CALIFORNIA
Water Boards

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GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

North Coast Regional Water Quality Control Board

DATE: **August 8, 2018**

TO: **Interested Parties**

FROM: **Alydda Mangelsdorf, Chief**
Planning and Watershed Stewardship Division

RE: **Staff Responses to Public Comments on the 2018 Triennial Review Submitted During the Written Comment Period Beginning May 5, 2018 and Ending June 22, 2018**

Staff began the 2018 Triennial Review of the Basin Plan in mid-2017, releasing for public review a draft staff report, Planning Program Workplan for Fiscal Years 2018-2021, and adopting resolution No. R1-2018-0030. A written public comment period was noticed beginning on May 5, 2018 and closing on June 22, 2018. In that period, a public workshop on the 2018 Triennial Review was held before the Regional Water Board during its regularly scheduled meeting in May 2018. An information item to discuss in a public forum the content of the adopting resolution was held before the Regional Water Board during its regularly scheduled meeting in July 2018.

Staff has reviewed all the comment letters received during the public comment period and considered all oral and written comments provided. What follows are staff's responses to the public comments received. There were 16 comment letters submitted, each with numerous separate comments. Many of the comments addressed Regional Water Board activities, generally. Others were specific to the Basin Plan and the draft Planning Program Workplan for FY 2018 through 2021. Staff responses are provided for all substantive

comments received. In some cases, staff has summarized the comments for clarity. In a few cases, comments have resulted in revisions to the Planning Program Workplan. Specifically, the Planning Program Workplan for FY 2018 through 2021 has been revised to:

1. Add the development of a Russian River Sediment TMDL Action Plan or TMDL Alternative as a high priority for the Region, pending approval of a new position and adequate funding to hire a Russian River Watershed Steward.;
2. Make more explicit a commitment to develop a regional flow objective (e.g., narrative flow objective) as part of the Navarro Instream Flow Criteria/Objective project; and
3. Update the schedule for the Groundwater Protection Strategy to accommodate changes in staff availability during the first quarter of FY 2018.

Comments were submitted by the organizations/authors listed below. Staff's responses are indexed based on the index numbers assigned each letter in the table below. The written public comment letters are available in their original form on our website at:

https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/

Comments Submitted by

Index No.	Organization	Submitter
1	-	Bill Chesney
2	City of Fortuna	Doug Culbert
3	Del Norte County	Kylie Heriford
4	Earth Law Center	Grant Wilson
5	Environmental Protection Information Center (EPIC)	Amber Jamieson
6	Friends of Del Norte County (FODN)	Eileen Cooper
7	-	Janet Gilbert
8	Great Old Broads for Wilderness	Shelley Silbert
9	IDEXX	Jody Frymire
10	Institute for Fisheries Resources (IFR), Pacific Coast Federation of Fishermen's Associations (PCFFA), Save California Salmon (SCS)	Regina Chichizola
11	Karuk Tribe	Susan Fricke
12	-	Fred Krieger
13	Quartz Valley Indian Reservation	Crystal Robinson
14	Russian River Keeper	Bob Legge
15	Sierra Club (North Group Redwood Chapter)	Felice Pace
16	-	David Webb

Staff Responses to Public Comments

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1.1	Suggested Workplan Addition	"I would like to request that NCRWQ add to the existing work plan investigations to determine the sources of these high bacterial levels and implement the actions necessary for the protection of people coming into contact with the Shasta River including researchers, students, anglers, irrigators and the general public."	Staff are working with landowners in areas that past sampling has shown elevated levels of fecal indicator bacteria to identify bacterial sources and implement management measures to reduce loading through the Shasta River TMDL Conditional Waiver of Waste Discharge Requirements. Staff anticipate these actions will reduce bacterial loads in the Shasta River.
2.1	Seasonal Discharge Prohibition	Dye study implemented by the City of Fortuna in November 2017 did not provide enough data to make determinations of fate and transport of treated effluent. The study also occurred during a time period that did not represent normal functioning of the percolation pond. The City states that discontinuation of the seasonal discharge prohibition project will reduce momentum to the new dye study and may eliminate the project's potential environmental benefits. The City requests that this project remain a priority and that the Regional Water Board allocate 5% of staff resources to it.	As stated in the Triennial Review Staff Report and the City's June 22nd comment letter, the City has been slow to pursue activities associated with development of this project since first adopted as a planning priority in March 2015. As a result, during the intervening period, planning staff have been redirected to other priority work, while awaiting progress from the City. It is clear based upon comment letter's attachments that the City has taken initial steps to evaluate potential implications of year-round discharge to the Eel River. However, based upon existing progress, and the need to pursue other high priority work, staff's recommendation to remove this project from the 2018 Planning Program Workplan will remain unchanged. However, Regional Water Board planning staff will review and provide written comment on the attachments provided on June 22, 2018. Further, Regional Water Board planning staff will continue to be available to work with the City to review scientific workplans and data as they become available. Please note from the 2018 Triennial Review Staff Report that comparison of wastewater discharge rates in the Lower Mainstem Eel River to determine the potential for flow

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			augmentation during critical low flow summer months indicates that even if all the wastewater treatment plants in the basin were allowed to discharge during the summer, the flow augmentation benefit would be negligible; in fact, there would be no discernable change in riffle crest height as a result. Therefore, continued pursuit of scientific study related to summertime point source discharge would necessarily explore other environmental benefits derived from an exemption from the seasonal discharge prohibition. It is possible to reprioritize this project for a Basin Plan amendment in the next cycle based upon future progress during the intervening period.
3.1	ONRW Designation	"The Board reiterates that the designation remains (1) not fully investigated (2) unnecessary and unwarranted on the Smith River (3) not defined under state law (4) subject to full environmental review under CEQA and possibly NEPA and (5) not within the purview of the NCRWQB."	The ONRW designation project has been redefined based on public comments received during scoping for the 2014 Triennial Review ONRW project, which focused on the Smith River. The 2018 Triennial Review ONRW project is redefined to 1) establish the ONRW term and definition in Chapter 3 of the Basin Plan and 2) use a landscape scale assessment tool (to be developed as part of the Climate Change Adaptation Policy project) to objectively identify ONRW-eligible waters within the North Coast Region. Staff propose that the assessment specifically pursue identification of waters important with respect to climate change resilience and staff anticipate that the Smith River may likely remain a candidate.
3.2	ONRW Designation	ONRW status is unnecessary now since last Triennial Review because of (1) State of Oregon has designated North Fork Smith River as Outstanding Resource Water (ORW) with other measures and (2) federal protections in place against potential mining activities in Public	Staff agree that the potential immediate value of designating the Smith River as an ONRW has been mitigated by the State of Oregon's action. Please see Response 3.1.

