

California Regional Water Quality Control Board
Santa Ana Region

December 1, 2006

ITEM: 13

SUBJECT: TRIENNIAL REVIEW OF THE WATER QUALITY CONTROL PLAN
FOR THE SANTA ANA RIVER BASIN (BASIN PLAN)

DISCUSSION:

The purpose of this hearing is to give the public an opportunity to comment on the proposed Triennial Review Priority List and Work Plan, and for the Regional Board to consider adoption of proposed Resolution No. R8-2006-0085, approving the 2006 Triennial Review Priority List.

The California Water Code requires periodic review of water quality control plans (basin plans). Federal law requires that water quality standards be reviewed at least once every three years (hence the term "Triennial Review"). Public participation is an important part of this process. On June 6, 2006 and September 13, 2006, Regional Board staff conducted public meetings to solicit comments on staff's draft list of Basin Planning issues under consideration for inclusion in the 2006 Triennial Review. Announcements of these Triennial Review public meetings were sent by electronic mail to hundreds of interested parties, and posted on the Regional Board's web site. The proposed final Triennial Review list of 36 Basin Plan issues reflects consideration of comments made at the public meetings, and of written comments submitted to Board staff. The proposed list identifies these issues, their proposed priority, and the resources expected to be necessary to address them. A detailed discussion of each of these issues is provided in Attachment C to this report.

The Regional Board's current and assumed future budget for Triennial Review-related activities supports two staff positions (2.0 Personnel Years - PY), per fiscal year. This level of funding is the same as it has been for the last several years. Since this budget also supports Basin Planning program-related activities not connected with specific Basin Planning issues, such as conducting the triennial reviews, at the current funding level, only the first 20 or so issues on the proposed Triennial Review priority list could possibly be addressed by staff during the three years until the next triennial review. However, experience suggests that unexpected complexity and/or controversy may necessitate completion of work on many of these issues in the next Triennial Review cycle.

The following attachments are part of this report:

Attachment A - Tentative Resolution No. R8-2006-0085

Attachment B - Discussion of Issues

Attachment C - Response to Comments

These documents have also been posted at www.waterboards.ca.gov/santaana/

RECOMMENDATION:

Board Staff recommends adopting Resolution No. R8-2006-0085, approving the proposed Triennial Review Priority List and Work Plan.

California Regional Water Quality Control Board
Santa Ana Region

RESOLUTION NO. R8 – 2006 - 0085

Adoption of Prioritized List of Issues to be Addressed
in the Basin Plan Triennial Review

WHEREAS:

1. Section 303 (c) of the Clean Water Act requires that states hold public hearings for review of water quality standards (beneficial uses, water quality objectives and antidegradation policy) at least once every three years.
2. California Water Code Section 13240 requires that water quality control plans be periodically reviewed. Water quality control plans specify the state's water quality standards.
3. An updated Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was adopted by the Regional Board on March 11, 1994, and approved by the State Water Resources Control Board (SWRCB) on July 21, 1994. The updated Basin Plan was approved by the Office of Administrative Law (OAL) and became effective on January 24, 1995. The United States Environmental Protection Agency, Region 9 (USEPA) has approved most of the 1994 Basin Plan but has reserved action on certain water quality standards.
4. On April 18, 1997, the Regional Board adopted an amendment to the Basin Plan deleting the bacterial quality objectives specified for ocean waters. This amendment became effective upon approval by the SWRCB and OAL and has been approved by the USEPA.
5. On May 19, 2000, the Regional Board adopted another amendment to the Basin Plan to incorporate language authorizing the inclusion of compliance schedules in NPDES permits. The SWRCB , OAL and USEPA have approved this amendment, which became effective on July 15, 2002.
6. On January 22, 2004, the Regional Board adopted amendments to the Basin Plan to incorporate an updated total dissolved solids (TDS) and nitrogen management plan, including revised groundwater subbasin boundaries and TDS and nitrate-nitrogen objectives, revised surface water quality objectives for certain waters, and revised waste load allocations for TDS and nitrogen. The surface water standards changes are awaiting USEPA approval, while other components of these amendments became effective upon approval by the SWRCB and OAL.
7. To comply with the federal and state requirements for review of water quality standards/basin plans, Regional Board staff prepared a proposed list of issues to be addressed in the current triennial review of the Basin Plan. The issues on this list were prioritized, by fiscal year, to reflect both water quality concerns and the availability of needed resources.

8. Copies of the proposed list were distributed to all interested parties for their review and comment.
9. Regional Board staff conducted public meetings with interested stakeholders on June 6, 2006 and September 13, 2006, to consider the proposed prioritized list of Basin Planning Issues to be addressed in the next three years. Notice of the public workshop was given to all interested parties.
10. The Regional Board conducted a public hearing on December 1, 2006, to consider the adoption of staff's prioritized list. Notice of the public hearing was given to all interested parties and published in accordance with Water Code Section 13244.
11. The Regional Board considered all testimony at the public hearing regarding the prioritized list of identified Basin Plan Triennial Review issues.

THEREFORE BE IT RESOLVED THAT:

1. The California Regional Water Quality Control Board, Santa Ana Region, adopts staff's prioritized list of issues to be addressed in the current Triennial Review.
2. Areas of the Basin Plan not identified as needing investigation and possible revision are reaffirmed as adequate at the present time. The Basin Plan remains in effect until subsequent amendments are adopted and approved.
3. The Executive Officer is directed to forward copies of this resolution to the State Water Resources Control Board in fulfillment of the requirement of Section 13245 of the Water Code.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Santa Ana Region, on December 1, 2006

Gerard J. Thibeault
Executive Officer

Attachment A -- Resolution R8-2006-0085

Final 2006 Basin Plan Triennial Review Priority List
Revised November 15, 2006

Issue No.	Issue Description	Estimated Basin Planning Staff Resources ¹			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
1.	Amend the Basin Plan to include a prohibition on the use of septic tank subsurface disposal systems in the Quail Valley area.	[0.5]	[0.1]		[0.6] ²
2.	Consider changes to beneficial uses and associated objectives, taking the Water Code Section 13241 factors into account, in relation to standards compliance during wet weather. The immediate focus is to consider revisions to REC-1 and REC-2 beneficial uses and bacterial water quality objectives for surface waters based on USEPA's national criteria (<i>E.coli</i> and/or enterococci) and the recommendations of the Storm Water Quality Standards Task Force (SWQSTF). SWQSTF recommendations are now likely to include: 1) adoption of recreational use subcategory beneficial use definitions and redesignation of certain waters; 2) adoption of a high flow suspension of REC-1 standards; 3) removal of REC from certain waters ³ . Add rationale for the 2.2 mpn/100 ml Coliform discharge limit for POTWs discharging to the Santa Ana River and its tributaries. The SWQSTF has indicated its commitment to assist with other tasks identified in this list. Commencement of this support work is contingent on the schedule for completion of the ongoing REC-related standards review.	0.5	0.5	0.5	1.5 ⁴

¹ Basin Planning resources, unless otherwise noted. 2.0 personnel years (PY) per year of Basin Planning resources are currently available.

² Enforcement program staff resources.

³ A Use Attainability Analysis will be required for these activities.

⁴ Ongoing work supported by the SWQSTF.

Final 2006 Triennial Review Priority List
Revised November 15, 2006

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
3.	Add TMDL Basin Plan amendments, newly adopted or revised (e.g., for Newport Bay/San Diego Creek, Middle Santa Ana River Watershed, Big Bear Lake, Canyon Lake and Lake Elsinore).	[8.0]	[8.0]	[8.0]	[24] ⁵
4.	Amend the Basin Plan to incorporate the following, recommended or needed to facilitate implementation of the 2004 Nitrogen -TDS Basin Plan amendments: <ul style="list-style-type: none"> • A Reclamation Guidance Document. • An agreement for collaborative implementation by proponents of recharge projects involving imported water and/or interbasin water transfers of management strategies necessary to assure compliance with the Basin Plan TDS and nitrogen objectives. • Revise waste load allocations for the Santa Ana River to correspond with the actual or projected surface water POTW discharges 	0.2	0.2		0.2 ⁶
5.	Reviews of adopted TMDLs (per TMDL schedules/requirements).	[0.2]	[1.0]	[1.0]	[2.2] ⁷
6.	Consider revisions to SHEL beneficial use definition (addition of beneficial use for shellfish harvesting for bait purposes, not human consumption) and re-designation of appropriate waters.	0.1	0.25		0.35 ⁸
7.	Develop/revise nutrient objectives for region, focusing on 303(d) - listed waters, including Newport Bay, San Diego Creek, Lake Elsinore, Canyon Lake, Big Bear Lake and its tributaries. This may include reviewing ammonia objective for specific water bodies based on 1999 USEPA national criteria.	[1.0]	[1.0]	[1.0]	[3] ⁹
8.	Amend the Basin Plan to include a prohibition on the use of septic tank subsurface disposal systems in the Cherry Valley area.	0.1			

⁵ TMDL program resources

⁶ Some work already underway

⁷ TMDL program resources

⁸ Supported by County of Orange resources.

⁹ TMDL resources.

Final 2006 Triennial Review Priority List
Revised November 15, 2006

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
9.	Develop criteria for wetlands mitigation. Revise narrative to expand wetland definitions and description of 401 process.	0.2	0.1		0.3 ¹¹
10.	<p>Add the following water bodies to Tables 3-1 and 4-1 and designate appropriate beneficial uses and water quality objectives (expanded from 2002 Basin Plan Triennial Review list):</p> <ol style="list-style-type: none"> Add Santa Ana Delhi Channel and divide into appropriate reaches; assign REC-1 or recreational use subcategory¹² or remove REC-1¹³, REC-2, WILD, and/or WARM, as appropriate; Add Mystic Lake (San Jacinto Wildlife Reserve) and assign intermittent REC-1 or recreational use subcategory, REC-2, RARE, WARM, WILD and/or BIOL, as appropriate; Add Los Cerritos Wetlands (Seal Beach) and assign REC-1, REC-2, WILD, BIOL, RARE, SPWN, MAR, and/or EST, as appropriate; Add Buck Gully, Los Trancos Canyon Creek, Muddy Canyon Creek, Pelican Point Creeks (Corona Del Mar and Crystal Cove State Park), and assign REC-1 or Recreational use subcategory, REC-2, WARM, and/or WILD, as appropriate; Add East Garden Grove-Winterburg and Bolsa Chica/Anaheim-Barber City flood control channels and assign REC-2, WILD, WARM, and REC-1 or recreational use subcategory, as appropriate; Add Carbon, Fullerton, and Brea Creeks (San Gabriel River watershed) and assign REC-2, WILD, WARM, and REC-1 or recreational use subcategory, as appropriate. 	0.2	0.1		0.3 ¹⁴

¹¹ Partially funded by a USEPA grant.

¹² Approval of the recreational use subcategory (through a Basin Plan amendment, see item #2). Use Attainability Analysis (UAA) required to address recreational use subcategory designations for this and other surface waters.

¹³ UAA required to remove REC-1 use for this and other surface waters.

¹⁴ SWQSTF is expected to support work on this Task.

