly deliberated during the Regional Water Board adoption process. That deliberation resulted in modification of the original term, "site potential effective shade", and led to additional content in the staff report describing in great detail both the definition and application of the term. Also, see the response to comment G1.1.

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

# G5.1 Poburko Required Compliance with the requirements of SB617.

The actions of the NCRWQCB with regard to the Basin Plan amendment will be fairly challenged, by the Office of Administrative Law (OAL) and the regulated public to fall within the definition of "Major Regulation" (Government Code SECTION 1. Section 11342.548) and the actions of the NC Board have failed to demonstrate compliance with chaptered law as approved under SB 617, signed by the Governor on October 5, 2011.

The NCRWQCB states that. The Administrative Procedure Act (APA) establishes rulemaking procedures and standards for state agencies in California (Gov. Code, §§ 11340 et. seq.) to ensure that regulations are clear, necessary and legally valid. The claim is that SB 617 "appears" to amend existing OAL requirements to require a "standardized regulatory impact analysis" for a major regulation suggests an attitude of confusion as to its appearance of applicability. The required actions per SB617 are clear and transparent and represent an action of the people of California via the legislature. The claim that Chapter 3.5 of the APA (as amended by SB617) "generally" does not apply to the adoption or revision of water quality control plans and guidelines pursuant to Division 7 (commencing with Section 13000) of the Water Code pursuant to Government Code section 11353 is without technical merit. CGC 11353(b)(1) states,

The Regional Water Board's response addressed the original comment. Government Code section 11353 provides that basin plan amendments are not subject to Chapter 3.5 of the APA, except as provided in subdivision (b) [subdivision (b) articulates the required submittals for OAL, including a clear and concise summary of any regulatory provision, the administrative record, a summary of the necessity for the regulatory provision, and legal certification that the action was taken in compliance with procedural requirements of the Porter-Cologne Water Quality Control Act]. SB 617 makes amendments to Chapter 3.5 that are not controlling for basin plan amendments.

The Administrative Procedure Act (APA) establishes rulemaking procedures and standards for state agencies in California (Gov. Code, §§ 11340 et. seq.) to ensure that regulations are clear, necessary and legally valid. SB 617 appears to amend existing OAL requirements to require a "standardized regulatory impact analysis" for a major regulation. The Regional Water Board intends to comply with applicable OAL requirements including submittal of a clear and concise summary and a summary of the necessity for the regulatory provision. However, Chapter 3.5 of the APA (as amended by SB617) generally does not apply to the adoption or revision of water quality control plans and guidelines pursuant to Division 7 (commencing with Section 13000) of the Water Code pursuant to Government Code section 11353.

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

(a) Except as provided in subdivision (b), this chapter does not apply to the adoption or revision of state policy for water quality control and the adoption or revision of water quality control plans and guidelines pursuant to Division 7 (commencing with Section 13000) of the Water Code. It appears, that the NCRWQCB attempted to use a literal interpretation of the printed law, by claiming that Chapter 3.5 of the APA does not apply to the adoption or revision of state policy for water quality control and the adoption or revision of water quality control plans and guidelines pursuant to Division 7, does not apply to the Basin Plan amendment. This may be interpreted as a correct statement, if the policy approved by the NCRWQCB was maintained by the NCRWQCB as a simple policy, however the statement may be considered invalidated when the NCRWQCB chose to amend the policy to the Basin Plan. Additionally implied reliance on CGC 11353(b)(1)(a) for non APA compliance based on the claim that the "Basin Plan" is just a "plan" represent a mis-use of the printed law. The "Basin Plan" is not clearly just a "plan" but represents the binding regulatory structure of the NCRWQCB. Claims that these documents are just "plans" and "policies" represents an intentional play on words to support the agencies OR and should not be supported by the SWCB. Additionally, CGC 11353(b)(2) states, (b) (1) Any policy, plan, or guideline, or any revision thereof, that the State Water Resources