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		Land Order 7859, which prohibits various resource extraction activities for 20 years.	
3.3	ONRW Designation	The Board of Supervisors again requests that this project be removed from the Workplan or at the least reframed as "Explore ONRW Status and Implications" without reference to the Smith River.	See Response 3.1.
3.4	ONRW Designation	To continue recommending the ONRW designation project for the Smith River is illogical given no research has been completed and thus designation is premature, even according to the Regional Water Board's staff report.	See Response 3.1.
3.5	ONRW Designation	The project to designate Smith River as an ONRW lacked: transparency, noticing, and collaboration. These deficiencies have become the basis for the project, which should not have been a priority from the beginning.	Staff agree that robust stakeholder outreach is an important part of any basin plan amendment project. The newly defined project will include robust outreach and collaboration with engaged stakeholders.
3.6	ONRW Designation	"...our Board is not convinced ONRW designation is necessary to maintain the quality ... in light of the State's anti-degradation policy, Resolution 68-16 which makes clear even if no formal designation has been made, lowering of water quality should not be allowed for waters."	The Del North County Board of Supervisors (BOS) is correct that Resolution No. 68-16 is designed to protect high quality waters from being degraded. Though, under Resolution No. 68-16, the Regional Water Board has the authority to allow degradation down to the water quality objectives if they can make certain findings. An ONRW designation can be made for high quality waters, but also for waters of recreational and ecological significance, even where water quality has been degraded through time. ONRW designation could provide added protection to waters that may be vulnerable to degradation because of climate change and waters that have high value but need additional funding to restore lost conditions. The Smith River has both recreational and ecological significance, as well as high water quality for many constituents.

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3.7	ONRW Designation	ONRW designation should be done at the State level and not by a Regional Water Board. As well, such designation should be subject to CEQA, as stated in a previous letter to the Regional Water Board.	The ONRW project as a basin planning process is a certified regulatory program that satisfies CEQA requirements. The State Water Resources Control Board (State Water Board) has encouraged the Regional Water Boards to evaluate ONRW designation during the latter's Triennial Review process, please direct this concern to State Water Board staff.
3.8	ONRW Designation	The Board of Supervisors are concerned how designation will affect current and future businesses along the river. Such economic impacts should be both clarified and acceptable when presented to the County and stakeholders in the jurisdiction.	Economic considerations will be considered when developing a methodology for ONRW designation, as is required of basin plan amendments.
3.9	ONRW Designation	"California does not yet have a scientific or numeric standard on which to base ONRW designation... There is no test, no scale, simply a subjective opinion of what should be designated ONRW stemming from meetings that took place during the Triennial Review process…"	Staff agree. Please see Responses 3.1 and 3.2. The newly defined ONRW project is coupled with the Climate Change Adaptation Strategy project and will rely on the objective, landscape-scale assessment tool developed under the latter project to identify ONRW-eligible waters. There will be a focus on waters with resiliency characteristics important to protecting beneficial uses into the future.
4.1	Instream Flow Criteria	2014 Triennial Review placed high priority on development of regional narrative flow objectives and methodology; however, these goals were not realized. The language in 2018 Triennial Review should be revised to re-include the language of "develop a regional narrative flow objective and corresponding flow objective" and elevate this inclusion as a high-priority item.	Regional Water Board staff agree that a narrative flow objective in the Basin Plan would support the development of implementation measures to protect instream flows, until numeric flow objectives can be developed for individual streams or watersheds. Accordingly, Regional Water Board staff will revise the language in this item from “Consider the development of a regional flow objective (e.g. narrative objective) and corresponding implementation methodology” to “Develop a regional flow objective (e.g., narrative objective) and corresponding implementation methodology.”
4.2	Instream Flow Criteria	In addition to using Navarro River watershed for analytical assessment of instream flow criteria, the following watersheds should be included: Scott River; Shasta River; Green	The Regional Water Board has neither the staffing nor funding to replicate the process we have begun in the Navarro River watershed in the Scott River, Shasta River, Green Valley Creek, and Mark West Creek during the next

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		Valley Creek; and Mark West Creek. Request for inclusion is based on existing information of and work on the requested watersheds as well as their continuing impairments. ELC provided summaries as to why each of these should be included with citations.	Triennial Review cycle. However, Regional Water Board staff are involved in efforts to address flow-related water quality concerns in each of these watersheds. In the Scott River, the Regional Water Board has funded a groundwater study to investigate the dynamics of the interaction of groundwater with surface water and identify management solutions to address water supply needs. That study has produced management strategies that are now being considered for implementation in the groundwater sustainability plan process. The hydrology of the Scott River is complex. From 1942-1977, flood irrigation was the primary method of irrigation. Under those conditions, summer flows were likely elevated over natural conditions, and cannot be assumed to be unimpaired. The groundwater study supported by the Regional Water Board is a tool to understand the complex interactions between groundwater, surface water, and water use. The Regional Water Board will continue to investigate these issues in pursuit of an appropriate regulatory outcome. While Scott River flow criteria have been developed by the Karuk Tribe and California Department of Fish and Wildlife (CDFW), these criteria are interim criteria until such time that a complete analysis can be accomplished. The Regional Water Board has discussed the merits of the interim flow criteria with both the State Water Board's Division of Water Rights and CDFW. We recognize the value of these interim criteria, but also recognize that they are insufficient as the basis of permanent flow objectives. In the Shasta River and Mark West Creek, the Regional Water Board is collaborating with the Division of Water Rights and

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			the CDFW on the development of instream flow analyses under the auspices of the California Water Action Plan. The outcome of the Mark West Creek process may include actions to address flow-related concerns in Green Valley Creek, as well. In Green Valley Creek, the Regional Water Board is collaborating with CDFW and CA Sea Grant to investigate the interaction of flow and water quality concerns, primarily dissolved oxygen, which has been demonstrated to be the greatest factor limiting salmonid survival. The processes currently underway in these watersheds are likely to lead to a regulatory outcome (Groundwater Sustainability Plan or Water Rights Policy) faster than the basin planning process could accomplish. The Regional Water Board will continue to collaborate with our regulatory partners in these processes, and if an amendment of the Basin Plan is appropriate, the Regional Water Board will consider that action.
4.3	Instream Flow Criteria	Regional instream flow objective would aid RWB and sister agencies' efforts in: water rights decisions; developing implementation measures; connecting flow and beneficial uses; clarifying relationship between flow and other regulated parameters; and identify specific, impaired waterways due to altered flow.	See Response 4.1
4.4	Instream Flow Criteria	"There are several narrative criteria examples that the NCRWQCB could glean from found on a draft technical report composed by the USGS and the EPA. The NCRWQCB should similarly apply a flow objective that would protect its waterways, ecosystems, and aquatic life."	Staff will consider these and other examples in the process of developing a narrative flow objective.

