No.	Commenter
1.	American Rivers
2.	California Association of Sanitation Agencies
3.	California Coastkeeper Alliance
	Klamath Riverkeeper
	Humboldt Baykeeper
	Russian Riverkeeper
	Los Angeles Waterkeeper
	Monterey Coastkeeper
	San Luis Obispo Coastkeeper
	Ventura Coastkeeper
	San Diego Coastkeeper
	San Francisco Baykeeper
	Orange County Coastkeeper
	Inland Empire Waterkeeper
4.	California Trout
	Trout Unlimited
5.	Center for Biological Diversity
6.	Earth Law Center
	California Sportfishing Protection Alliance
	Living Rivers Council
	Coast Action Group
	Karuk Tribe
	Pacific Coast Federation of Fisherman's Associations

	Somment Deadmite. 12pm on February 5, 2015
	Environmental Law Foundation
	Klamath Riverkeeper
	Friends of the Eel River
	Russian Riverkeeper
7.	General Public
8.	North Coast Stream Flow Coalition
9.	Planetary Solutionaries
10.	Quartz Valley Indian Reservation
11.	Riverside County Flood Control and Water Conservation District
	on behalf of the MS4 Permittees in the Whitewater River Region
12.	Santa Barbara Channelkeeper
13.	United Sates Environmental Protection Agency, Region IX

No.	Author	Comment	Response
1.0	American Rivers	Sufficient flow is a parameter that is essential to	Sufficient flow is necessary to protect water
		protecting the physical, chemical, and biological	quality and beneficial uses of water. "Pollution,"
		quality as well as many of the designated uses of	such as lack of adequate flow, may cause
		the water bodies and has been recognized by the	impairments to water quality standards.
		U.S. Environmental Protection Agency (EPA) as a	Specifically, reduced flows can cause or
		non-pollutant cause of impairment. Flow	contribute to impaired water quality conditions,
		alteration plays a significant role in the	such as elevated water temperatures, increased
		degradation of water quality conditions and failure	pollutant concentrations, degraded recreational
		to support designated beneficial uses such as cold	opportunities, and reduced habitat area and/or
		freshwater habitat in water bodies throughout	volumes.
		California, thus warranting inclusion of the formal	
		identification of flow alteration as a cause of	State law recognizes the connection between flow
		impairment under Category 4c in the Integrated	and water quality. The Legislature specifically
		Report.	identified its intention to "combine the water
			rights and water pollution and water quality
			functions of state government to provide for
			consideration of water pollution and water quality,
			and availability of unappropriated water whenever
			applications for appropriation of water are granted
			or waste discharge requirements or water quality
			objectives are established" when it created the
			State Water Resources Control Board. (Wat.
			Code, § 174.)
			The State Water Board has broad authority to

No.	Author	Comment	Response
			consider water quality and pollution when it
			makes water allocation determinations. (Wat.
			Code, §1258.) The State Water Board has
			significant experience both setting and
			implementing flow criteria through water right
			actions, including its Bay-Delta Program and its
			Policy for Maintaining Instream Flows in
			Northern California Coastal Streams. The State
			Water Board also has experience setting flow
			requirements as part of its responsibility to certify
			that the operation of hydropower facilities subject
			to Federal Power Act licensing meet water quality
			standards. Those actions are always controversial
			and frequently involve differences of opinion
			among scientists, who testify under oath, as to
			appropriate flow criteria in those proceedings.
			The State Water Board has previously recognized
			that its major rivers are over-allocated and
			adversely impacted by flow alterations (see for
			instance Strategic Plan Update 2008-2012, State
			Water Resources Control Board, September 2,
			2008, p.10). However, the extent of the impact on
			instream beneficial uses of a stream depends on
			the unique circumstances of each situation and

No.	Author	Comment	Response
			requires knowledge of other factors impacting the
			physical and biological integrity of the
			watercourse, including physical impediments to
			fish passage and sediment recruitment (dams and
			culverts, in addition to natural impediments such
			as waterfalls and landslides), the source of the
			water accreting to the stream (is it cool
			groundwater or is it warm runoff from open
			lands), the location and physical effect of
			diversions relative to habitat, and other factors
			that affect pollution.
			Pursuant to the above-cited state law, the State
			Water Board is expressly required to consider
			water quality and pollution when making water
			rights determinations. The converse is not true,
			however, with regard to the federal law directly applicable to developing the Integrated
			Report. The federal statutory directives pursuant
			to CWA 303(d) and 305(b) require states to report
			on the water quality necessary to provide for fish,
			wildlife, and recreational opportunities and other
			beneficial uses. In fulfilling its reporting
			obligations pursuant to CWA 303(d) and 305(b),
			the federal statutes do not expressly require the

No.	Author	Comment	Response
			states to consider flow, pollution, or allocation of
			water rights, when reporting on standards
			attainment. Clean Water Act (CWA) section
			305(b), combined with the section $303(d)$
			reporting requirements, comprises the California
			Integrated Report (Integrated Report). Those
			reporting requirements establish a process for
			states to use to develop information on the quality
			of their state's waters.
			CWA spatian 205(h) is the principle means by
			CWA section 305(b) is the principle means by which U.S. EPA and the public assess whether
			waters meet water quality standards. The report is
			used by U.S. EPA to inform Congress on the
			quality of navigable waters and their tributaries
			nationwide.
			CWA section 305b requires states to report on:
			"[A] description of the water quality of all
			navigable waters in such State during the
			preceding year, with appropriate supplemental
			descriptions as shall be required to take into
			account seasonal, tidal, and other variations,
			correlated with the quality of water [].

No.	Author	Comment	Response
			"[A]n analysis of the extent to which all navigable waters of such State provide for the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities in and on the water."
			 "[A]n analysis of the extent to which the elimination of the discharge of pollutants and a level of water quality which provides for the protection and propagation of a balanced population of shellfish, fish, and wildlife and allows recreations activities in and on the water, have been or will be achieved by the requirements of this chapter, together with recommendations as to additional action necessary to achieve such objectives and for what waters such additional action is necessary." (CWA § 305(b)(1)(A)-(C); see id. at § 305(b)(1)(D) & (E) (describing economic and

No.	Author	Comment	Response
			U.S. EPA describes the section 305(b) reporting
			goals at:
			http://water.epa.gov/type/watersheds/monitoring/u
			pload/2003_07_24_monitoring_305bguide_v1ch1
			<u>.pdf</u> ,
			and provides 2006 Integrated Report Guidance
			here:
			nere.
			http://water.epa.gov/lawsregs/lawsguidance/cwa/t
			mdl/2006IRG_index.cfm.
			As provided in the above U.S. EPA reference
			material, the primary purpose of the 305(b) and
			303(d) reporting requirements is to determine the
			extent waters are attaining standards, identify
			waters that are impaired and need to be added to
			the 303(d) list and placed in Category 5 for the development of a total maximum daily load
			(TMDL), and identify waters that can be removed
			from the list when standards are attained.
			The guidance U.S. EPA developed for states to
			implement the Integrated Report consistently

No.	Author	Comment	Response
			provides that segments should be placed in
			Category 4c when "the [S]tates demonstrate[] that
			the failure to meet an applicable water quality
			standard is not caused by a pollutant, but instead
			is caused by other types of pollution" such as lack
			of adequate flow. (See Guidance for 2006
			Assessment, Listing and Reporting Requirements
			Pursuant to Section 303(d), 305(b) and 314 of the
			Clean Water Act (July 29, 2005).
			In making decisions concerning standards
			assessment, it is imperative that the State Water
			Board undertakes a structured framework
			regarding its assessment and listing methodology
			and also provides information on the content of
			such methodologies.
			It may be appropriate to assess flow alteration
			pursuant to section 305(b) to the extent it could be
			used to support water quality decision-making.
			However, without a defined methodology for
			assessing non-pollutant related pollution, Water
			Board staff does not have a consistent and
			transparent approach to analyzing the extent to
			which flow-related alterations cause or impact

No.	Author	Comment	Response
			water quality standards. The decisions made by
			the State and Regional Water Boards must be
			based on a methodology that provides all
			stakeholders with the opportunity to understand
			exactly how assessment decisions are made. The
			State Water Board's listing determinations must
			be supported by documentation that explains the
			analytical approaches used to infer true segment
			conditions. (See U.S. EPA's 2006 Guidance for
			Assessment and Listing, p. 29 (explaining what
			constitutes an assessment methodology and U.S.
			EPA's review of a state's methodology for
			consistency with the CWA and a state's water
			quality standards).) In addition to recognizing
			U.S. EPA's recommendation that segments be
			placed in Category 4c when the cause is solely
			due to pollution, and given the uncertainties
			associated with determining appropriate flow
			criteria to be used as a threshold for determining
			impairment, the State Water Board does not
			believe that placing segments in Category 4c of
			the Integrated Report results is warranted. Neither
			is such a reporting format an appropriate use of its
			limited resources, particularly considering the
			State Water Board's broad authority to address

No.	Author	Comment	Response
			flow issues through its other legal authorities,
			which unlike information provided in the
			Integrated Report, have the potential to result in
			flow improvements through voluntary or
			regulatory action.
1.1	American Rivers	American Rivers respectfully disagrees with the	The State Water Board has not indicated that it is
		SWRCB's interpretation of the EPA's 2006	bound to U.S. EPA's guidance. Additionally, the
		Guidance for 2006 Assessment, Listing and	State Water Board disagrees with the
		Reporting Requirements Pursuant to Sections	commenter's interpretation of U.S. EPA's
		303(d), 305(b) and 314 of the Clean Water Act	Guidance for 2006 Assessment, Listing, and
		(EPA Guidance) specific to the categorization of	Reporting Requirements Pursuant to Sections
		waters in multiple categories for the same	<u>303(d)</u> , 305(b), and 314 of the Clean Water Act,
		waterbody segment. The SWRCB misinterprets	which is excerpted in the Staff Report at page 10.
		EPA Guidance by asserting that the example	U.S. EPA's guidance at section V.G.3 (pg. 56)
		provided by the EPA is the only situation in which	states:
		an impaired segment may be placed in Category	Segments should be placed in Category 4c
		4c. In this portion of the EPA Guidance, the EPA	when the [S]tates demonstrate[] that the
		is merely providing an example and is not	failure to meet an applicable water quality
		implying that segments that are impaired solely	standard is not caused by a pollutant , but
		due to lack of adequate flow or to stream	instead is caused by other types of pollution.
		channelization are the only conditions in which an	Segments placed in Category 4c do not
		impaired segment may be placed in Category 4c.	require the development of a TMDL.
		EPA Guidance clearly states that waterbody	Pollution, as defined by the CWA is 'the
		segments not only can, but should, be included in	man-made or man-induced alteration of the
		more than one reporting categoryFor	chemical, physical, biological, and

No.	Author	Comment	Response
		example, if a water body is impaired by a	radiological integrity of water' (section
		pollutant (e.g., temperature) and pollution (e.g.,	502(19)). In some cases, the pollution is
		flow alteration), then the water body would be	caused by the presence of a pollutant and a
		listed in Category 5 for temperature and Category	TMDL is required. In other cases, pollution
		4c for flow alteration.	does not result from a pollutant and a TMDL
			is not required. States should schedule these
			segments for monitoring to confirm that there
			continues to be no pollutant associated with
			the failure to meet the water quality standard
			and to support water quality management
			actions necessary to address the cause(s) of
			the impairment. Examples of circumstances
			where an impaired segment may be placed in
			Category 4c include segments impaired
			solely due to lack of adequate flow or to stream channelization.
			stream chamenzation.
			(Page 56, emphasis added.) In California
			waterbody-pollutant combinations are assessed
			consistent with the Water Quality Control Policy
			for developing the California's Clean Water Act
			Section 303(d) List (Listing Policy) to determine
			the overall use support rating. That overall use
			support rating is used by the California Water
			Quality Assessment Database (CalWQA) to

No.	Author	Comment	Response
			determine the overall Integrated Report Category
			for the waterbody as a whole.
			The State Water Board interprets the U.S.EPA
			guidance to indicate that a waterbody should not
			be placed into Category 4c if there is a pollutant
			based impairment identified to be impairing water
			quality that requires a TMDL. The waters for
			which flow information has been submitted for
			inclusion into Category 4c are all identified in the
			Integrated Report as impaired due to pollutants
			under Category 5, 4a, or 4b. Waterbodies
			impaired by pollutants, such as temperature, and
			also by flow modifications will be addressed by
			TMDLs for the pollutant. To the extent that the
			pollutant is affected by flow, the Regional Water
			Boards will work with the State Water Board
			through its Division of Water Rights to determine
			the extent to which a water right action can
			improve the pollution impairment and the
			appropriate implementation action.
			Additionally, U.S. EPA submitted a comment
			letter regarding the State Water Board's
			consideration of the CWA 303(d) List stating:

No.	Author	Comment	Response
			"EPA commends the Regional Board and State
			Board staff for the transparency of the process
			with respect to data used in the assessment and the
			applicable standards." U.S. EPA also explained
			that the purpose behind its substantive listing
			recommendations to the State Water Board was
			designed to ensure that U.S. EPA's approval of
			the CWA 303(d) list could occur without U.S.
			EPA making changes subsequent to the State
			Water Board's approval. Notably, while U.S.
			EPA noted disagreement with certain listings or
			delistings proposed in the Staff Report, U.S. EPA
			stated no disagreement with the Staff Report's
			assessment of flow related data and information.
			U.S. EPA has final review and approval authority
			of California's CWA 303(d) List before it becomes effective.
			becomes effective.
1.2	American Rivers	There are multiple circumstances in which	See Responses to Comments 1.0 and 1.1.
		waterbodies can, and should, be identified as	The second se
		impaired by flow alteration immediately utilizing	The development of site-specific criteria related to
		existing information to develop site-specific	flow is encouraged and would facilitate
		criteria. These circumstances include specific	assessment of flow related impairments.
		waterbody segments that already have the	However, the development of such site-specific
		necessary information available to make a clear	criteria related to flow is outside the scope of the

No.	Author	Comment	Response
		determination that flow alterations are a causal factor of a pollutant impairment or are the source of non-pollutant impairment of a designated beneficial use.	development of the Integrated Report. State Water Board staff and Regional Water Board staff (collectively the Water Boards) did not find that there was a clear determination that flow alterations are the sole cause of impairment to beneficial uses.
1.3	American Rivers	Flow conditions which have been identified as a causative factor to pollutant impairments listed in Category 5, should be acknowledged within Category 4c. This approach is important for information purposes and is directed by the EPA in their Guidance.	See Responses to Comments 1.0 and 1.1.
1.4	American Rivers	While the SWRCB currently does not have a standard methodology for making this determination, there are waterbody segments where beneficial uses for aquatic species are clearly not being met due to complete elimination of stream flow or stream flow that is so limited as to make a segment of the waterbody unusable to salmonids or other species. These waterbody segments should be acknowledged in Category 4c immediately.	See Responses to Comments 1.0 and 1.1 The State Water Board and North Coast Regional Water Board (North Coast Water Board) staff could not clearly determine if the beneficial uses of a water quality segment were impaired solely due to stream flow or lack thereof. In many water segments, flow is seasonal resulting in dry periods during the summer months. If interpretive guidance or a clear methodology was developed to examine flow and other forms on non-pollutant related pollution, Water Board staff would have a transparent and consistent way to characterize

No.	Author	Comment	Response
			beneficial use impairments caused by such
			pollution.
1.5	American Rivers	We appreciate the variety of realms in which the	See Responses to Comments 1.0, 1.1, and 1.4.
		SWRCB currently acknowledges flows and would	
		like to point out that the actions listed by the	The State Water Board acknowledges that flow
		SWRCB in pages 11 through 13 of the Integrated	alterations can and do affect water quality and
		Report are specifically connected to surface water	impair beneficial uses in California. In some
		rights. While these efforts play an integral role in	cases, augmentation of flow in stream from
		the maintenance and management of flows and	upstream reservoirs improves water quality by
		should be continued, they are geographically	intentionally or incidentally providing dilution or
		specific and have limited recognition of the	hydrostatic barriers to seawater intrusion that
		impact of flow alteration on water quality	would impair instream and other beneficial uses,
		conditions. The acknowledgement of flow	particularly during dry seasons or years. In other
		alterations within the context of the CWA	cases too much or too little flow as a result of
		mandated Integrated Report provides the SWRCB	water supply alterations and operations causes
		with a unique opportunity and responsibility to	water quality impairments.
		acknowledge the status of flow conditions in the	
		context of water quality. Utilization of category 4c	The waters proposed for inclusion into Category
		to identify impairments caused by flow alteration	4c are all identified as impaired due to pollutants
		will provide information that is useful for both	under Category 5, 4a, or 4b. If a waterbody is
		local and national prioritization assessment that	currently on the 303(d) List, stakeholders should
		informs funding allocations and policy	be able to utilize that information to influence
		recommendations. Additionally, the identification	planning, policy, and permitting decisions.
		of flow impairment through category 4c listing	Additionally, the data and information pertaining
		provides an important tool that can be utilized for	to flow within the possession of the commenter

No.	Author	Comment	Response
		local land use planning decision making and	may be directed to the appropriate public agency
		permitting via a nexus with CEQA that is not	to be utilized for local land use planning and
		currently available via approaches to flows that	decisions that are subject to CEQA.
		are specific to the SWRCB's own efforts to	
		allocate and enforce surface water rights.	Commenter's acknowledgement and explanation about the value of the State Water Board's
		The ability of local entities to utilize information provided by the SWRCB through the Integrated Report to make informed planning and policy	Integrated Report, while arguably distinct and separate from the actual purposes of the development of the report, underscores the
		decisions will become increasingly important over	importance that placement of waters in Category
		time as the State's water resources are further	4c is done in accordance with developed, sound,
		strained by demand and climate conditions.	and scientifically defensible methods.
		Additionally, it is anticipated that there will be an	and scientificarry defensible methods.
		increasing local interest in water supply	
		conditions as implementation of the Sustainable	
		Groundwater Management Act places local	
		entities in an ever increasing position of	
		responsibility to effectively manage groundwater	
		resources while recognizing surface and	
		groundwater connections.	
2.0	CASA	The State Water Board notes that future metals	Comment noted.
		assessment will be made for the dissolved fraction	
		using the California Toxics Rule (CTR)	
		conversion equations. CASA agrees that	
		regardless of the end data result, the dissolved	

No.	Author	Comment	Response
		fraction or total, the metals data must be	-
		considered as one line of evidence (LOE) to make	
		listing and de-listing recommendations. CASA	
		also agrees that the dissolved fraction is the most	
		appropriate form of the metals to use for listing	
		decisions.	
2.1	CASA	The Clean Water Act Section 303(d) portion of	Comment noted.
		the California Integrated Report addresses	
		impairments by pollutants. As the Staff Report	
		acknowledges, it is inappropriate to include	
		surface flows in the 303(d) portion of the report	
		because flow is not a pollutant. CASA supports	
		the State Water Board staff's recommendation to	
		not treat lack of flow as a pollutant and to delist	
		any flow related listings in the applicable future	
		listing cycles. Further, CASA also agrees with the	
		State Water Board staff's recommendation to not	
		address flow related impairments with the Clean	
		Water Action Section 305(b) portion of the	
		California Integrated Report at this time since	
		further research and inter-agency coordination is	
		required.	
2.2	CASA	The Colorado River Region's Basin Plan does not	Based on the administrative record pertaining to
		contain pyrethroid objectives; however, the	the adoption of the CWA section 303(d) List by
		proposed 2012 303(d) List contains	the Colorado River Basin Regional Water Quality