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

Control Board has adopted or that a court determines is subject to this part, after June 1, 1992, shall be submitted to the office[OAL]. CGC 11353(b)(2) clearly states that adoptions of policies, plans or guidelines adopted after June 1, 1992 are subject to Chapter 3.5 of the APA. Furthermore as stated by the NCRWQB in its OR, "Even if provisions of SB617 did apply to Basin Plan amendments, SB 617 requirements apply to a major regulation proposed on or after November 1, 2013. The Temperature Policy was proposed as early as November, 2011," represents a willful attempt by the NCRWQCB to disenfranchise the people of the state by discounting the free act of the legislature that assigned the authority of the NCRWQCB and the SWRCB in the first place. The claim that the Basin Plan amendment is exempt from the new provision of SB617, based on claims of initiating the process prior to the implementation date discounts the fact that the first hearing on the amendment is dated November 20, 2013. CEQA compliance of the Board's resolution was then finalized on March 13, 2014, with full knowledge of the new requirements, raised during public comment. This circumvention if the will of chaptered law by the NCRWQCB should not be supported by the SWCB. SB617 also stated: SECTION 1. Section 11342.548 Government Code "Major regulation" means any proposed adoption, amendment, or repeal of a regulation subject to review by the Office of Administrative

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

Law pursuant to Article 6 (commencing with Section 11349) that will have an economic impact on California business enterprises and individuals in an amount exceeding fifty million dollars (\$50,000,000), as estimated by the agency.

The impacts of requiring forest landowners to retain, "shade" would result in the encumbrance of extensive tracks of private timber and productive agricultural land value for public benefit. The value of those lands would be essentially "taken" for the public good, without compensation, which is unlawful. The cost of this private property, its potential associated resource value, and downstream impacts to the CA economy, can conservatively be assumed to exceed fifty million dollars in a single county.

No.	Author	Comment	Response
C1.1	CFBF	The following two comments address related issues. They are addressed in the same response for convenience.  The Substitute Environmental Document's Analysis is Improper As it Relies Upon an Illegal Manner of Compliance. The California Environmental Quality Act ("CEQA"), Cal. Pub. Resources Code, §§ 21000 et seq, requires agencies to consider a reasonable range of foreseeable methods of compliance. For each method, the agency must consider impacts, mitigation, alternatives, costs, and technical factors. (Pub. Resources Code, § 21100; Cal. Code Regs., tit. 14, §§ 15064, 15126.6.) The Substitute Environmental Document's ("SED") analysis is improper as it relies upon an illegal vehicle for compliance, thus mischaracterizing the potential environmental impacts of the proposed action. In a general sense, the SED does not correctly analyze "the reasonably foreseeable environmental impacts of the reasonably foreseeable methods of compliance" as it purports to (see Staff Report at pp. 92 and 100-101) for one overarching reason. Namely, the Regional Board's reliance on Porter-Cologne waste discharge authorities to require maintenance and preservation of shade (which is not a "discharge") illegally expands the Regional Board's jurisdiction. This error then	The Regional Water Board's original response is adequate. The Policy describes a full range of temperature implementation actions, both within the Regional Water Board's permitting jurisdiction, and actions outside of the Regional Water Board's permitting jurisdiction. See also Responses G1.1 and G1.2.  Regional Water Board Original Response: For legality of the alternatives selected, see response regarding controllable factors. The Policy describes a full range of temperature implementation actions, both within the Regional Water Board's permitting jurisdiction, and actions outside of the Regional Water Board's permitting jurisdiction. This includes voluntary measures, restoration grants, and actions that other agencies may take. Pursuant to California Code of Regulations, title 23, section 3777, subdivision (b)(3), the Staff Report includes an analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce any significant or potentially significant adverse environmental impacts. Section 9.3 of the Staff Report presents four alternatives that were considered by staff during the development of the proposed Policy and Basin Plan amendment. The alternatives analyzed include: 1) the required no project alternatives analyzed include: 1) the required no project alternatives analyzed include: 1) the required no project alternatives analyzed include: 3) individual watershed TMDL development; and 4) the preferred alternative of a regional Temperature Implementation Policy and TMDL Action Plans for the Eel, Mattole and Navarro Rivers.

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

propagates through the much of the remainder of Staff's analysis of environmental impacts.

## The SED's Consideration of Project Alternatives Is Not Adequate

In Section C.3 of Farm Bureau's October 14, 2013 comment letter, Farm Bureau commented essentially that the Regional Board failed to consider a reasonable range of alternatives when two of just three actual alternatives considered are predicated on regulation of shade and/or heat from solar radiation through the Regional Board's waste discharge authorities, rather than its water quality control and TMDL authorities. In response to CEQA Comment #5 (re: adequate range of alternatives under CEQA), and General Comment #10 (re: "regulation of controllable factors"), the Regional Board argues essentially two points: First, the Regional Board argues that the four alternatives considered in its SED constitute a legally adequate reasonable range of feasible alternatives under CEQA. Second, the Regional Board argues that Alternatives 2 and 4 are not infeasible alternatives in excess of its regulatory authorities and may, therefore, be considered as part of a reasonable range of feasible alternatives. The Regional Board's response to General Comment #10 merely asserts that the Regional Board's proposed regulation of shade "is in the context of discharges," and that Alternatives 2 and 4 are therefore feasible