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Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
10.	g. Add Laguna Lake (City of Fullerton) and assign REC-1 or recreational use subcategory, REC-2, WARM, WILD, COMM as appropriate.				
11.	Add new reaches and designate appropriate beneficial uses ¹⁵ (Table 3-1 and Table 4.1): Changes needed as a result of FERC relicensing (modified from 2002 Basin Plan Triennial Review List): a. Lytle Creek: 1) From 1-15 to Korean Christian Camp Bridge or SCE diversion - designate new reaches and COLD or WARM beneficial uses, as appropriate. Designate reaches Intermittent as appropriate. 2) From Korean Christian Camp Bridge or SCE diversion to headwaters of South, Middle, and North Fork - designate as a separate reach and keep COLD. b. Mill Creek, from SAR to Valley of the Falls Road Bridge or upper SCE diversion - Designate new reaches and assign COLD or WARM beneficial uses, as appropriate. Designate reaches Intermittent as appropriate; c. SAR from Seven Oaks Dam to Power House 1 – designate as COLD or WARM, and existing or intermittent, as appropriate, and list as Reach 6; d. SAR from Power House 1 to headwaters – list as Reach 7 and keep COLD. b. Mill Creek, from SAR to Valley of the Falls Road Bridge or upper SCE diversion - Designate new reaches and assign COLD or WARM beneficial uses, as appropriate. Designate reaches Intermittent as appropriate; c. SAR from Seven Oaks Dam to Power House 1 – designate as COLD or WARM, and existing or intermittent, as appropriate, and list as Reach 6; d. SAR from Power House 1 to headwaters – list as Reach 7 and keep COLD.	0.1	0.1		0.2 ¹⁶
12.	Consider adopting and/or removing existing site-specific objectives for the Santa Ana River. The Santa Ana River Dischargers Association (SARDA) has identified at least three pollutants, including aluminum, chlorine and cyanide, for which site-specific objectives may be warranted. It may be appropriate to remove site-specific objectives for copper, cadmium, and lead for middle Santa Ana River reaches and their tributaries, as well.	0.1	0.1		0.2 ¹⁷

¹⁵ In addition, include narrative description of localized flow conditions including effects of diversions, perennial and intermittent flows and springs.

¹⁶ Upper Santa Ana Water Resources Association – Triennial Review Committee is expected to support work on this Task.

¹⁷ Supported by SARDA.

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
13.	<p>Update Beneficial Use Table 3-1 and Water Quality Objectives Table 4-1 (modified from 2002 Basin Plan Triennial Review list), as appropriate, including consideration of:</p> <p>Add beneficial use designations (Table 3-1):</p> <ul style="list-style-type: none"> a. Add COMM to appropriate lakes, reservoirs, and streams; b. Add RARE to appropriate waters, including all reaches of San Diego Creek, Sand Canyon Wash, valley reaches of Lytle, Cajon, and City Creeks, Day Creek, Barton Creek, Waterman Creek, Fish Creek, Reaches 4, 5, 6, and 7 of the San Jacinto River, Strawberry Creek, North Fork of San Jacinto River, Sunnyslope Creek, Reach 4 and 6 of the Santa Ana River, Reach 1 & 2 of Mill Creek, Oak Glenn Creek, Reach 1, 3, and 4 of San Timoteo Creek, Bear Creek, the Shay Meadows wetland and Baldwin Lake; c. Add SPWN to appropriate waters, such as Mountain Home Creek, Lytle Creek, San Antonio Creek, San Jacinto River – North Fork, and Reach 7, and Santa Ana River Reach 3 & 4; d. Add WILD to San Jacinto River Reaches 4 & 5. <p>Changes needed to reflect existing hydrology:</p> <ul style="list-style-type: none"> e. San Diego Creek from upper Newport Bay to drop structure at MacArthur Blvd - designate as a separate reach and add EST; f. Erwin Lake - revise beneficial uses to intermittent. 	0.1	0.2	0.1	0.4

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
14.	Remove Laguna and Lambert Reservoirs from Lakes and Reservoirs section of Table 3-1 and Table 4-1. Add the creeks that remain to Table 3-1 and 4-1, and assign appropriate WQS.	0.1			0.1
15.	Add waters in the Goodhart Canyon Watershed to Santa Ana Region and assign water quality standards. (Drainage has been altered by the construction of Diamond Valley Reservoir's East Dam). Add or subtract waters that would change as a result of realigning Region's boundary (to accurately reflect watershed boundaries) with Region 9 in the area of Laguna Hills.	0.1			0.1
16.	Add a water quality objective narrative regarding the excessive growth of macrophyte aquatic plants or combine with existing algae narrative objective.		0.1		0.1
17.	Revise numeric objective for residual chlorine for discharges to surface waters.		0.5	0.5	1.0
18.	Republish basin plan in updated electronic format with updated maps based on CalWaters data and reflecting changes in watershed boundaries.		0.1		0.1 ¹⁸
19.	Add narrative on implementation procedures for narrative turbidity and toxicity objectives.		0.3	0.3	0.6
20.	Revise Chapter 5 Prohibitions Applying to Inland Surface Waters (saline and sewage discharges) and modify to explicitly include lakes.			0.1	0.1

¹⁸ State Water Resources Control Board contract funds will be used to complete the majority of this task.

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
21.	Revise Chapter 3 Beneficial Use Tables narrative to incorporate Tributary Rule.			0.1	0.1
22.	Consider narrative revisions to make clear that water quality standards apply to intermittent surface waters, as well as perennial waters.			0.1	0.1
23.	Consider revisions to recognize importance of headwaters as a separate class or category of waters, and of protecting their WQS.			0.1	0.1
24.	Develop waste discharge prohibitions for excessive sedimentation resulting from controllable water quality factors (targeted at excessive sedimentation in upper Newport Bay, Big Bear Lake, and Lake Elsinore Watersheds).		0.3	0.2	0.5
25.	Consider need for clarification of Chapter 5 Minimum Lot Size Requirements and Exemption Criteria for New Developments (using on-site sewage disposal systems).			0.25	0.25
26.	Non-regulatory, descriptive updates and revisions, including: <ul style="list-style-type: none"> a. Add narrative on Alaska Rule; b. Update information on approved policies (e.g., Nonpoint Source Enforcement Policy, 303(d) Listing Policy) (Chapter 2); c. Update Chapter 5 "Disposal of hazardous and Nonhazardous Waste" to reflect loss of SWAT program; d. Update SLIC Program Discussion; e. Update Animal Confinement Facilities (Dairies) discussion in Chapter 5; f. Update Nonpoint Source Program discussion in Chapter 5; g. Add narrative on the efforts to remediate perchlorate contamination in the region. 		0.25		0.25
27.	Update the discussion of implementation of the antidegradation policy in Chapter 2 to address non-point source pollution.		0.1	0.1	0.2

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Revised November 15, 2006

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
28.	Reevaluate temperature criteria to ensure full protection of aquatic life.			0.25	0.25
29.	Update dissolved oxygen objectives for WARM/COLD beneficial uses.			0.25	0.25
30.	Review silver water quality objective for groundwater.			0.25	0.25
31.	Revise fluoride WQO to be consistent with DHS MCLs.			0.25	0.25
32.	Review ammonia objective based on 1999 USEPA national criteria.		0.1		0.1
33.	Develop and adopt biological criteria for managing water quality.		1.0	1.0	2.0 ¹⁹
34.	Santa Ana River, Reach 3 – add TOC WQO.			0.1	0.1
35.	Review Methylene Blue-Activated Substances (MBAS) water quality objective for surface waters.			0.1	0.1

¹⁹ SWRCB directing statewide effort

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 Revised November 15, 2006

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
36.	Santa Ana River, Reach 3 – clarify the COD water quality objective.			0.1	0.1
	<u>SUBTOTAL: Resource needs to address Triennial Review issues</u>	11.7	14.4	14.65	
	Resources used for conducting Triennial Review	0.2			
	Funding supported by TMDL resources	[9.2]	[10]	[10]	
	Funding supported by Enforcement resources	[0.5]	[0.1]	[0]	
	<u>TOTAL TRIENNIAL REVIEW RESOURCES NEEDED (2.1 PY available)</u> (Subtotal Resources less resources for Triennial Review, less resources provide by TMDL and Enforcement programs)	1.8	4.3	4.65	

**2006 TRIENNIAL REVIEW
DESCRIPTION OF ISSUES
Updated October 23, 2006**

Issue No. 1

Amend the Basin Plan to include a prohibition on the use of septic tank subsurface disposal systems in the Quail Valley area

A large number of septic systems in the Quail Valley area of Riverside County are failing due to the high density of systems, poor soil conditions, high groundwater and other conditions, causing a public health threat and contributing to water quality impairment of surface waters. Eastern Municipal Water District and Elsinore Valley Municipal Water District are evaluating the design and financing of sewer systems for the area. The proposed Basin Plan amendment would prohibit the use of new septic systems in most areas of Quail Valley and would require the residents to connect to the sanitary sewer system within one year of its availability. The prohibition was adopted by the Regional Board on October 3, 2006.

Estimated Resources:

Total Staff Time: 0.6 PY (RWQCB enforcement program staff resources)

Contract \$: none

Duration: 2 years

Issue No. 2

Consider changes to beneficial uses and associated objectives, taking the Water Code Section 13241 factors into account, in relation to standards compliance during wet weather. The immediate focus is to consider revisions to REC-1 and REC-2 beneficial uses and bacterial water quality objectives for surface waters, based on USEPA's national criteria (*E. coli* and/or enterococci) and the recommendations of the Storm Water Quality Standards Task Force (SWQSTF). SWQSTF recommendations are now likely to include: 1) adoption of a REC-1 subcategory beneficial use definition and redesignation of the REC subcategory that applies to certain waters; 2) adoption of a high flow suspension of REC-1 standards; 3) removal of REC from certain waters. Add rationale for the 2.2 mpn/100 ml Coliform discharge limit for POTWs discharging to the Santa Ana River and its tributaries.

The SWQSTF has indicated its commitment to assist with other tasks identified in this list. Commencement of this support work is contingent on the schedule for completion of the ongoing REC-related standards review.

During the public participation process leading to the development of the 2002 Triennial Review list and work plan, co-permittees in the Regions' urban, area-wide storm water runoff NPDES permits and other stakeholders in the Region recommended that the

question of compliance with water quality objectives during wet weather be considered, including whether and to what extent the Water Code Section 13241 factors had been evaluated in this context. The stakeholders also recommended that beneficial use designations be reviewed to assure that established water quality objectives were appropriate. This issue was identified as a lower priority item on the draft list, with the note that significant stakeholder resources would be necessary to conduct the recommended review, in light of Board staff resource limitations.

The draft 2002 Triennial Review list included as a high priority the review of REC-related bacterial quality objectives to consider US EPA's national bacteria quality criteria, which are based on *E. coli* and enterococcus. The current Basin Plan objectives are based on fecal coliform.

Based on commitments from the stakeholders to provide requisite support, the approved 2002 Triennial Review list placed the standards review issue identified by the stakeholders high on the list. In part, the Board recognized the merit of conducting the standards review to assure that the WC Section 13241 factors were properly evaluated when considering changes to the bacterial quality objectives.

In response to the adopted 2002 Triennial Review, the Stormwater Quality Standards Task Force was initiated. While the Task Force (or other stakeholder groups) may ultimately elect to dedicate resources necessary to conduct standards reviews on a broad scale (including other items on the proposed 2006 Triennial Review list), the initial focus of the Task Force effort is on REC-related standards. The Task Force has developed preliminary recommendations, including: (1) a high flow suspension of REC standards; (2) adoption of a "limited" REC subcategory; (3) adoption of *E. coli* objectives; (4) adoption of a narrative pathogen objective; and, (5) adoption of objectives based on *E. coli*. The Task Force is also preparing recommendations, based on Use Attainability Analyses, for re-designation and de-designation of certain waters. The documents prepared by the Task Force are posted on the Santa Ana Watershed Project Authority website (www.sawpa.org). SAWPA is a key sponsor of and facilitator for the Task Force effort.