No.	Author	Comment	Response
		recommendations to list malathion, bifenthrin, and	Control Board for waters within its region, CASA
		cypermethrin. These listing recommendations are	did not submit any written comment, evidence, or
		based upon criteria developed by UC Davis.	testimony prior to such adoption.
		CASA would like to note that there are a number	
		of technical shortcomings in the UC Davis	The version of the Listing Policy then applicable
		criteria. First, the chronic toxicity criteria are not	(adopted 2004) provides (at section 6.1.3) that the
		based on actual data; instead, a default acute to	Regional Water Board may assess and determine
		chronic ratio was applied. Second, it is well	the appropriate evaluation guidelines to use to
		documented that pyrethroid sensitivity has a	assess narrative water quality objectives, which it
		significant inverse temperature relationship, but	did here and for which the State Water Board
		this relationship was not accounted for in the	finds to be consistent with the Listing Policy. The
		criteria derivation. Lastly, the criteria were	time at which commenter should submit argument
		developed assuming that all of the pyrethroids	and evidence in support of the Regional Board
		would be in the dissolved fraction, which is a poor	utilizing a different evaluation guideline would
		assumption for pyrethroids since they have low	most appropriately be during public participation
		solubility and tend to strongly associate with	process and hearing of the Regional Board.
		solids. In short, all of these technical	Additionally, the Listing Policy also provides,
		shortcomings combined result in unnecessarily	"Requests for review of specific listing decisions
		overly stringent criteria. Further, the Staff Report	must be submitted to the SWRCB within 30 days
		notes that since conversion of a whole water	of the RWQCB's decision." (See Section 6.3.)
		concentration to a dissolved concentration is not	Adhering to that process requirement, which was
		possible due to lack of information, the whole	not done in this case, is the appropriate manner to
		water concentrations were used for assessment,	appeal a listing decision made by the Regional
		adding yet another margin of safety.	Board. Nevertheless, the State Water Board
			provides the following response:

No.	Author	Comment	Response
		Instead of using the UC Davis criteria, CASA	
		recommends using the criteria developed by the	The Basin Plan for the Colorado River Basin (at
		US Environmental Protection Agency (USEPA)	p.3-2) contains a narrative water quality objective
		Office of Pesticide Programs (OPP). OPP	for toxicity that states "All waters shall be
		develops criteria, called aquatic life benchmarks,	maintained free of toxic substances in
		which are based on peer-reviewed studies required	concentrations which are toxic to, or which
		under the Federal Insecticide, Fungicide, and	produce detrimental physiological responses in
		Rodenticide Act (FIFRA). These benchmarks	human, plant, animal, or indigenous aquatic life."
		represent allowable environmental levels of	
		various pyrethroids that, in turn, the California	State and Regional Water Board staff utilizes the
		Department of Pesticide Regulation (CDPR)	most up to date and protective evaluation
		utilize to evaluate environmental risk during	guidelines to evaluate narrative water quality
		registration and re-registration in California. In	objectives consistent with Section 6.1.3 of the
		the end, CASA strongly urges the State Water	Listing Policy.
		Board and Regional Water Boards to work with	
		CDPR (as specified in the Management Agency	The Staff Report provides that the evaluation
		Agreement Between the State Water Board and	guidelines used for assessments include the UC
		CDPR) and USEPA to address pesticide water	Davis Aquatic Life Water Quality Criteria and the
		quality issues since they are ultimately responsible	U.S. EPA Office of Pesticide Programs Pesticide
		for ensuring that water quality is not adversely	Ecotoxicity Database. The UC Davis water
		impacted by pesticide use.	quality criteria are a peer reviewed and published
			criteria document that meets the requirements of
			Section 6.1.3 of the Listing Policy. Furthermore,
			the UC Davis criteria have been used in the U.S.
			EPA promulgated TMDL for Pesticides, PCBs,

No.	Author	Comment	Response
			and Sediment Toxicity in Oxnard Drain 3.
			In the UC Davis method, the use of default acute
			to chronic ratios was determined to be the best
			available approximation of chronic criteria in the
			absence of larger chronic data sets. The use of
			default acute to chronic ratios was peer reviewed
			and is based on guidance in the U.S. EPA Great
			Lakes methodology.
			While it is not possible to quantify the effects of
			all variables that can affect toxicity in developing
			criteria, such as temperature these factors are
			accounted for through the application of safety
			factors, as in the UCD criteria development. The
			UC Davis criteria documents acknowledge that
			the freely dissolved concentrations of pyrethroids are the most bioavailable, but that this information
			is not always available so environmental
			managers may choose to use total concentrations
			as a conservative assumption.
			All of the aspects of the UC Davis criteria
			discussed above in this response were included in
			the peer reviewed criteria, which staff have

No.	Author	Comment	Response
			determined to be appropriate to use as evaluation
			guidelines under Section 6.1.3 of the Listing
			Policy.
			The U.S. EPA Office of Pesticide Programs'
			benchmarks are based on the most sensitive
			toxicity value for each benchmark category, and
			typically examine smaller data sets for a limited
			number of species. The benchmarks provide a less
			robust guideline for assessing attainment of the
			narrative objective when compared to aquatic life
			criteria that have been developed using a full
			species sensitivity distribution, such as the UC
			Davis criteria. The U.S. EPA Office of Pesticide
			Programs benchmarks do not account for
			temperature effects or binding to solids.
			State and Regional Water Board staff will
			continue to seek and utilize the most robust and
			up-to-date science to assess and protect beneficial
			uses in future listing cycles. Further, Water
			Boards staff agrees that there is a need for
			continued work with CDPR and U.S. EPA, and
			staff will continue to work with CDPR and U.S.
			EPA on issues of joint interest.

No.	Author	Comment	Response
2.3	CASA	It would be premature to list according to 2012	See Response to Comment 2.2.
		USEPA recommended bacteria criteria for REC-1	
		until the criteria are adopted into the Water	As stated on Page 7 of the draft Staff Report. The
		Quality Control Plan for Ocean Waters of	U.S. EPA 2012 Criteria for Recreational Water
		California and the Regional Water Quality	Quality was not used in the development of the
		Control Plans for Inland Waters. Additionally, the	303(d) List portion of the 2012 California
		USEPA 2012 water quality criteria for REC-1	Integrated Report.
		bacteria are recommended criteria and may not	
		necessarily be adopted; therefore, any listing or	
		delisting recommendations should be assessed	
		according to water quality criteria specified in the	
		current water quality control plans.	
2.4	CASA	The Staff Report introduces a new concept for	State Water Board staff did not suggest the
		determining if a beneficial use is "supported."	Regional Water Boards employ an "extra
		Specifically, the State Water Board staff	condition" but correctly directed the Regional
		encouraged Regional Water Boards to employ an	Boards to apply the directives set forth in the
		extra condition in the 2012 Listing Cycle that	Listing Policy. The procedure described by this
		requires a monitoring data set to consist of at least	comment is consistent with Tables 3.1 and 3.2 of
		26 samples for conventional pollutants and at least	the Listing Policy.
		16 samples for toxic pollutants in order for a use	
		to be considered "supported." Since the process	Table 3.1 of the Listing Policy is used to
		for determining individual and overall beneficial	determine the minimum number of measured
		use support ratings affects how listings are made	exceedances needed to place a water segment on
		for various water segments, CASA believes it	the section 303(d) List for toxicants. Table 3.1
		would be more appropriate to address this	states "Application of the binomial test requires a

No.	Author	Comment	Response
		procedure in the Listing Policy.	minimum sample size of 16. The number of
			exceedances required using the binomial test at a
			sample size of 16 is extended to smaller sample sizes."
			An identical statement exists for Table 3.2 (used
			to determine exceedances for conventional or
			other pollutants) with a minimum sample size of
			26 required.
			The statements indicate that at least 16 or 26
			samples, respectively, are necessary to determine
			if beneficial uses are supported. Furthermore, the
			tables were extended to smaller sample sizes (2 and 5 respectively) which can be used to
			determine if beneficial uses are not supported.
3.0	California	Despite years of advocacy and work to assemble	See Responses to Comments 1.0 through 1.2 and
	Coastkeeper	relevant science, law and policy information, the	1.4.
	Alliance	Integrated Report fails to list any waterways in the	
		North Coast as impaired due to altered flows. This	State Water Board staff disagrees with the
		is at odds with extensive evidence put before the	commenters' assertion that the decision to not
		State Water Resources Control Board and the	include altered flows as part of the California
		North Coast Regional Water Quality Control	Integrated Report is at odds with extensive
		Board regarding the dire state of these waterways	evidence put before the Water Boards. The
		with regard to flow. As described in our myriad	information submitted by the California

No.	Author	Comment	Response
		comments and data submissions, listing for flows	Coastkeeper Alliance was reviewed by the North
		triggers numerous important benefits for local	Coast Water Board staff and the State Water
		waters, including, but not limited to:	Board staff and it was determined that the data
		• Higher prioritization of identified, impaired	and information submitted was not of sufficient
		waterways on lists of bond and other funds	quality and/or quantity to make an adequate
		earmarked for restoration of impaired waters.	assessment. The application of the Listing Policy
		•Reduce the burden of proof in state regulatory	to pollution based impairments, like flow
		processes that can address flow needs, such as	alterations, is inappropriate and outside the scope
		waste and unreasonable use hearings and public	of the methodology used to develop the Listing
		trust doctrine applications.	Policy. The Listing Policy is solely applicable to
		•Better support local land use and planning	the development of the 303(d) List (Categories 5,
		decisions by requiring decision makers to consider	4a and 4b) and is therefore pollutant focused.
		flow impacts in CEQA assessments.	(See Listing Policy, Section 2.1 (concerning
		•Allow the state to better track and highlight the	Category 5): "Waters shall be placed in this
		primary causes of waterway impairment.	category of the section 303(d) list if it is
			determined, in accordance with the California
		Listing for flows under the 303(d) List would	Listing Factors, that the water quality standards
		align official state acknowledgement of	are not attained; the standards nonattainment is
		waterways impaired by a lack of flows with	due to toxicity, a pollutant, or pollutants; and the
		actual, documented conditions, as robustly	remediation of the standards attainment problem
		supported by the scientific evidence mentioned	requires one of more TMDLs." The use of the
		above. Further flow impairment listings provide a	Listing Policy requires a pollutant based water
		long list of benefits, not just to river ecosystems	quality objective and an associated numeric to
		and the protection of beneficial uses, but also to	interpret that objective and determine impairment
		regional decision makers, state and local agencies,	of beneficial uses. Even with regard to evaluating

No.	Author	Comment	Response
		and the State Board itself. Given the escalating	narrative water quality objectives for pollutants,
		threats facing the region's waterways and	the Listing Policy (at section 6.1.3) requires that
		salmonids and the length of time between listing	evaluation guidelines be: applicable to the
		cycles, we urge the State Water Board to take	beneficial use, protective of the beneficial use,
		immediate action to incorporate flow listings into	linked to the pollutant under consideration,
		the 2012 303(d) List.	scientifically based and peer reviewed, well
			described, and identify a range above which
			impacts occur and below which no or few impacts
			are predicted. Furthermore, such guidelines must
			be responsive to principles of public participation
			and transparency.
			While the placement of a segment impaired by
			altered flows due to anthropogenic causes may be
			appropriate under Category 4c of the Integrated
			Report, without a methodology or interpretive
			guidance in place to make that determination, any
			recommendations would be made in a non-
			transparent and potentially inconsistent manner.
			The commenter's assertions of benefits are
			assumptions that may or may not be realized if
			flow alterations were included in Category 4c of
			the Integrated Report. Segments that are
			appropriately placed in Category 4c for
			impairments caused solely due to pollution from

No.	Author	Comment	Response
			anthropogenic actions compel no subsequent
			regulatory action.
			Lastly the commenter is confusing the terms "list"
			and "2012 303(d) List" in relation to identifying
			altered flows. Altered flow is defined as
			pollution and is not considered to be applicable
			under CWA section 303(d). It may by applicable
			under CWA section 305(b) as part of Category 4c
			of the California Integrated Report.
3.1	California	California Coastkeeper Alliance was required to	See Responses to Comments 1.0-1.2, 1.4, and 3.0.
	Coastkeeper	bring suit in 2007 to compel the Department of	
	Alliance	Fish and Wildlife and State Water Board to work	State Water Board staff assumes the commenter is
		together to implement mandates to set minimum	referring to obligations under Public Resources
		flows and reflect those numbers in the approval of	Code 10,000 et seq. Those requirements do not
		water rights permits. The actions subsequent to	apply to implementation of the Clean Water Act,
		the conclusion of this matter have been hampered	and the use of the CWA section 305(b) portion of
		by lack of sufficient funding, communication and	the California Integrated Report would not be the
		other impediments, with the result that water	appropriate avenue to achieve or compel such
		diversions continue – and in many places are	State Water Board or Department of Fish and
		escalating – despite the needs of waterways and	Wildlife (DFW) action. The State Water Board
		fish. Immediate action is needed to $-at a$	does consider streamflow recommendations when
		<i>minimum</i> – formally recognize that "no water" is a	it processes water right applications. It also
		problem the state will acknowledge and act on.	exercises its continuing authority over water right
			permits and licenses as appropriate given

No.	Author	Comment	Response
			resources available, quality of data available, legal
			requirements, and the due process rights of
			diverters.
3.2	California	The State Water Board's failure to include any	See Responses to Comments 1.4 and 3.0.
	Coastkeeper	flow listings is at odds with clear law and science.	
	Alliance	The Clean Water Act, its implementing	State Water Board staff looked in great detail at
		regulations and U.S. EPA Guidance, provide the	the priority list identified by the commenter. Staff
		overarching legal and regulatory direction for	looked beyond the submitted information and
		state action. Even assuming that further guidance	could not find an adequate amount of information
		and process on flows listings would be beneficial	to support a recommendation for inclusion into
		in close cases, the waterways that our groups	Category 4c. However, if a transparent and
		identified on a priority shortlist (see list attached	consistent methodology for assessing pollution
		to comment letter) were selected because they are	related impairments were in place it could
		the most egregiously impaired due to altered	facilitate future categorizations of these waters
		flows – in some cases having no flow at all for	within the California Integrated Report
		months of the year when flows historically were	framework. The State Water Board is working
		regularly present.	with the DFW to develop an appropriate
			methodology.
		Continued refusal by the state to take even the	
		most straightforward steps – such as recognizing	Issues revolving flow are extremely complicated
		that a dry waterbody is impaired because it cannot	especially those in the North Coast area. Lack of
		support fish – raises serious public trust concerns.	flow can be attributed to non-anthropogenic
		The State Water Board is entrusted to protect	sources such as drought or seasonal variation. A
		public trust resources, which includes ensuring	dry waterbed itself is not sufficient evidence to
		waterways continue to flow. The California	show impairment. Segments are appropriately

No.	Author	Comment	Response
		public trust doctrine protects navigable streams	placed in Category 4c for impairments caused
		and their tributaries for a variety of uses including	solely due to pollution from anthropogenic actions
		fishing and habitat for fish. The doctrine requires	yet require no subsequent regulatory action.
		states to manage lands underlying navigable	
		waters in trust for the benefit of the public. It	
		creates a duty for states to protect waterways for	
		preservation and public use.	
3.3	California	The State Water Board has an affirmative duty to	This comment extends beyond the scope of the
	Coastkeeper	ensure navigable waterways – remain navigable –	State Water Board's consideration of the
	Alliance	and preserve a waterways natural habitat. As the	Integrated Report.
		Supreme Court held in Audubon Society, and as	
		recently reaffirmed in Light v. State Water	Nonetheless, the State Water Board has and
		<i>Board</i> , "no party can acquire a vested right to	continues to take actions related to instream flow
		appropriate water in a manner harmful to public	petitions, as well as to evaluate and develop
		trust interests and the state has 'an affirmative	minimum flow requirements for appropriative
		<i>duty</i> ' to take the public trust into account in	water rights.
		regulating water use by protecting public trust	
		uses whenever feasible." Therefore, the State	
		Water Board not only has the authority to prevent	
		waterways to become impaired by low flows, but	
		it has an affirmative duty to protect public trust	
		resources to ensure navigable waterways do not	
		become impaired from low flows. Additionally,	
		the State Water Board's Public Trust Enforcement	
		Unit should take immediate action to direct water	

No.	Author	Comment	Response
		users and water masters to stop dewatering	
		streams and rivers where clear violations of the	
		public trust doctrine have occurred.	
3.4	California	The statement that the four listings on the existing	In terms of process, the 4 listings are not being
	Coastkeeper	303(d) list due to flow related alterations in the	considered by the State Water Board during this
	Alliance	Ballona Creek and Ventura River watersheds	listing cycle, which involves only decisions by the
		"will likely be proposed for delisting as part of the	Regional Water Quality Control Boards for the
		next Listing Cycle" is extremely concerning. As	North Coast, Lahontan, and Colorado River
		discussed at length in Santa Barbara	regions. The 4 listings at issue in this comment
		Channelkeeper's comments, the flow listings of	involve listing decisions from the Los Angeles
		Reaches 3 and 4 of the Ventura River for pumping	region.
		and diversion accurately reflect the current	
		diminished flows and resulting impairments to	Additionally, the commenter's concern regarding
		designated beneficial uses in those Reaches. The	the 4 listings pertains to the Staff Report's effort
		listings are legally valid, and consistent with the	to inventory the Water Boards' actions concerning
		State Water Board's Listing Policy. In contrast,	the 303(d) List and flow-related alterations.
		delisting Reaches 3 and 4 from the 303(d) list as	The Staff Report (at p. 9-10) states that the Water
		impaired for flows due to excessive pumping and	Boards have not considered the direct assessment
		diversion is inconsistent with the Listing Policy,	of flow data since the adoption of the Listing
		the Clean Water Act, and facts on the ground. We	Policy in 2004. The Staff Report acknowledges,
		urge the State Water Board to consider the	however, that there were 4 listings on the existing
		substantial and significant evidence	303(d) List related to flow-related alterations in
		Channelkeeper references to support the existing	the Ballona Creek and Ventura River watersheds
		impairment listings in its decision.	(Region 4) but that those decisions were made
			prior to the adoption of the Listing Policy.