As stated in the project description Section 9.2.1., the objective is to document in one place the tools and actions available and necessary to achieve temperature water quality standards so as to protect and restore the beneficial uses of water in the North Coast Region. Alternative one, the required no action alternative, does not achieve this goal and was eliminated. Alternative two was an outgrowth of the scoping process and therefore analyzed as a potential alternative to address shade. However, the requirement for hard and fast riparian buffer zones does not address all controllable factors such as flow, and lacks a documented and organized strategy to help guide other agencies to ensure regional action to attain and maintain the water quality objective for temperature throughout the region. Additionally, it was thought to be overly burdensome in some instances to apply blanket prescriptive requirements regardless of the site-specific effect on beneficial uses. This type of program was not viewed as warranted at this time because it could result in excessively applied restrictions to some streams that may not be affected by the presence or absence of shade and therefore would be overly burdensome to some landowners or project proponents.

Alternative three, the status quo approach to individual TMDL development, has been determined to be inefficient, inequitable and an antiquated model of watershed-scale pollution reduction for ubiquitous pollutants or impairments such as sediment or temperature.

Based on a number of technical TMDL analyses, a regional policy that addressed the discharges of waste and common controllable factors in conjunction with a site-specific or

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

alternatives for which the Regional Board has legal authority to consider as part of a legally adequate reasonable range of feasible alternatives. The Regional Board's explanation does not explain what discharge provides the requisite nexus for its broad assertion of control over shade and solar radiation where, in many watersheds and locations, there would necessarily be no such nexus, especially in waters with no 303(d) listing or existing TMDL. Accordingly, the Regional Board has failed to explain what legal authority it has to propose or consider Alternatives 2 and 4 and, therefore, how it can include these alternatives as part of a legally adequate reasonable range of feasible alternatives. Because the CEQA- and alternatives-related comments raised in Section C.3 of Farm Bureau's October 14, 2013 letter are not adequately addressed in the Regional Board's responses to comments or its underlying documents, these issues remain pertinent matters for the State Board's consideration.

Explanation of Inadequate Response: The Regional Board has failed to explain what legal authority it has to propose or consider Alternatives 2 and 4 and, therefore, how it can include these alternatives as part of a legally adequate reasonable range of feasible alternatives. Because the CEQA- and alternatives-related comments raised in Section C.3 of Farm Bureau's October 14, 2013 letter are not adequately addressed in the Regional

programmatic evaluation was the preferred alternative.

Finally, the alternative analysis process under CEQA requires a screening of potential proposals/projects that could achieve the project goals and the reasons why the preferred alternative was selected. However, it is not required to conduct a fully equivalent environmental impact or cost benefit analysis for each alternative.

	Board's responses to comments or its underlying	
	documents, these issues remain pertinent	
	matters for the State Board's consideration.	
C1.2	The Substitute Environmental Document's	The Regional Water Board's original response is adequate. The
	Environmental Review of Impacts Is Improper	Policy will not rezone or force rezoning any timberlands. In
	and Flawed	many instances the Policy will not affect agricultural lands;
	1) conversion of prime farmland, unique	however, there are likely instances where compliance measures
	farmland, and farmland of statewide importance;	implemented would result in a loss of land production along the
	2) conflict with existing zoning for agricultural	stream corridor or potentially change the use of a water right in
	use, or a Williamson Act contract; or 3) other	order to protect beneficial uses.
	changes in the existing environment which, due	
	to their location or nature, could result in	The CEQA analysis is performed at a program level and by
	conversion of Farmland, to nonagricultural use	necessity requires a broad and general assessment of potential
	or conversion of forest land to nonforest use.	compliance measures to comply with the regulations for certified
		regulatory programs. This does not require a project-level
	With respect to 1) conflict with existing zoning	analysis or the identification of a quantifiable footprint, only
	for, or cause rezoning of, forest land, timberland	reasonably foreseeable possibilities over complex landscapes
	or timberland zoned Timberland Production, and	throughout the entire region. Staff recognizes that this may
	2) the loss of forest land or conversion of forest	seem inadequate and in turn may cause concern; however, the
	land to non-forest use, the Staff Report	purpose of the CEQA exercise is to disclose potential impacts
	concludes that there is "no impact." The Report	broadly. As stated in the document, many of the projects that
	concludes that the identified "potentially	might be undertaken by affected persons as a result of the
	significant" impacts to existing farmlands could	Temperature Implementation Policy and Action Plans would be
	impact some portion of not more than 5 percent	subject to a project-level CEQA review conducted by the
	of the land area of the North Coast Region, that	Regional or State Water Board or by another lead agency,
	these lands could not be replaced, and that the	which would entail identification and mitigation of any significant
	impact is therefore unavoidable.	environmental effects. In addition, other regulatory mechanisms
		can be expected to provide opportunities for minimizing and
	In its response to CEQA Comment the Regional	avoiding significant environmental effects. These regulatory
	Board points to various lists of potential	requirements and mitigation measures are likely to reduce
	compliance measures in Section 9.4 of the Staff	many, but not all, of the potential impacts to less than significant
	Report, but provides no estimate, analysis, or	levels. In some cases it may not be possible to mitigate the