As stated above, the immediate focus of the SWQSTF is to consider revisions to REC-1 and REC-2 beneficial uses and bacterial water quality objectives. The 1995 Basin Plan includes a bacterial quality objective for REC-1 waters of a log mean of <200 fecal coliform organisms per 100 ml based on five or more samples per 30-day period. In 1986, the EPA published national criteria guidance *Ambient Water Quality Criteria for Bacteria – 1986* (EPA 440/5-84-002), recommending the use of *Escherichia coli* and enterococci as indicator bacteria. The epidemiological data upon which the criteria guidance is based indicate that *E. coli* and enterococci are better correlated with health effects related to water-contact recreation. USEPA's Action Plan for Beaches and Recreational Waters (EPA/600/R-98/079, March 1999) has directed all states to adopt bacterial standards that are consistent with current EPA guidance by 2003. The use of *E. coli* and enterococci as bacterial indicators is reflected in Title 17 of the California Code of Regulations, Sec. 7956, *et seq.*, regulations for public beaches and ocean

water-contact sports areas. These regulations implement Assembly Bill 411. In addition, the Ocean Plan, 2004, adopted by the State Water Resources Control Board, includes standards implementing CCR Section 7956, *et seq.*, applicable to marine waters of the state, including the Santa Ana Region.

The Regional Board has implemented the recommendations of the Department of Health Services when setting effluent limitations for the discharge of treated municipal wastewater to the Santa Ana River and other waters that are used for water contact recreation. The Department's recommendations derive, in part, from the science underlying the Reclamation Criteria developed by the Department for various recycled water uses, including discharges to nonrestricted recreational impoundments. These Criteria are codified in Title 22 of the California Code of Regulations. Briefly, these criteria specify that discharges of recycled water to nonrestricted recreational impoundments (i.e., those with REC-1 uses) must be adequately oxidized, coagulated, clarified, filtered and disinfected (tertiary treated or equivalent). The Criteria establish a performance standard of 2.2 mpn/100 ml total coliform to define adequate disinfection. The intent of these criteria is to assure that when recycled water is used for REC 1 purposes, it is essentially pathogen-free, thereby protecting public health. The Department also developed wastewater disinfection guidelines for discharges of wastewater to REC-1 surface waters ("Wastewater Disinfection for Public Health Protection"). These disinfection guidelines recommend the same treatment requirements for wastewater discharges to REC-1 waters as those stipulated in Title 22 for supply of recycled water to nonrestricted recreational impoundments, since the public health risks under both scenarios are analogous. Accordingly, to assure the protection of public health, the Board's waste discharge requirements for POTW discharges to REC-1 waters apply this 2.2 mpn/100 ml performance standard.

Comments have been received regarding this regulatory approach. The comments indicate that: (1) the Reclamation Criteria do not apply to discharges to surface waters and cannot, therefore, be used as the basis of setting effluent limitations in permits for POTW discharges to surface waters; and, (2) there is inconsistency between the 200 fecal coliform organism/100 ml objective and the 2.2 mpn/100 ml standard included in the Board's permits, and this inconsistency must be addressed before the 2.2 mpn/100 ml standard can be lawfully applied. Findings in the Regional Board's waste discharge requirements have been augmented to provide a more detailed explanation of the basis for implementing this standard. However, explanatory language should also be included in the Basin Plan. The narrative pathogen objective being developed by the Stormwater Quality Standards Task Force, if approved, would be used to support the application of the coliform performance standard in POTW permits.

Estimated Resources:

Total Staff Time:	0.5 PY/year
Contract \$:	none
<u>Duration:</u>	3 years+ (assumes ongoing work by the SQSTF)

Issue No. 3

Add TMDL Basin Plan amendments, newly adopted or revised (e.g., for Newport Bay/San Diego Creek Watershed, Middle Santa Ana River Watershed, Big Bear Lake, Canyon Lake, and Lake Elsinore).

Pursuant to Section 303(d) of the Clean Water Act (CWA), the Regional Board has identified a number of water bodies in the Region as impaired, (i.e., not meeting water quality standards), due to various pollutants. The CWA requires that a Total Maximum Daily Load (TMDL) be established for any water body listed as impaired. The TMDL is the allowable amount of a pollutant that can be discharged from all sources, both point and non-point, and still ensure that water quality standards are achieved (water quality objectives are met and beneficial uses are protected).

TMDL development was initiated or completed for certain water bodies/pollutants during the last triennial review cycle. Implementation of approved TMDLs is an ongoing task. During the next 3-year period, Board staff expects to develop TMDLs, and the associated implementation plans, for inclusion in the Basin Plan for the following water bodies:

- Newport Bay and San Diego Creek, for toxic substances, including selenium
- Lake Elsinore, for toxics;
- Canyon Lake, for pathogens;
- Big Bear Lake, for toxicity;

Estimated Resources:

Total Staff Time: 8 PYs / year (TMDL program resources)

Contract \$: \$1,200,000 (TMDL Program)

Duration: 3 years

Issue No. 4:

Amend Basin Plan to incorporate the following, recommended or needed to facilitate implementation of the 2004 Nitrogen – TDS Basin Plan amendments:

- **A Reclamation Guidance Document;**
- **An agreement for collaborative implementation by proponents of recharge projects involving imported water and/or interbasin water transfers of management strategies necessary to assure compliance with Basin Plan TDS and nitrogen objectives.**

The Reclamation Guidance Document is an outgrowth of the Nitrogen/TDS Task Force effort to review groundwater basin boundaries and nitrogen and TDS objectives throughout the Region, as well as management strategies for these constituents. The Nitrogen/TDS Task Force investigations were triggered by concerns that the existing

objectives might not have been developed in a scientifically defensible manner and could severely limit opportunities for wastewater reclamation and recharge. The Task Force work culminated in significant amendments to the Basin Plan, which were approved by the Regional Board in December 2004. These amendments have been approved by the State Water Board and Office of Administrative Law. The surface water standards components of the amendments are awaiting US EPA approval.

The Task Force recognized that development of a reclamation guidance document that could be used by project proponents when developing reclamation/recharge projects would facilitate permitting of those projects. The Task Force thus expended considerable time and energy in developing a draft guidance document. The draft document describes the regulatory framework under which reclamation/recharge projects must be considered, including antidegradation requirements and CEQA. The draft document then guides proponents through the permitting/approval process, describing the discretion available to the Regional Board and how and under what circumstances that discretion is likely to be employed. However, work on this document was placed on hold so that appropriate focus could be placed on consideration of the N/TDS-related Basin Plan amendments. In addition, Board staff believed that revision of the document, largely (though not solely) editorial in nature, would be necessary before it could be recommended to the Regional Board.

The Task Force members have requested that completion of the document be given high priority during this triennial review. Board staff agrees that the document would be very worthwhile and believes that its completion would honor the resource commitments of the Task Force.

To implement the 2004 Nitrogen /TDS Basin Plan amendments in an appropriate and equitable manner, it is necessary to assure that groundwater recharge projects using imported water and interbasin transfers, as well as recycled water, are consistent with the nitrogen and TDS objectives established in those amendments, and with the revised nitrogen and TDS management strategies, including maximum benefit programs. Recycled water recharge projects are and must be regulated under waste discharge requirements. A regulatory approach involving waste discharge requirements or conditional waivers therefore could be considered for imported water/interbasin transfer recharge projects. Alternatively, a collaborative effort and Regional Board approved agreement to manage such recharge projects in a manner that assures long-term compliance with the Basin Plan could be considered. The process to establish this groundwater recharge management strategy is beginning; the management strategy itself has yet to be developed. Key components of this management plan will likely be development and implementation of an ongoing monitoring and modeling program to demonstrate and predict the long-term effects of groundwater recharge on TDS and nitrogen objectives, and to identify corrective actions that will be utilized if objectives are at risk of being exceeded due to recharge activities. Once this strategy has been developed, it, along with the Reclamation Guidance Document, should be incorporated into the Basin Plan as elements of an overall program to implement the 2004 N/TDS amendments.

Estimated Resources:

Total Staff Time: 0.1 PY / year (supported by the N/TDS Basin Monitoring Task Force)

Contract \$:

Duration: 2 year

Issue No. 5

Complete triennial review of adopted TMDLs (per TMDL schedules/requirements)

The TMDLs adopted and approved for the Santa Ana Region to date take a phased approach and include commitments to review the TMDLs periodically to assess the need for refinement. Since the TMDLs are incorporated in the Basin Plan, modifications of TMDLs require a Basin Plan amendment.

Estimated Resources:

Total Staff Time: 2.2 PYs (TMDL program resources)

Contract \$: none

Duration: 3 years

Issue No. 6

Consider revisions to SHEL beneficial use definition (addition of beneficial use for shellfish harvesting for bait purposes, not human consumption) and re-designation of appropriate waters.

As defined in the Basin Plan, waters designated Shellfish Harvesting (SHEL) "support habitats necessary for shellfish (e.g., clams, oysters, limpets, abalone, shrimp, crab, lobster, sea urchins, and mussels) collected for human consumption, commercial or sports purposes." The SHEL beneficial use is a designated use of Upper Newport Bay. The Basin Plan water quality objective for waters that support SHEL is fecal coliform of a median concentration not more than 14 MPN /100 ml and not more than 10% of samples exceed 43 MPN/100 ml. This objective is intended to protect the health of persons who consume harvested shellfish. This water quality objective is often not met in Upper Newport Bay. A recent use attainability assessment of Upper Newport Bay has suggested that while shellfish are harvested for use as bait, they are not used for human consumption. As a result, the suggestion has been made to create a modified or limited SHEL beneficial use that would include the collection of shellfish for bait purposes only and where there is not, nor has there been, shellfish collection for human consumption. If approved, this refined use would be considered for Upper Newport Bay.

Estimated Resources:

Total Staff Time: 0.35 PY (with assistance from the County of Orange)
Contract \$: none
Duration: 2 years

Issue No. 7

Develop/revise nutrient objectives for the Region, focusing on 303 (d) – listed waters, including Newport Bay, San Diego Creek, Lake Elsinore, Canyon Lake, Big Bear Lake and its tributaries. This may include reviewing ammonia objective for specific water bodies based on 1999 USEPA national criteria.

The Regional Board approved nutrient TMDLs for the Newport Bay/San Diego Creek watershed in 1998, for the Lake Elsinore and Canyon Lake watersheds in 2004, and the Big Bear Lake watersheds in 2006, to address eutrophic conditions (nutrient over-enrichment) in receiving waters. The TMDLs require the Regional Board to review and revise as necessary relevant nutrient water quality objectives.

Studies are being conducted, pursuant to the Newport Bay/San Diego Creek watershed nutrient TMDL implementation plan, to consider revised nutrient objectives. The results of these investigations will be used to develop specific recommendations for changes to the nutrient objectives. It is expected that these recommendations will be considered during this Triennial Review cycle.

Recent data collected from Lake Elsinore and Canyon Lake have shown the need to revise the objectives for total nitrogen, total phosphorus, chlorophyll A, and dissolved oxygen for the TMDLs of these lakes. These TMDLs will be updated within the next two years.

Additional data are being collected from Big Bear Lake and its tributaries to allow the appropriate revisions to its TMDL within the near future.

The USEPA issued national guidance on developing ammonia objectives in 1999. Although the guidance was developed to protect waters from toxic effects, ammonia also contributes to nutrient problems in waters. The 1999 USEPA national criteria has already been incorporated into the Canyon Lake TMDL and possibly will be incorporated into other TMDLs in the Region. It might be efficient to adopt the 1999 national criteria Regionwide at the same time that the next TMDL adopts the criteria.

Estimated Resources:

Total Staff Time: 1 PY/year(TMDL program resources)
Contract \$: none
Duration: 3 years

Issue No. 8

Amend the Basin Plan to include a prohibition on the use of septic tank subsurface disposal systems in the Cherry Valley area.