No.	Author	Comment	Response
			The Listing Policy provides listing factors based
			solely on pollutant impairments. As a result, any
			section 303(d) listings related to flow alterations
			are contrary to the Listing Policy and U.S. EPA
			guidance and would be appropriate for
			reconsideration. Because the 4 segments were
			included on the 303(d) list due to pollution-related
			impairments, and not a pollutant, the Staff Report
			explains that the 4 listings for flow will likely be
			proposed for delisting in the next listing cycle.
			However, it is important to note that the 4
			segments were also listed on the 303(d) List for
			pollutant impairments for which TMDLs have
			been developed: Ventura River Reaches 3 and 4 –
			are identified as impaired due to pumping and
			water Diversion. The Regional Water Board and
			U.S. EPA have found that those flow related
			impairments were addressed via the Ventura River
			Algae TMDL. Regarding the listings for Ballona
			Creek Wetlands, identified as impaired due to
			hydromodification and reduced tidal flushing, the
			Regional Water Board and U.S. EPA have found
			that the Ballona Creek Sediment and Exotic
			Vegetation TMDL are addressing the stressors

No.	Author	Comment	Response
			involved with the hydromodification and reduced
			tidal flushing.
			U.S. EPA tried to implement a flow TMDL for the Ventura River listings and abandoned the effort because it lacked authority to address non- pollutant impairments. Consequently, a Nutrient TMDL has been implemented that takes into account the flow impairments as a causative factor.
			The proposed CWA 303(d) list for the State Water Board's current consideration does not include listing decisions from Region 4. Any such proposed delisting in Region 4 would occur in a future listing cycle at which time the commenter may participate in that decision-making process. State Water Board staff will discuss with U.S. EPA to determine the best way to move forward.
3.5	California Coastkeeper	The Staff Report lists State and Regional Water Board work underway to address flow through	See Responses to Comments 1.0 and 3.0.
	Alliance	other programs. While we recognize these efforts	The commenter points out that the many board
		and their possible precedent-setting utility to	actions currently underway do not address other
		inform future efforts, it is important to note that	or all impaired waterways where readily available

No.	Author	Comment	Response
		they cannot replace water quality related flow	data exists indicating impairment due to flow.
		listings for the reasons described herein and in	State Water Board staff has determined that the
		numerous comment letters and memos to date.	readily available data submitted is not sufficient to
		The Bay-Delta Flow Criteria is specific to the	indicate impairment solely due to flow. The one
		Delta, and does not address other impaired	action to fit all impairments does not work well in
		waterways where readily available data exists that	situations that are as complicated and site specific
		they are impaired due to flows. Curtailments of	as those related to non-pollutant water quality
		the Miller/Deer/Antelope creeks using the public	impairments caused by flow. Consequently, if it
		trust doctrine were temporary drought actions that	is the State Water Board's desire to include non-
		have been lifted and were region specific to the	pollutant related flow impairments under
		Central Valley, and does not address North Coast	Category 4c of the California Integrated Report, a
		impaired waterways. The frost protection	consistent and transparent methodology must be
		regulations in the Russian River and North Coast	put into place. Moving forward with
		Instream Flow Policy serve to protect instream	categorization of flow impairment-based data and
		flows through restrictions on surface water rights	information that is not defensible would defeat the
		conditions that are subject to Reasonable Use and	purpose of any efforts to achieve the commenter's
		public trust doctrines and need to be expanded	desired potential results.
		into other regions where data shows waterways	
		are impaired due to low flows. We encourage the	The Draft Staff Report details how the State
		Board to use all of the many tools at its disposal to	Water Board is using the tools available to best
		address the pervasive flow issues that impact the	address identified flow issues and any associated
		rivers and streams in the priority shortlist and	impacts to beneficial uses.
		many others throughout the North Coast,	
		particularly as we confront the real possibility that	
		this drought could become the new normal.	

No.	Author	Comment	Response
		CCKA encourages the Board to use all of the	
		many tools at its disposal to address the pervasive	
		flow issues that impact the rivers and streams, the	
		urgency with which conditions of dewatered	
		waterbodies must be addressed demands direct	
		acknowledgment by the Board how and why a	
		lack of flows is impairing waterbodies.	
3.6	California	We urge the Board to list waters impaired by flow	See Responses to Comments 1.0 through 1.2.
	Coastkeeper	and to proactively apply the public trust and	
	Alliance	reasonable use doctrines to address the pervasive	Additionally, this comment extends beyond the
		flow issues the North Coast, and state. For	scope of the CWA section 303(d) List portion of
		example, the State Water Board should apply the	the 2012 California Integrated Report. However,
		Reasonable Use Doctrine to agricultural water	the State Water Board will continue to explore
		use. The Reasonable Use Doctrine is the	avenues to provide adequate flows for the
		"cornerstone of California's complex water rights	protection of both human and aquatic life. The
		laws." All water use must be reasonable and	use of the Reasonable Use Doctrine as the
		beneficial regardless of the type of underlying	commenter points out is a key water rights
		water right. The State Water Board has already	mechanism and is utilized by the Division of
		determined that "more efficient and reasonable	Water Rights staff. The State Water Board will
		agriculture practices have the potential to <i>enhance</i>	continue to promote strategies to prevent the
		flows, reduce contaminants, and minimize fish	waste and unreasonable use of the State's water.
		losses. The Reasonable Use Doctrine can be used	
		to promote such practices. Regardless of whether	The example presented by the commenter is the
		the State Water Board lists waterways for flow	type of strategy that will be explored through the
		impairments; the Board should use its broad	interagency and stakeholder meetings regarding

No.	Author	Comment	Response
		authority under the Reasonable Use Doctrine to	flows and the best avenues for maintaining
		prevent the waste and unreasonable use from	adequate flows.
		inefficient agricultural and other practices to	
		protect instream flows.	
		For example, public resources are expended to	
		conduct stream-by-stream studies to determine,	
		how much water fish need. However, these	
		studies are costly and time consuming; they	
		provide agencies an excuse to maintain the status	
		quo of no water for fish; and even when the	
		studies are completed, the recommended instream	
		flows are not enforced. For example, current	
		instream flow studies on the Scott River are	
		designed to meet requirements of Public	
		Resources Code 10000-10005, but not the	
		aforementioned Reasonable Use or Public Trust	
		doctrines. This approach allows the State Water	
		Board to not wait for the Department of Fish and	
		Wildlife to present their studies before taking	
		action to get water back into streams. Instead of	
		continuing to conduct stream-by-stream studies,	
		the State Water Board should redesign current and	
		future instream flow studies so they quantify	
		instream flows necessary to meet California's	

No.	Author	Comment	Response
		legal obligations under the Reasonable Use and Public Trust doctrines.	
3.7	California Coastkeeper Alliance	The State Water Board should produce a legal memo or fact sheet describing the limitations of water rights. Guidance on the Reasonable Use and Public Trust doctrines limit water rights would empower NGO advocates and water users to advance collaborative solutions. Without State Water Board guidance on the matter, local water users are unwilling to make compromises on their wasteful and unreasonable water use.	Comment noted. The application of waste and unreasonable use provisions is situational. The State Water Board will continue to enhance the information and resources it provides on its website related to waste and unreasonable use and public trust, including references or actions taken by the Board that may provide context for stakeholders.
3.8	California Coastkeeper Alliance	 The State Water Board can restore instream flows by taking the following actions: (1) Develop Water Bond guidance with grantscoring criteria that prioritizes projects that permanently dedicate water for instream use; (2) Require that water conserved with public funds be permanently dedicated to meet instream flow needs via CA Water Code Section 1707; (3) Recognize tribal cultural and subsistence use of water as "beneficial." (4) Require applicants for new water rights to demonstrate that water is available for appropriation in excess of water necessary to meet 	The commenter provides several valid avenues that may be utilized by the State Water Board. The Division of Water Quality staff will ensure that staff in the Division of Financial Assistance is aware of this suggestion. Further, staff encourages the commenter to participate in the interagency flow meetings and to continue to coordinate with the State Water Board's Division of Water Rights.

No.	Author	Comment	Response
		public trust requirements, potential uses of unexercised riparian water rights, and unregistered pre-1914 water rights.	
3.9	California Coastkeeper Alliance	We strongly support the designation of Little River, Widow White Creek, Martin Slough, lower Elk River, Jolly Giant Creek, and Campbell Creek to the Federal Clean Water Act's list of impaired waters as impaired by high concentrations of fecal coliform bacteria, such as E. coli. Humboldt Baykeeper has monitored, collected and submitted data to support these listings back in 2010. These areas are frequently used for swimming and other recreation, domestic water supplies, commercial oyster farms, and recreational/subsistence shellfish harvest.	Comment noted.
4.0	California Trout	Our Coalition is aware of State Water Board and Regional Water Board deliberations regarding the Listing of water bodies on the CWA Section 303d list (Category 4c) for flow impairment. While we do not directly dispute evidence used by Regional Board staff to omit listing of waterbodies due to flow impairments, we agree with the Integrated Report's acknowledgement that "there is no Regional or State water quality objective,	Comment noted. To clarify, Water Board staff engaged in discussions, as did board members, but there were no deliberations or decision making which would require public notice or meeting in accordance with the Bagley-Keene Open Meeting Act.

No.	Author	Comment	Response
		narrative or numeric, related to flow, and that lack of such a methodology for assessing flow impairments makes appropriate listing	
		determinations difficult.	
4.1	California Trout	The State Water Board should support the Regional Water Board's upcoming March 11, 2015 workshop to consider a regional approach to evaluate flow alteration impairment through the Integrated Report process and support the Regional Boards efforts to conduct in stream flow studies and develop flow objectives.	The State Water Board fully supported and participated in the workshop at the North Coast Water Board on March 11, 2015. State Water Board Member Steve Moore is the State Water Board liaison to Region 1 and participated in the meeting. State Water Board staff from the Division of Water Rights, Division of Water Quality, and Office of Chief Counsel also presented information at that workshop.
			The goal of this workshop was to present water quality regulatory approaches to address low flows, with particular focus on the development and implementation of flow objectives. The workshop was not intended to address the development of a statewide approach to evaluating flow impairment.
4.2	California Trout	Support efforts to identify funding sources to support expanded flow measurement efforts throughout coastal water sheds (for example, through appropriate use of Proposition1 funds).	The State Water Board is committed to exploring potential funding sources to help support efforts related to flow issues.

No.	Author	Comment	Response
4.3	California Trout	State Board should consider approaches that can be effectively applied across the diverse and	Comment noted. The North Coast Water Board workshop on March 11, 2015 prompted
		complex hydrology of the coastal California	discussion of regulatory approaches for
		watersheds without undue expenditure of limited	addressing the diverse and complex hydrological
		resources. An approach relying only on site-	factors associated with flow. The meeting had a
		specific flow studies would be exceedingly	particular focus on regional flow objective
		challenging, exhaust available funding resources	development that could be used to focus limited
		and require many years of studies.	resources.
4.4	California Trout	We encourage State Board to adopt a regionalized	A regionalized approach to addressing flow
		approach similar to the North Coast Instream	criteria was discussed at the March 11, 2015
		Flow Policy immediately on an interim basis	North Coast Water Board workshop.
		followed by a thorough review and validation.	
		We seek to work with Regional and State Water	The State Water Board will draw on what has
		Board staffs to consider our approach.	been learned through implementation of the North
			Coast Instream Flow Policy in considering future
			actions that may apply to other areas of the state.
			Further, the Division of Water Rights continues to
			investigate and develop regional methods to
			determine appropriate streamflows, which could
			be used to adopt principles and guidelines for
			maintaining instream flows in areas of the state
			other than those covered by its instream flow
			policy, as authorized by Wat. Code section
			1259.4, subd. (a)(2).

No.	Author	Comment	Response
4.5	California Trout	In closing, we welcome the opportunity to work with State and Regional Water Board staff to participate in a working group with inter-agency coordination from CDFW, the Division of Water Rights, the Division of Water Quality, and other stakeholders to develop a strategy to help protect the State's public trust resources now being	Comment noted.
5.0	Conton for	threatened by depleted low flows.	The Listing Deliay in offect for this listing avelo
5.0	Center for Biological Diversity	The State Board has failed to consider ocean acidification in its water quality assessment, counter to EPA's recommendations and the requirements of the Clean Water Act. The Board must solicit and evaluate data on ocean acidification and identify water segments that are violating water quality standards.	The Listing Policy in effect for this listing cycle (adopted 2004) provides, "Requests for review of specific listing decisions must be submitted to the SWRCB within 30 days of the RWQCB's decision." (See Section 6.3.) Adhering to that process requirement, which was not done in this case, is the appropriate manner to appeal a listing decision made by the Regional Board. Nevertheless, the State Water Board provides the following responses:
			When Water Board staff conduct an assessment of water quality for the California 305(b) reporting and 303(d) listing, Water Board staff reviews the data and information collected from monitoring locations around the state that meet the assessment methodology described in the Water

No.	Author	Comment	Response
			Quality Control Policy for Developing California
			Clean Water Act Section 303 (d) List (Listing
			Policy)
			(http://www.waterboards.ca.gov/water_issues/pro
			grams/tmdl/docs/ffed_303d_listingpolicy093004.
			pdf). If data show that water quality does not
			meet the applicable water quality standard for a
			pollutant, the water body segment is listed on the
			303(d) list, which requires a TMDL (Total
			Maximum Daily Load).
			The Center for Biological Diversity (Center)
			provided scientific papers on research showing
			that carbon dioxide levels are expected to rise,
			which will in turn cause changes in the ocean
			chemistry. Staff reviewed the scientific papers
			provided by the Center; specifically, the research
			conducted in Central California near Monterey
			Bay. The research was based on carbon dioxide
			experiments. As discussed in "Utility of deep sea
			CO2 release experiments in understanding the
			biology of high CO2 ocean: Effects of
			hypercapnia on deep sea meiofauna" Section 4,
			Discussion, pages 12 through 15, variation in pH
			observed in the carbon dioxide release

No.	Author	Comment	Response
			experiments did not allow the researchers to
			examine the biological impact caused by increases
			in carbon dioxide. It appeared that during the
			carbon dioxide experiments, a pH reduction of 0.6
			pH units comparing to the control areas was
			observed, and the accuracy of the sensors was
			suspected. During the experiments carbon
			dioxide concentrations (measured as pH) varied
			throughout all experiments. This high variability
			in carbon dioxide and pH made it impossible to
			interpret the dose tolerance response of animals to
			hypercapnia that could trigger physiological stress
			or death for any of the animals studied. The
			author stated on page 15 that "understanding of
			the biological and ecological consequences of
			increased hypercapnia over shallow and deep
			waters of the world ocean will require knowledge
			of the physiological responses of organisms as a
			function of the severity and duration of
			hypercapnia."
			The California Listing Policy requires that we
			consider only data and information that meet the
			minimum quality assurance requirements as it
			outlined in "Data Quality Assessment Process",

No.	Author	Comment	Response
			Section 6.1.4 of the Listing Policy: "Even though
			all data and information must be used, the quality
			of the data used in the development of the section
			303(d) list shall be of sufficient high quality to
			make determinations of water quality standards
			attainment." The variable pH data do not meet the
			data quality requirements described in the Listing
			Policy. Therefore, the research results cannot be
			used for 303(d) listing.
			If data for pH specific to California's marine
			waters are available for assessment during the
			next listing cycle, that data will be evaluated
			under the provisions of the Listing Policy using a
			weight-of-evidence approach to evaluate the lines
			of evidence based on the applicable water quality standard. The State Water Resources Control
			Board and the Regional Water Quality Control
			Boards solicit all readily available data and
			information prior to the evaluation process. We
			encourage you to submit your data specific to
			California's marine waters when solicitation for
			data is announced, and it will be evaluated for the
			next 303(d) listing cycle decisions.

No.	Author	Comment	Response
5.1	Center for	Data submitted by the Center was not evaluated	See Response to Comment 5.0.
	Biological	by the State Board. The Center has previously	
	Diversity	provided supporting materials on the impacts of	
	-	ocean acidification and submitted scientific	
		information supposing the inclusion of ocean	
		waters on the 303(d) list. Ocean acidification	
		imposes a serious threat on marine life. California	
		should list ocean waters as impaired.	
5.2	Center for	California has an independent duty to evaluate	See Response to Comment 5.0.
	Biological	ocean acidification during its water quality	
	Diversity	assessment (Environmental Protection Agency	The State Water Board's proposed 303(d) List
	-	2010). Specifically, EPA directed states to	portion of the Integrated Report only pertains to
		evaluate ocean acidification data for their 2012	waters within the jurisdiction of the Regional
		integrated reports (Environmental Protection	Water Quality Control Boards for the North
		Agency 2010). The Clean Water Act provides that	Coast, Lahontan, and Colorado River regions.
		states must "evaluate all existing and readily	
		available water quality-related data and	Pursuant to section 6.1.2.1 of the Listing Policy,
		information to develop the list." 40 C.F.R. §	the Water Boards have an obligation to seek all
		130.7(b)(5); see also Sierra Club v. Leavitt, 488	readily available data and information through
		F.3d 904 (11 th Cir. 2007). Beyond reviewing the	their solicitation process, but to undertake an
		information submitted by the Center, California	independent evaluation of ocean acidification
		must also evaluate pH, biological information, and	beyond the data and information submitted to it.
		other monitoring data that is available to it and	The Listing Policy was developed to establish a
		seek out ocean acidification data from state,	standardized approach for developing the CWA
		federal, and academic research institutions. EPA's	303(d) List to achieve the overall goal of

No.	Author	Comment	Response
		2010 memo and Integrated Report Guidance	achieving water quality standards for California's
		discussed several sources, including the National	surface waters.
		Oceanic and Atmospheric Administration data	
		(EPA 2010: 7-9; EPA Guidance 30-31). There are	The Pacific Ocean overlaps jurisdictional
		now several sources for high resolution ocean	boundaries for multiple Regional Water
		acidification data.	Boards. Since this is a national and global issue,
			the regions are not addressing this issue
		California has failed to meet the Clean Water	individually as it is more appropriately addressed
		Act's requirements to evaluate all readily	by the U.S. EPA. To this point, the U.S. EPA
		accessible data and information on ocean	recently released a document titled "Strategic Plan
		acidification. To correct its integrated report and	for Federal Research and Monitoring of Ocean
		303(d) list, the Board needs to obtain and evaluate	Acidification" (Ocean Acidification Research
		all relevant parameters of ocean acidification	Plan) which will guide research and monitoring
		data available from these sources that serve	that will improve our understanding of ocean
		as clearinghouses for ocean acidification data,	acidification, its potential impacts on marine
		especially those that are specific to California's	species and ecosystems, and adaptation and
		waters.	mitigation strategies.
			The State Water Board adopted an amendment to
			the Listing Policy, which defines (at section 6.1.1)
			all readily available data and information for the
			development of the CWA section 303(d) List as
			that data and information that can be submitted to
			the California Environmental Data Exchange
			Network (CEDEN). The State Water Board

No.	Author	Comment	Response
			encourages the commenter to submit California
			specific data into CEDEN.
5.3	Center for	The State Water Board must evaluate whether any	See Responses to Comments 5.0 and 5.2.
	Biological	of California's ocean waters must be included on	
	Diversity	the 303(d) list because current measures are not	Evaluating current preventative measures is
		stringent enough to prevent ocean acidification	beyond the scope of listing for the purposes of
		and achieve water quality standards. 33 U.S.C. § 1313(d).	CWA section 303(d).
			When applicable data is submitted into CEDEN it
		California Ocean Plan at 3 (2012). These	will be evaluated and assessed consistent with the
		beneficial uses are not being attained by ocean	Listing Policy and applicable water quality
		waters off California due to ocean acidification.	standards.
		California must consider ocean acidification data	
		in light of designated uses and applicable	
		standards. The standards for chemical and	
		biological characteristics require that:	
		•The pH shall not be changed at any time more	
		than 0.2 units from that which occurs naturally.	
		•Marine communities, including vertebrate,	
		invertebrate, and plant species, shall not be	
		degraded.	
		•The natural taste, odor, and color of fish,	
		shellfish, or other marine resources used for	
		human consumption shall not be altered.	