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

range bearing on the potential magnitude of the possible environmental effects of these activities, or of their potential spatial distribution and extent.

Explanation of Inadequate Response: In each case, the Regional Board's responses ultimately defer any more meaningful or detailed analysis, citing the current lack of information concerning potential impacts of any specific projects in the future. There is no further analysis of the Policy's impacts to existing farmland and timberand forest land or water use patterns, and no attempt at quantification of potential direct, indirect, and cumulative impacts at even a programmatic level of detail. The Regional Board's responses to comments do not therefore meaningfully or adequately address Farm Bureau's related comments in Section C.2 and "Forest Resources"

indirect impacts of the Temperature Implementation Policy to a less-than-significant level. In addition some actions may not require discretionary approvals or an agency with regulatory authority may not take action. Finally, some impacts may not be identified or mitigated because it is impossible to predict who will take action in response to the Temperature Implementation Policy and Action Plans, or what action they will take. For these reasons, this programmatic analysis must acknowledge the potential for significant impacts that cannot be mitigated to a less than significant level.

Finally, the potential spatial distribution and extent of the Policy is described in the Staff Report.

For additional discussion see the response to General Comment G1.1 and G1.2.

Regional Water Board Original Response: Potentially significant and unavoidable impacts to agricultural and forest resources were identified and discussed throughout Chapter 9 of the Staff Report. Compliance measures such as riparian buffers could lead to a loss of agricultural or forest lands production and as acknowledged, there is no mitigation for loss of land production.

It is true that this Policy will not rezone or force rezoning any timberlands. Additionally, the Policy does not prohibit management or eliminate their potential to produce timber resources. Landowners managing riparian areas have always been obligated to manage in such a way as to ensure adequate shade, stream flow and erosion control protections and to meet water quality objectives. This policy only states the requirement more directly. It is important to note that the approach articulated in the Policy is consistent with the Regional Water

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

Board's existing approach to addressing temperature. The Regional Water Board has been addressing temperature concerns consistent with this Policy for years. The focus on effective shade to address elevated water temperature is not new, and will not change as a result of the adoption of the Policy. The aspect of this Policy that is new is the incorporation into the Basin Plan.

Staff acknowledges the potentially significant and unavoidable impacts to agricultural lands throughout Chapter 9 of the Staff Report. In many instances the Policy will not affect agricultural lands; however, there are likely instances where compliance measures implemented would result in a loss of land production along the stream corridor or potentially change the use of a water right in order to protect beneficial uses. Compliance measures such as those listed in Section 9.4 illustrate the potential actions required to meet the water quality objective for temperature.

During the project scoping period, the California Farm Bureau Federation (CFBF) raised several concerns regarding potentially significant impacts to agricultural lands. After evaluating the reasonably foreseeable compliance measures, staff determined that acknowledging the potential effects of the Policy on agricultural lands was sensible. In this analysis staff agrees with the CFBF that on a programmatic level there could be potentially significant impacts. However, without a specific project, the level of analysis regarding direct effects to agricultural lands can't be analyzed in further detail.