Rising nitrate levels have been observed in water wells in the Cherry Valley area (located in the Beaumont Groundwater Management Zone). Recently nitrate concentrations in a couple of groundwater production wells have approached the MCL. On-site waste disposal systems have been identified as a possible source of nitrates in groundwater. The proposed Basin Plan amendment would prohibit new on-site waste disposal systems in the Cherry Valley area.

Estimated Resources:

Staff time:	0.1 PY
Contract \$:	none
<u>Duration:</u>	1 year

Issue No. 9

Develop criteria for mitigating wetlands impact mitigation. Revise narrative to expand wetland definition and description of 401 process.

Staff proposes to develop regional criteria for determining appropriate mitigation when wetlands and other Waters of the State are impacted by various construction activities, primarily those involving dredging and filling. Dredging and filling activities are subject to:

- Permits issued by the U.S. Army Corps of Engineers, pursuant to CWA Section 404; and,
- Water quality standards certifications issued by the SWRCB or Regional Board pursuant to CWA Section 401.

In some cases, waste discharge requirements are adopted by the Board for dredge and fill projects. These regulatory actions implement federal and state requirements for "no net loss of wetlands" as a result of land use practices, and state and federal policies encouraging the expansion of existing wetlands and creation of new ones.

Successful mitigation of the loss of wetlands and other Waters of the State depends on a number of factors, including consideration of the ecological functions and values of the impacted area, and the location of the proposed mitigation (within or outside of the impacted watershed), among others.

To develop information needed to further investigate this issue, an inventory and assessment of the quality of the riverine wetland resources in Region is being conducted. This work has been partially funded by a USEPA grant and is nearing completion.

The criteria that staff proposes to develop will enable both staff and the regulated community to more easily and consistently determine appropriate mitigation projects when wetlands and other waters of the State are affected by construction or development.

Estimated Resources:

Staff time: 0.3 PY (Partially funded by a USEPA grant)
Contract \$: none
Duration: 2 years

Issue No. 10

Add the following water bodies to Tables 3-1 and 4-1 and assign WQS (expanded from 2002 Basin Plan Triennial Review List):

- a. **Add Santa Ana Delhi Channel; divide into Reaches from Upper Newport Bay to headwaters (beginning of Santa Ana Gardens and Delhi Channels) and assign REC-1 or REC-1 subcategory or remove REC-1, REC-2, WARM, WILD, and EST, as appropriate;**
- b. **Add Mystic Lake and assign intermittent REC-1, REC-2, RARE, WARM, WILD, and BIOL as appropriate;**
- c. **Add Los Cerritos Wetlands and assign REC-1, REC-2, RARE, WILD, BIOL, SPWN, MAR, and EST as appropriate.**
- d. **Add Buck Gully, Los Trancos Canyon Creek, Muddy Canyon Creek, Pelican Hill Waterfall, Pelican Point Creek, Pelican Point Middle Creek, and assign appropriate REC-1 or REC-1 subcategory, REC-2, WARM, and WILD as appropriate;**
- e. **Add East Garden Grove Wintersburg and Bolsa Chica/Anaheim-Barber City Channels and assign appropriate REC-1 or REC-1 subcategory, REC-2, WILD, and WARM as appropriate;**
- f. **Add Carbon, Fullerton, and Brea Creeks (San Gabriel River watershed) and assign appropriate REC-1 or subcategory, REC-2, WILD, and WARM, as appropriate;**
- g. **Add Laguna Lake (in Fullerton) and assign appropriate REC-1 or REC-1 subcategory, REC-2, WARM, WILD, and COMM as appropriate;**

These waters were not specifically included in the 1995 Basin Plan. In addition to listing these waters in the Basin Plan, appropriate beneficial uses and water quality objectives need to be identified for them.

- The Santa Ana Delhi Channel discharges to Upper Newport Bay. The SWQSTF is assisting Board staff to determine appropriate assignment of beneficial uses to this water. This will include the preparation of a use attainability analysis wherever REC-1 is not assigned.

- Mystic Lake is a large, ephemeral lake in the San Jacinto River Valley. Recent land acquisitions have brought Mystic Lake within the California Department of Fish and Game's San Jacinto Wildlife Area.
- The Los Cerritos Wetlands are located in the Cities of Seal Beach and Long Beach adjacent the San Gabriel River. In the Santa Ana Regional Water Quality Control Board's section of the wetlands (located in the City of Seal Beach), property containing degraded wetlands has been purchased to be preserved. The wetlands will be restored and/or enhanced.
- Buck Gully empties into the ocean just south of Corona Del Mar State Beach and into the Newport Beach Marine Life Refuge Area of Special Biological Significance (ASBS). Los Trancos, Muddy Canyon and Pelican Point Creeks flow through Crystal Cove State Park. All these waters discharge into the Irvine Coast Marine Life Refuge Area ASBS.
- Laguna Lake is a seven-acre lake in the Laguna Lake Park in the City of Fullerton.
- East Garden Grove Wintersburg, Anaheim-Barber City, and Bolsa Chica Channels are soft-bottomed, engineered flood control channels that discharge into Huntington Harbour and Anaheim Bay.
- Carbon, Fullerton, and Brea Creeks drain into Coyote Creek, a tributary to the San Gabriel River.

Estimated Resources:

Staff time: 0.3 PY (SWQSTF is expected to support work on this task)

Contract \$: undetermined

Duration: 2 year

Issue No. 11

Add new reaches and designate appropriate beneficial uses (Table 3-1 and Table 4-1). Changes needed as a result of Federal Energy Regulatory Commission (FERC) relicensing (modified from 2002 Basin Plan Triennial Review List):

a. Lytle Creek:

- 1) From 1-15 to Korean Christian Camp Bridge or SCE diversion – designate new reaches and COLD or WARM beneficial uses, as appropriate. Designate reaches Intermittent as appropriate.

- 2) From Korean Christian Camp Bridge or SCE diversion to headwaters of South, Middle, and North Fork – designate as a separate reach and keep COLD;**
- b. Mill Creek, from SAR to Valley of the Falls Road Bridge or upper SCE diversion – designate new reaches and assign COLD or WARM beneficial uses, as appropriate. Designate reaches Intermittent as appropriate;**
 - c. SAR from Seven Oaks Dam to Power House 1 – designate as COLD or WARM, and existing or intermittent, as appropriate, and list as Reach 6;**
 - d. SAR from Power House 1 to headwaters – list as Reach 7 and keep COLD.**

In 2003, the Federal Energy Regulatory Commission (FERC) issued new licenses for the continued operation and maintenance of hydroelectric facilities operated by Southern California Edison (SCE) on Mill Creek, Santa Ana River, and Lytle Creek. In coordination with FERC's licensing, the State Water Resources Control Board issued a CWA Section 401 Water Quality Standards Certification (401 Certification) for the hydroelectric operations. These regulatory actions impose several conditions on these hydroelectric operations, and on the several water districts that divert and appropriate water from these streams downstream from the hydroelectric operations in coordination with the operation of these facilities. To accurately reflect the conditions of the FERC license and the 401 certification, it appears appropriate to designate new reaches of the main stem of Mill Creek from the SR 38 bridge upstream to its headwaters, of the Santa Ana River above the Seven Oaks Dam to the Bear Creek confluence, and of Lytle Creek from its valley reach upstream to the Miller Narrows diversion, and to determine and assign appropriate beneficial uses to these reaches. Upon an initial review of the stream reaches and related FERC documents, it appears that these waters support a cold water ecosystem, at least intermittently, and do not support and sustain a warm water ecosystem.

Estimated Resources:

Staff time:	0.2 PY (supported by USARWRA)
Contract \$:	undetermined
<u>Duration:</u>	2 years

Issue No. 12.

Consider adopting and/or removing existing site-specific objectives for the Santa Ana River. The Santa Ana River Dischargers Association (SARDA) has identified at least three pollutants, including aluminum, chlorine, and cyanide, for which site-specific objectives may be warranted. It may be appropriate to remove site-specific objectives for copper, cadmium, and lead for middle Santa Ana River reaches and their tributaries, as well.

The Santa Ana River Dischargers Association (SARDA) has identified at least three pollutants for which site-specific objectives may be warranted. SARDA would like Board staff to participate in a recalculation effort relative to the aluminum water quality criteria.

The current water quality objective is based on a national standard and SARDA believes that it is significantly lower than necessary to protect the aquatic life of the Santa Ana River.

In addition, SARDA believes that EPA's 1984 guidance for chlorine would not be appropriate for the Santa Ana River. Therefore, they would like Regional Board staff to consider adopting site-specific standards for chlorine for the Santa Ana River if EPA's guidance is adopted for the rest of the region.

Finally, site-specific objectives (SSOs) for copper, cadmium, and lead for the Santa Ana River and certain tributaries were incorporated in the 1995 Basin Plan and submitted for review and approval by the USEPA. EPA reserved action on these SSOs in light of its promulgation of the California Toxics Rule (CTR), which incorporated new scientific information concerning the appropriate objectives for these metals that was not available at the time the SSOs were adopted. EPA reserved action to allow the Regional Board to consider whether it would be appropriate to delete the SSOs and to rely instead upon the CTR. Given the new scientific information, it appears appropriate to withdraw the SSOs in favor of the numeric water quality criteria in the CTR.

Estimated Resources:

Total Staff Resources: 0.2 (Supported by SARDA)
Contract \$: none
Duration: 2 years

Issue No. 13

Update Beneficial Use Table 3-1 and Water Quality Objective Table 4-1 (modified from 2002 Basin Plan Triennial Review), as appropriate, including consideration of :

Add beneficial use designations (Table 3-1):

- a. **Add COMM to appropriate lakes, reservoirs, and streams;**
- b. **Add RARE to appropriate waters, including all reaches of San Diego Creek, Sand Canyon Wash, valley reaches of Lytle, Cajon, and City Creeks, Day Creek, Barton Creek, Waterman Creek, Fish Creek, Reaches 4, 5, 6, and 7 of the San Jacinto River, Strawberry Creek, North Fork of the San Jacinto River, Sunnyslope Creek, Reach 4 and 6 of the Santa Ana River, Reaches 1 & 2 of Mill Creek, Reach 1, 3, and 4 of San Timoteo Creek, Bear Creek, the Shay Meadows wetland, and Baldwin Lake;**
- c. **Add SPWN to appropriate waters, such as Mountain Home Creek, Lytle Creek, San Antonio Creek, San Jacinto River - North Fork, and San Jacinto River Reach 7, and Santa Ana River Reaches 3 & 4 (Prado Dam to San Jacinto Fault);**
- d. **Add WILD to San Jacinto River Reaches 4 & 5.**

Changes needed to reflect existing hydrology:

- f. San Diego Creek from upper Newport Bay to drop structure at Macarthur Blvd – designate and name as a separate reach and add EST;**
- g. Erwin Lake – revise beneficial uses to intermittent.**

The commercial and sportfishing (COMM) beneficial use is used for waters that are used for commercial or recreational collection of fish or other organisms, including those collected for bait. There are several inland waters in Region 8 where sportfishing is a popular activity and yet no inland waters have been previously designated with the COMM beneficial use in the Basin Plan. It is appropriate to add COMM to a number of inland waters where this beneficial exists.

Spawning, reproduction, and development (SPWN) waters support high quality aquatic habitats necessary for reproduction and early development of fish and wildlife. Several inland waters have been designated with SPWN, however other waters meet the SPWN criteria and have not been designated with this beneficial use. It may be appropriate to add the SPWN designation to several inland waters that support this beneficial use, particularly if native or popular sport fish are reproducing successfully.