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5.1	ONRW Designation	NCRWQCB should strategically focus on systems that show support for stronger protections. Timeline and process for ONRW designation are too lengthy and should be streamlined. Given statewide antidegradation policy, reinventing new-region specific ONRW rules is duplicative work.	See Responses 3.1 and 3.2. The 2018 Triennial Review project on ONRWs proposes to include the term "ONRW" in the Basin Plan and define it in accordance with federal regulations. A future triennial review project may seek to define the approach to implementing water quality protection programs in ONRW designated waters. Such a project would clearly require close coordination with the State Water Board and other Regional Boards in the State.
5.2	ONRW Designation	While EPIC supports ONRW designation for the Smith as a high priority, EPIC recommends the Regional Water Board utilize authority under the federal Clean Water Act to safeguard the Smith River from further harm due to industrial activities.	Comment noted. See also Response 3.6.
5.3	ONRW Designation	The Salmon River should be designated as an ONRW under high priority. The Salmon River is important watershed with significant ecological, cultural, and historical important salmonid species. Additionally, the watershed provides numerous Beneficial Uses for recreation, water supply, and cultural heritage (with respect to the Karuk and Shasta Tribes).	Staff thanks EPIC for the recommendation on a potential candidate for ONRW designation. Because of feedback on the 2014 Triennial Review project focusing on the Smith River as an ONRW-eligible water, staff propose to design an objective process for identifying all waters within the North Coast Region that could be designated as ONRWs for strategic importance. See also Responses 3.1 and 3.2.
5.4	ONRW Designation	Dillon Creek should be designated as an ONRW under high priority to a safeguard from future impacts to Beneficial Uses from resource extraction activities such as mining and logging.	See Response 5.3
5.5	ONRW Designation	Clear Creek should be designated as an ONRW under high priority to protect at-risk anadromous fish and other aquatic habitats. Such designation was also requested by the Karuk Tribe in the previous Triennial Review.	See Response 5.3

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5.6	ONRW Designation	Elder Creek should be designated as an ONRW under high priority because it is part of the University of California Natural Reserve System.	See Response 5.3
5.7	Instream Flow Criteria	Numeric flow objectives should be developed and enforced in the Scott River. The river and many of its tributaries run dry during the summer due to diversions and withdrawals. The watershed is also home to wild runs of Chinook, Coho, and steelhead salmonid species; however, impacts stated previously have led to increased risk of fish kills. Enforceable flow objectives could have prevented or reduced these risks.	See Response 4.2
5.8	Suggested Workplan Addition	The Regional Water Board should develop and prioritize Beaver Recovery Strategy that includes the following: (a) a policy statement to coordinate with other agencies such as USFWS, NOAA NMFS, and CDFW; (b) incorporation of the strategy into the climate change adaptation policy; (c) incorporation of the strategy into the groundwater protection strategy; (d) direction to staff to work with CDFW to promote beaver restoration and reintroduction in the North Coast.	See Response 11.6
5.9	Climate Change Adaptation Policy	"It is requested that the Climate Change Adaptation Policy prioritizes protecting intact watersheds critical habitat for endangered species, regions that are surrounded by Wilderness and Roadless Areas, Late Successional Reserves and mature forests."	Staff thanks EPIC for this comment as it gives a concrete consideration for the Regional Water Board's climate change efforts. Please see Response 3.1 and 3.2. One of the key activities of the Climate Change Adaptation Strategy project will be the development of an objective landscape-scale assessment tool, which allows for identification of waters with various characteristics, including those the commenter have identified. Existing tools such as ONRW designation, may be utilized to protect high quality waters and waters of

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			ecological and recreational significance, which can also provide climate change resilience services.
5.10	Climate Change Adaptation Policy	It is recommended that the Climate Change Adaptation Policy focus on developing protections for “Essential Connectivity Areas” and “Potential Riparian Connections” identified in the map below." [see page 6 of PDF for map]	See Response 5.9
6.1	ONRW Designation	Friends of Del Norte are "most supportive" of the Regional Water Board's efforts in designating the Smith River and its tributaries as ONRW. FODN also appreciate the broadened scope to create a designation pathway for other water body candidates in the North Coast.	Staff thanks FODN for their support.
6.2	ONRW Designation	ORW designation by Oregon does not protect the California portions of Smith River. Serpentine soils in the watershed contain “strategic metals of national importance” and current Wild and Scenic designation does not protect the watershed from "strategic claims of National Importance." The 1990 Smith River NRA Act does not invalidate existing mining rights and therefore such rights pose a risk to "lands within the Smith National Recreation Area."	Staff agrees that Oregon's ORW designation and the federal protections are insufficient to protect high quality waters from existing mining rights and other threats such as climate change. Please see Responses 3.1 through 3.9.
7.1	ONRW Designation	"The letter from the BOS appears to challenge the legitimacy of the state to even make an ONRW decision as there doesn’t appear to be guidelines in place. Nor does the letter find ONRW status valuable. I disagree with the BOS and ... [my comments to the BOS] generated a brief discussion about postponing the approval of the already written letter. The county clerk	Staff thanks the commenter for her comments. Please also see Responses 3.1 through 3.9.

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		said the board needed to respond before June 26, 2018. They voted to send their original letter.""	
7.2	ONRW Designation	"I wholeheartedly support recognizing the Smith River watershed as an Outstanding National Resource Water ... Designation as an ONRW does not change our present uses of the river... [but] It does influence future developments and management activities such that we can hold those plans to the highest standards" for water quality and human health protection.	Staff thanks the commenter for her comments. Please see Responses 3.1 through 3.9.
8.1	ONRW Designation	"GOB has experienced the exceptional recreational opportunity that the Smith River offers... All GOBs who went on the trip believe that the Smith River is worthy of the ONRW designation.	Staff thanks GOB for their comments. Please also see Responses 3.1 through 3.9 for further detail on staff's thinking on the ONRW project.
8.2	ONRW Designation	GOB states that the Smith River and its ecology is "rare" and significant. GOB believes there is sufficient evidence provided their organization that the Smith is of exceptional recreational and/or ecological significance.	Staff thanks GOB for their comments.
8.3	ONRW Designation	GOB is based in Durango, CO and experiences from the Gold King Mine wastewater spill into the Animus River have led to GOB believing that the Smith River be designated as an ONRW with all due haste. These experiences include the Animas River closing for two weeks and resulting impacts to recreation, local tourism industry, and irrigation by local farmers and the downstream Navajo Nation in New Mexico. Given the existing mining potential of the two watersheds, GOB fear that without protection	Staff thanks GOB for their comments.