No.	Author	Comment	Response
		 The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health. Ocean plan at 6 & 10. Finally, California's antidegradation policy requires the maintenance of existing high quality. Resolution 68-16. Ocean acidification is causing violations of these standards in certain waters of California. 	
5.4	Center for Biological Diversity	 While the state has failed to evaluate ocean acidification data, the Center's prior submissions indicate water quality problems and violations of the above standards that warrant listing. Without repeating former comments, I will urge the state to evaluate the Center's submissions as well as publicly available monitoring data on ocean acidification. Moreover, this comment focuses on new scientific data that underscores the fact that these standards are already not being attained. Shellfish in the California Current large marine ecosystem have experienced massive mortality during this water quality assessment period. Hatcheries and natural shellfish have experienced 	See Responses to Comments 5.0 and 5.2. The new information submitted by the commenter is outside of the solicitation for the 2012 California Integrated Report. State Water Board staff encourages the commenter to submit all applicable California data and information related to the water quality of the State's oceans into CEDEN for future assessments.

No.	Author	Comment	Response
		reproduction failures from California to	
		Washington (Feely et al. 2012). A new study by	
		Waldbusser et al. identified aragonite saturation as	
		the factor causing limited growth and mortality	
		for shellfish (Waldbusser & Hales 2014). Pacific	
		oyster larvae in hatcheries in the Pacific	
		Northwest experienced massive mortality due to	
		ocean acidification (Barton et al. 2012). The	
		Waldbusser follow-up study identifies saturation	
		state as the principal cause of the adverse	
		biological impacts (Waldbusser & Hales 2014).	
		Notably, California already experiences levels of	
		aragonite undersaturation that have been linked to	
		harmful effects in shellfish (Feely et al. 2008;	
		Gruber et al. 2012; Hauriet al. 2013). Such	
		conditions in experiments caused a forty percent	
		increase in deformities and death of rare northern	
		abalone (Crim et al. 2011). Another study of	
		Olympia oysters, a foundation species along the	
		coast, showed that ocean acidification stunted	
		their growth (Hettinger et al. 2012). California	
		mussels also grew thinner and weaker shells that	
		are more vulnerable to mortality, predation, and	
		desiccation (Gaylord et al. 2011).	

No.	Author	Comment	Response
		Off of California's coast, scientists have	
		documented harmful biological consequences in	
		marine communities of plankton. In a recent study	
		of pteropods in the California Current (Bednaršek	
		et al. 2014), scientists found 53% of onshore	
		individuals and 24% of offshore individuals to	
		have severe dissolution damage that was	
		correlated positively with the percentage of	
		undersaturated water withrespect to aragonite	
		(id.). Further, scientists estimate that shell	
		damage due to ocean acidification has doubled in	
		near shore habitats since pre-industrial conditions	
		and will triple by 2050 (id.). Because pteropods	
		form the base of the foodweb, providing food for	
		many species of fish, a decline in pteropods could	
		have far-reaching ecosystem impacts.	
		Additionally, ocean acidification has likely	
		increased the toxicity of harmful algal blooms in	
		Southern California that have both caused	
		objectionable aquatic growth and concentrated	
		toxins in seafood that are harmful to human	
		health. The toxicity of harmful algal blooms	
		increases with ocean acidification. Ocean	
		acidification conditions can increase toxins as	

No.	Author	Comment	Response
		much as five-fold in harmful algae that can poison	
		marine mammals and even cause paralytic	
		shellfish poisoning in people (Fu et al. 2012;	
		Avery O Tatters et al. 2013; Tatters et al. 2012;	
		Avery O. Tatters et al. 2013). The neurotoxin	
		domoic acid in diatom Pseudo-nitzschia increased	
		with acidification as did the toxicity of	
		Alexandrium catenella (Id.). A -0.5pH change	
		caused toxin production in the diatoms to increase	
		4.2-fold and a -0.3pH unit change increased the	
		toxicity 2.5-fold (Tatters et al. 2012). The	
		experiments done in these studies were at levels of	
		CO2 that are already occurring in California, and	
		the increase in the toxicity of harmful algal	
		blooms in Southern California may be consistent	
		with ocean acidification (Id.) Already, these	
		harmful algal blooms have been related to mass	
		mortalities of fish and marine mammals and these	
		studies suggest that the damage will become much	
		worse.	
		While these are a few new studies highlighted, the	
		body of science previously submitted plus the data	
		sets recommended herein provide ample	
		information on ocean acidification for California	

No.	Author	Comment	Response
		to evaluate against its water quality standards. A	
		failure to do so undermines the intent and	
		provisions of the Clean Water Act.	
6.0	Earth Law Center	The State Water Board should recognize on the	See Responses to Comments 1.0 through 1.2, 1.4,
		303(d) list the waterways on the Coalition's	and 3.0
		May 15, 2013 shortlist (attached) impaired for low	
		or no flow.	For the current listing cycle pertaining to the State
			Water Board's consideration of approving the
			2012 Integrated Report, the notice of solicitation
			was transmitted on January 14, 2010. The
			deadline for the submission of data and
			information was August 30, 2010. State Water
			Board staff examined and reviewed all data that
			was timely submitted. Data and information
			submitted subsequent to the deadline is not
			considered for purposes of the 2012 Integrated
			Report for this listing cycle.
			The data submitted in response to the 2010 Notice
			of Solicitation had identified more waters than the
			commenter references on its "top ten" shortlist.
6.1	Earth Law Center	At minimum, list the Scott River and Shasta	See Responses to Comments 1.0 through 1.2, 1.4,
		River, which North Coast staff found to have	and 3.0.
		sufficient information and data submitted to meet	
		all criteria of staff suggested methodology for	The North Coast Water Board staff found that the

No.	Author	Comment	Response
		characterization as impaired.	only two waters with the minimum information
			(four criteria identified by the Regional staff)
			necessary to characterize a potential impairment
			under Category 4c of the Integrated Report, are
			the Scott and Shasta Rivers. However, the North
			Coast Water Board further concluded:
			The Scott and Shasta rivers are both listed as
			impaired for temperature, the TMDLs
			document altered flow conditions as one of
			many factors contributing to the temperature
			impairment, and the Regional Water Board is
			addressing altered flow concerns in these
			rivers in the context of the temperature
			impairments. A protocol is needed for
			distinguishing between a water body that is
			impaired by a pollutant and exacerbated
			by altered flow conditions, versus a water
			body that is primarily impaired because of
			flow conditionsthe methodology has not
			been vetted state-wide and has not been
			determined to be appropriate for assessing
			flow impairments through the Integrated
			Report process. An appropriate methodology
			should be developed in consultation with the

No.	Author	Comment	Response
			State Water Board, the Division of Water
			Rights, other regional water boards, and
			stakeholders. Before Regional Water Board
			staff can make a decision whether or not to
			place a water body in Category 4c for altered
			flows, a methodology should be in place that
			is scientifically defensible and repeatable so
			that it can be consistently applied in the
			Integrated Report process state-wide to
			determine if altered flow is causing the non-
			attainment of water quality standards now
			and in the future to any stream in the state
			(page 67 of the Regional Staff Report).
			State Water Board staff also evaluated these water
			bodies and came to similar conclusions. State
			Water Board staff attempted to utilize the existing methodology available in the Listing Policy using
			not only information that was submitted but also
			other information from internal and external
			sources. While there was sufficient information
			identified for these two waters, the applicability of
			utilizing the Integrated Report process for
			addressing waters with flow impairments that are
			already impaired by pollutants has still not been

No.	Author	Comment	Response
			fully examined.
6.2	Earth Law Center	In the alternative these (ten) "shortlist" water	See Responses to Comments 1.0 through 1.2, 1.4,
		bodies should be listed as impaired due to altered	3.0, and 6.1.
		flow on the 305(b) Report per the Clean Water	
		Act and EPA guidance, and are an important	
		precursor to further action under local, state and	
		federal laws and policies to prevent further	
		degradation and ensure the long-term health of the	
		state's waterways. Many other states already list	
		waterways as impaired due to altered flow.	
		California should catch up rather than continuing	
		to delay proper identification of all impairments in	
		order to keep and return needed flow in our rivers	
6.2		and streams.	
6.3	Earth Law Center	The CWA calls for stakeholder involvement in the	State and Regional Water Board staff participated
		303(d)/305(b) process through the submission of	in several meetings with stakeholders as indicated
		citizen data and comments. The Coalition and	by the commenter, and the State Water Board
		other members of the public have responded over the last four and a half years with data, lines of	agrees that stakeholder participation is a vital element to informed decision making. State
		evidence, legal analysis, and repeated accounts of	Water Board staff did take into account the many
		the necessity of, and practical benefits associated	conversations and information provided by the
		with, the requested flow impairment listings. Yet,	stakeholders while compiling the Draft Staff
		virtually none of the public's input is reflected in	Report. The public participation and discussion
		the Draft Staff Report on the 2012 California	regarding flow impairment and the Integrated
L		the Brait Starr Report on the 2012 Cultoning	100 around 110 w impairment and the integrated

No.	Author	Comment	Response
		Integrated Report [Clean Water Act Sections 303(d) and 305(b)] (Draft Staff Report). This raises serious questions as to the effectiveness and future viability of state-citizen partnerships, which are essential to ensuring the good health of the state's waterways. This is not a one-way process; the public must be involved in both the provision of relevant local data, and in the application of impairment listings to protect local waterways.	Report was highly valued by staff, and staff plans to continue the coordination as it moves forward examining flow impairments.
6.4	Earth Law Center	The CWA calls for 303(d) listings where beneficial uses are impaired – whether by pollution or pollutants. California can and should choose to include flow impairments under Category 4c of its Section 303(d) list, or, at minimum, must identify flow-impaired waterways as such in the state's overall Integrated Report.	See Responses to Comments 1.0 through 1.2, and 3.0. The CWA section 303(d) requires the identification of impairments of water quality standards and the development of TMDLs to address those impairments within a reasonable time frame. Category 4c of the Integrated Report is not considered to be part of the 303(d) List of impaired waterbodies by either the State Water Board or U.S. EPA. The State Water Board considers waters in Category 4a (a TMDL has been developed), 4b (other regulatory controls obviate the need for TMDL development), and 5 (TMDL needed) to be those on the statewide

No.	Author	Comment	Response
			303(d) List while U.S. EPA considers only
			Category 5 waters to be part of the federal 303(d)
			List.
6.5	Earth Law Center	A flow objective is not necessary to make a listing for flow impairment. Water quality standards encompass both the designated uses of a water hody and the water quality criteria established to	See Responses to Comments 1.0, 1.1, and 1.4. The State Water Board agrees that beneficial use
		body and the water quality criteria established to protect those uses, as well as antidegradation requirements. As long as an impairment of a beneficial use can be shown, the waterway is impaired regardless of the existence of adopted criteria. Available data shows clear beneficial use impairments due to low flow for "shortlist" waterways, particularly the Scott and Shasta Rivers. These waterways should accurately be listed as impaired due to altered flow.	impairment is sufficient (with or without a flow objective) but determining the beneficial use impairment is extremely difficult for staff without a methodology in place, especially for something as complex as flow. The State Water Board and North Coast Water Board staff could not clearly determine if the beneficial uses of a water quality segment were impaired solely due to stream flow or lack thereof. In many water segments, flow is seasonal resulting in dry periods during the summer months. If a clear standard or methodology was developed to examine flow and other forms on non-pollutant related pollution, Water Board staff would have a transparent and consistent way to characterize beneficial use
			impairments caused by such pollution.The Water Boards have assessed applicable water quality standards for the Scott and Shasta Rivers

No.	Author	Comment	Response
			and the impairments are identified on the 303(d)
			List as follows: Klamath River HU, Shasta River
			HA is listed for: Aluminum (Municipal supply
			beneficial use), Low Dissolved Oxygen (Cold
			freshwater habitat beneficial use), and
			Temperature (Cold freshwater habitat beneficial
			use). The Dissolved oxygen and Temperature
			listings are being address by a TMDL that was
			approved in 2007.
			Klamath River HU, Scott River HA is listed for:
			Aluminum (Municipal supply beneficial use),
			Biostimulatory Conditions (Cold freshwater
			habitat beneficial use)*, Dissolved Oxygen (Cold
			freshwater habitat beneficial use)*, pH (Cold
			freshwater habitat beneficial use)*, Sedimentation
			(Cold freshwater habitat beneficial use), and
			Temperature (Cold freshwater habitat beneficial
			use). The Sedimentation and Temperature listings
			are being address by a TMDL that was approved
			in 2006. The listings with an asterisk are new
			listings proposed for this cycle.
6.6	Earth Law Center	Similarly, a state-adopted methodology is not	See Responses to Comments 1.0, 1.1, 3.0, and 6.5.
		necessary to list "shortlist" flow-impaired	
		waterways–especially the Scott and Shasta Rivers.	The Weight of Evidence approach referenced by

No.	Author	Comment	Response
		Numerous other states successfully list for flow	the commenter is more accurately referred to as
		impairment without a standardized methodology.	the Situation-Specific Weight of Evidence
		Even if the State Water Board insists on utilizing	Approach within the Listing Policy (at section
		a methodology, the Listing Policy's "weight of	3.11) which may be utilized to assess standards
		evidence" can be used to support flow listings.	impaired by pollutants but not pollution. The
			Listing Policy was designed for use with pollutant
			based impairments. Given the State Water
			Board's broad authorities over flow, the federal
			government's limited authority over flow, there is
			little demonstrated benefit to Category 4c
			impairment identification.
6.7	Earth Law Center	Sufficient data are available on multiple North	See Responses to Comments 1.0, 1.1, 3.0, and 6.1.
		Coast waterways (especially the Scott and Shasta	
		Rivers) to find that flow alterations are causing	State Water Board staff determined that
		impairment. The Draft Staff Report fails to even	assessment for flow based impairment could not
		acknowledge the North Coast staff's recognition	be adequately performed utilizing existing
		of strong flow impairment data submitted on the	guidance and methods.
		Scott and Shasta Rivers, which met all the criteria	
		of the North Coast staff's suggested methodology	
		for flow listings. The Draft Staff Report must be	
		revised to recommend flow listings for at least the	
		Scott and Shasta Rivers and to describe in detail	
		the procedure and other justifications for the	
		rejection of listings for other "shortlist"	
		waterways.	

No.	Author	Comment	Response
6.8	Earth Law Center	The Draft Staff Report incorrectly concludes that	See Response to Comments 1.0 and 1.1.
		water segments cannot be listed as flow-impaired	
		under Category 4c when the same water segment	
		is listed as impaired by a pollutant. To the	
		contrary, U.S. EPA's 2006 Guidance specifically	
		demonstrates that states using a "multi-category"	
		reporting framework can list a waterway in both	
		Category 4c and 5. States using a "single	
		category" reporting framework can list a	
		waterbody with both Category 4c and 5	
		impairments. For example, numerous states (such	
		as Idaho, Ohio and Tennessee) list waterways in	
		Category 4c for pollution even when pollutant	
		impairments are identified for the same segment,	
		with EPA approval.	
6.9	Earth Law Center	Pollutant listings do not effectively address flow,	See Responses to Comments 1.0 and 1.1.
		since only pollution listings properly and directly	
		address flow impairment. This is why EPA's 2006	
		Guidance distinguishes "lack of adequate flow" as	
		a cause of impairment, rather than solely as a	
		source of impairment.	
6.10	Earth Law Center	Those waterways already listed as impaired due to	See Response to Comment 3.4.
		altered flow in Region 4 should not be delisted	
		during the next Listing Cycle. Delisting these	
		waterways is neither required by law nor	

No.	Author	Comment	Response
		warranted by the data that correctly justified the initial listings.	
6.11	Earth Law Center	California should choose to list waterways as impaired due to altered flow on its 303(d) list rather than the 305(b) Report. Other states take this approach, such as Tennessee (which places all impaired waterways on its 303(d) list, including those in Category 4c) and Ohio (which lists flow as a cause of impairment on its 303(d) list if there is also a pollutant impairing the waterway). If the State Water Board chooses not to take this approach, they should at least list flow-impaired waterways on the 305(b) Report.	See Responses to Comments 1.0, 1.1, and 3.0. It is State Water Board staff's interpretation that waterbodies currently listed for pollutant based impairments should not be included for pollution based impairments as well. The pollution based impairments should be addressed via the TMDL or other regulatory process. If all pollutant based impairments are eventually addressed and the pollution impairments still exist, then placement into Category 4c could be appropriate.
6.12	Earth Law Center	While the flow programs listed in the Draft Staff Report are important, they are simply insufficient to both keep water in threatened and impaired waterways and ensure that additional water is put back in those waterways. The state must allow local citizens to utilize the tools they need to protect waterways – these tools include formal flow impairment identification where appropriate.	It is unclear what can be gained from a waterbody being place onto Category 4c for pollution impairment when that same water is already on the 303(d) List for pollutant impairment. Citizens are able to utilize the fact that these waters area already impaired due to pollutants, some of which have identified flow as a contributing factor to those impairments, as a tool to affect local projects, policy, and obtain funding for restoration.
6.13	Earth Law Center	In addition to ensuring the proper identification of the state's impaired waterways, there are	See Responses to Comments 1.5, 6.6, and 6.12.

No.	Author	Comment	Response
		numerous practical benefits of flow listings that	Given the State Water Board's broad authorities
		expand upon and complement other identified,	over flow and the federal government's limited
		existing programs to restore flow. These include:	authority over flow, there is little demonstrated
		supporting better local land use and planning	benefit to Category 4c impairment identification.
		decisions that keep flow in impaired waterways,	
		ensuring greater prioritization for restoration	
		funding, easing of the burden of proof in state	
		regulatory processes that can address flow needs,	
		and allowing for the state to better track and	
		highlight waterway impairment causes (thereby	
		prioritizing resources to address those waterways	
		more efficiently).	
6.14	Earth Law Center	A May 15, 2013 letter to the State Water Board	Comment noted. The State Water Board greatly
		from ELC and California Coastkeeper Alliance	appreciates the coordinated efforts between its
		(CCKA) (attached for reference) further described	staff and Earth Law Center staff to determine if
		in detail the benefits of flow listings and attached	and how flow impairments could be included
		a "shortlist" of waterways believed by Coalition	within the CWA sections 303(d) and 305(b).
		members and others to be "clearly and	Ultimately, staff concluded that the lack of a
		incontrovertibly impaired." After a meeting with	consistent methodology for assessing non-
		Chair Marcus and upper management in Summer	pollutant related pollution within the California
		2013, ELC provided as requested further details	Integrated Report process did not allow for an
		on the listing processes other states use to identify	affirmative determination of beneficial use
		flow impairment. Again at the request of the State	impairment. This conclusion should not diminish
		Water Board, in September 2014 ELC researched	the discussion and collaboration between Earth
		and provided details on the exact categorization	Law Canter and the State Water Board.