New (since 1998) information has become available indicating that a number of the Region's waters support recently listed rare, threatened and/or endangered species or their habitat, and/or have been given a federal Critical Habitat Designation. These waters should be considered for the RARE beneficial use. In addition, there are a few waters that have had recent historic accounts of a listed species but no accounts of current habitation. The waters that currently are not listed in the Basin Plan as having the RARE beneficial use and that have been reported to support this use, include:

- All Reaches of San Diego Creek (for the Least Bell's Vireo);
- Sand Canyon Wash (for the Least Bell's Vireo);
- Valley reaches of Lytle, Cajon, and City Creeks (for the San Bernardino Kangaroo Rat);
- Day Creek, City Creek, Barton Creek, North Fork of the San Jacinto River, Strawberry Creek, and Reach 7 of the San Jacinto River (for the Mountain Yellow Legged Frog);
- Reach 4 of the Santa Ana River (for the Santa Ana Sucker, Least Bell's vireo, and the Santa Ana River Wooly Star);
- Reach 6 of the Santa Ana River (for the Southwestern Willow Flycatcher and historically the Mountain Yellow Legged Frog);
- Sunnyslope Creek (for the Santa Ana Sucker);
- Mill Creek Reach 2 (for the Southwestern Willow Flycatcher and historically the Mountain Yellow Legged Frog);
- Mill Creek Reach 1 (for the San Bernardino Kangaroo Rat);

- Reach 4, 5, 6, and 7 of the San Jacinto River (for the San Bernardino Kangaroo Rat);
- Reach 5 and 6 of the San Jacinto River (for the Arroyo Toad);
- Reach 3, 4, and 5 of the San Jacinto River (for the San Jacinto Crownscale);
- Oak Glenn Creek (for the Southwestern Willow Flycatcher);
- Reach 1, 3, and 4 of San Timoteo Creek (for the Southwestern Willow Flycatcher and Least Bell's Vireo);
- Bear Creek (for the Southwestern Willow Flycatcher);
- Shay Meadows wetland (for the unarmored three spine stickleback); and
- Baldwin Lake (for the unarmored three spine stickleback).

Species information included above was mostly provided in comments submitted by the Center for Biological Diversity.

Wildlife habitat (WILD) waters support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife. Recent information has become available that certain waters support the wildlife habitat (WILD) beneficial use and have not been assigned that beneficial use. Therefore it is appropriate to assign the WILD beneficial use to these waters.

San Diego Creek's lower reach, as it flows into Upper Newport Bay, is affected by tidal action and salinity. It may be appropriate to assign this reach with the Estuarine Habitat (EST) beneficial use.

Erwin Lake, east of Big Bear Lake, is an intermittent lake, drying out during most years. At the present it is assigned with present or potential beneficial uses whereas intermittent beneficial uses may be the more appropriate designation.

Estimated Resources:

Staff time: 0.4 PY
Contract \$: none

Duration: 3 years

Issue 14

Remove Laguna and Lambert Reservoirs from Lakes and Reservoirs section of Table 3-1 and Table 4-1.

Laguna and Lambert Reservoirs, located in the City of Irvine, were used exclusively for storage of agricultural irrigation water. Recently they have been drained and the dams removed. Most of the former reservoir footprint has been or soon will be converted to residential developments.

Estimated Resources:

Staff time: 0.1 PY
Contract \$: none
Duration: <1 year

Issue No. 15

Add waters in the Goodhart Canyon watershed to Santa Ana Region and assign water quality standards. Add or subtract waters that would change as a result of realigning Region's boundary with Region 9 in the area of Laguna Canyon.

The construction of the Diamond Valley Reservoir, located 4 miles southwest of the City of Hemet (Riverside County) and completed in 1999, has altered the hydrology of the Goodhart Canyon Watershed. Before the construction of the Diamond Valley Reservoir, runoff from Goodhart Canyon Water flowed through Diamond and Domenigoni Valleys into streams tributary to the Santa Margarita River, in the San Diego Region and under jurisdiction of the San Diego Regional Water Quality Control Board. The construction of Diamond Valley Reservoir has diverted the runoff from Goodhart Canyon and directed it into the Salt Creek drainage, tributary to Canyon Lake and in the Santa Ana Region. The Goodhart Canyon Drainage area is approximately 4 miles long by one mile wide. The Basin Plan needs to be amended to include this area and to assign appropriate standards to it.

The present boundary between Regional Boards 8 and 9 in the area where Laguna Hills, Laguna Woods, and Laguna Canyon (Orange County) meet may be inaccurate. Inaccurate mapping of watershed boundaries when the boundaries were first determined and recent urbanization has led to a situation in which it is unclear where the appropriate Regional Board boundary is in this area.

Estimated Resources:

Staff time: 0.1 PY
Contract \$: none
Duration: <1 year

Issue No. 16

Add a water quality objective narrative regarding the excessive growth of macrophyte aquatic plants or combine with existing algae narrative objective.

The excessive growth of macrophytes (macroscopic aquatic plants) have significantly impacted beneficial uses of certain water bodies in the region, particularly in Big Bear Lake. Excessive growth of aquatic macrophytes and algae are often the result of excess concentration of nutrients (i.e., nitrogen, phosphorus) in point source and non-point source waste discharges. The excessive growth of algae and aquatic macrophytes can lead to taste and odors problems, color, increased turbidity, and can

depress dissolved oxygen concentrations, leading to fish kills. Action on this issue may include updating and expanding the current algae water quality objective of the Basin Plan to include macrophyte aquatic plants or adding a new narrative objective addressing aquatic macrophytes, and providing discussion concerning the potential for blooms of certain types of blue green algae to lead to toxicity in fresh water lakes.

Estimated Resources:

Total Staff Resources: 0.1
Contract \$: none
Duration: 1 year

Issue No. 17

Revise numeric objective for residual chlorine for discharges to surface waters.

The Basin Plan currently specifies that the chlorine residual in wastewater discharged to inland surface waters shall not exceed 0.1 mg/L. During the 1994 revision of the Basin Plan, the California Department of Fish and Game commented that this objective is not sufficiently stringent to protect aquatic and wildlife habitat beneficial uses. Board staff initially proposed that the objective be revised to 0.05 mg/L; however, comments were received from Chino Basin MWD (now, Inland Empire Utilities Agency) and Metropolitan Water District that this revised objective might not be achievable with existing wastewater treatment technologies. It was suggested that compliance with a more stringent chlorine residual limit could necessitate complete reconfiguration of wastewater treatment plant treatment trains or application of overly expensive, innovative technologies. By contrast, other comments indicated the 0.05 mg/L objective might not be sufficiently protective of aquatic life. More recently, USEPA has commented that a chlorine objective for ambient surface waters, not simply wastewater discharges, should be included in the Basin Plan. EPA indicates that the residual chlorine objectives should be identified based on a consideration of the EPA's 1984 Ambient Water Quality Criteria – Chlorine (EPA 440/5-84-030 Jan. 1985).

One of the higher priority issues identified by the Regional Board during the 1994 and 1998 triennial reviews was to evaluate the residual chlorine objective, but it has not been completed to date because of resource constraints.

Estimated Resources:

Staff time: 1 PY
Contract \$: undetermined
Duration: 2 years

Issue No. 18

Republish Basin Plan in updated electronic format with updated maps based on Cal Waters data and reflecting changes in watershed boundaries.

At the present it is difficult to access the Basin Plan (including amendments) from the Regional Board's web site. It would be appropriate to update the Basin Plan in an electronic format that would be readily accessible from the web site. In addition, maps of the region are not updated with the latest Cal Waters map data and do not accurately reflect watershed boundaries in the Diamond Valley and Laguna Canyon area. It would be appropriate to update the Region's maps and have them be readily accessible to the public. The State Water Resources Control Board has proposed providing contract funds to complete republishing basin plans and updating maps for all the State Regional Boards.

Estimated Resources:

Staff time: 0.1 PY
Contract \$: \$700,000 (SWRCB for Basin Plains Statewide)

Duration: 1 years

Issue No. 19

Add narrative on implementation procedures for narrative turbidity and toxicity objectives.

Add narrative on implementation procedures for turbidity:

USEPA has recommended that the Basin Plan should explain how turbidity standards are to be implemented (e.g., how "natural turbidity" is to be determined and what measures are used to control turbidity when the standard is exceeded).

Add narrative on implementation procedures for toxic substances objectives:

The toxicity objectives in Chapter 3 of the Basin Plan are multi-part narrative objectives addressing: (1) bioaccumulation of toxic substances; (2) contaminant concentrations in drinking water sources; and (3) water column, sediment and biota toxic pollutant concentrations adversely affecting beneficial uses. USEPA has recommended that the first narrative objective under Toxic Substances should be amended to read: *Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to aquatic organisms, other wildlife, and human health.* EPA also recommended that the Basin Plan be revised to include a description of NPDES permit implementation procedures for toxicity related objectives.

Estimated Resources:

Staff time: 0.6 PY
Contract \$: undetermined
Duration: 2 years

Issue No. 20

Revise Chapter 5 Prohibitions Applying to Inland Surface Waters (saline and sewage discharges) and modify to explicitly include lakes

The Basin Plan does not explicitly prohibit the discharge of acids or caustics (whether neutralized or not), or excessively saline wastes to surface waters. These prohibitions should be added to the plan and modified to explicitly include lakes.

Estimated Resources:

Staff time: 0.1 PY
Contract \$: none
Duration: <1 year

Issue No. 21

Revise Chapter 3 Beneficial Use tables narrative to incorporate Tributary Rule

Revise Section 3 "Beneficial Use Tables" narrative to incorporate the Tributary Rule. Current wording is, "Specific waters which are not listed have the same beneficial uses as the streams, lakes or reservoirs to which they are tributary or the groundwater basins or subbasin to which they are tributary or overlie." This wording should be broadened to reflect wording in 40 CFR 131.10 (b): "In designating uses of a water body and the appropriate criteria for those uses, the State shall take into consideration the water quality standards of downstream waters and shall ensure that its water quality standards provide for the attainment and maintenance of the water quality standards of downstream waters. "

Estimated Resources:

Staff time: 0.1 PY
Contract \$: none
Duration: <1 year

Issue No. 22

Consider revisions to make clear that water quality standards apply to intermittent surface waters, as well as perennial waters.

Board staff has long applied the tributary rule to the Region's intermittent surface waters. To protect the water quality standards of perennial waters, it is necessary to apply standards of perennial waters to the intermittent waters that are their tributaries.. In addition, the numerous intermittent surface waters of the Region are considered waters of the state and of the United States. The California Water Codes states that, "...the quality of all waters of the state shall be protected." Under most circumstances, the United States Army Corps of Engineers considers intermittent waters to be within their jurisdiction and requires CWA Section 404 permits for the dredging of, discharge of fill to, these waters. Consequently, a CWA Section 401 certification is also required before these "dredge and fill" discharges can occur.

Estimated Resources:

Staff time: 0.1 PY
Contract \$: none
Duration: <1 year

Issue No. 23

Consider revisions to recognize importance of headwaters as a separate class or category of waters, and of protecting their WQS.

The protection of the headwaters of a stream are critical in restoring or maintain water quality and beneficial uses of the water body. Often the headwaters are most sensitive area in a particular watershed and require special protection. Listing headwaters as a separate class or category would allow more specific protection of that water body.

Estimated Resources:

Staff time: 0.1 PY
Contract \$: none
Duration: <1 year

Issue No. 24

Develop waste discharge prohibitions for excessive sedimentation resulting from controllable water quality factors (targeted at excessive sedimentation in upper Newport Bay, Big Bear lake, and Canyon Lake Watersheds)

Excessive sedimentation negatively impacts the beneficial uses of several of the Region's waters. TMDL's have been developed to reduce the impacts of sedimentation in Upper Newport Bay, Big Bear Lake, and Canyon Lake. The development of waste discharge prohibitions would allow more effective enforcement of the TMDLs and more timely regulation of sediment discharges.