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		afforded by an ONRW designation, the Smith River could face a similar fate.	
8.4	ONRW Designation	"The other two bodies of water in California with ONRW designations are Mono Lake and Lake Tahoe. Broads believes that both of these bodies of water have similar ecological and recreational traits to the Smith River ... If Smith River is not designated as a ONRW, then a full report should be published detailing why Mono Lake and Lake Tahoe were designated but not the Smith River."	A recommendation to the Board regarding ONRW designation will follow a public review process, including review of a staff report discussing staff's research and findings. The staff report will certainly enumerate the findings that supported designation of Lake Tahoe and Mono Lake as ONRWs.
9.1	General Recommendation	IDEXX recommends the NCRWQCB change the contact recreation (REC-1) bacteria criteria from fecal coliforms to either *E. coli* or enterococci. The latter parameters are less error prone and are recommended by the US EPA in the 2012 Recreational Water Quality Criteria and by the World Health Organization.	Staff thanks IDEXX for its recommendation. The State Water Resources Control Board adopted on August 7, 2018 a statewide REC-1 objective for bacteria in freshwater streams based on *E.coli,* which will supersede the fecal coliform objective current contained in Region 1's Basin Plan.
9.2	General Recommendation	IDEXX recommends the NCRWQCB change the bacteria criteria listed for ground waters from fecal coliforms to *E. coli* or enterococci. The rationale is that *E. coli* and enterococci are more protective indicators of fecal contamination. Additionally, the US EPA Ground Water Rule recommends using either *E. coli* or enterococci as the bacteria indicator for ground waters.	Thank you for your recommendation. Municipal and domestic drinking water requirements for groundwater are based on total coliform and are protective of drinking water supplies.
10.1	General Recommendation	"We would like to recommend that the Board prioritize Actions and Basin Plan Amendments that will lead to the protection, restoration and maintenance of salmon species, and their critical habitat that fishermen and tribes depend on to survive."	Staff thank the commenters for their recommendation. Staff agree that the protection, restoration and maintenance of salmonid species is a high priority, for the benefit of ecosystem health, the food chain, unique north coast habitats, tribes, fishermen, and all Californians. The Board implements numerous programs, including planning,

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			monitoring, TMDLs, WDRs, 401 certification, grants, inspections, enforcement and others in pursuit of this goal. With respect to the Triennial Review, there are several factors considered when establishing priorities, including protection of human health, endangered species/habitat, and the recommendations of stakeholders, among others.
10.2	General Recommendation	"There has been a pattern at the Region 1 Board that is continued in this Draft Staff Report, of not addressing the decline of salmon populations caused by the degradation of their critical habitat, which includes water quality and quantity these wild stocks require to spawn and rear. For example, the priorities and staffing numbers outlined in the current staff report are heavily focused on Sonoma County. We request that non-point pollution, including flow impairments and agriculture stormwater runoff, be a focus of upcoming Basin Plan Amendments."	Staff thank the commenters for their recommendation. Staff point out that of the 4 TMDL projects and 6 planning projects recommended for staffing this triennial period, the following 5 projects are designed at least in part to address the concerns you raise: TMDL Programmatic Retrospective Review, Develop Instream Flow Criteria/Objectives, Assess Climate Change Impacts, Establish ONRW definition and list of candidate waters; and Update CUL, FISH, and T-FISH beneficial uses. One of the foci of the TMDL development program in the last several years has been to address human health risk associated with pathogens. But, recall that beginning 20 years ago, the Regional Water Board in collaboration with U.S. EPA undertook a massive effort to develop sediment and temperature TMDLs with a particular focus on the protection of salmonid-related Beneficial Uses. The TMDL Programmatic Retrospective Review is intended to assess how well those 25+ TMDLs are being implemented and recommend needed updates, to better ensure protection of all beneficial uses, including salmonid health and habitat. Staff agree that agricultural stormwater runoff is an issue requiring additional attention. To that end, staff are assigned to the development of agricultural lands permits.
10.3	General Recommendation	"Water quality and quantity are the single most important factors threatening salmon in the region... We request that flow and pollution issues on key salmon rivers such as the Klamath, South Fork Trinity, Scott, Shasta, Eel,	Staff agree with the importance of the issues raised. Please be aware that the triennial review process is to assess any changes in regulation that are needed to support permitting and enforcement action. In 2014 the Regional Water Board agreed with stakeholders that developing flow

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		and Smith Rivers be prioritized in this Triennial Review process."	criteria/objectives would help support needed action. To implement existing regulation, the Regional Water Board has dedicated staff resources in the form of watershed stewards to the Klamath, Scott, Shasta, and Elk Rivers. Staff actively collaborate with partners on flow assessment in the Scott, Trinity, Eel and Russian Rivers, to further inform future regulation, which is in addition to efforts to develop flow objectives in the Navarro River. And, staff also are actively collaborating with partners on water quality issues in the Smith River.
10.4	Update Beneficial Uses Chapter	"...key actions, such as protection of instream flows through flow standards and designating Tribal Cultural, Subsistence and Non-Tribal Subsistence Beneficial Uses are essential to the survival of North Coast Salmon species and protection of human health in the North Coast region, however they are not given the priority ranking they deserve."	Staff agree with the importance of the issues raised. As such, we propose to maintain staff resources towards the development of flow criteria/objectives beginning as pilot project in the Navarro. We also propose to apply staff resources to updating our CUL and FISH beneficial uses to incorporate the State Boards new CUL, FISH, and T-FISH beneficial uses.
10.5	Instream Flow Criteria	"We recommend that 2.2.5 one be moved up to an immediate priority, and that the regional flow objectives be developed sooner rather than later.... We ask that Protection of Instream Flows and Setting of Flow Standards be ranked as a top priority and the Scott, South Fork Trinity and Mainstem Eel River be added to the list of priority watersheds for inclusion in the Flow Standard Process. We would also support a regional flow standard or approach." "We request that temperature and flow studies and actions be taken in the South Fork Trinity, Scott, Shasta, Mainstem and South Fork Eel and associated Basin Plan Amendments follow that	See Response 4.2. The development of flow objectives in the Navarro River watershed is a priority that the Regional Water Board is actively working on. Regional Water Board staff also sees the benefit of a regional flow standard approach. Our experiences developing flow criteria in the Navarro River and supporting efforts in the Shasta River, South Fork Eel River, and Mark West Creek watersheds have demonstrated that the traditional approach is both costly and slow. The idea of a tiered regional approach to setting flow criteria is gaining traction among agencies. The Regional Water Board is participating in the California Water Quality Monitoring Council's Environmental Flow Workgroup to further progress on this approach. We expect that our involvement in efforts to establish flow

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		aim to restore water quality and habitat to these areas. We request that these flow restoration actions be coordinated with local restoration groups and fisheries agencies..."	objectives in the Navarro River and Sproul Creek watersheds, and flow-water quality investigations in Russian river tributary watersheds, will inform the development of a regional approach that will more broadly address inadequate flow conditions. Finally, the Regional Water Board has recently completed two years of temperature and flow studies in the South Fork Trinity River watershed, in cooperation with a local watershed groups and agencies, to support local efforts to address flow-related concerns and inform regulatory priorities.
10.6	Groundwater Protection Strategy	"We support 2.2.4, Groundwater Protection Strategy… [and recommend to] identify where groundwater is interconnected with surface water flows and manage for stream flows needed for salmon."	Generally shallow groundwater is interconnected to stream flow. Groundwater and overland flow all contribute to surface flow in streams. But, groundwater flow is the largest component of the sustained base flow of a stream, which is an expression of the groundwater discharge from the aquifer (Freeze and Cherry 1979). The United Stated Geological Survey (USGS) published findings that groundwater and surface-water systems are connected, and groundwater discharge is often a substantial component of the total flow of a stream. However, the underlying geology can affect the rate at which precipitation becomes surface flow, but wells and spring diversions are generally diverting from the same hydraulically connected source. As such, large numbers of diversions from springs and wells can have a cumulative effect on summer base flows. A component of Groundwater Protection Strategy is to coordinate Regional Water Board staff partnerships with local, state, federal entities to further develop our understanding of localized groundwater and surface water interactions and integrate such knowledge into our planning and permitting programs. However, the types of studies and specificity needed to identify where groundwater