As several commenters noted, agricultural resources should be acknowledged as a resource that benefits the region and California. In this line of logic, taking a minimal fraction of the

		state's overall prime agricultural out of production is not likely a significant impact. However, from the perspective of an individual landowner, the selection of a compliance measure (e.g., riparian buffer) in an area of prime agricultural land or high value timber land could result in a local impact. Yet, it must be stressed that riparian buffers are not the only compliance measure to be implemented and do not result in a de facto taking of lands. The site-specific nature of the Policy is intended to include flexibility to attain mutually beneficial outcomes.
C.1.3	Water Rights Amendments As Proposed Mitigation The proposed mitigation on pages 159 and 160 relating to the inclusion of certain proposed amendments to existing water rights permits relies on action outside of the Regional Board's control or jurisdiction and is, therefore, improper. Also, the statement on page 160, suggesting that the CDFW can legally include "bypass flow requirements" in a Fish and Game Code 1602 permit for modification of a water diversion	The Regional Water Board's original response is adequate. The SED adequately addresses the uncertainty associated with other agency decisions. Regarding the use of Fish and Wildlife 1602 agreements as potential mitigation, the Staff Report states on page 160:  Based on the wide range of potential impacts associated with water treatment and supply, enforcement of a measure is uncertain. Therefore, adverse impacts to the environment are potentially significant and unavoidable.
	structure (as opposed to an extraction of water pursuant to a valid water right) is incorrect.  In responding to this point, raised by numerous commenters, the Regional Board stated that "In the case of conversion of a direct diversion, the Regional Board would take actions to ensure the associated riparian water right was converted to an appropriative right, either as a condition of use of grant funds, or through coordination with the Division of Water Rights." As a threshold	As stated on page 162 of the Staff Report:  However, because of the programmatic nature of the CEQA analysis, it is not possible to say with certainty that all impacts will be mitigated to less than significant levels. Identified mitigation will become enforceable in permits and other orders by the Regional Water Board, but we cannot be certain that other agencies will adopt the recommended mitigation for activities under the jurisdiction of other agencies. As a result, even impacts identified as less than significant with mitigation incorporated must also be

matter, it is not clear how riparian water rights can be "converted" to an appropriative right. At a minimum, if the Regional Board is going to exercise its authority to "take actions to ensure" such a conversion, it should explain how this will be done.  Explanation of Inadequate Response: As the State Board is well aware, the maintenance and management of surface water rights is essential to agriculture. Farm Bureau does not believe the Regional Board appropriately responded to points raised in its comment letter in relation to water rights and instream flows (See NCRWQCB General Comment #12) and consequently repeats those comments here:	Regional Water Board Original Response: Regarding the establishment of minimum flows, the Policy directs the Regional Water Board to coordinate with the Division of Water Rights (and Department of Fish and Wildlife) on instream flow studies and the establishment of flow objectives, as necessary. Establishment of such objectives requires in-depth analysis beyond the scope of this policy development exercise, including water quality considerations beyond temperature.
atract. The Policy should elerify that it applies to	The Degional Water Poord's original reapones in a degreets
PacifiCorp and its facilities only to the limited extent that the Regional Board will coordinate	The Regional Water Board's original response is adequate. Staff acknowledges that whether the dams are ultimately removed is a decision before several federal and state agencies in consideration of other factors in addition to water quality,
-	can be "converted" to an appropriative right. At a minimum, if the Regional Board is going to exercise its authority to "take actions to ensure" such a conversion, it should explain how this will be done.  Explanation of Inadequate Response: As the State Board is well aware, the maintenance and management of surface water rights is essential to agriculture. Farm Bureau does not believe the Regional Board appropriately responded to points raised in its comment letter in relation to water rights and instream flows (See NCRWQCB General Comment #12) and consequently repeats those comments here:  The Policy should clarify that it applies to PacifiCorp and its facilities only to the limited

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

#### Certification for the project

Similarly, the analysis required by the California Environmental Quality Act ("CEQA") included in the staff report for the Policy inappropriately discussed removal of the dams owned by PacifiCorp as a potential means of compliance with the Policy. Although, the Klamath River TMDL provided a programmatic discussion of dam removal "as possible strategies by which final compliance with the TMDL load allocation may be accomplished," it was acknowledged that "Whether the dams are ultimately removed is a decision before several federal and state agencies in consideration of other factors in addition to water quality, including water allocations, species protection and power needs." (Klamath River TMDL staff report, p. 9-19.)