Estimated Resources:

Staff time: 0.5 PY
Contract \$: none
Duration: 2 years

Issue No. 25

Consider need for clarification of Chapter 5 Minimum lot Size Requirements and Exemption Criteria for new Developments (using on-site sewage disposal systems)

There are areas in the Region where residential development is occurring on small lots where sanitary sewers are not available. Because of economic factors, there continues to be a demand for this type of development. Studies have shown that high density developments relying on on-site sewage disposal systems (OSDS) impact water quality by increasing concentrations of nitrates in groundwater. As a result, in 1989, the Board adopted Resolution No. 89-157 and amended the Basin Plan to require one-half acre minimum lots for new developments using OSDS. The Regional Board also adopted and subsequently revised certain criteria for exemptions from this lot size requirement. It is not clear that county and municipal planning and building authorities have applied the minimum lot size requirements and exemption criteria consistently and correctly, in part perhaps because of a lack of clarity in the requirements themselves. Board staff is addressing this matter with the involved agencies and may recommend some clarifications of the requirements.

Estimated Resources:

Staff time: 0.25 PY

Contract \$: none

Duration: <1 year

Issue No. 26

Non-regulatory, descriptive updates and revisions, including:

a. Add narrative on Alaska Rule;

On April 27, 2000, USEPA published a final rule (65 FR 24641) regarding when state water quality standards become effective for CWA purposes. This rule, known as "EPA Review and Approval of State and Tribal Water Quality Standards," and commonly called "the Alaska Rule," provides that state water quality standards, or amendments to such standards, submitted to EPA for approval after May 30, 2000 (effective date of the rule), must be approved by EPA before such standards or amendments may be implemented for CWA purposes. The Basin Plan should be updated to reflect this regulation.

b. Update information on approved policies, e.g., Nonpoint Source Enforcement Policy, 303 (d) Listing Policy, etc. (Chapter 2);

The approved policies listed in our Basin Plan have not been updated or revised since 1995. There have been new policies that need to be added and others that require being updated. For example, the Nonpoint Source Management Plan has been adopted, and updated in 2004 with adoption of an Implementation and Enforcement Policy that explains how the SWRCB and RWQCBs will use the Porter-Cologne Act mandates and authorities to implement and enforce the NPS Program Plan.

The Water Quality Control Policy for Developing California's Clean Water Act Section 303 (d) List, referred to as the 303 (d) Listing Policy, was adopted in 2004. The policy

describes the process by which the SWRCB and the RWQCBs will comply with the listing requirements of section 303 (d) of the federal Clean Water Act. CWA Section 303 (d) requires states to identify waters that do not meet, or are not expected to meet, applicable water quality standards after the application of certain technology-based controls. These waters are then to be scheduled for the development of total maximum daily loads (TMDLs).

c. Update Chapter 5 “Disposal of Hazardous and Nonhazardous Waste” to reflect loss of SWAT program;

The final section of Chapter 5 references the Solid Waste Assessment Test (SWAT) program, which was implemented in 1985. The purpose of the SWAT program was to determine whether hazardous or toxic substances above regulatory thresholds, or any other constituents which may threaten water quality, were migrating from a solid waste disposal facility. As of 1995, funding for this program ceased and is not expected to be reinstated. The Basin Plan should be amended to reflect this change.

d. Update SLIC Program Discussion;

The Basin Plan currently contains a description of the SLIC program, the Regional Board’s program to address groundwater contamination from volatile organic compounds (VOCs). The information/data in the description need to be updated to reflect current conditions.

e. Update Animal Confinement Facilities (Dairies) discussion in Chapter 5;

The Regional Board’s program to address waste discharges from confined animal facilities has evolved significantly, and the Basin Plan should be revised to reflect the current direction of these ongoing activities.

f. Update Nonpoint Source Program discussion in Chapter 5;

Much has been added to the Nonpoint Source Program since the Basin Plan was last updated in 1995. Two major policies added to the NPS program are the NPS Plan and the Implementation and Enforcement Policy. In 2000 a statewide approach for managing NPS pollution, the Plan for California’s Nonpoint Source Pollution Control (NPS Plan), was adopted. The NPS Plan required implementation of NPS control Management Measures in the six land use categories of agriculture, marinas & boating, urban, forestry, hydromodification, and wetlands. A key element of the 2000 Plan was implementing these management measures using a three-tiered approach in which the first tier, self-determined implementation, is favored. The second and third tier of implementation incorporate escalating regulatory involvement to achieve program objectives.

In 2004 the Policy for Implementation and Enforcement (I&E) Policy was adopted to provide guidance for enforcement of the state’s NPS pollution control program. The NPS I&E Policy abandons the three-tiered approach for implementation of management

measures contained in the 2000 NPS Plan as not being supported by the California Water Code and inconsistent with the SWRCB's Enforcement Policy. The NPS I&E Policy gives direction to Regional Boards to regulate all non-point sources of pollution using the administrative authorities provided by the Water Code's Porter-Cologne Act. Regulatory actions to address NPS pollutant discharges include, but are not limited to, Basin Plan prohibitions, Waste Discharge Requirements (WDRs), and Waivers of WDRs. The NPS discussion in Chapter 5 should be update to reflect this evolution.

g. Add narrative on the efforts to remediate perchlorate contamination in the region.

In 1997, California's Department of Health Services found levels of perchlorate in drinking water wells throughout the State of California, including wells in the City of Rialto. Perchlorate can interfere with the iodide uptake of the thyroid gland which can result in decreased production of thyroid hormones necessary for prenatal and postnatal growth and development, as well as for normal metabolism and mental function in adults. Perchlorate is used as an ingredient in the manufacturing process of such items as solid fuel propellant for rockets, missiles and fireworks and in industrial applications where it is used in the manufacture of matches, flares, pyrotechnics, ordnance and explosives.

It is apparent that previous defense and/or industrial activities has contributed to perchlorate groundwater contamination in the Rialto area. The Regional Water Quality Control Board (RWQCB) has been directing site assessment and remediation efforts in this area for the last several years. The RWQCB has been very active in working with the responsible parties, other affected agencies, and holding numerous public meetings to develop an appropriate remedial action plan. This major activity should be described in the Basin Plan.

Estimated Resources:

Staff time:	0.25 PY
Contract \$:	none
<u>Duration:</u>	1 year

Issue No. 27

Update discussion of the implementation of the antidegradation policy in Chapter 2 to address nonpoint source (NPS) pollution.

The Basin Plan references State Board Resolution No. 68-16 as the State's antidegradation policy. USEPA has recommended that the discussion of implementation of the State's antidegradation policy in the Basin Plan should be expanded to clarify that the State has, in State Board Order No. 86-17 and in an October 7, 1987 guidance memorandum, interpreted Resolution No. 68-16 to be fully

consistent with the federal antidegradation policy. Further, the Basin Plan should consider and address how the policy is to be applied to NPS pollution.

Estimated Resources:

Staff time:	0.2 PY
Contract \$:	none
<u>Duration:</u>	2 years

Issue No. 28

Reevaluate temperature criteria to ensure full protection of aquatic life

The current temperature standard in the Basin Plan protects against adverse effects of heated water discharges on beneficial uses by expressing limits on temperature increases. USEPA has suggested that the temperature objective may be overly general and may not be adequately protective of aquatic life, particularly native species. USEPA's present policy is to protect for the most sensitive species in the water body by season. Optimal temperature values are available for various species for growth and survival at all life stages and should be reviewed.

Estimated Resources:

Staff time:	0.25 PY
Contract \$:	none
<u>Duration:</u>	1 year

Issue No. 29

Update dissolved oxygen objectives for WARM/COLD beneficial uses

Comments from USEPA suggest that the Regional Board should consider optimal levels of dissolved oxygen for various life stages of salmonid fishes and other aquatic species. Criteria recommended by USEPA in 1986 include warm and cold water dissolved oxygen values for embryonic, larval, and other life stages (Ambient Water Quality Criteria for Dissolved Oxygen, EPA 440/5-86-003, April 1986). Values are available for salmonid waters and non-salmonid waters with criteria ranging from "no production impairment" to "limit to avoid acute mortality."

Estimated Resources:

Staff time:	0.25 PY
Contract \$:	undetermined
<u>Duration:</u>	1 year

Issue No. 30

Review silver water quality objectives for WARM/COLD beneficial uses

The Basin Plan currently specifies a silver water quality objective of 0.05 mg/L for groundwater. The Maximum Contaminant Level (MCL) for silver has been revised to 0.1 mg/L. The Basin Plan should be updated to reflect the new MCL. This item was on the list of issues for the 1998 Triennial Review, but has yet to be addressed.

Estimated Resources:

Staff time:	0.25 PY
Contract \$:	none
<u>Duration:</u>	1 year

Issue No. 31

Revise fluoride WQO to be consistent with Department of Health Services's MCLs.

The fluoride water quality objective presently listed in the Basin Plan, specified as optimum fluoride concentrations for surface waters, are temperature based and range from 0.7 to 1.2 mg/l. The California Department of Health Services (DHS) has recently implemented a maximum contaminant level (MCL) for fluoride of 2.0 parts per million for the State. Later this year Metropolitan Water District of Southern California (MWD) is planning to begin adding fluoride to the water they distribute to provide the optimum levels required to prevent tooth decay. With the addition of fluoride metropolitan's surface water will have a target level of between 0.7 and 0.8 .ppm. There is a concern that discharges of water fluoridated by MWD may violate the Basin Plan WQO. Staff of MWD has asked Regional Board staff to revise the fluoride WQO to be consistent with DHS's new MCL and with the other Regional Boards in the area.

Estimated Resources:

Staff time:	0.25 PY
Contract \$:	none
<u>Duration:</u>	1 year

Issue No. 32

Review ammonia objectives based on 1999 USEPA national criteria.

The 1995 Basin Plan incorporated new site-specific objectives for un-ionized ammonia (the toxic form of ammonia) for the Santa Ana River and certain tributaries. These objectives are implemented by limitations on ammonia in waste discharges to these waters. The requisite effluent ammonia limits are also specified in the Basin Plan. Finally, the 1995 Basin Plan includes revised, basin-wide un-ionized ammonia

objectives. EPA reserved action regarding approval of these new objectives and requested that Board staff submit additional technical justification.

EPA published revised national criteria guidance for ammonia in the Federal Register on December 22, 1999. These revised criteria are based on scientific information concerning un-ionized ammonia toxicity. Board staff has advised EPA that given this new science, it does not appear worthwhile to pursue EPA approval of the objectives in the Basin Plan. Staff advised EPA that we would recommend that review of these objectives (and associated implementation provisions) be included in the Triennial Review list. EPA was expected to promulgate criteria for states failing to adopt numerical objectives consistent with the new criteria by 2004.

Estimated Resources:

Staff time:	0.1 PY
Contract \$:	undetermined
<u>Duration:</u>	1 years

Issue No. 33

Develop and adopt biological criteria for managing water quality

Development of biological criteria was identified in USEPA's *Water Quality Criteria and Standards Plan* (EPA 822-R-98-003, June 1998) as one of six priority objectives for the water quality standards program for this decade. USEPA indicates that the Regional Board should develop bioassessment and biocriteria consistent with USEPA's technical guidance.

Estimated Resources:

Staff time:	2.0 PY
Contract \$:	undetermined
<u>Duration:</u>	3 years

Issue No. 34

Santa Ana River, Reach 3 – add TOC WQO

Total organic carbon (TOC) is a direct measure of the organic content in water. The California Department of Health Services (DHS) has published draft (4-23-01) Groundwater Recharge Reuse regulations for groundwater recharge with recycled municipal water. The proposed TOC limit is dependent on the percentage of contribution of recycled water to the groundwater in storage. These regulations are applicable to the Santa Ana River, which is comprised primarily of recycled water and is a significant source of recharge in Orange County. It is appropriate to incorporate a

TOC objective for the Santa Ana River, Reach 3, in order to protect the Orange County groundwater recharge activities.