No.	Author	Comment	Response
		of the flow impairment listings in ten states	
		around the country (i.e., Category 4c versus 5,	
		303(d) versus 305(b), etc.).	
6.15	Earth Law Center	Despite years of increasingly detailed legal and	See Responses to Comments 1.0, 1.1, 1.4, 3.0 and
		factual support, however, the North Coast staff	6.3.
		listed no waterways as flow-impaired on either the	
		303(d) list or the 305(b) Report. The primary cited	
		reason in its Public Review Draft Staff Report for	
		the 2012 Integrated Report (Public Review Draft	
		Staff Report) was that the "Listing Policy does not	
		provide guidance for evaluation of water quality	
		impairments related to reduced flow." However,	
		as the Coalition explained in its joint April 1,	
		2014 comment letter to the State Water Board and	
		at subsequent North Coast workshops in both	
		Santa Rosa and Redding, this reasoning is flawed.	
		The CWA, implementing regulations and U.S.	
		EPA guidance do allow for flow listings; a	
		specific methodology for such is unnecessary in	
		cases where there are clear beneficial use	
		impairments; and listings can move forward	
		where the data support such listings. Thus the	
		Coalition found in its letter to the State Water	
		Board the "failure to include any flow listings to	

No.	Author	Comment	Response
		be unsupportable."	
6.16	Earth Law Center	After the North Coast's revised Staff Report for	See Responses to Comments 4.1, 6.1, and 6.3.
		the 2012 Integrated Report (North Coast Staff	
		Report) was released on July 30, 2014, the	The State Water Board will consider adopting the
		Coalition submitted additional comments	statewide list at its April 8, 2015 meeting. The
		(attached for reference) and testified with	North Coast Water Board may modify decisions
		numerous other supporters of the flow listings at	of its 303(d) list or 305(b) report during the next
		the August 14, 2014 North Coast Board meeting.	listing cycle.
		(Notably, no one spoke in opposition to the	
		listings.) The Coalition supported the North Coast	The data submitted as part of the 2012 Notice of
		staff's assessment of strong flow impairment	Solicitation is available for review online at
		evidence for the Scott and Shasta Rivers, but	http://www.waterboards.ca.gov/water_issues/prog
		opposed the decision not to list these waterways in	rams/tmdl/ref_menu.shtml. Further the North
		light of this data showing impairment.	Coast Water Board staff report and supporting
		While the North Coast Board ultimately approved	information for its Regional Integrated Report is
		the 303(d) list without flow impairment listings,	incorporated by reference in Appendix K of the
		the Resolution's subsection on flow (as described	Draft Staff Report (See Staff Report, p. 25, which
		further below) specifically "reserves its right to	states:
		modify the 303(d) List in accordance with	
		applicable rules and regulations" The hearing	"The administrative record contains all
		following up on this direction is set for March 11,	records used to develop the 2012
		2015. Considering the significant, regular public	California Integrated Report. Records are
		involvement that has occurred for four and a half	any documents produced, received,
		years, the Coalition is surprised that the Draft	owned, or used by the State Water Board

No.	Author	Comment	Response
		Staff Report not only recommended no flow impairment listings, but also failed to recognize the extensive arguments and information provided by the Coalition and its members, often at the State Water Board's own request. Indeed, the Draft Staff Report actually takes a step backwards from the North Coast Staff Report by failing to specifically address the strong flow impairment data available for the Scott and Shasta Rivers, data recognized by the North Coast staff. Based on the extensive information provided by the public, as well as other readily available information (which the State Water Board is required to consider), the Coalition asks that the Draft Staff Report be revised to list those North Coast waterways on the "shortlist" as flow- impaired.	and Regional Water Boards regardless of media, physical form, or characteristics. An index of the references for data and information in the administrative record used for development of the 2012 California Integrated Report is presented in Appendix K of this report."
6.17	Earth Law Center	Effective state-citizen partnerships are essential for ensuring the good health of California's waterways. Failing to recognize any waterways as flow-impaired or meaningfully respond to the specific points the Coalition and other stakeholders have raised for years questions the future effectiveness and viability of public-state partnerships in the context of the 303(d)/305(b)	See Responses to Comments 4.1 and 6.3. The State Water Board agrees that state-citizen partnerships are essential for ensuring the health of California waters and to develop current and future strategies to protect and enhance those waters. The Draft Staff Report was written in response to the stakeholder input on the topic of

No.	Author	Comment	Response
		process and its implementation. The Coalition	flow and to provide a cohesive description of the
		asks that the Draft Staff Report be revised to	issues faced by Water Board staff with examining
		reflect the significant stakeholder involvement in	flow related issues within the Integrated Report
		the 303(d)/305(b) process, particularly by listing	framework. Water Board staff has actively
		"shortlist" waterways as flow-impaired pursuant	participated in and encouraged communication
		to Section 303(d) – especially, the Scott and	with the stakeholders on this issue. State Water
		Shasta Rivers – and responding to other points	Board staff participated during the March 11,
		raised by the Coalition in these comments and	2015 workshop and will promote the continued
		previous comments.	dialogue with stakeholders and other agencies
			moving forward.
6.18	Earth Law Center	CWA Section 303(d)(1)(A) establishes the	See Responses to Comments 1.0, 1.1 and 6.11.
		requirements for the 303(d) list as follows:	
		Each state shall identify those waters within its	The State Water Board disagrees with the
		boundaries for which the effluent limitations	commenter's interpretation that pollution-caused
		required by section 301(b)(1)(A) and section	impairments are appropriately identified on the
		301(b)(1)(B) are not stringent enough to	CWA section 303(d) List. That assertion is also
		implement any water quality standard applicable	contrary to U.S. EPA's guidance on developing
		to such waters. The State shall establish a priority	the 303(d) list.
		ranking for such waters, taking into account the	
		severity of the pollution and the uses to be made	Commenter's reliance for such interpretation on
		of such waters.	CWA section $303(d)(1)(A)$ containing the term
			"pollution" is misplaced. In context, the phrase
		In other words, if (after the identified Section 301	"taking into account the severity of the pollution"
		controls are put in place) a water body's water	pertains to a state's obligation to establish a
		quality standards are not being met, then "those	priority ranking for such waters. CWA section

No.	Author	Comment	Response
		waters" "shall" be identified under Section 303(d)	303(d)(1)(A) does not obligate states to identify
		-regardless of whether due to pollutant or	flow impaired waterways as commenter asserts.
		pollution. Indeed, Section 303(d)(1)(A), which	
		mandates such identification of impaired waters,	Pollution, as defined by the CWA is "the man-
		includes only the word "pollution." The word	made or man-induced alteration of the chemical,
		"pollutant" does not become relevant until Section	physical, biological, and radiological integrity of
		303(d)(1)(C), which addresses total maximum	water" (section 502(19)). In order to determine if
		daily loads (TMDLs). Identifying a waterway as	actions are resulting in the attainment of
		flow-impaired under Category 4c is thus	applicable water quality standards, you must first
		consistent with inclusion on the 303(d) list, which	identify an applicable water quality standard and a
		by the CWA's own language encompasses	method for assessing attainment. In the case of
		"pollution." The identification of flow-impaired	pollution you must also show that it is the result of
		waterways under Section 303(d)(1)(A) is a	made-made alterations and that no other pollutant
		separate and distinct task from determining	is causing water quality impairment.
		whether or not TMDLs are required to address	
		those impairments. This latter task is described in	
		CWA Section 303(d)(1)(C). Unlike Section	
		303(d)(1)(A), Section 303(d)(1)(C) does	
		specifically reference "pollutants," but in the	
		context of developing a TMDL only. In other	
		words, Section 303(d) of the CWA supports the	
		listing of all impaired waterways – whether	
		impaired by pollution or pollutants – and then the	
		development of TMDLs for the pollutant	
		impairments on the list.	

No.	Author	Comment	Response
6.19	Earth Law Center	The above argument was supported by North Coast Board Chair John Corbett, who stated at the August 14, 2014 North Coast Board meeting that "there is merit to the argument [under] 303(d)(1)(a) that you can list a water as being impaired as separate from particular pollutants." Chair Corbett also stated that he thinks the reasoning presented by ELC for flow impairment listings "is right." Chair Corbett accordingly asked that the final Resolution approving the 2012 303(d) list be amended to "add the phrase 'and reserving the right to add to the 303(d) list. Based on the CWA, as well as the statements offered by the Chair of the North Coast Board, the Draft Staff Report should be revised to properly include "shortlist" waterways – especially the\ Scott and Shasta Rivers – as flow impaired, preferably on the 303(d) list but if not, in the 305(b) Report.	 See Response to Comment 6.18. The California Integrated Report is updated on an ongoing basis. The decision to not include flow at this time does not preclude the addition of flow as part of a future Listing Cycle. Yet it is the State Water Board's view that such characterization would occur pursuant to its CWA section 305(b) reporting obligation. Resolve #15 of the North Coast Board Resolution R1-2014-0043 reads, "The Regional Water Board reserves the right to modify the 303(d) List in accordance with applicable rules and regulations, including the Listing Policy." As previously stated, it is the State Water Board's interpretation of the Clean Water Act that pollution based impairments are not part of the section 303(d) List. The Regional Water Board can modify its 303(d) List as part of future listing cycles, but adding flow to the 303(d) List would not be in accordance with the Listing Policy or other applicable rules and regulations.

No.	Author	Comment	Response
			Water Board staff will continue to coordinate with stakeholders and other agencies to better characterize flow impairments and to determine whether and, if so, how they should be incorporated into the Integrated Report process.
6.20	Earth Law Center	A flow objective is not necessary to make a listing for flow impairment. As long as an impairment of a beneficial use can be shown, the waterway is impaired and available data show clear BU impairment. The Draft Staff Report States that "without a numeric or narrative objective to apply as an evaluation guideline, the use of current assessment methods is not appropriate" (p. 11). This is incorrect. Water quality standards encompass both the designated uses of a water body and the water quality criteria established to protect those uses, as well as antidegradation requirements. Where low flows in rivers, creeks and stream have impaired a beneficial use, the water quality standards have been violated, and the water body segment must be listed under Section 303(d).	See Responses to Comments 1.0, 1.1, 1.4, 6.5, and 6.18.
6.21	Earth Law Center		See Perspanse to Comment 3.0
0.21	Earth Law Center	Moreover, from a practical perspective, waiting the numerous years likely needed to adopt flow	See Response to Comment 3.0.

No.	Author	Comment	Response
		objectives would cause corresponding years worth	Moreover, it is unclear how characterization of
		of harm to affected waterways, harm that could be	pollution related impairments would prevent harm
		prevented with timely identification of flow	to affected waterways.
		impairments. The next integrated report cycle for	
		the North Coast is 2018, and a flow objective may	The North Coast Water Board can incorporate off-
		well not be adopted by that date. Both the Draft	cycle decisions recommendations consistent with
		Staff Report and recent North Coast Board	the recently amended Listing Policy. The Draft
		Triennial Review actions support this concern;	Staff Report outlines the many other actions the
		these demonstrate that no one has committed to	State Water Board is undertaking to address flow
		the development of a flow objective, despite the	related issues and the commitment to participate
		insistence that one is needed.	in the upcoming flow related meetings. The
			March 11, 2015 workshop focused on regulatory
			approaches to address low flows with a particular
			focus on the development and implementation of
			flow objectives.
6.22	Earth Law Center	Other states have avoided this logjam and moved	See Response to Comment 6.11.
		forward with CWA-compliant, narrative flow	
		objectives that allow them to readily identify	
		flow-impaired waterways and take other	
		protective actions under the CWA. However,	
		California does not appear to be on this path.	
		Considering the low likelihood of a North Coast	
		flow objective being completed by any state entity	
		in the next several years, the State Water Board	
		should act now to list clearly flow impaired	

No.	Author	Comment	Response
		waterways, including the Scott and Shasta Rivers.	
6.23	Earth Law Center	The Draft Staff Report calls for a "consistent methodology for addressing pollution [] prior to including assessments of flow-related information" (p. 11). But as multiple letters from Coalition members to the North Coast Board and the State Water Board indicate, it is the CWA, its implementing regulations and U.S. EPA Guidance that constitute the overarching legal basis for state action – not a state-adopted methodology. If State Water Board staff insists on using an adopted methodology, the Listing Policy can serve this purpose. The Listing Policy states that where the "weight of evidence indicates non-attainment, the water segment shall be placed on the Section 303(d) list," even when all other Listing Factors do not result in a listing. Coalition members including ELC staff participated extensively in the drafting of the Listing Policy through the AB 982 PAG, and can attest that the weight of evidence approach was developed for such purposes. As the provided and readily available data show, the "weight of evidence" for "shortlist" waterways indicates impairments due to altered flow, and	See Responses to Comments 1.0, 1.1 and 6.6. Section 1, subsection 3, of the Listing Policy states in express terms the intent for the application of the weight of evidence listing factor: "3. <u>Data Assessment</u> : An assessment in favor of or against a list action for a waterbody- pollutant combination shall be presented in fact sheets. The assessment shall identify and discuss relationships between all available lines of evidence for water bodies and pollutants . This assessment shall be made on a pollutant-by- pollutant (including toxicity) basis. (Emphasis added.)"

No.	Author	Comment	Response
		such waterways should be listed for flow	
		impairments.	
6.24	Earth Law Center	A statewide policy for identifying flow impairments for the 303(d) list and/or 305(b) Report, if developed by the State Water Board for close cases (<i>i.e.</i> , cases unlike the Scott and Shasta Rivers), must comply with the letter and intent of CWA Section 303(d) to serve as a backstop to protect waterways where pollution controls fail to protect beneficial uses. Particularly in light of the state's significant deviation from the federally mandated, biennial 303(d)/305(b) Report schedule, any decision making structure to identify flow-impaired waterways must err on the side of recognizing and listing threatened and impaired waterways, rather than erecting further roadblocks to restoring essential flows. Delays for the development of a "flows listing policy" would interfere with the need to immediately identify the most egregious cases of water bodies impaired due to altered flow, including the Scott and Shasta Rivers.	See Responses to Comments 1.0, 1.1, and 3.0. Water Board staff would like to determine the best regulatory approaches for addressing low flows and flow alterations. The Integrated Report process may or may not be the appropriate solution. The workshop on March 11, 2015 at the North Coast Water Board was intended to inform this determination. It is not the State Water Board's intention to create roadblocks to restoring the State's water quality but rather to scientifically and transparently protect, restore and enhance the State's water quality.
6.25	Earth Law Center	Sufficient data are available on the Scott and Shasta Rivers for a flow-impairment listing. After reviewing data on North Coast flow, State	See Responses to Comments 1.0, 1.4, 6.1, 6.3, 6.5, 6.7, and 6.16.

No.	Author	Comment	Response
		Water Board staff concluded that "a consistent	
		source of high quality flow data across watersheds	
		is lacking" (p. 11). This statement is incorrect. As	
		North Coast staff pointed out in their Staff Report,	
		there is sufficient data for at least the Scott and	
		Shasta Rivers to make a finding of impairment	
		due to altered flow. After suggesting a	
		methodology with specific criteria that could be	
		used to evaluate flow impairment, North Coast	
		staff found that "[s]ubmitted information for the	
		Scott River and Shasta River indicate that all	
		criteria are met, if this methodology were to be	
		used."	
		By contrast, the State Water Board's Draft Staff	
		Report fails to even acknowledge the North Coast	
		staff's suggested methodology and recognition of	
		the strong flow impairment data available for the	
		Scott and Shasta Rivers. No reason was given for	
		the state's rejection of this conclusion by the	
		North Coast staff. The State Water Board further	
		ignores information provided (as requested) by	
		ELC on other states' listing methodologies, which	
		demonstrate a wide range of acceptable and	
		straightforward processes for identifying flow-	
		impaired waterways.	

No.	Author	Comment	Response
6.26	Earth Law Center	We ask that the Draft Staff Report be revised to at	See Responses to Comments 1.0, 1.2, 1.4, 1.5, and
		least recommend listing of the Scott and Shasta	6.11. The State Water Board staff
		Rivers for flow, as identified in the North Coast	recommendations and findings are detailed in the
		Staff Report, and to also describe in detail the	current Draft Staff Report.
		assessment procedure taken for "shortlist"	
		waterways that were rejected for listing. If the	
		State Water Board chooses to ignore the North	
		Coast staff's findings with regard to date for the	
		Scott and Shasta, we ask that the reasons for that	
		rejection be provided in detail, particularly in light	
		of the extensive work to date by the public and	
		North Coast staff regarding consideration of flow	
		impairments in these waterways.	
6.27	Earth Law Center	The draft staff report incorrectly concludes that	See Responses to Comments 1.0, 1.1, 1.2, 1.4 and
		waterways cannot be listed as flow impaired when	1.5.
		already listed as impaired by a pollutant. U.S.	
		EPA's 2006 Guidance specifically demonstrates	The statement contained in the Staff Report to
		that states using a "multi-category" reporting	which commenter refers does not make an
		framework can list a waterway in both categories	incorrect conclusion or interpretation by applying
		4c and 5. Based on their own interpretation of the	U.S. EPA's 2006 guidance. U.S. EPA's 2006
		EPA's 2006 Guidance, State Water Board staff	Guidance states (at section V.G.3, pg. 56):
		chose "not to place water in Category 4c for	
		pollution when other impairments by pollutants	"Segments should be placed in Category
		are identified for the same water body segment"	4c when the [S]tates demonstrate[] that the
		(p. 10).	failure to meet an applicable water quality

No.	Author	Comment	Response
		This is contrary to the interpretations by other states and U.S.EPA. Contrary to the Draft Staff Report's interpretation, the plain meaning of this language is Category 4c is reserved for impairments caused by pollution rather than pollutants. It says nothing about the case in which impairments are caused by <i>both</i> pollutants and pollution, focusing only on the categorization of pollutants versus pollution under the Guidance system.	standard is not caused by a pollutant (emphasis added), but instead is caused by other types of pollution. Segments placed in Category 4c do not require the development of a TMDL."
6.28	Earth Law Center	EPA's 2006 Guidance does not state that waterways cannot be listed for both pollutant and pollution impairments. To the contrary, the EPA's 2006 Guidance demonstrates that if a state uses a "multi-category" reporting framework (as the EPA's 2006 Guidance suggests ₃₀), then a waterway can be placed in both Category 4c and 5. The Guidance specifically demonstrates this point with "Segment J" in its "Segment Categorization Guide" (see Figure 1, below). If a state chooses to use a "single-category" approach (<i>i.e.</i> , where "Category 5 takes precedence over all other categories"), then a water body that has both a Category 4c and 5 impairment can be classified	See Responses to Comments 1.0, 1.1, 1.2, 1.4 1.5, and 6.27