PacifiCorp Explanation of Inadequate Response: The Response does not address the comment because while it asserts that other agencies must adhere to the Basin Plan, that would be true without the Policy and the Policy is not needed to direct other agencies in their responsibilities. The Policy supposedly compiles a toolbox for North Coast Board staff to address temperature concerns. As noted in PacifiCorps' comments and as stated in the Klamath TMDL staff report, dam removal is a decision before other agencies in consideration of other factors in addition to water quality.

including water allocations, species protection and power needs.

Regional Water Board Original Response: The Policy is meant to be comprehensive, and thus describes a full range of temperature implementation actions, both within the Regional Water Board's permitting jurisdiction, and actions outside of the Regional Water Board's permitting jurisdiction. It is correct that FERC projects, water rights, and local land use planning actions are not under the direct jurisdiction of the Regional Water Boards. However, other state and federal agencies must comply with the applicable Basin Plan objectives and take such plans and polices into consideration when taking discretionary actions. For example, an applicant seeking a Federal license or permit where the proposed activity may result in a discharge to surface water is required to obtain a Clean Water Act Section 401 water quality certification. The purpose of the 401 certification is to ensure that waste discharged to these waters from a proposed activity meets water quality standards and other appropriate requirements of the applicable Basin Plan.

State 401 Certification conditions become mandatory conditions of any federal license or permit for the project. When the State Division of Water Rights issues a 401 Certification for a FERC project or a water diversion project, they must certify that the project complies with the applicable water quality objectives and associated implementation plans within a region's Basin Plan. In turn the proposed Policy would rely on the jurisdiction of other agencies and their responsibility to adhere to the Basin Plan. Therefore, the examples of dam removal, which range from projects directly under the Regional Water Board jurisdiction to those under the Division of Water Rights, are reasonable and foreseeable compliance measures as a result of the proposed

			Policy which a CEQA impact analysis must consider. It should be noted that this analysis does not infer that particular effects associated with those measures will occur; only that it is a reasonable means of compliance that could occur.
C2.2	Hemstreet	The Policy should clarify that it applies to PacifiCorp and its facilities only to the limited extent that the Regional Board will coordinate with the State Water Board in any 401 certification for the Project, Cont. The staff report's CEQA analysis lists dam removal as a compliance measure for "measures to address tailwater and surface impoundments" (p. 108) and "to restore and maintain stream flows that support beneficial uses" (p. 117-118). As described above, the staff report should clarify that dam removal is a compliance measure under the Policy only for projects under the jurisdiction of or within existing authority of the NCRWQCB and not dams regulated by FERC under the Federal Power Act. Due to the fact that the NCRWQCB staff will not take any action related to PacifiCorp besides continued coordination with the SWRCB in any water quality certification process for the Project, "large scale dam removal" and the removal of dams owned by PacifiCorp are inappropriate examples of the environmental effects of the Policy.  PacifiCorp Explanation of Inadequate Response: The response does not address the comment because removal of dams owned by PacifiCorp	The Regional Water Board's original response is adequate. Staff acknowledges that whether the dams are ultimately removed is a decision before several federal and state agencies in consideration of other factors in addition to water quality, including water allocations, species protection and power needs.  Regional Water Board Original Response: All types of stream impoundments can be used as additional examples of in-stream structures potentially affected by the proposed Policy. For example, as stated in the Staff Report, there are several large dams in the North Coast Region; additionally, there are smaller impoundments – often termed "flashboard" dams – that are used to raise the water levels in streams to provide for diversion (either direct or pumping) primarily for agricultural use. Additionally, the Staff Report points to programs of implementation and compliance measures including the construction of off-stream ponds, embankment ponds, bypass flow structures and dam removal.  The specific example of the PacifiCorp dams was used to further illustrate the concept that the proposed Policy is intended to affect decisions and actions taken by other agencies, such as the Division of Water Rights or Bureau of Reclamation.  Additionally, the use of the PacifiCorp dams as examples was essential in discussing the potentially significant impacts to the environment as result of a project-level action. As presented-in the Klamath Facilities Removal Environmental Impact