Estimated Resources:

Staff time: 0.1 PY (SWRCB directing statewide effort)
Contract \$: none
Duration: 1 year

Issue No. 35

Review Methylene blue-Activated Substances (MBAS) water quality objective for surface waters

MBAS is an indicator for presence of detergents in water. Positive results may indicate the presence of wastewater. The 1995 Basin Plan specifies a MBAS water quality objective of 0.05 mg/L. In 1992, the Department of Health Services updated the MBAS secondary drinking water standard to 0.5 mg/L. The Basin Plan should be updated to reflect the updated standard.

Estimated Resources:

Staff time: 0.05 PY
Contract \$: none
Duration: 1 year

Issue No. 36

Santa Ana River, Reach 3 – clarify the COD water quality objective

The Basin Plan specifies water quality objectives for the Santa Ana River, Reach 3, to protect Orange County groundwater subbasins. In the 1983 Basin Plan, Reach 3 objectives are specified as filtered objectives; however, the “filtered” specification was inadvertently omitted for COD from the 1995 Basin Plan.

Estimated Resources:

Staff time: 0.1 PY
Contract \$: none
Duration: 1 year

Response to Comments¹ on the 2006 Triennial Review

1. **Fontana Union Water Company**
Chris Diggs, Director of Operations
June 2, 2006

Comment:

Fontana Union Water Company (FUWC) supports modifying Beneficial Use Table 3-1 in the existing Basin Plan, because the table is not reflective of current conditions and is not likely to reflect future conditions in certain stream reaches. Although the change in Issue No. 13.2 from COLD to I-COLD for Lytle Creek appears to be intended to make the stream reaches and the beneficial use designations more closely represent existing stream conditions, FUWC believes that a more appropriate designation for this reach of Lytle Creek would be WARM or I-WARM.

Response:

Staff will consider all relevant information from stakeholders on the appropriate designation of beneficial uses for Mill Creek, and Lytle Creek and the Santa Ana River. Staff has elevated the priority of this issue to No. 11 and the revised the description to include, "Lytle Creek: 1) From 1-15 to Korean Christian Camp Bridge or SCE diversion – designate new reaches and COLD or WARM beneficial uses, as appropriate. Designate reaches Intermittent as appropriate." Our goal is to assign beneficial uses that accurately reflect existing uses and conditions in Lytle Creek, and to reflect the conditions of the Federal Energy Regulatory Commission (FERC) license. Staff has agreed to work with a stakeholder work group to determine appropriate beneficial uses for these streams.

In pertinent part, the Basin Plan definition of COLD is, "...waters that support coldwater ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats ...," and the definition of WARM is "waters support a warmwater ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats ..." To make an appropriate determination of whether the COLD or WARM beneficial use applies, an evaluation needs to be made regarding a waters' ability to support a cold water or warm water ecosystem. Beneficial uses will be designated that protect all uses of a water, including the most sensitive. The reach of Lytle Creek in question supports populations of rainbow trout and speckled dace. Beneficial use designations need to be assigned to protect these aquatic resources. The aquatic ecologist for the San Bernardino National Forest considers speckled dace as a COLD water species, and it is commonly accepted that the different species of trout are considered a COLD water species. The speckled dace is a

¹ Comments presented in this response have been summarized, shortened and/or paraphrased from the original. Original comments are posted on the Santa Ana Regional Board's web site, <http://www.waterboards.ca.gov/santaana/>

species of special concern for the California Department of Fish and Game and the United States Forest Service.

**2. Southern California Edison
Russ Krieger, Vice President - Power Production
June 2, 2006**

Comment:

Southern California Edison (SCE) holds three licenses from the FERC for the operation of hydroelectric projects on Lytle Creek, Mill Creek, and the Santa Ana River. After the diversion of water from these hydroelectric projects, the water is immediately released into pipelines owned and operated by local water supply companies for domestic, irrigation, and other beneficial uses. The proposed changes in Issue No. 13.2 appear to be intended to make stream reaches and the beneficial use designations consistent with the situation that has existed for over the past 100 years. SCE recommends that the stream reaches listed in Issue No. 13.2. be modified to read:

- Lytle Creek from 1-15 to Miller Narrows – change to I-COLD and list as Reach 1;
- Lytle Creek from Miller Narrows to headwaters – list as Reach 2;
- Mill Creek from Highway 38 to the confluence with Mountain Home Creek – list as Reach 2;
- Mill Creek from the confluence with Mountain Home Creek to the upper diversion, Forest Falls – change to I-COLD and list as Reach 3.

Additionally, it is unclear if the “I-COLD” designation is the most appropriate characterization for these three stream reaches, instead of an “I-WARM” or “WARM” designation.

Also, the designation of the three new stream reaches described above may cause other minor changes to Table 3-1 to reflect the appropriate beneficial uses in the stream reaches. The proposed spawning (SPWN) designation for Reach 1 of Lytle Creek may not be appropriate. In addition, the hydropower generation (POW) designation should be removed for Mountain Home Creek and added to Mill Creek Reach 1 and Santa Ana River Reach 5.

SCE is looking forward to provide Regional Board staff with all the information it needs to address these issues.

Response:

Board staff is committed to working SCE and the other stakeholders address these issues. We have elevated issue No. 11 on the priority list and revised the issue description to be more general and encourage discussion. As stated in response to Comment No. 1, appropriate beneficial uses will be designated recognize the aquatic ecosystems found in these creeks, acknowledging the existing FERC licenses. Since these waters exhibit perennial and intermittent sections, and are affected by water diversions and pumped water discharges,

staff is considering adding a brief narrative as a footnote to Table 3-1 that will describe the streams' variable hydrology and aid in understanding how this variability has affects selection of beneficial uses that apply.

Staff notes that there should be changes in the designation of POW for certain reaches of the waters, as discussed in SCE's comments. The reach in which water is diverted to provide hydrogenation should be designated with the POW beneficial use.

**3. San Bernardino Valley Municipal Water District
Robert L. Reiter, General Manager and Chief Engineer
June 2, 2006**

Comment:

The District and the water agencies, including but not limited to Bear Valley Mutual Water Company and Crafton Water Company, are specifically interested in the following issues (Regional Board's response will follow each comment):

Issue No. 4 Reformat / republish Basin Plan

Resolution Number RB-2006-0042 and Order Number R8-2006-005 should not be incorporated into the Basin Plan. Doing so will short-cut the collaborative process and likely subject the Regional Board to immediate litigation.

Response:

The intent of this issue was to designate staff resources for ongoing efforts to republish the Basin Plan in a format that will be more accessible and easier to use, and to incorporate into the Plan the 2004 TDS - Nitrogen Management Plan and other Basin Plan amendments adopted since 1995. This effort is likely to be assisted by work being proposed by SWRCB staff to update and revise all the water quality control plans in the state using an electronic format and digitally-based information management techniques.

Staff is drafting a Reclamation Guidance Document that will likely be amended to the Basin Plan to guide implementation of the TDS - Nitrogen Management Plan. Staff is also engaged in a collaborative process to develop a strategy for managing imported water recharge and inter-basin water transfers in a manner that implements the TDS - Nitrogen Management Plan. The outcome of this process will also likely be captured in Basin plan amendments.

Comment:

The District and the water agencies are interested in a number of other issues listed in the Triennial Review Priority List. Our interest in these issues stems from the general descriptions of these issues and the far-reaching potential implications of these issues. We seek further clarification of the Regional Board's intent with regard to each of these issues, the nature of the problem to be addressed, and other relevant information.

Response:

Please review the 2006 Triennial Review Description of Issues that is posted on the Regional Board's web site <http://www.waterboards.ca.gov/santaana/> for pertinent information on these issues. It is unlikely that staff will be able to review middle and lower priority issues during this triennial review due to resource constraints.

Comment:

Issue No. 13.1 b. Add RARE to appropriate waters. How is the determination of "appropriate waters" to be made? Does the determination apply to an entire reach as designated in the Basin Plan or only where the specific use presently exists?

Response:

Rare, Threatened or Endangered Species (RARE) waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened or endangered (RTE). Regionwide, a number of perennial and intermittent waters provide habitat that supports various RTE species, e.g., the Least Bell's Vireo and Southwestern Willow Flycatcher, the Santa Ana sucker, San Bernardino Kangaroo Rat and the Santa Ana Wooley Star. A RARE designation likely should apply to the entire stream reach of a water body known to support RTE species. In general, threats to the water quality standards of a stream reach that supports RARE may affect the stream's ability to support RARE everywhere along the reach, not just the locations where RTE species have been found, and therefore, the RARE designation should apply to an entire stream reach where the use occurs.

Comments:

Issue No. 13.1 c. Add SPWN to appropriate waters. How is the determination of "appropriate waters" to be made? How will the reaches, creeks and streams be identified for localized designations?

Response:

Spawning, Reproduction, and Development (SPWN) waters support high quality aquatic habitats necessary for reproduction and early development of fish and wildlife. Self-sustaining populations of native fish species, including rainbow trout, the Santa Ana sucker and speckled dace, are known to inhabit waters of Lytle Creek, Mill Creek, and the Santa Ana River, and their tributaries. Streams with self-sustaining populations, where reproduction and early development of native fish is taking place, should be designated with the SPWN use to reflect that they do provide suitable habitat necessary for the support of viable populations of native fish species. Identification of waters that are candidates for the SPWN use will be made by staff using the reliable information available, in consultation with stakeholders representing the water supply community, resources agencies, environmental advocacy groups, etc.

General response to the following SBVMWD comments:

Board staff remains committed to working with SBVMWD and its partner agencies and stakeholders to determine appropriate beneficial use designations for all sections of Lytle Creek., Mill Creek, and the Santa Ana River affected by the 2003 FERC relicensing of hydropower diversions from these waters. This includes establishing whether beneficial uses occur intermittently or perennially, and what are the appropriate stream reaches for the purposes of designating uses of these streams.

Comments:

Issue 13.2. a. Add new reaches and designate appropriate beneficial uses. The reach from Turk Point to Miller Narrows was identified to be too warm for trout during many seasons of the year. The classification should be I-WARM.

Response:

The FERC license of 2003 for Lytle Creek noted that surface flows are visible from the diversion (at Miller Narrows) downstream to the Korean Christian Camp Bridge (a distance of 0.34 miles), and then, for the next 1.2 mile downstream, the stream bed is highly permeable (Turk's Basin) and all flow reaching this area percolates into the stream bed and no stream flow is visible. Below the highly permeable streambed segment, at Turk's Point, the streambed becomes narrower, and stream flows are visible for about another mile, down to the Grapeland Tunnel. (Staff notes that the flow regimes described above prevail in the area of Turk's Basin and downstream reaches during summer and fall, when rainfall runoff and snow-melt induced flows are absent and base flows above Miller Narrows are largely diverted.) The FERC license also stated that small populations of rainbow trout and Santa Ana speckled dace have been found in the bypassed reach (the reach from the Miller Narrows diversion downstream to the FUWC's works). Winter rains and snow melt often result in stream flows that breach the Miller Narrows diversion, and that when this occurs, surface flows in the segment of the creek below the diversion often continue into the spring and summer. All of these factors need to be considered when determining the appropriate beneficial uses of these reach of Lytle Creek.

Comments:

Issue No. 13.2 b. Reach 1 of Mill Creek should be re-designated with a beneficial use of I-WARM.