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			is interconnected with surface water flows and manage for stream flows needed for salmon is beyond the scope of the strategy.
10.7	Climate Change Adaptation Policy	"We support 2.2.6 [climate change adaptation strategy]."	Staff thank the commenters for their support.
10.8	Review Biostimulatory Substances Objective	"We Support 3.1.3 [revise biostimulatory substances objective…]."	Staff thank the commenters for their support.
10.9	Update Beneficial Uses Chapter	"We support 3.2.1 [update CUL, FISH, TSUB, and SUB beneficial use definitions] … non-tribal subsistence fishing has historically been an important cultural aspect of commercial as well as sport fishing communities."	Staff thank the commenters for their support.
10.10	ONRW Designation	"We support 2.2.3 [ONRW designation] … The South Fork Trinity should be assessed for designation as an Outstanding Natural Resource [W]ater as well as the Smith River."	Staff thank the commenters for their support. Please see Response 5.3.
10.11	TMDL Program Retrospective	"We support 4.1.1 [TMDL Program Retrospective Review] … as a high priority."	Staff thanks the commenters for their support.
10.12	Suggested Workplan Addition	"That the regulation of agricultural discharges and the creation of NPDES permits, Waste Discharge Requirements or Agricultural Waivers in key salmon areas be added to the list as a high priority item or that an Agricultural Stormwater Policy be added to the review as a priority item."	The Triennial Review process is to establish the basin planning priorities of the Board. This priority-setting process is specific to the formation of regulation and is separate from permitting and enforcement. Staff note your recommendations regarding permitting and enforcement priorities and will pass them on to our agency's permitting and enforcement staff.
10.13	Develop TMDL Action Plans for Other 303(d) Listed Waterbodies	Action Plans for Temperature and Sediment TMDLs for the South Fork Trinity River should be added as high-priority items. IFR, PCFAA, SCS are unable to find an Action Plan for the sediment TMDL nor are aware of reasoning why the Regional Water Board has not created	The Regional Water Board adopted a Sediment TMDL Implementation Policy into the Basin Plan to implement all sediment TMDLs, including EPA-developed TMDLs. The Regional Water Board has also adopted a Temperature Implementation Policy to implement the temperature standards, regardless of impairment status. The TMDL

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		a temperature TMDL for the river. They also request an investigation into the increasing use of nutrients to see if nutrient listing is warranted. Additionally, the Regional Water Board should look to water rights to regarding enforcement and adjudications on the Trinity River.	Programmatic Retrospective Review recommended as a 2018 Triennial Review priority is to evaluate the effectiveness of our programs at implementing these policies and adopted TMDL Action Plans. If approved as a priority, staff will be making recommendations, as necessary, to improve the effectiveness of the TMDL Action Plans and the two implementation policies. Regarding nutrients, staff are currently collaborating with the State Board to assess all readily available ambient water quality data in the North Coast Region to determine status under Section 303(d) of the Clean Water Act. Staff will be evaluating all readily available nutrient data as part of the 303(d)/305(b) Integrated Report process. A draft staff report and proposed 303(d) list is scheduled for public review in mid-2019.
10.14	Suggested Workplan Addition	"That assessment and identification of toxins and the toxin's impacts on fish and drinking water sources be added as a priority. These toxins should include mercury, pesticides, nitrates and copper. If multiple watersheds and/or fish species are impacted by these pollutants, we suggest Basin Plan Amendments be created to address the pollutants."	The Triennial Review process is to establish the basin planning priorities of the Board. This priority-setting process is specific to the formation of regulation and is separate from monitoring, inspection, permitting and enforcement. Our SWAMP program conducts ambient water quality monitoring, including monitoring for the constituents you mention. Our permits implement objectives for those constituents, where there is a reasonable potential for them to be discharged. And, our enforcement program enforces violation of permits, on a prioritized basis. Exceedances of water quality objectives are recognized as high priority for Board actions.
10.15	Suggested Workplan Addition	Commenters request a Basin Plan amendment be developed to prioritize water quality and habitat protection in North Coast estuaries, because they are critical to salmonid health and survival. Commenters say these estuaries are some of the most degraded habitats.	Staff agree that healthy estuaries are critical to watershed health and species protection. The 2018 Triennial Review staff report highlights the importance of Humboldt Bay as a specific estuary (medium priority project) and DO in estuaries generally (low priority project). Once other high priority projects are completed, or new staff resources are identified, work on estuary-specific projects will certainly be considered.

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10.16	General Recommendation	"That fisheries agencies and tribes are consulted on priorities and their comments be incorporated into the Triennial Review."	Staff thank the commenters for their recommendation. Staff agree that input from fisheries agencies and Tribes is valuable to the triennial review process, as well as many other program priority-setting processes of the Regional Water Board.
10.17	TMDL Program Retrospective	Commenters currently do not feel that sediment issues in the North Coast have been properly addressed and request the consideration of revisions to sediment-related TMDLs, waivers and WDRs, and associated BMPs. Commenters would like to see examples of BMP evaluation and effectiveness monitoring. Commenters request progress reports on sediment TMDLs beginning with the South Fork Trinity and Eel Rivers as part of an effort to review effectiveness of TMDLs due to their importance to fisheries.	The TMDL Programmatic Retrospective Review is intended to evaluate and report on the effectiveness of all the Region's TMDLs. Staff appreciates the commenters' concerns about sediment impaired basins and recognize the range of concerns pertaining to salmonid support function including DO, temperature, and flows.
10.18	General Recommendation	Commenters suggest that enforcement be a focus for the Regional Water Board and that a northern office be opened to focus on enforcement and collaborative actions in key salmon rivers. Commenters believe areas north of Sonoma County have not received adequate attention, due to the Regional Water Board office being distant from the northern areas, which have "the highest quality waters, best remaining salmon runs, and best chance for restoration and climate change adaptability."	Staff thank the commenters for their comment. This is a topic unrelated to the 2018 Triennial Review. Please know that a northern office, enforcement, and region-wide monitoring are all topics of keen interest to Regional Water Board staff.
10.19	Mixing Zone Policy	"We do not support the continued focus on issues such as mixing zones for NPDES permits or other non-agriculture related point source related focuses, as we believe non-point pollution and the needs of fisheries needs to	Staff thank the commenters for their comment. Staff agree that water quality protections aimed at protecting and restoring threatened and endangered species, including salmonids, are a high priority. The 2018 Planning Program Workplan attempts to strike a balance between protection of