		is not a result of the Policy. Again, dam removal is a decision before other agencies in consideration of other factors in addition to water quality. The staff report should remove the examples as requested in PacifiCorp's comment.	Statement/Environmental Impact Report, December 2012, prepared by the U.S. Department of the Interior and California Department of Fish and Wildlife, several significant and unavoidable impacts to the environment are anticipated if dam removal proceeds. By disclosing impacts for a large project such as the Klamath Dam Removal Project, the analyses capture a range of impacts broad enough to cover small projects as well.
C2.3	Hemstreet	Page 154, last paragraph: The document states "that dam removal would have longterm beneficial effects on free-flowing condition, water quality, scenic, wildlife, fishery, and recreation river values associated with the upstream and downstream reaches designated as Wild and Scenic." As suggested in the comments above, this paragraph should be deleted from the staff report. Klamath River dam removal is not an action that is within the jurisdiction of the Regional Board and therefore not subject to this policy. However, there is no discussion of interim conditions, which could have remarkable impacts on fisheries, including listed species, water quality, scenic conditions and other recreational values until ultimate "long term" conditions are achieved.  PacifiCorp Explanation of Inadequate Response: The response does not address the first portion of the comment for the same reasons that the comments made above regarding Klamath dam removal were not addressed. The response	The Regional Water Board's original response is adequate. Potentially significant impacts to recreation were identified within the checklist under recreation as noted in the previous response to comments. Additionally, within the checklist discussion (page 162) under mandatory findings of significance b), the following statements were made:  These impacts include elevated exhaust levels, fugitive dust, vehicle and GHG emissions, turbidity, suspended sediment loads and reductions of dissolved oxygen, potential negative alteration of critical habitat for multiple fish species, groundwater resources, cultural resources, scenic quality, recreation, and noise. Most of these impacts are expected to be short term. Individual project-specific CEQA review will be necessary in those cases as appropriate. Many can and will be mitigated to less than significant levels with the implementation of specific mitigation measures. However, because of the programmatic nature of this CEQA analyses, it is not possible to say with certainty that all impacts will be mitigated to less than significant levels.  Regional Water Board Original Response: Interim impacts (immediately after dam removal) are discussed extensively throughout Chapter 9, and are a prime example of the potential

groundborne vibrations and increasing the ambient noise levels for outdoor receptors. Again, the disclosure of impacts from the Klamath Dam Removal Project was used as an example for other projects that may occur (and would obviously need a project-level CEQA analysis).  For additional discussion see the response to CEQA C2.1 and C2.2.		does not address the second portion of this comment because although short term impacts were listed in Chapter 9, the comment addresses the summary discussion in the environmental checklist of whether there would be significant impacts to recreation, and this discussion does not include the short term impacts.	for outdoor receptors. Again, the disclosure of impacts from the Klamath Dam Removal Project was used as an example for other projects that may occur (and would obviously need a project-level CEQA analysis).  For additional discussion see the response to CEQA C2.1 and
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No.	Author	Comment	Response
E1.1	CFBF	The Staff Report notes on page 164 that the	The Regional Water Board's original response is adequate. The
		Regional Board must consider economics in at	Temperature Policy does not establish new water quality
		least two specific contexts: First, the Staff Report	objectives and is therefore not subject to section 13241. (San
		acknowledges that (under the Porter-	Joaquin River Exchange Contractors Water Authority v. State
		Cologne Act [Water Code section 13000, et	Water Resources Control Bd. (2010) 183 Cal.App.4th 1110,
		seq.]) "the Board must consider economics in	1119 -1120, as modified (May 5, 2010); City of Arcadia v. State
		establishing water quality objectives that ensure	Water Resources Control Bd. (2010) 191 Cal. App. 4th 156, 177,

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

the reasonable protection of beneficial uses." (Staff Report, p. 164.) Second, the Staff Report notes that CEQA requires that the [Regional Water Quality Control Boards] analyze the reasonably foreseeable methods of compliance with proposed performance standards and treatment requirements." (*Ibid.*; see, also, Pub. Resources Code, § 21000, et seq.)

The Staff Report acknowledges at page 164 only that the Regional Board must "consider economics in establishing water quality objectives" under the Porter-Cologne Act and "analyze [...] reasonably foreseeable methods of compliance" including "economic factors" under CEQA. (Staff Report, p. 164.) Beyond this, however, the Staff Report opines that "[t]he Regional Water Board is not obligated to consider the balance of costs and benefits with implementation of a TMDL or Basin Plan amendment." (Ibid.) Rather, the Staff Report opines that the Board is "only obligated to consider economic factors and may adopt a TMDL or Basin Plan amendment even if the costs are significant." (Ibid.) Unfortunately, this unduly narrow characterization of the Regional Board's obligation to "consider" and "analyze" the potential economic impacts of the proposed action and also to regulate water quality in a reasonable manner is incorrect.

as modified on denial of reh'g (Jan. 20, 2011).) Even where section 13241 applies, the analysis performed at a policy level is by necessity requires a broad and general assessment of potential compliance measures. Water Code section 13241 requires economic consideration, not necessarily a detailed analysis. (See e.g. City of Arcadia v. State Water Resources Control Board (2011) 191 Cal. App.4<sup>th</sup> 156, 177 ["[s]ection 13241 does not specify how a water board must go about considering the specified factors. Nor does it require that the water board make specific findings on the factors"].) In addition, the Policy makes clear that additional balancing and proper consideration of relevant factors will occur in any site-specific determination. See also Comment G.1. C.1.1 above.