No.	Author	Comment	Response
		under Category 5, while still recognizing the	
		pollution impairment.	
6.29	Earth Law Center	Flow is not effectively addressed through	See Response to Comments 1.0, 1.1, and 1.4.
		pollutant listings.	
		After choosing not to list any waterways as	The Draft Staff Report describes the many other
		impaired due to altered flow, the Draft Staff	programs it utilizes to address low flows and flow
		Report explains that the "[t]he current strategy	alterations. The TMDL is one regulatory process
		relies on the TMDL process or other regulatory	where flow alterations are addressed and has been
		alternatives to identify causative factors and	utilized in several areas including those initiated
		linkage analyses to control the pollution	by U.S. EPA including the Ballona Creek
		associated with pollutant impairments" (p. 10).	Wetlands Sediment and Invasive Exotic
		The Draft Staff Report continues that the "lack of	Vegetation TMDLs and several Eel River TMDLs
		flow has been identified as a causal factor" in	for Sediment and Temperature. The meeting on
		TMDLs developed to increase water temperature	March 11, 2015 focused on identifying other
		and sedimentation, such as in the Shasta River	regulatory mechanisms to address low flows.
		Watershed Temperature and Dissolved Oxygen	
		TMDL action plan (p. 10). However, addressing	
		flow through pollutant listings is not as effective	
		as addressing flow through flow impairment	
		listings, since only the latter properly and directly	
		addresses the impairment.	
6.30	Earth Law Center	Existing waterways listed under category 5 should	See Response to Comment 3.4.
		not be delisted.	
		The Draft Staff Report states that the four current	The State Water Board's approval of the statewide
		listings for flow-related alterations (all in Region	CWA section 303(d) list must be in accordance

No.	Author	Comment	Response
		4, which is not part of this listing cycle) "will	with the CWA, it's implementing regulations, and
		likely be proposed for delisting as part of the next	the Listing Policy. State Water Board staff's
		Listing Cycle" (p. 10). The reason cited is that the	recommendations concerning the segments
		listings were made "prior to adoption of the	commenters assert have flow impairments are in
		Listing Policy and before guidance was developed	accordance with all three.
		on the method to inventory waters impaired by	
		pollution, and not pollutants" (pp. 10-11).	
		However, as described above, the Draft Staff	
		Report's reliance on the Listing Policy is	
		misplaced, since the CWA and its implementing	
		regulations provides the overarching legal and	
		regulatory direction for state action, not the	
		Listing Policy. The CWA calls for listings to	
		reflect beneficial use impairments. State listing	
		policies cannot be less stringent than the CWA.	
		Delisting existing flow-impaired waterways	
		simply based on the existence or not of state	
		guidance is neither required by the CWA nor	
		warranted by the data, which correctly justify the	
		EPA-approved listings.	
6.31	Earth Law Center	California should list for flow impairment in the	See Responses to Comments 1.0, 1.1, 6.11, and
		303(d) list rather than the 305(b) report.	6.18.
		The Draft Staff Report assumes that the Coalition	
		advocated for Category 4c flow listings under the	
		305(b) Report generally rather than on the 303(d)	

No.	Author	Comment	Response
		list. However, the Coalition previously requested	
		that flow impaired waterways be included on the	
		303(d) list, highlighting as support the other states	
		that take this approach and associated benefits.	
		states such as Tennessee appropriately place	
		waterways impaired by altered flow in one list, to	
		be clear to the public and decision makers which	
		waterways are "impaired" and which are not, and	
		why. Tennessee lists all under their 303(d) list,	
		being clear of course that only pollutants will	
		receive TMDLs.	
6.32	Earth Law Center	Existing efforts to restore flow described in the	See Responses to Comments 3.0 and 6.12. The
		draft staff report are inadequate to protect north	State Water Board Policy for Maintaining
		coast rivers and streams. The flow programs in the	Instream Flows in Northern California Coastal
		draft staff report are insufficient to keep water in	Stream (effective February 4, 2014), is directly
		impaired water bodies and ensure additional water	applicable to the North Coast waters highlighted
		is put back in those water bodies. After rejecting	by the comments. The March 11, 2015 workshop
		flow impairment listings with little explanation	in coordination with the North Coast Water Board
		the Draft Staff Report discusses in far more	focused on determining additional regulatory
		significant detail the state's other efforts to protect	approaches for addressing low flows and flow
		flow, expressing that "it is important to	alterations in the North Coast and statewide.
		acknowledge that the State and Regional Water	
		Boards address flow through various other	
		programs" (see p. 11-13).	
		The Coalition commends the State and North	

No.	Author	Comment	Response
		Coast Boards on these efforts. However, most of	
		them address flow <i>outside</i> of the North Coast,	
		proving of little near- or medium-term value to the	
		waterways at issue. Moreover, there is no	
		information that they will provide the short-term	
		relief that flow listings could provide, as described	
		extensively by the Coalition and other	
		commenters in prior letters.	
6.33	Earth Law Center	With respect to the Draft Staff Report's discussion	Comment noted. See Response to Comment 3.1.
		of the public trust doctrine, the Coalition	
		commends the State Water Board's recognition of	Public trust complaints can be brought before the
		its responsibilities to protect flows under the	State Water Board anytime, independent of the
		doctrine. However, the legal landscape regarding	California Integrated Report process. It is not
		the public trust doctrine is in flux.	clear that incorporating flow alterations into the
		The California Supreme Court is currently	Integrated Report would enhance the State Water
		considering whether to grant review of the recent	Board's functions related to the Public Trust
		ruling that protecting the public trust could require	Authority.
		regulating withdrawals of interconnected	
		groundwater. And acting alone, the State Water	
		Board's efforts to enforce the public trust doctrine	
		have not been sufficient to protect flows in the	
		vulnerable rivers of the North Coast. For example,	
		some North Coast advocates report that they	
		received no substantive State Water Board	
		response to public trust and other complaints	

No.	Author	Comment	Response
		concerning Scott River flows, which are so low	
		that salmon either have no or delayed access to	
		some spawning grounds even during normal	
		precipitation years, while irrigators continue to	
		over-divert and inadequately report on such	
		diversions. Listing rivers for flow impairment	
		could bolster the Board's public trust authority by	
		reinforcing the need for responsive actions,	
		including but not limited to curtailment letters.	
6.34	Earth Law Center	Another example referenced in the Draft Staff	This comment is beyond the scope of the
		Report is the Policy for Maintaining Instream	proposed 303(d) List portion of the 2012
		Flows in Northern California Coastal Streams	California Integrated Report.
		(AB 2121 Policy). The Coalition appreciates key	
		elements of the AB 2121 Policy, such as the	
		establishment of regionally protective criteria that	
		include a limited season of diversion, minimum	
		bypass flow, and maximum cumulative diversion	
		rate. However, the AB 2121 Policy has significant	
		shortcomings.	
		For example, the geographic scope of the AB	
		2121 Policy is limited, leaving out the entire	
		Klamath River system. (Similarly, the Russian	
		River Frost Protection regulations provide a useful	
		tool to address flow, but are geographically	
		limited to the Russian River stream system.)	

No.	Author	Comment	Response
		Further, while development of site-specific	
		criteria under the AB 2121 Policy could prove	
		beneficial, implementation has been limited.	
6.35	Earth Law Center	The AB 2121 Policy fails to adequately address	This comment is beyond the scope of the
		historic over diversion in the North Coast. Flow	proposed 303(d) List portion of the 2012
		impairment listings would supplement the AB	California Integrated Report.
		2121 Policy by offering practical benefits to all	
		applicable waterways – regardless of geographic	
		location within the North Coast and other gaps	
		associated with the AB 2121 Policy.	
6.36	Earth Law Center	Two final examples referenced in the Draft Staff	See Responses to Comments 1.0, 1.1, and 3.2.
		Report are the State Water Board's "prioritization	
		report" mandated by Delta Reform Act of 2009	The site specific nature of flow makes it a difficult
		and the California Department of Fish and	parameter to address. While site-specific studies
		Wildlife's instream flow studies under Public	are time consuming they are necessary to
		Resources Code sections 10000-10005. In both	adequately characterize the specific flow needs for
		cases, while the data from the associated instream	sustained aquatic life.
		flow studies will be useful, there have been	
		significant delays in completing these studies.	
		Rather than postponing action while waiting for	
		studies that take years to complete, we should take	
		immediate steps, such as by making flow	
		impairment listings, to protect the most severely	
		dewatered rivers and streams.	

No.	Author	Comment	Response
No. 6.37	Author Earth Law Center	Comment There are many practical benefits of flow impairment listing that would help restore flow to impaired waterways. The Draft Staff Report also barely mentions in just one short sentence – the benefits of flow impairment listing. ELC and partners have repeatedly informed the State Water Board over the last several years of the many benefits of flow impairment listings, which go far beyond what the Draft Staff Report described. These are benefits already being enjoyed in other states around the country, including Western states. First, Section 303(d) listings for flow could provide support in local land use and planning decisions by requiring decision makers to consider flow impacts in development and redevelopment projects under	ResponseSee Responses to Comments 1.0, 1.4, 3.0, and6.12.As provided in the U.S. EPA reference materialnoted in Response to Comment 1.0, the primarypurpose of the 305(b) and 303(d) reportingrequirements is to determine the extent waters areattaining standards, identify waters that areimpaired and need to be added to the 303(d) listand placed in Category 5 for the development of atotal maximum daily load (TMDL), and identifywaters that can be removed from the list whenstandards are attained.While State Water Board staff acknowledges thepotential benefit of better informed planning
		CEQA and other local land use requirements, potentially mitigating the flow impacts of such projects.	decisions, the suggested benefits can already be realized with the current section 303(d) listings.
6.38	Earth Law Center	Second, flow listings can significantly increase the chances of receiving government (particularly bond) funds for flow restoration by highlighting those waterways most in need; they can also help stakeholders meet public and private grant requirements for projects that can result in	See Responses to Comments 1.0, 1.4, 3.0, 6.12 and 6.37.

No.	Author	Comment	Response
		increased flow, some of which call for attention to	
		impaired waters listings.	
6.39	Earth Law Center	Third, watershed-based organizations and local	See Responses to Comments 1.0, 1.4, 3.0, 6.12
		governments can use flow impairment listings to	and 6.37.
		help guide their watershed management plans and	
		prioritize activities in their watershed or	
		jurisdiction	
6.40	Earth Law Center	Fourth, such listings would lower the burden of	See Responses to Comments 1.0, 1.4, 3.0, 6.12
		proof at State Water Board hearings related to	and 6.37.
		water rights and flow, such as waste and	
		unreasonable use hearings,41 public trust doctrine	
		applications, FERC relicensing's, dam removals,	
		new water diversion applications,43 reopening of	
		existing water rights permits, environmental	
		review of water transfers, and other flow-related	
C 11		actions.	
6.41	Earth Law Center	Fifth, flow impairment listings can guide	See Responses to Comments 1.0, 1.4, 3.0, 6.12
		implementation of the new groundwater	and 6.37.
		legislation by ensuring that new management	
		plans and groundwater controls properly address	
		the impacts of groundwater extraction on stream	
		flows, which are widespread in the North Coast	
6.42	Fouth Low Conter	region.	See Desmonses to Commonte 1.0, 1.4, 2.0, 6.12
6.42	Earth Law Center	Finally, 303(d) listings for flow would advance the development of a statewide database of	See Responses to Comments 1.0, 1.4, 3.0, 6.12 and 6.37.
		the development of a statewide database of	

No.	Author	Comment	Response
		waterways with reduced flows, which currently	
		does not exist and is much needed to ensure that	
		the state is properly identifying and prioritizing its	
		efforts to address the health of the waters of the	
		state. These practical benefits (discussed in more	
		detail in the Coalition's May 15, 2013 comment	
		letter and elsewhere) are the reasons that the	
		Coalition and others have been working for	
		almost the last five years to ensure that the most	
		severely dewatered rivers and streams are	
		identified as flow-impaired.	
7.0	General Public	Disagree with the do no delist decision for	The State Water Board staff finds that the North
		Indicator bacteria on the Russian River mainstem	Coast Water Board's staff recommendation is
		from Fife Creek to Dutch Bill Creek. The listing	valid and consistent with the Listing Policy. The
		was based on fecal coliform and while 8 E. coli	recommendation referred to by the commenter is
		LOEs showed no exceedances. The single line of	identified as Decision Number 25533. The
		fecal coliform evidence provides no credible	decision language states "29 of 103 fecal coliform
		support for the recommendation since E. coli is	samples from the mainstem Russian R. from Fife
		the preferred indicator bacteria.	Ck. to Dutch Bill Ck. exceed the objective and
			this exceeds the allowable frequency from Table
			4.2 of the Listing Policy." This assessment is
			consistent with the Listing Policy and warrants a
			Do Not Delist from the 303(d) list decision
			recommendation.

No.	Author	Comment	Response
8.0	North Coast Stream Flow Coalition	Failure of the State Board to list streams proposed by Earth Law Center and Coalition members which are obviously flow impaired is detrimental to public health, contrary to law and will delay actions to restore beneficial uses which rely on adequate stream flow. (note: Commenter refers to input and testimony submitted to Regional Boards and the State Board by the Earth Law Center to support this comment)	See Responses to Comments 1.0, 1.1, 1.2, 1.4, 1.5, 3.0, 3.1, and 6.1.
8.1	North Coast Stream Flow Coalition	There is new information on flow impairments for North Coast and Klamath River Basin streams prepared by Riverbend Sciences for National Marine Fisheries Service which was used in the recovery plan for Coho salmon. (note: a web link to this new information is provided in the comment letter)	The current proposed 303(d) List portion of the 2012 California Integrated Report is based on data and information submitted by August 30, 2010. The new information should be submitted into CEDEN and will be evaluated in accordance with the procedures of the Listing Policy in future listing cycles.
8.2	North Coast Stream Flow Coalition	The Shasta and Scott River Basins are identified by DWR as "medium" priority for groundwater extraction impacts which requires sustainable groundwater management plans and groundwater extraction regulation. These plans and regulations may, but are not required to, address the impacts of groundwater extraction on stream flows. A flow impaired listing would confirm groundwater	See Responses to Comments 1.0, 1.1, 1.5, 3.0, 6.5, and 6.12.

No.	Author	Comment	Response
		extraction may be a factor in causing the flow	
		impairment but because SWRCB didn't list the	
		water body as flow impaired, that constitutes a	
		finding that no impairment exists.	
		In the Scott and Shasta River Basins cold water	
		fisheries, including Coho and Chinook salmon	
		and Steelhead trout, are flow dependent. So too in	
		many, cases, are riparian and appropriative	
		surface water rights. Therefore, the State Board's	
		failure to list these streams as flow impaired may	
		well frustrate, efforts to remediate flows that are	
		inadequate to support Public Trust resources and	
		surface water rights. In the worst case scenario,	
		the State Board's failure to list the Shasta and	
		Scott as flow-impaired could be used to justify	
		new groundwater extraction to further damage	
		flow-dependent beneficial uses of surface water.	
		The State Board should not make the efforts of	
		those who are working to protect and restore	
		beneficial uses of surface water more difficult by	
		failing to list as flow-impaired those watersheds in	
		which there is substantial and persuasive evidence	
		that beneficial uses have been damaged or	

No.	Author	Comment	Response
		destroyed as a result of dewatering.	
8.3	North Coast Stream Flow Coalition	Similar situations obtained on significant portions of several other North Coast streams which have been proposed for listing as flow impaired including the Eel River, Mattole River, Napa River and Mark West Creek. Failure to list these streams as flow impaired will make it much more difficult for our member organizations to convince local and regional groundwater management entities that they should assess and address the impact of groundwater extraction on those beneficial uses dependent on adequate stream flows.	See Responses to Comments 1.0, 1.1, 1.5, 3.0, 6.5, 6.12, and 8.2.
8.4	North Coast Stream Flow Coalition	A decision by the State Board to list streams proposed for listing as flow impaired would assist those working to secure and restore stream flows. We would not, for example, have to work to convince groundwater management entities that a stream is flow impaired, we could rely on the State Board's listing. Similarly a state board listing will assist our members in preventing new developments which would further dewater our streams and rivers or in securing modifications of those new developments to reduce impacts to	See Responses to Comments 1.0, 1.1, 1.5, 3.0, 6.5, and 6.12.