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		become a top priority of this board if salmon are to survive in the region."	human health and protection of threatened and endangered species.
10.20	General Recommendation	"The level of economic depression in the rural North Coast, and resulting social issues, such as drug use, homelessness, and family problems, are well documented. These issues are especially widespread in port towns and on reservations and other predominantly Native American communities. Water quality and fisheries issues are therefore environmental and social justice issues for Mendocino, Humboldt, Del Norte, Trinity and Siskiyou Counties."	Staff thank the commenters for their comment. Staff agree with the conclusions regarding water quality and environmental and social justice. The Regional Water Board is very active in identifying and implementing tools to support the needs of disadvantaged communities. But, the topic deserves broader discussion. Please contact Alydda Mangelsdorf at alydda.mangelsdorf@waterboards.ca.gov and Claudia Villacorta at Claudia.villacorta@waterboards.ca.gov for further discussion.
10.21	General Recommendation	"The Region 1 Board has been tasked by the state to protect high quality water, however the board regularly does not prioritize the most important salmon streams in its planning. Fisheries-related Beneficial Uses, such as rearing and spawning, are often the most sensitive beneficial use within the region, however the Draft 2018 Triennial Review does not even mention fisheries or fishing based economics at all."	Staff thank the commenters for their comment. The 2018 Triennial Review attempts to balance the needs of both human health and endangered species protection.
11.1	Ocean Beaches and Freshwater Streams Pathogen TMDL Action Plan	"We support the high priority assigned to indicator bacteria in the Triennial Review... The absence of bacterial impairment listings in the Klamath Basin is likely more due to the lack of historic data collection rather than to a lack of actual impairment... We request that to the extent possible, the bacterial plan be developed in such a way that it can be readily adapted to new areas (e.g., Scott and Shasta valleys) if, as we anticipate, the geographic	Staff agree and are aware of potential unlisted bacterial impairments in the region. Staff will endeavor to develop the Ocean Beaches and Freshwater Streams pathogen TMDL project with an eye toward scalability and expansion. Also, the Regional Board is currently implementing a watershed stewardship program in the Scott and Shasta Basins which is heavily focused on reducing bacterial impairment.

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		extent of bacterial impairment listings expand in the future. Indicator bacteria are a serious problem in the Shasta and Scott basins and we urge the Regional Board to do whatever it can to take immediate action to improve conditions."	
11.2	TMDL Program Retrospective	"We support the TMDL Program Retrospective Review to assess which components of TMDL implementation are working well and which are not working well.... the Triennial Review staff report lists questions to be addressed during the review. We request that the following additional questions be added to that list: 1) What is the effectiveness of encouraging voluntary actions compared to enforcement and regulatory mandates? Where have these been approaches been attempted? What are the pros and cons of these approaches? Can they be used in a complementary manner? 2) For infrastructure projects such as riparian fencing or changing points of diversion ... are those projects still being maintained and resulting in the intended outcomes, or has the project failed.... To the extent possible, please quantify the progress that has been made versus what still needs to be done (e.g., what percent of stream miles have properly functioning riparian fencing? What percent of road miles have been upgraded or decommissioned?)."	Staff appreciate the Tribe's support for this new project and will add these questions to those considered as the project is fully scoped and staffed.
11.3	TMDL Program Retrospective	"We recommend that if the review comes up with ideas for improved policies and approaches, then they should be implemented	Staff anticipate that issues, opportunities, and/or recommendations, that arise from this retrospective will take several forms - from internal policy changes, to basin plan

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		as soon as possible rather than waiting. We do not understand why it would be necessary to wait until the 2021 Triennial Review to decide to implement those improvements."	amendments, to alternative implementation opportunities, or other mechanisms. Where there are opportunities to implement improvements without Board action, early implementation may be possible or warranted.
11.4	Groundwater Protection Strategy	Karuk Tribe supports the development of a groundwater protection policy and state that "enforceable... and effective regulation of surface and groundwater withdrawals are essential elements of an effective strategy to protect instream beneficial uses."	Staff appreciate the Tribe's support.
11.5	Groundwater Protection Strategy	"We would also like to emphasize the need for this policy in the Scott basin. Monitoring indicates a shallow groundwater table also documented as interconnected to surface flow in the Scott basin. This unique feature has the potential to have severe impacts to groundwater pollution... We have a high level of support for this policy and request to be involved with staff in the development."	Staff appreciates the Tribe's support and have added the tribe to the list of interest parties.
11.6	Groundwater Protection Strategy	"We request that the groundwater recharge element of the Groundwater Protection Policy include a recommendation to work with... [CDFW], the California Fish and Game Commission, and Tribes to improve management of beavers (Castor canadensis) in California. Current beaver management in California still focuses solely on their historic role as fur-bearers and pests but does not consider their ecological ... or hydrologic benefits ... resulting from the dams that beavers build..."	This is a valid point worthy of consideration. To further support such efforts the Groundwater Protection Strategy Basin Plan Amendment as currently envisioned will include the addition of Wildlife and Rare Threatened and Endangered Species as beneficial uses of groundwater. However, the waterboards have limited jurisdiction in addressing issues related to the management of wildlife populations, where we clearly must defer to CDFW and USFWS. However, given the "ecosystem engineering" role beavers play in watershed health, there are certainly implications on water supply, infiltration, water quality, riparian zones, and wetlands where a more collaborative approach would be warranted and beneficial.

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11.7	Instream Flow Criteria	The Tribe "strongly" supports numeric flow objectives but are "disappointed that no Klamath Basin waterbodies are included as priorities. The Tribe recommends that "aggressive" action be taken in the Scott and Shasta River basins regarding flow criteria.	See Response 4.2
11.8	Climate Change Adaptation Policy	"We request that the Climate Change Adaptation Policy include recommendations for improving beaver management in California."	Staff thank the Karuk Tribe in recommending beaver management as it gives the Regional Water Board a concrete consideration for the development of a climate change policy. Please see Responses 5.9 and 11.6 for further elaboration to similar requests.
11.9	ONRW Designation	"As noted previously in our comments on the 2014 Triennial Review, we encourage the Regional Board to designate high-quality waters within the Klamath Basin as ONRW. The Salmon River as well as Middle Klamath tributaries such as Clear Creek and Dillon Creek should also be designated as ONRW."	See Response 5.3
11.10	Review Biostimulatory Substances Objective	"We support this revision, since it reflects current science and is highly relevant to parts of the Klamath Basin, such as those waterbodies where biostimulatory conditions are caused or exacerbated by streamflow depletion or reservoir impoundments."	Staff appreciates the Tribe's support.
11.11	Update Beneficial Uses Chapter	The Tribe supports the replacement of the Basin Plan's cultural and subsistence Beneficial Uses with statewide definitions. The Tribe also request to be consulted during the waterbody designation process of Beneficial Uses so that it can provide input.	Staff looks forward to consulting with the Karuk tribe on this matter.
12.1	Revise Copper Objective to	"The Regional Water Board should consider adoption of U.S. EPA's 2007 recommended water quality criteria for copper as the	Federal water quality criteria contained in the National Toxics Rule (NTR) and the California Toxics Rule (CTR) address human health and aquatic life protection applicable to inland