Regional Water Board Original Response: The economic analysis requirements are limited to an estimate and range of the cost of compliance measures and identify potential sources of funding, not economic losses from foregone timber harvest. Even with the Board of Forestry's (BOF) requirements to analyze economic impacts regarding the ASP rules, it was concluded in the Initial Statement of Reason (ISOR), May 2009, that there was no information at the time to estimate the opportunity of foregone timber harvest from the area within Del Norte, Humboldt, Trinity, Siskiyou, Sonoma, or Mendocino Counties. Subsequent to additional public input, the BOF acknowledged in the 2009 Final Statement of Reason (FOSR), October 2009, that there is evidence supporting statewide adverse economic impacts to geographically specific locations. The Regional Water Board and BOF analysis are in agreement that the level of significance of these impacts varies depending on the circumstances and estimates of foregone profit will vary from plan to plan.

		Explanation of Inadequate Response: As detailed herein, multiple provisions of law require reasonable balancing of competing demands and beneficial uses and meaningful consideration of economic impacts of a proposed water quality regulation, including the relative costs and benefits of the regulation as an important measure of the proposed regulation's "reasonableness." Staff's economic analysis (Staff Report, pp. 164, et seq.), rationale and purpose (Staff Report, pp. 1-2 and 29-31), and alternatives analyses (Staff Report, pp. 96-100) in support of the present Policy fail, both collectively and singly, to satisfy these requirements of law.	
E2.1	Poburko	As to, ECON Comment #1, the NCRWQCB, regardless of any implied misunderstanding by the commenter, in the response to ECON	The Regional Water Board's original response is adequate. For CEQA purposes, the economic and social impacts of the proposed project are considered to determine if they will cause
		Comment #1, the NCRWQCB response claims, "The foregone profit associated with canopy	or contribute to an adverse environmental impact, not whether the costs of the measures themselves are significant or will
		retention cost and the preservation of shade on	cause an economic hardship. See also Response E1.1
		timberlands would require a project level	cause an economic narasmp. Oce also response E1.1
		analysis and is beyond the scope of this	Regional Water Board Original Response: The economic
		analysis"	analysis requirements are limited to an estimate and range of
		However without some level of analysis within	the cost of compliance measures and identify potential sources
		the scope of the CEQA document there is no	of funding, not economic losses from foregone timber harvest.
		ability for the public to evaluate the true	Even with the Board of Forestry's (BOF) requirements to
		economic impacts of the action taken and approved by the NCRWQCB.	analyze economic impacts regarding the ASP rules, it was concluded in the Initial Statement of Reason (ISOR), May 2009,
			that there was no information at the time to estimate the
		As to the claim reported by the NCRWQCB in	opportunity of foregone timber harvest from the area within Del

Amendment to the North Coast Water Quality Control Plan to Establish a Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro Watersheds

response to ECON Comment #2, "that the economic consideration related to individual harvest plans are too complex to estimate at a regional policy level," is not supported by evidence or citation. A preliminary analysis must be required and at least attempted. This may require the NCRWQCB to contract with a specialist, as their current staff matrix is absent of individuals legal qualified to conduct the assessment (see Professional Foresters Law pertaining to economic evaluations on forested landscapes).

Explanation of Inadequate Response:
The economic analysis contained in the staff report is inadequate as it provides no real analysis and fails to evaluate the total opportunity cost born by the regulated public pertaining to the implementation of the amendment and only address the cost born to comply where compliance is lacking and restoration is required.

Norte, Humboldt, Trinity, Siskiyou, Sonoma, or Mendocino Counties. Subsequent to additional public input, the BOF acknowledged in the 2009 Final Statement of Reason (FOSR), October 2009, that there is evidence supporting statewide adverse economic impacts to geographically specific locations. The Regional Water Board and BOF analysis are in agreement that the level of significance of these impacts varies depending on the circumstances and estimates of foregone profit will vary from plan to plan.