No.	Author	Comment	Response
		stream flow.	
8.5	North Coast Stream	A watershed's inclusion on the 303d impaired	See Responses to Comments 1.0, 1.1, 1.5, 3.0, 6.5,
	Flow Coalition	waterbodies list would mean that CEQA reviews	and 6.12.
		for new and expanding developments with	
		potential to negatively impact streamflows in a	
		flow-impaired watershed would be required to	
		analyze and disclose potential impacts to stream	
		flows. If there would likely be impacts, new and	
		expanding developments would be required to	
		explore options to avoid those impacts. In this	
		manner, some part of the regulatory responsibility	
		for preventing damage to beneficial uses of	
		surface water is shifted from the SWRCB and	
		regional boards to the planning entities	
		responsible for environmental review of new or	
		expanding developments.	
8.6	North Coast Stream	The State Board should not make the efforts of	See Responses to Comments 1.0, 1.1, 1.5, 3.0, 6.5,
	Flow Coalition	those who are working to protect and restore	and 8.2.
		beneficial uses of surface water more difficult by	
		failing to list as flow-impaired those watersheds in	
		which there is substantial and persuasive evidence	
		that beneficial uses have been damaged or	
		destroyed as a result of dewatering. Rather the	
		Board should consider those doing this work as	

No.	Author	Comment	Response
		partners. Please give us the flow impaired listings	
		which are supported by substantial evidence.	
8.7	North Coast Stream	The Water Boards should be resolved to	See Response to Comments 1.0, 1.1, and 3.0.
	Flow Coalition	appropriately list waterbodies as flow impaired to	
		afford all resources the State can muster to restore	
		stream flows since it is in the best interest of the	
		State to have healthy stream flows.	
8.8	North Coast Stream	The Coalition disagrees with the Re-segmentation	The State Water Board staff finds that the North
	Flow Coalition	and subsequent failure to list the Upper and Lower	Coast Water Board's staff recommendation to re-
		Scott River as impaired by aluminum and bio	segment the Scott River is valid and consistent
		stimulatory substances. Re-segmentation was	with the Listing Policy. The Listing Policy allows
		based on one comment letter and allowed State	for streams to be segmented according to similar
		board to only list the new middle segment of the	hydrology and land use (Section 6.1.5). The
		Scott River as impaired.	North Coast Water Board's Staff Report outlines
			the rational for the re-segmentation and State
			Water Board staff concurs that the re-
			segmentation and associated delisting of the
			Upper and Lower Scott River for aluminum
			impairment is appropriate.
			Additionally, North Coast Water Board staff has
			been encouraged by State Water Board and
			USEPA staff to re-segment the North Coast
			Regional Basin's water bodies in an effort to more
			accurately reflect the true extent of impairment as

No.	Author	Comment	Response
			reflected by the data. The Basins of the other
			Regional Water Boards in the state generally
			contain more discretely defined water bodies
			consisting of streams and/or stream-segments.
8.9	North Coast Stream	The new segmentation ignores stream habitat	See Response to Comment 8.8.
	Flow Coalition	types. The upper segment of the alluvial Scott	
		Valley is dominated by agriculture, the middle	
		segment is agricultural and forested river canyon	
		and the lower section is forested canyon.	
8.10	North Coast Stream	The decision to re-segment makes it more difficult	See Response to Comment 8.8.
	Flow Coalition	to obtain a listing or a delisting because more	
		samples will have to be obtained for a smaller	The Listing Policy application of the number of
		section of stream.	samples required to list and delist has not
			changed. It is only appropriate to list the area
			where data reflect impairment. This allows for a
			better determination of sources after impairment is
			identified. Furthermore, if a TMDL source
			analysis determines other segments are also
			impaired by the pollutant, they will be
			appropriately included on the 303(d) List.
8.11	North Coast Stream	The decision to re-segment was made without	See Response to Comment 8.8.
	Flow Coalition	public input or tribal consultation and imposes	
		costs on the Quartz Valley Indian Reservation. It	The North Coast Regional Water Board provided
		is an environmental injustice which the State	fair and meaningful involvement for all interested
		Board should reject. Difficulties in achieving	persons regarding its consideration of its proposed

No.	Author	Comment	Response
		listings causes disadvantaged communities to	2012 Integrated Report for waters within its
		suffer harm when water bodies of their lands are	region. In accordance with the Listing Policy (at
		polluted and depleted due to lack of flow.	sections 6.1.1 and 6.1.2) the Regional Water
			Board actively solicited and considered data and
			information from all sources and any interested
			person. Pursuant to the Listing Policy (at section
			6.2), the Regional Water Board reached its
			decision at the conclusion of a public hearing,
			upon consideration of all evidence and testimony
			of all interested persons, which occurred after
			advance notice to the public was given and an
			opportunity for the public to comment on its draft
			Staff Report for its Integrated Report, and
			subsequent to holding a public workshop.
			The Quertz Valley Indian Reconvision which also
			The Quartz Valley Indian Reservation, which also has submitted a comment letter addressing the
			segmentation of the Scott River, is on the lyris list
			for all notices and announcements concerning the
			North Coast Regional Water Board's development
			and adoption of the 2012 Integrated
			Report. North Coast Regional Water Board staff
			reports that representatives of the Quartz Valley
			Tribe were present at its public workshops and/or
			adoption hearing. Additionally, the North Coast

No.	Author	Comment	Response
			Regional Water Board's staff report (Section 3.6.5, pp.28-29) explains:
			 3.0.3, pp.28-29) explains. "3.6.5 Assessment of Data From Streams and Stream Segments Within Native American Reservations: The Regional and State Water Boards do not have the authority to list or delist water bodies within the boundaries of Native American Reservations, as only the federal government through the USEPA has jurisdiction to list and delist water bodies on Tribal land. However, the Regional Water Board's Basin Plan applies to streams and stream segments within Native American Reservations when the Tribe does not have a USEPA approved Basin Plan of their own. Only the Hoopa Valley Tribe has a USEPA-approved Basin Plan in the North Coast Region."
			for data collected both within and outside Native American Reservation boundaries. The objectives

No.	Author	Comment	Response
			from the Regional Water Board's Basin Plan were applied to all data, except those data collected in water bodies on the Hoopa Valley Tribe Reservation, where the objectives from the Hoopa's Basin Plan were utilized. All lines of evidence were associated with decisions for those water bodies, although the lines of evidence containing data collected on Tribal land were not utilized by Regional Water Board staff to make a final listing or delisting determination. Instead, staff summarized the data
			from Tribal land and made a recommendation to U.S. EPA to either list or delist the stream(s) or streams segment(s) where the data were collected on Tribal Land.
8.12	North Coast Stream Flow Coalition	The segmentation of the Scott River opens the door to further arbitrary re-segmentation of water bodies, making it appear that fewer miles of stream are impaired or that progress towards removing impairments has been made when it hasn't.	See Responses to Comments 8.8 and 8.11.
8.13	North Coast Stream Flow Coalition	The Coalition asks the State Board to develop and adopt guidance for when and how a regional board can re-segment a single water body. The	See Response to Comment 8.8.

No.	Author	Comment	Response
		Coalition believes that decisions to re-segment	
		should be made as Basin Plan amendments to	
		insure public participation and utilize the best	
		available science.	
8.14	North Coast Stream	A decision by the State Board to list streams as	See Responses to Comments 1.0, 3.0, and 6.12.
	Flow Coalition	flow impaired would provide Coalition members	
		and other citizens with an effective tool to	
		forestall further dewatering or streams.	
9.0	Planetary	The comment submitted is a website maintained	This comment does not appear to pertain to the
	Solutionaries	by the commenter regarding the overall failure of	scope of the proposed 303(d) List portion of the
		California's water quality regulatory programs.	2012 California Integrated Report.
9.1	Planetary	The commenter references the State's map of	This comment is beyond the scope of the
	Solutionaries	impaired waters and comments that there has been	proposed 303(d) List portion of the 2012
		a "170% increase in toxicity listings from 2006 to	California Integrated Report.
		2010. All assessed waters in the 2010 Report are	
		a compilation of the latest approved data. The data	
		indicate an increase in toxicity and listing of water	
		impaired bodies will continue to rise.	
		Unfortunately, the public may not know just how	
		bad things are statewide until 2017 or beyond, as	
		government regulators failed to provide an	
		updated assessment listing the status of the State's	
		waters. Even then, critics point out that water	
		quality monitoring, and the related data, are	
		conducted almost extensively by the polluters".	

No.	Author	Comment	Response
9.2	Planetary	This document recommends the basic elements of	This comment is beyond the scope of the
	Solutionaries	a State water monitoring program and serves as a	proposed 303(d) List portion of the 2012
		tool to help EPA and the States to determine	California Integrated Report.
		whether a monitoring program meets the	
		prerequisites of CWA Section 105(e)(1).	
9.3	Planetary	Navigating the State Water Boards' websites to	This comment is beyond the scope of the
	Solutionaries	ascertain the total number of impaired water	proposed 303(d) List portion of the 2012
		bodies was difficult, even with the assistance of	California Integrated Report. However, the State
		Board personnel.	Water Board is currently exploring the creation of
			a more user-friendly website interface relating to
			water quality programs. In the meantime, staff
			contacts have been provided on the existing
			website to direct visitors to a knowledgeable staff
			person to aid in accessing public information.
9.4	Planetary	State Water Board Did Not Adopt CWA	This comment is beyond the scope of the State
	Solutionaries	Section 303(D) List Until 2004	Water Board's consideration of the 303(d) List
			portion of the 2012 California Integrated Report.
			However, the State Water Board has submitted a
			303(d) List to EPA since 1976. The State Water
			Board developed and adopted the Listing Policy
			in 2004.
9.5	Planetary	The Performance report indicate that California	This comment is beyond the scope of the
	Solutionaries	officials have a lack-luster track-record in	proposed 303(d) List portion of the 2012
		productivity for its expenditure of CWA and	California Integrated Report. However, the State
		SDWA funds, failure to provide required updated	Water Board recently approved on February 5,

No.	Author	Comment	Response
		303(d), and the vast amounts of water bodies yet	2015, amendments to the Listing Policy designed
		to be assessed is indicative of a system in need of	to allow for a more efficiently produced and more
		innovative progress, oversight and regulatory	timely submitted, 303(d) List and 305(b) Report.
		reform.	
10.0	Quartz Valley	Proposed De-Listing of Klamath National Forest	This comment is beyond the scope of the
	Indian Reservation	(KNF) Reference Streams for Temperature and	proposed 303(d) List portion of the 2012
		Sediment. The Staff Report concurs with the	California Integrated Report. Determination of
		NCRWQCB's recommendation to de-list streams	reference streams is outside the scope of the
		within KNF for sediment and temperature that	Integrated Report process.
		KNF has identified as "reference streams." We	
		agree that it is appropriate that reference streams	State Water Board staff concurs with the North
		include natural disturbances: however, we	Coast Water Board's staff determination that an
		strongly disagree with the assumption that the	updated guidance developed by the U.S. Forest
		large high-severity fires that have burned in recent	Service is consistent with SWAMP protocols and
		decades in riparian zones on KNF lands are	is the most appropriate evaluation guideline to
		"natural". While it is natural for fires to burn with	interpret the Basin Plan's narrative water quality
		a mosaic of severity which would include patches	objective for Suspended and Settleable Material.
		of stand-replacing crown fires, a century of fire	State Water Board staff also concurs with the
		suppression has dramatically altered forest stand	North Coast Water Board staff's analysis of
		structure and fuel continuity. As a result, when	temperature based reference streams and the
		fires now occur and escape containment, the	recommended delistings associated with those
		percent area burned with high severity has likely	delistings.
		increased, causing deleterious effects on aquatic	
		ecosystems such as increased sediment, reduced	
		stream shade, and increased water temperature.	

No.	Author	Comment	Response
10.1	Quartz Valley	Prior to fire suppression, the size of individual	See Response to Comment 10.0.
	Indian Reservation	fires was limited by features such as streams,	
		riparian zones, and ridgetops which stopped fires	This comment is beyond the scope of the
		from spreading long distances (Taylor and	proposed 303(d) List portion of the 2012
		Skinner 2003) (figure1). Mean fire size has	California Integrated Report.
		increased dramatically in northwestern California	
		since the fire suppression began in the early 20th	
		century (Miller et al. 2012).	
10.2	Quartz Valley	Commenter recommends that reference sites be	See Response to Comment 10.0. The reference
	Indian Reservation	revisited to explicitly identify streams where	streams will continue to be monitored and
		riparian zones have been impacted by high-	examined for impairments consistent with the
		severity fire, and that those impacted streams not	Listing Policy and future Listing Cycle.
		be delisted for temperature and sediment.	
10.3	Quartz Valley	We are disappointed with the decision to not list	See Responses to Comments 1.0, 1.4, 3.0, and
	Indian Reservation	the Scott River as impaired for lack of flow,	6.12.
		which had been requested by QVIR as well as a	
		coalition of 26 other conservation and fishing	
		advocacy groups. Lack of a flow impairment may	
		affect other processes, such as the implementation	
		of recent Statewide groundwater legislation and	
		applications for new appropriative water rights.	
10.4	Quartz Valley	Commenter supports the listing of a portion of the	Comment noted. See Responses to Comments 8.8
	Indian Reservation	mainstem Scott River for high pH, low DO, and	and 8.10.
		bio stimulatory conditions as well as the proposed	
		listing of Shackleford Creek above Campbell	

No.	Author	Comment	Response
		Lake for low pH. However the commenter is	-
		concerned with the NCRWQCB's segmentation	
		of the Scott River. The segmenting of the river	
		seems to be driven by the availability of data.	
		Other segments may be impaired but there is no	
		data available showing this in part because of a	
		lack of landowner cooperation in these segments.	
		Segmenting a water body to not list poorly	
		sampled segments acts as a reward to landowners	
		who don't allow monitoring. If allowed to stand,	
		the NRWQCB's decision would set an	
		unfortunate precedent. The commenter requests	
		that the SWRCB reverse the NRWQCB's decision	
		and list the entire Scott River for aluminum, DO,	
		biostimulatory conditions, and pH.	
11.0	Riverside County	The Permittees request this comment letter be	Comment noted. To clarify, Water Board staff
	Flood Control and	added to the record for the 303(d) list portion of	does not accept lines of evidence. Rather, staff
	Water Conservation	the 2012 California Integrated Report. The	examines the readily and available data submitted
	District on behalf of	permittees provide lines of evidence herein which	consistent with the Listing Policy and Notice of
	the MS4 Permittees	more specifically characterize flow in the	Solicitation and creates the lines of evidence
	in the Whitewater	Coachella Valley Stormwater Channel (CVSC)	based on that data and information.
	River Region	and identify that MS4 discharges are not a source	
		for the new listings toxicity and total ammonia.	The proposed 303(d) List portion of the 2012
			California Integrated Report was developed based
			all readily available data and information that was

No.	Author	Comment	Response
			submitted as part of the notice of solicitation,
			which had a deadline of August 30, 2010 and data
			and information submitted subsequent to that
			deadline is not evaluated during this listing cycle.
11.1	Riverside County	The Permittees request that the State modify the	This comment is beyond the scope of the
	Flood Control and	assessment methodology for the proposed toxicity	proposed 303(d) List portion of the 2012
	Water Conservation	listing in the CVSC to be consistent with the	California Integrated Report.
	District on behalf of	State's 303(d) Listing Policy.	
	the MS4 Permittees		The Listing Policy and its assessment
	in the Whitewater		methodology is not being proposed for
	River Region		amendment at this time.
11.2	Riverside County	The Permittees wish to ensure that a 303(d)	This comment is beyond the scope of the
	Flood Control and	listing, not caused by MS4 discharges, does not	proposed 303(d) List portion of the 2012
	Water Conservation	trigger unnecessary actions by the Permittees	California Integrated Report.
	District on behalf of	under the current or future MS4 Permit.	
	the MS4 Permittees		The source determination and regulatory actions
	in the Whitewater		associated with 303(d) Listings are actions taken
	River Region		after an impairment is identified and is not part of
			the Integrated Report process. TMDL and
			permitting staff will determine the sources and
			appropriate regulatory actions to ensure the
			impairment is properly addressed.
11.3	Riverside County	Page 14 of the draft staff report states that	State Water Board staff interprets the provisions
	Flood Control and	potential sources for listings will only be	of Section 6.1.2.2 subpart K of the Listing Policy
	Water Conservation	identified by the Water Boards, "when a specific	regarding potential sources of pollutants to mean

No.	Author	Comment	Response
	District on behalf of	source analysis has been performed as part of a	sources that have been clearly identified as part of
	the MS4 Permittees	TMDL or other regulatory process." The	a specific sources analysis as part of a TMDL or
	in the Whitewater	Permittees are unclear on why a specific source	other regulatory process. This approach and
	River Region	analysis would need to be conducted if readily	allows for a transparent and consistent source
		available data exists now, during the listing	characterization for impairments.
		process, which can assist with more accurate	
		characterization of potential sources for the	
		proposed listing. Additionally, Section 6.1.2.2 of	
		the State's 303(d) Listing Policy requires regional	
		Boards to identify potential pollutant sources "as	
		specifically as possible" when creating the	
		waterbody fact sheets used to describe the basis	
		for proposed listings.	
11.4	Riverside County	Dry weather MS4 discharges are not a source of	See Response to Comment 11.2.
	Flood Control and	flow in the CVSC, and therefore, are not	
	Water Conservation	contributing to impairment. There are several	
	District on behalf of	lines of evidence which demonstrate that dry	
	the MS4 Permittees	weather MS4 discharges are not a source of flow	
	in the Whitewater	in the CVSC.	
	River Region		
11.5	Riverside County	First line of evidence which demonstrates dry	Comment noted. See Response to Comment 11.2.
	Flood Control and	weather MS4 discharges are not a source of flow	
	Water Conservation	in the Coachella Valley Stormwater Channel	If it has been determined that the Whitewater
	District on behalf of	(CVSC). The CVSC is the only perennially	River MS4 permittees are not contributing to dry
	the MS4 Permittees	flowing receiving water in the Whitewater River	weather flows as part of an established and

No.	Author	Comment	Response
	in the Whitewater	MS4 permit area; however, as noted in the current	approved regulatory program, then it is unlikely
	River Region	Whitewater River Region MS4 Permit, MS4	the MS4 permittees will be associated with any
		discharges do not constitute a significant source of	applicable dry weather regulatory actions
		the flows (emphasis added.): "The CVSC is the 25	resulting for the Coachella Valley Stormwater
		mile long, constructed downstream extension of	Channel.
		the Whitewater River channel, beginning west of	
		Washington Street in La Quinta and ending on the	The fact sheets do not have a section where non-
		north shore of the Salton Sea. The lower 17-mile	potential sources can be identified.
		reach of the CVSC is the only surface waterbody	
		in the Whitewater River Region that features	
		perennial flow; these flows are dominated by	
		effluent from the NPDES permitted POTW	
		discharges, rising groundwater, and agricultural	
		return flows."	
11.6	Riverside County	Second line of evidence which demonstrates dry	See Responses to Comments 11.2 and 11.5.
	Flood Control and	weather MS4 discharges are not a source of flow	
	Water Conservation	in the Coachella Valley Stormwater Channel	
	District on behalf of	(CVSC). Regional soil type. Whitewater River	
	the MS4 Permittees	Region soil types limit the ability for dry weather	
	in the Whitewater	MS4 flows to reach the CVSC, as noted in the	
	River Region	current MS4 Permit (emphasis added): "The	
		predominant soil types within the Whitewater	
		River Region are classified as Carsitas and	
		Myoma. These sands are extremely pervious and	
		promote rapid infiltration of runoff." "Due to the	

No.	Author	Comment	Response
		small percentage of the Whitewater River	-
		Watershed and the Whitewater River Region in	
		urban land uses, Permittee requirements for New	
		Developments to retain Urban Runoff, and natural	
		soil conditions, Urban Runoff constitutes a minor	
		percentage of the total flow in the Whitewater	
		River during storm conditions. During non-storm	
		conditions, Urban Runoff discharges to Receiving	
		Waters in the Whitewater River Region are also	
		relatively minor based on flow volume."	
11.7	Riverside County	Third line of evidence which demonstrates dry	See Responses to Comments 11.2 and 11.5.
	Flood Control and	weather MS4 discharges are not a source of flow	
	Water Conservation	in the Coachella Valley Stormwater Channel	
	District on behalf of	(CVSC). Diversion of all MS4 outfalls to CVSC	
	the MS4 Permittees	to drywells. There are only three MS4 outfalls	
	in the Whitewater	which outlet to the proposed listed reach of the	
	River Region	CVSC. As of 2011, all three of these outfalls have	
		been diverted to dry wells, thereby ensuring that	
		no discharges occur from the City of Coachella's	
		MS4 to the CVSC during dry weather. During a	
		site walk with City of Coachella staff on March	
		14, 2013, Region 7 staff confirmed the presence	
		and functionality of dry well diversions. The	
		current MS4 permit features language which	
		reflects implementation of these BMPs: "The	

No.	Author	Comment	Response
		City of Coachella has proactively implemented	
		structural Best Management practices (MPs) to	
		effectively infiltrate all Dry Weather Urban	
		Runoff prior to reaching MS4 Outfalls regulated	
		by the CVSC Bacterial Indicators TMDL. These	
		structural BMPs were completed in 2011 with	
		additional modifications planned to improve the	
		effectiveness of the Avenue 52 outfall controls.	
		These BMPs ensure that there are no discharges	
		from the City's MS4 during Dry Weather."	
11.8	Riverside County	Additionally, as required by Phase 1 of the	See Responses to Comments 11.2 and 11.5.
	Flood Control and	Bacterial Indicator TMDL at CVSC, the City of	
	Water Conservation	Coachella submitted and received Region 7	
	District on behalf of	approval for its Quality Assurance Project Plan	
	the MS4 Permittees	(QAPP) in May of 2013. One of the objectives of	
	in the Whitewater	the City's QAPP is to conduct monthly monitoring	
	River Region	to assess whether flows from the City's three MS4	
		outfalls have surface connectivity with flows in	
		the CVSC. In accordance with Phase 1	
		implementation of the TMDL, this monitoring	
		data is submitted to Region 7 staff on a quarterly	
		basis, and it provides evidence that as of May	
		2013, discharges from MS4 outfalls to the CVSC	
		have not occurred. The Permittees request that	
		State Board staff review this data, as it can	