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	Consider Biotic Ligand Model	applicable freshwater copper objectives in the North Coast Basin Plan." The commenter continues to cite various evidence to argue that updating the criteria will allow permittees substantial benefit with respect to compliance and costs thereof. The commenter also argues that the outdated California Toxics Rule (CTR) negatively impact stormwater permittees without providing a benefit to water quality, whereas the Biotic Ligand Model can "significantly improve predictions of acute toxicity." Thus, the commenter recommends the Regional Water Board prioritize, adopt, and incorporate the U.S. EPA 2007 recommended criteria for copper in freshwater.	surface waters, enclosed bays, and estuaries of the North Coast Region. NTR and CTR water quality criteria are implemented through the provisions of the State Water Board's Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (SIP). The SIP applies to discharges of toxic pollutants into the inland surface waters, enclosed bays, and estuaries of California subject to regulation under the State's Porter-Cologne Water Quality Control Act and the federal Clean Water Act. Such regulation may occur through the issuance of National Pollutant Discharge Elimination System permits or other relevant regulatory approaches, including storm water permits. The SIP establishes a standardized approach for permitting discharges of toxic pollutants to non-ocean surface waters in a manner that promotes statewide consistency. Review of U.S. EPA's 2007 recommended water quality criteria for copper as the applicable freshwater copper objectives for inland surface waters is most appropriately deferred to the State Water Board Water Quality Standards and Assessment Section for SIP review and updates. Use of this mechanism for adjustment to copper criteria ensures continued consistency of statewide criteria. In the interim, should permittees identify a need to consider adjustment to copper limitations, the SIP, in its current configuration, affords the use of the Biotic Ligand Model (BLM) to assign the most appropriate copper criterion.
12.2	Water Quality Objectives	With regards to iron, aluminum, turbidity parameters, compliance issues arise because	See Response 12.1

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		natural sources of these constituents during wet events will lead to water quality exceeding primary MCL's. The Regional Water Board should consider alternative approaches for regulating these constituents.	
12.3	Water Quality Objectives	The commenter suggests that the Regional Water Board focus implementation of MCL-based standards "on those pollutants or parameters which will potentially impact finished drinking water;" i.e. pollutants not adequately controlled by standard drinking water treatment: "e.g. dissolved constituents such as TDS, chloride, and sulfate."	See Response 12.1
13.0	Various	Comment letters submitted by the Karuk Tribe and Quartz Valley Indian Reservation contain identical substantive recommendations and comments. In aggregating comments for responses, the Karuk Tribe comments noted in 11.1 – 11.11 are repeated in all instances for Quartz Valley.	See Responses 11.1 – 11.11
14.1	Russian River Pathogen TMDL	"The State Water Board's Draft Provisions create a scenario that will lead to anti-backsliding throughout Region 1... RRK expects Staff and the Regional Board Members to uphold their current protective WQS for Bacteria and not weaken them. If the State Water Board Requires Region 1, and/or any other region with similarly stringent standards, to adopt ANY proposed less stringent Bacteria Provisions' water quality objectives, RRK will prepare to advocate against this as it will constitute illegal backsliding."	Regarding bacteria, the bacteria objectives in the Basin Plan are comprised of three components: 1) a narrative objective that requires bacteriological quality of waters to not be degraded beyond natural background levels, 2) waters designated for contact recreation to meet fecal coliform concentrations, and 3) waters designated for shellfish harvesting to meet fecal coliform concentrations. The State Water Board's action on August 7, 2018 to replace the REC-1 fecal coliform objectives with E. coli objectives advances the science associated with freshwater stream protection. Region 1's natural conditions objective is still in place, however, and remains the limiting objective for watershed health. Region 1 has just completed data collection for a

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			reference stream assessment, which will aid in interpretation of the narrative natural background objective. The *E. coli* and enterococci concentrations that are associated with reference streams will allow for protection of North Coast streams well below the statewide REC-1 objectives.
14.2	Laguna de Santa Rosa Nutrient, Dissolved Oxygen, Temperature, and Sediment TMDL	"In the prior 2014 Triennial Review, Staff mentioned allocating resources with the intent of clarifying the geographic extent of the impairments and to remap the Laguna Watershed into smaller segments with mainstem reaches separate from tributary waterbodies (2015-2017 listing cycle)." RRK requests access to this information.	Please contact Alydda Mangelsdorf directly at Alydda.mangelsdorf@waterboards.ca.gov for the information you seek.
14.3	Laguna de Santa Rosa Nutrient, Dissolved Oxygen, Temperature, and Sediment TMDL	The Draft Staff Report mentions the October 2017 wildfires affecting the watershed and states that the long-term consequences for water quality may be unknown. Moreover, RRK states that very few property owners understand risks associated with denuded landscapes. Thus, RRK recommends that the NCRWQCB "should be diligent in conducting studies and securing grant funding" for monitoring as well as implementation of erosion and sediment control, especially make funding available to entities who have extensive experience in these affected landscapes.	Thank you for your suggestions. The consequences of the October 2017 wildfires require the full investment of multiple partners within the Russian River watershed, both in Mendocino and Sonoma Counties. The State of California has invested significant resources in addressing immediate and long-term impacts from the fire. Similarly, the Regional Water Board has been actively involved in numerous collaborative endeavors to assess impacts and address impacts. Staff are diligent in its continued coordination with numerous partners and appreciates the continued efforts of the Russian River Keeper, as well.
14.4	Ocean Beaches and Freshwater Streams Pathogen TMDL Action Plan	RRK requests that the data produced from the coast pathogen monitoring be shared with the public once ready, preferably "in some file where the information is labeled under 'Ocean Beaches and Freshwater Streams Bacteria TMDL (Coastal Pathogen TMDL)' " and that this	While this request is not directly related to the Triennial Review, staff intends to upload the coastal pathogen monitoring data to CEDEN and will make available on the website our final report(s) on the results of this monitoring effort.