No.	Author	Comment	Response
		provide additional valuable insight regarding the	
		MS4 contribution to flows in the CVSC.	
11.9	Riverside County	Wet Weather MS4 discharges did not cause the	See Responses to Comments 11.2 and 11.5.
	Flood Control and	exceedences on which the proposed 303(d)	
	Water Conservation	listings are based. The basis for the proposed	
	District on behalf of	listings is data collected through the Surface	
	the MS4 Permittees	Water Ambient Monitoring Program (SWAMP)	
	in the Whitewater	on the following dates: October 26, 2005; May 2,	
	River Region	2006; May 8, 2007; October 22, 2007; April 22,	
		2008; and October 29, 2008. According to rainfall	
		records for these years (see Attachment A, Table	
		A-5 – Table A-10), no wet weather discharges	
		occurred on the day of, or 72 hours prior to these	
		sample dates. Therefore, MS4 wet weather	
		discharges did not cause the exceedances on	
		which the proposed listings are based.	
11.10	Riverside County	Modify the assessment for the toxicity and total	See Response to Comment 11.0.
	Flood Control and	ammonia listings to be consistent with the State's	
	Water Conservation	303(d) listing policy. The supporting	If the environment has changed as a result of an
	District on behalf of	documentation for the proposed toxicity listing in	approved BMP program then previous data may
	the MS4 Permittees	the CVSC identifies two of seven samples as	be disregarded in future assessments consistent
	in the Whitewater	exceeding the objective; these two exceedances	with Section 6.1.5.3 of the Listing Policy. The
	River Region	were collected in 2005 and 2006. Since that time,	collaboration the commenter has had with
		all dry weather MS4 discharges have been	Colorado River Water Board Staff will result in
		diverted (see comment #1); existence of these	these listings being prioritized for reassessment

No.	Author	Comment	Response
		diversions has been verified by Region 7 staff.	and potential delistings during future listing
		Section 6.1.5.3 of the State's 303(d) Listing Policy	cycles. In the meantime, State Water Board staff
		specifically states: "If the implementation of a	encourages the commenters to submit monitoring
		management practice(s) has resulted in a change	data to CEDEN.
		in the water body segment, only recently collected	
		data [since the implementation of the management	
		measure(s)] should be considered."	
11.11	Riverside County	The Permittees request that (1) the lines of	See Responses to Comments 11.0 and 11.10.
	Flood Control and	evidence provided herein be placed on the record	
	Water Conservation	for the 303(d) list portion of the 2012 California	
	District on behalf of	Integrated Report; these lines of evidence more	
	the MS4 Permittees	specifically characterize flows in the CVSC, and	
	in the Whitewater	identify that MS4 discharges are not a source for	
	River Region	the proposed new listings for toxicity and total	
		ammonia, and (2) the assessment for the toxicity	
		and total ammonia listings be revised, consistent	
		with the State's 303(d) Listing Policy.	
12.0	Santa Barbara	Reaches 3 and 4 of the Ventura River may not be	See Responses to Comments 1.0, 1.1, 3.0, 3.4,
	Channelkeeper	delisted from the 303(d) list as impaired for flow	6.11, and 6.30.
		by pumping and diversion. The existing listings	
		for Reaches 3 and 4 of the Ventura River	
		accurately reflect the current diminished flows	
		and resulting impairments to designated beneficial	
		uses in those Reaches. There are two major dams	
		which affect surface flows in reaches 3 and 4,	

No.	Author	Comment	Response
		Matilija and Casitas. More recently, studies and	
		reports continue to acknowledge the strong	
		connection between groundwater pumping and	
		diversions and the resulting loss of flows in the	
		River. Reduced Surface Flows Impair the	
		Beneficial Uses of Reaches 3 and 4, Including	
		Endangered Species Habitat. When flows	
		decrease below the threshold, the steelhead habitat	
		suitability declines significantly. (note: a draft line	
		of evidence to support this comment has been	
		submitted with the comment letter).	
12.1	Santa Barbara	There are two major dams which affect surface	See Responses to Comments 1.0, 3.0, 1.1, 3.4,
	Channelkeeper	flows in reaches 3 and 4, Matilija and Casitas.	6.11, and 6.30.
		Two major river diversions are located within	
		these reaches, Robles Diversion Facility and the	U.S. EPA abandoned the effort related to the
		Foster Park Subsurface Diversion. The City of	TMDL referenced by the commenter because a
		Ventura operates the Foster Park Subsurface	TMDL cannot be written for pollution. Instead
		Diversion ("Foster Park"). Three major municipal	U.S. EPA found that the appropriate avenue for
		well fields are located in Reaches 3 and 4. These	addressing the flow alterations was to identify
		are operated by Meiners Oaks Water District, the	them as a causative factor in the Ventura River
		Ventura River Water District, and the City of	Algae TMDL.
		Ventura. Groundwater from these reaches is also	
		pumped for agricultural and domestic purposes.	
		See U.S. EPA Draft Ventura River Reaches 3 and	
		4 Total Maximum Daily Loads For Pumping &	

No.	Author	Comment	Response
		Water Diversion- Related Water Quality	
		Impairments ("EPA Draft TMDL").	
12.2	Santa Barbara	In 1998, the U.S. EPA approved California's list	See Responses to Comments 1.0, 1.1, 3.0, 3.4,
	Channelkeeper	of impaired water bodies identified pursuant to	6.11, and 6.30.
		Clean Water Act section 303(d) (33 U.S.C. §	
		1313(d)), which first listed Reaches 3 and 4 as	Prior approval of these listings being carried over
		impaired for pumping and diversion. According to	since 1998 does not preclude the Water Boards
		Los Angeles Regional Water Quality Control	from recommending removal based on the state's
		Board ("Regional Board") staff, the original	Listing Policy and U.S. EPA guidance.
		listing referenced a 1996 Steelhead Restoration	
		and Management Plan for California ("Steelhead	
		Restoration Plan") as one basis for the listing	
		decision. The plan states, "The major obstacle to	
		steelhead restoration in this system is blocked	
		access to headwaters and excessive water	
		diversion." Steelhead Restoration Plan, p. 201.	
		The plan describes several large-scale water	
		diversions in the river including Foster Park and	
		the City of Ventura's wells in the lower River,	
		which, "ha[ve] resulted in dewatering portions of	
		the lower river during summer and fall."	
		Steelhead Restoration Plan, p. 203.	
		Most recently, on August 4, 2010, the State Water	
		Resources Control Board ("State Water Board")	

No.	Author	Comment	Response
		approved California's 2010 303(d) list.	
		Channelkeeper notes that the supporting fact	
		sheets for these listings state that both the	
		Regional Board and State Water Board staff	
		reviewed the existing Ventura River watershed	
		listings for pumping, water diversions, and fish	
		barriers and decided to make no modifications to	
		the list. On October 11, 2011, the U.S. EPA	
		approved the State Water Board's triennial review	
		and update to the 303(d) list, which maintained	
		the pumping and diversion impairments for	
		Reaches 3 and 4 of the Ventura River.	
12.3	Santa Barbara	The commenter presents several recent studies the	See Responses to Comments 1.0, 1.1, 3.0, 3.4,
	Channelkeeper	provide data and information related to the	6.11, 6.30, 11.10, and 12.3.
		groundwater to surface water interaction. They	
		also provide hydrology studies that recommend	The data and information presented for waters in
		various flow thresholds for Foster park reach of	Region 4 (Los Angeles) is beyond the scope of the
		the Ventura River necessary to support aquatic	303(d) List portion of the 2012 California
		life beneficial uses.	Integrated Report, which assessed information
			submitted for Regions 1 (North Coast), 6
		Commenter has included temperature and	(Lahontan) and 7 (Colorado River).
		Dissolved Oxygen data showing exceedances of	
		the Basin Plan Objectives for these parameters	The proposed 303(d) List portion of the 2012
		stating that the exceedances shown in this data are	California Integrated Report was developed based
		related to low flow conditions which further	all readily available data and information that was

No.	Author	Comment	Response
		supports their comment that flow impairment listings should be maintained.	submitted as part of the notice of solicitation, which had a deadline of August 30, 2010.
			In the meantime, State Water Board staff encourages the commenters to submit data and information to CEDEN so it is available for future assessment.
			-
12.4	Santa Barbara	The Clean Water Act and U.S. EPA Guidance	See Responses to Comments 1.0, 1.1, 6.11, and
	Channelkeeper	Provide for Flow-Impairment Listings. Under the	6.18.
		Clean Water Act, when effluent limitations are	
		insufficient to ensure compliance with water	
		quality objectives and a water body can no longer	
		be put to its designated beneficial uses	
		(collectively "water quality standards"), that water	
		body's water quality standards have not been	
		attained and its beneficial uses are impaired. The	
		State must identify that water body on the list of impaired waters $22 \text{ LLS} (0.5, 1212(d)(1))$ An	
		impaired waters. 33 U.S.C. § 1313(d)(1). An	
		impairment listing is required whether the	
		impairment is caused by "pollutants" or "pollution " Soc 32 U.S.C. $\$$ 1212(d)(1)(A): soc	
		"pollution." See 33 U.S.C. § 1313(d)(1)(A); see also Pronsolino v. Nastri, 291 F.3d 1123, 1137-38	
		(9th Cir. 2002), cert. denied, 123 S. Ct. 2573	
		(301 Cm, 2002), cert. ucmeu, 123 S. Ct. 2375	

No.	Author	Comment	Response
		 (2003) ("Water quality standards reflect a state's designated uses for a water body and do not depend in any way upon the source of pollution"). In describing categories of impairment listings, EPA specifically uses "lack of adequate flow" as an example of a cause an impairment to a water 	
-		segment.	
12.5	Santa Barbara Channelkeeper	As discussed in Section II.A. above, the Clean Water Act requires that the State Water Board include all impaired water segments on the 303(d) list. The requirement to identify impaired waters on the 303(d) list is not conditioned on the existence of a formal listing policy. As with the Listing Policy, formal guidance from U.S. EPA is not a prerequisite to impairment listings and listings issued and approved predating the 2006 Guidance are entirely valid.	See Responses to Comments 1.0, 1.1, 6.11, and 6.18.
12.6	Santa Barbara Channelkeeper	Consistent with the language and the purpose of Clean Water Act section 303(d), the U.S. EPA has found that "pollution" must result in a 303(d) listing if it results in impairment. See U.S. EPA, "Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act," p. 56 ("2006 Guidance"). In describing	See Responses to Comments 1.0, 1.1, 6.11, and 6.18.

No.	Author	Comment	Response
		categories of impairment listings, EPA specifically uses "lack of adequate flow" as an example of a cause an impairment to a water segment. Accordingly, a water body that cannot support its designated beneficial uses due to altered flow must be included on the State Water Board's 303(d) list as impaired. Altered flows in Reaches 3 and 4 of the Ventura River caused by pumping and diversions impair those Reaches' beneficial uses. Thus, as provided by the Clean Water Act, in 1998 the State Water Board included Reaches 3 and 4 on the 303(d) list as impaired by pumping and diversion. Not only are these listings valid under the Clean Water Act, they are in line with relevant U.S. EPA Guidance.	Kesponse
12.7	Santa Barbara Channelkeeper	Section 3.9 of the Listing Policy states that "[a] water segment shall be placed on the section 303(d) list if the water segment exhibits significant degradation in biological populations and/or communities as compared to reference site(s) and is associated with water or sediment concentrations of pollutants including but not limited to chemical concentrations, temperature, dissolved oxygen, and trash." Listing Policy, p. 7.	See Response to Comment 12.3 explaining that such comment is beyond the scope of the proposed 303(d) List portion of the 2012 California Integrated Report. State Water Board agrees that Reaches 3 and 4 of the Ventura River may meet other listing factors related to pollutant impairments consistent with

No.	Author	Comment	Response
		Given the biological populations and communities	Sections 3.2, 3.9 and 3.11 of the Listing Policy.
		of steelhead in Reaches 3 and 4 of the Ventura	
		River, this listing factor is met. Specifically, the	
		Ventura River watershed is home to at least 11	
		endangered or threatened species, including	
		steelhead trout. See U.S. Fish & Wildlife Service,	
		Listing and Occurrence for California.2 Reaches 3	
		and 4 of the Ventura River are occupied by	
		steelhead and are rated as having high	
		conservation value. (supporting documentation	
		included in the comment letter).	
12.8	Santa Barbara	The situation-specific weight of evidence listing	See Responses to Comments 1.0, 1.1, and 6.11.
	Channelkeeper	factor provides that when information indicates	
		non-attainment of applicable water quality	Water Board staff agrees that the situation-
		standards that water segment is to be evaluated to	specific weight of evidence approach could be
		determine whether the situation-specific weight of	used to determine impairments by pollutants.
		the evidence demonstrates that the water quality	However, State Water Board staff disagrees that
		standard is not attained. Reaches 3 and 4 each	the Listing Policy applies to pollution. Section 1,
		meet the situation-specific weight of evidence	subsection 3, of the Listing Policy states in
		listing factor. Current conditions show that	express terms the intent for the application of the
		Reaches 3 and 4 are impaired for flow, and that	weight of evidence listing factor:
		the impairment is caused by pumping and	3. <u>Data Assessment</u> : An assessment in favor
		diversions. (see comment letter and attachments	of or against a list action for a waterbody-
		for proposed justification details). The available	pollutant combination shall be presented in
		information and data supporting impairment	fact sheets. The assessment shall identify

No.	Author	Comment	Response
		listing is scientifically defensible and	and discuss relationships between all
		reproducible. Further, in approving the State	available lines of evidence for water bodies
		Water Board's TMDL for the Ventura River, U.S.	and pollutants . This assessment shall be
		EPA recognized need for further action to address	made on a pollutant-by-pollutant (including
		flow impairment.	toxicity) basis. (Emphasis added.)
12.9	Santa Barbara	If the Listing Policy applies, then it applies	See Responses to Comments 3.4 and 12.8.
	Channelkeeper	equally for listing and delisting. See Listing	
		Policy, Section 4, pp. 11-13. In addition to	State Water Board staff disagrees that the Listing
		satisfying the delisting factors, which it cannot, to	Policy, specifically its listing and delisting factors,
		remove Reaches 3 and 4 from the 303(d) list the	applies to pollution—yet changes to the 303(d)
		responsible Regional Water Quality Control	List would afford the public participation
		Board (here Region 4) must document the list	processes as outlined therein.
		change in a fact sheet and hold a public hearing to	
		approve the change, respond in writing to all	The original listings were made prior to the
		public comments, approve a resolution in support	development of the Listing Policy. The waters
		of the decision, and submit supporting fact sheets,	should be re-evaluated using the current Policy
		responses to comments, documentation of the	and determine if the listings are appropriate.
		hearing process, and a copy of all data and	Region 4 waters are not being recommended for
		information considered to the State Water Board.	change for this Listing Cycle.
		The State Water Board must also assemble	
		supporting fact sheets and provide advance notice	
		and opportunity for public comment on the listing	
		decision. See Listing Policy, Section 6.3, p. 26.	
		The 2012 Integrated Report makes no reference to	
		the delisting factor, and Channelkeeper is unaware	

No.	Author	Comment	Response
		of any efforts by Region 4 or the State Water Board to comply with these delisting requirements. Accordingly, unless the delisting factors and additional requirements are met, Reaches 3 and 4 must remain listed as flow- impaired due to pumping and diversions. Because the existing pumping and diversion impairment listings for Reaches 3 and 4 are entirely consistent with the Clean Water Act, U.S. EPA Guidance, and the State Water Board's Listing Policy, that the impairments were identified on California's 303(d) list before the State Water Board adopted the Listing Policy or U.S. EPA adopted the 2006 Guidance in no way invalidates those listings.	
12.10	Santa Barbara Channelkeeper	Removing the impairment listings for Reaches 3 and 4 as the State Water Board says it will likely propose may impede existing and future efforts to remedy the ongoing flow-impairments of Reaches 3 and 4. Thus Channelkeeper strongly urges the State Water Board to comply with its Clean Water Act duty to continue to identify Reaches 3 and 4 on the 303(d) list as flow-impaired by pumping and diversions.	See Response to Comment 3.4. State Water Board staff is not recommending changes be made to any Region 4 waters for this Listing Cycle.
13.0	United States Environmental	We recommend all the water body-pollutant- combinations proposed for Category 4b by	Comment noted. State Water Board staff will revise the draft staff report and the proposed

No.	Author	Comment	Response
	Protection Agency,	Regional Board 7 be placed into Category 5 list.	303(d) List portion of the 2012 California
	Region IX	After reviewing the data and the justifications for	Integrated Report accordingly.
		4b, we find the justifications do not adequately	
		describe how the pollution controls identified will	
		achieve water quality standards. We acknowledge	
		that the programs that they have in place may	
		partially address the impairments and would not	
		object to these having a lower priority for TMDL	
		development.	
13.1	United States	The State Board should change the Regional	Comment noted. State Water Board staff will
	Environmental	Board 6 categorization for Carson River East Fork	revise the draft staff report and the proposed
	Protection Agency,	for the elements boron, phosphorus, and sulfate	303(d) List portion of the 2012 California
	Region IX	from 4b to 5. While the Regional Board has	Integrated Report accordingly.
		issued a Waste Discharger Requirement requiring	
		BMPs to control these pollutants, the controls are	
		insufficient to meet water quality standards in the	
		Basin Plan high influent concentrations associated	
		with Grover Hot Springs. The State Board could	
		address this program by implementing a natural	
		source exclusion in the Inland Surface Waters,	
		Bays and Estuaries Policy.	
13.2	United States	Topaz Lake should be added to the list. State	The proposed 303(d) List portion of the 2012
	Environmental	Board staff assessed trout data from Topaz Lake	California Integrated Report was developed based
	Protection Agency,	and concluded that mercury concentrations were	all readily available data and information that was
	Region IX	below the evaluation guidelines. EPA added	submitted as part of the notice of solicitation,

No.	Author	Comment	Response
		Topaz Lake to the Nevada 303(d) list on October	which had a deadline of August 30, 2010. The
		23, 2014 due to high mercury concentrations in	data provided by Nevada is outside the solicitation
		bass, a species that is more likely to accumulate	period and therefore will not be addressed until a
		mercury.	future Listing Cycle.
13.3	United States	We encourage State Board to consider and	Comment noted. This is consistent with the
	Environmental	incorporate off-cycle decisions for future 303(d)	recently amended Listing Policy, see specifically
	Protection Agency,	listing decisions due to at least one Regional	section 6.1.2.
	Region IX	Board approving off cycle listings/delistings.	