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		data be placed on the website under the aforementioned heading.	
14.5	Groundwater Protection Strategy	RRK agrees with NCRWQCB staff recommendations and are optimistic that stringent, enforceable policy/regulations will come out of these findings, particularly as they will relate to various water recycling practices, groundwater recharge/reuse, urban landscape irrigation and point and non-point source discharge prohibitions.	Staff appreciate RRK support and look forward to further engagement when the draft strategy is circulated for public comment.
14.6	Instream Flow Criteria	"Both Instream Flow Criteria and a Stream and Wetlands System Protection Policy are critically relevant to the Russian River Watershed and its tributaries. The fact that Staff predicts the Instream Flow Criteria will not be completed until 2024 is very discouraging and disturbing... Both 2.25 and 3.1.2 should both be moved to high priority projects during this next cycle."	The Regional Water Board shares the commenter's displeasure with the pace of traditional instream flow analyses. See Responses 4.2 and 10.5.
14.7	Develop Stream and Wetland System Protection Policy	"As staff in the San Francisco Bay Region have developed a draft Substitute Environmental Document, including a proposed Basin Plan amendment toward a Stream and Wetlands System Protection Policy, RRK suggests that staff's recommendation that this [project] should be retained on the 2018 triennial review list as a medium priority Basin Plan amendment [and] should be upgraded to that of high priority."	The availability of staff resources prevents inclusion of the Stream and Wetland Policy project as an addition to the other high priority projects already identified.
15.1	Groundwater Protection Strategy	Sierra Club supports retaining the groundwater protection strategy as a high priority project, but the Triennial Review document "should make clear how the 'Strategy' will lead to protection of groundwater quality and	Staff appreciate the support from the Sierra Club. The strategy will provide a summary of the current conditions throughout the Region and develop a roadmap for future regulatory and control activities. It will identify coordination with other agencies and describe the tools we will utilize to

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		groundwater discharges to surface waters" including the level of groundwater monitoring necessary.	coordinate with other agencies to continue to protect groundwater quality. The strategy will identify issues and concerns, including priorities on how our Board will move forward to address groundwater quality throughout the Region. The State Water Board Groundwater Ambient Monitoring and Assessment (GAMA) program includes data regularly collected by the Division of Drinking Water for public supply wells. GAMA includes data gathered from the Department of Water Resources, Department of Pesticide Regulation, the SWRCB GAMA/USGS Priority basins projects, Region 1 special studies, and our regulatory programs. These data sets allow us to perform initial assessments of pollutants of concerns to determine baseline conditions and trend analysis over time to evaluate if basin wide efforts or program specific (e.g., wastewater treatment plants, diaries, and irrigated lands) focus is necessary. Our regulatory programs collect groundwater data and a component of our strategy is to use the GAMA data and compare that to monitoring data from these programs. This enables us to assess impacts make recommendations to our regulatory programs. This approach allows us to inform the regulatory programs of areas of concern that should be scrutinized accordingly. Additionally, when assessing sources and areas of concerns we can determine what areas need further investigation, need resources (funding), and have data gaps that need to be addressed.
15.2	Groundwater Protection Strategy	During the development of a groundwater protection strategy, NCRWQCB should integrate planning with SGMA implementation by participating in Groundwater Sustainability Plan development in the Smith River Plain,	Staff agree with this recommendation and have taken initial steps to coordinate with the various North Coast Groundwater Sustainability Agencies, State Water Board, and Department of Water Resources.

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		Scott and Shasta Basins, and "in other basins where groundwater discharge plays a role in both flow-related pollution and ... non-attainment of applicable water quality standards." Staff time should be allocated for participation in groundwater basin planning.	
15.3	Groundwater Protection Strategy	"The Groundwater Protection Strategy item of the Triennial Review should be expanded to include development of specific actions to implement the strategy once it is adopted."	Staff agree with this recommendation and currently propose developing a workplan that provides recommendations and priority actions for the planning and regulatory divisions within the Regional Water Board.
15.4	Instream Flow Criteria	"The Triennial Review should prioritize and allocate staff resources for listing appropriate streams as "flow-impaired". Flow impaired stream listings are needed to adequately address pollution that is flow related and/or the violation of applicable water quality standards that are related to flow. Development of 'Numeric Flow Objectives' for streams should not be limited to the Navarro River but should be extended to all streams which are flow-impaired..."	Flow-impairment listings must be based on comparison to water quality objectives. [1] Additionally, see Response 10.5.
16.1	Revise Shasta TMDL Action Plan	The commenter states that in 2003, NCRWQCB staff collected bacteria data in Shasta River and found them exceeding human safety standards; however, no action was taken with this data and recent 2017 data show conditions have deteriorated. The commenter recommends that "the current 3-year workplan needs to allocate sufficient attention to this problem in the Shasta River... so appropriate action can be taken soon and not in 6 years (or more)." The	See Response 1.1

[1] State Water Board TMDL Program Listing Policy <https://www.waterboards.ca.gov/water_issues/programs/tmdl/303d_listing.html>

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		commenter also provides plots of these data in the comment letter.	
16.2	Instream Flow Criteria	Flow impairment issues in the Shasta basin has been ongoing "since at least 2010," but the NCRWQCB has not given a consistently valid reason as to why the issues have not been addressed. The Draft Staff Report acknowledges these issues, but does not prioritize it, instead choosing the Navarro. Despite being mentioned in the 2011 and 2014 Triennial Reviews, no actions have been taken. The scope of work for instream flow criteria should go expand beyond the Navarro into other rivers and, moreover, set Shasta up as a high priority.	See Response 4.2.
16.3	General Recommendation	"The continued reluctance of NCRWQ to take on the bad actors in the [Shasta] watershed makes those persons who invested time and money in creating and maintaining measures to protect water quality look like fools in their community. Their efforts need to be supported by showing that they were wisely taken and paid off, and not leave them looking like they could have done nothing at all and saved time and money. Continued enforcement failure in this area will result in loss of what forward progress has been made in attempting to protect water quality and leave the entire community at far greater risk of lawsuits over environmental issues."	See Response 10.18
16.4	Groundwater Protection Strategy	"In the [2014 Triennial Review] workplan, the groundwater protective measures ranked 2 don't include the staff suggested additional	A cornerstone of the Groundwater Protection Strategy is to continue ongoing regulatory efforts that focus on addressing chemical contamination. These activities are primarily

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		focus on chemical contamination as described in 2.2.4 of the staff report. It should be explicitly included also." The commenter's comment here is about the Shasta basin, but he speaks broadly about the groundwater protection strategy.	handled by the Cleanups, Groundwater Permitting, and National Pollutant Discharge Elimination System (NPDES) units within the Point Source Control and Groundwater Protection Division (Division). The strategy also focuses on a regional approach to addressing salts and nutrients and contaminants of emerging concern as required by the State Water Board Recycled Water Policy. The triennial review workplan only identifies planning staff resources allocated to the development of the strategy and basin plan amendment primarily lead by the Division's Senior Specialist in coordination with the Planning and Stewardship Division. Additionally, as noted in Section 2.2.1 of the Staff Report the amendment to the water quality objectives (Chapter 3) of the Basin Plan has been completed and is in effect. This amendment included the addition of a new narrative groundwater toxicity objective and updates to the chemical constituents objectives for groundwater and surface water and are currently being implemented by the Division.
16.5	TMDL Program Retrospective	"I applaud the inclusion of a high priority task to examine the outcomes-to-date of the numerous TMDL plans within the region. As many or all of them pass the 25% of the timeline mark, one would hope that most of the easier tasks will have been completed, and results of those efforts will show. And if not, then it will provide a firm foundation for the exercise of adaptive management while there is still time to act. Every effort should be made to do quantitative assessments of each, not qualitative ones."	See Response 10.17