Response:

At the present, this reach is designated as Intermittent COLD, and prevailing flow conditions suggest the I-COLD designation is appropriate. During dry weather, staff understands that most of the Mill Creek flow stream (which currently includes pumped groundwater) is diverted at the streamflow pickup downstream of the Highway 38 Bridge, however, there is some leakage that provides stream flow for a distance downstream from this diversion. Higher stream flows resulting from winter rains and snow melt overflow or bypass the diversion and often

provide flow to the reach of Mill Creek downstream from the Highway 38 Bridge for several months, into late winter, spring, and occasionally summer.

Comments:

Issue No. 13.2 c. Mill Creek from Highway 38 to above Mountain Home Village is being used as a conveyance facility to move water produced from wells near Mountain Home Village to the Mill Creek streamflow pickup at the Highway 38 Bridge. The well production may be terminated at any time and the reach would then likely dry up. This reach should be designated as I-WARM.

Response:

The premise that flow through this reach will cease if operation of the wells in the Mountain Home area is terminated may need to be evaluated by modeling. It is unclear how much flow would remain in this reach if the well production were to be terminated. In addition to conveying flows from wells near Mountain Home Village to the streamflow pickup at Highway 38 Bridge, this reach of Mill Creek conveys also gains flow from Mountain Home Creek, cienegas and springs, and surface runoff from the surrounding area. It is noteworthy that there is likely a connection between the rainbow trout fishery in Mountain Home Creek and this reach of Mill Creek, and that, in the past, California Department of Fish and Game stocked rainbow trout in the creek at the two large cienegas in this reach.

Comment:

Issue No. 13.2 d. "Mill Creek from Mountain Home Village to upper diversion, Forest Falls – change to I-COLD and list as Reach 3." This reach was determined to be too warm for trout in the summer season and is frequently dry. The beneficial use listing should be I-WARM.

Response:

Staff's observations of this reach suggest a pattern of continuous flow that coincides with the onset of seasonal fall / winter precipitation and rain fall runoff, snow melt, and bypass of SCE's diversion above Valley of the Falls Drive. Summer flows in this reach are intermittent. Rising groundwater may also contribute flow to this reach. Throughout summer 2006, staff has documented flows of about a one cubic per second and water temperatures around or below 20°C., at the crossing over Mill Creek to the Bear Paw Preserve (southeast of the junction of Highway 38 / Valley of the Falls Drive). However, anecdotal information available to Board staff indicates that during the summer, the creek often has no flow at certain times of the day. The FERC licensing agreement notes that fish habitat appears to be poor in this area. During periods when the wet weather seasonal precipitation flow pattern prevails, it appears reasonable that this reach could provide seasonal connectivity and habitat for trout populations. In the summer, there is little likelihood of trout habitat. Consequently, an intermittent designation may be appropriate.

Comment:

Issue No. 13.2. e. Mill Creek upper diversion to headwaters. This reach should be designated I-COLD.

Response:

Board staff and others have documented that upper Mill Creek (above the diversion) flows continuously and water temperatures are cool. It appears that this reach should remain as presently designated, COLD.

Comment:

Issue No. 13.2. f. SAR from Seven Oaks Dam to Power House 1. This reach should be designated I-WARM.

Response:

This reach is mostly in the Dam's inundation "take" area. There are areas of rising groundwater (cieneegas) that support linear segments of riparian wildlife and cold water habitat along this reach, as well as areas where beneficial uses are supported by surface flow from upstream reaches. Other sections of the reach are dry much of the year. These factors need to be considered to designate an appropriate COLD or WARM, intermittent or perennial beneficial use. It may be appropriate to subdivide this reach and more accurately reflect the beneficial uses of inundation pool and the river reach upstream of it.

Comment:

Issue No. 13.2. g. SAR from Power House 1 to headwaters – list as Reach 7. This reach should be designated COLD.

Response:

Staff agrees.

**4. Orange County Coast Keeper
Raymond Hiemstra, Associate Director- Projects
June 2, 2006**

Comment:

The issue to consider revisions to the SHEL beneficial use definition to not include human consumption should be dropped from the list. Collecting and consuming shell fish is not a fringe activity and should be fully protected.

Response:

This issue was placed on the Triennial Review list at the request of the County of Orange's Resource and Development Management Department (RDMD). At present, shellfish collected in the Upper Newport Bay do not meet bacteria standards for human consumption. Investigations conducted in response to the fecal coliform TMDL indicate that shellfish collection in Upper Newport Bay is limited to bait purposes.. Board staff will review and consider all pertinent information on this issue, including information from California Department of

Fish and Game, and public comments, in considering whether it is appropriate to recommend basin plan amendments to revise the SHEL use of Upper Newport Bay.

Comment:

Coastkeeper strongly supports the issues to develop/revise nutrient objectives focusing on 303 (d) listed waters, add a water quality objective narrative regarding the excessive growth of macrophyte aquatic plants, and develop a wetland impact mitigation policy. Would like to see the issue of a water quality objective narrative regarding excessive growth of macrophyte aquatic plants receive higher priority.

Response:

Comments noted. The triennial review list reflects Board staff's recommended priorities; the Regional Board may elect to revise them. However, Board staff's experience with the Big Bear Lake nutrient TMDLs suggests that while a macrophyte aquatic plant narrative objective would be appropriate and helpful, the present lack of such an objective does not preclude actions to protect waters affected by macrophyte growth.

Comment:

Drop the issue to remove site specific objectives (SSO) for Cu, Cd, and Pb for the middle Santa Ana River unless there is substantial recent data showing that these metals now meet CTR objectives.

Response:

The SSOs relied on total-dissolved translators in use at the time the SSOs were adopted. However, these translators have since been revised by USEPA, as reflected in the California Toxics Rule. It is appropriate to assure that the objectives for these metals reflect the best available science and the CTR. The revision of permit limits to reflect revised objectives would remain subject to the antibacksliding provisions of the Clean Water Act. This issue has been grouped with the Santa Ana River Dischargers Association (SARDA) request to consider developing site specific objectives for aluminum, chlorine, and cyanide for the Santa Ana River. Any site-specific objectives that may be considered must assure the protection of beneficial uses and conform to the requirements of the state's antidegradation policy (State Water Board Resolution No. 68-16).

Comment:

The issue to revise the numeric objective for residual chlorine should only be considered to lower residual chlorine discharges.

Response:

Any proposed revision to the numeric water quality objective for residual chlorine would adequately protect beneficial uses that support aquatic habitat and conform to antidegradation requirements.

Comment:

O. C. Coastkeeper strongly supports the addition of beneficial uses as shown in Issue No. 13 (Update Beneficial Use Table 3-1 and Water Quality Objectives Table 4-1).

Response:

This issue is in the top third of third priority list, and will likely be studied over the next three years.

Comment:

Revising portions of Lytle Creek and SAR to I-COLD should only be considered after a thorough temperature monitoring program has been completed.

Response:

See responses to Comments 1, 2, and 3, above.

Comment:

O.C. Coastkeeper strongly supports the addition of water bodies as listed in Issue No. 10.

Response:

This issue is in the top third of the priority list, and will likely be studied over the next three years.

Comment:

O.C. Coastkeeper strongly supports and would like to see a higher priority for the issues to add narrative on implementation procedures for narrative turbidity and toxicity objectives, revise Chapter 5 prohibitions applying to inland surface waters, consider revisions to make clear that water quality standards apply to intermittent surface waters as well as perennial waters, develop waste discharge prohibitions for excessive sedimentation, update the discussion of implementation of the antidegradation policy in Chapter 5, reevaluate temperature criteria to ensure full protection of aquatic life, and update dissolved oxygen objectives for WARM/COLD beneficial use.

Response:

Because Board staff's basin planning resources are limited, the Triennial Review list gives higher priority to issues that Board staff considers to be the most pressing. It is hoped that the staff resources available will be sufficient to review and consider at least the top third of the issues listed on the priority list. Should additional resources become available, or if stakeholder support were to be made available to address lower priority issues, priorities may be adjusted accordingly.

**5. Inland Empire Waterkeeper (IEWK)
Mandy Revell, Director
Comments received June 2, 2006**

Comment:

IEWK supports the prohibition of septic tank subsurface disposal systems in the Quail Valley area.

Response:

The prohibition has been adopted by the Regional Board. It must be approved by the State Water Board and Office of Administrative Law to become effective. .

(The remainder of IEWK's comments were similar to those made by O.C. Coastkeeper. Please see responses, above.)

**6. County of Orange Resources & Development Mgmt. Department
Chris Crompton, Manager- Environmental Resources
Comments received June 2, 2006**

Comments:

We encourage the Regional Board to utilize current stakeholder groups, such as the Stormwater Quality Standards Taskforce (SWQSTF), the Nitrogen and Selenium Management Program (NSMP) Working Group, or other newly convened stakeholder groups, to supplement resources for Basin Plan review items. A number of additional items may fall within the purview of the SWQSTF, and could potentially be incorporated into the future activities of this Task Force, including:

- a. The addition of new waters (Issue No. 10). Since the SWQSTF is currently evaluating recreational beneficial uses as part of its ongoing activities, the assignment of REC-1, REC-2 and any other related uses for the channels / waters listed in Issue No. 10 and should be addressed by the SWQSTF;
- b. Adding COMM as a use to appropriate lakes, reservoirs, and streams. Fishing may be more properly specified in the COMM beneficial use category, rather than in the REC-1 category, but may trigger the application of CTR objectives for fish consumption;
- c. Adding and changing beneficial use designations to water bodies and adding reaches;
- d. Removing Laguna and Lambert Reservoirs from the Basin Plan (Issue No.14);
- e. The addition of new waters (Issues 10 and 15).

Response:

Board staff acknowledges the value of using stakeholder groups' technical support resources to study issues identified in the Triennial Review. Several of RDMD's suggestions have been incorporated into the final Priority List. We have noted the offer of SWQSTF assistance in Issue No. 2 and No. 10, adding water bodies and designating appropriate beneficial uses, and look forward to the contributions of the SWQSTF in addressing this issue.

Comments:

Other stakeholder processes may form the most appropriate means for addressing additional issues, for example, technical support and data from the existing NSMP Working Group would be able to be used to analyze the issues of developing/revising nutrient objectives for the region, and to develop a water quality objective narrative regarding excessive growth of macrophyte aquatic plants. This exceptional resource (the NSMP Working Group's technical expertise) should be leveraged in moving forward with any revision of objectives or changes to the Basin Plan related to potential algal impairments.

Response:

Board staff agrees. Regional Board staff working on the Nutrient TMDL for the Newport Bay watershed are involved in the NSMP process; it is staff's intent to coordinate TMDL-related activities with those of the NSMP to maximize effect and minimize redundancy or conflict.

Stakeholder participation in a work effort to craft narrative water quality objectives regarding excessive growth of macrophyte aquatic plants is welcome. Such a Basin Plan narrative objective would likely apply region-wide, unless specifically limited to certain waters or watersheds. At this time, the issue regarding excessive growth of macrophyte aquatic plants (vascular aquatic plants) is largely focused on invasive plants that are currently affecting water quality standards of Big Bear Lake (coontail (*Ceratophyllum demersum*) and Eurasian milfoil (*Myriophyllum spicatum*), in particular). The Regional Board has adopted a nutrient TMDL for Big Bear to address the macrophyte problem.

Comment:

A working group convened to review available information and to assist Regional Board staff in developing a Basin Plan amendment for the protection of wetlands within the Region may be appropriate.

Response:

A study of the condition of the Region's riverine wetlands, being conducted by staff of CSU Long Beach and SCCWRP and funded by an EPA grant, is currently concluding. Board staff anticipates that much of the work to address Issue No. 9, "...develop criteria for wetlands mitigation," will be focused on revising the Basin Plan narrative to broaden how wetlands are defined, including updating the inventory of wetlands shown in the Plan and describing their condition, describing the Clean Water Act Section 401 water quality standards certification process

and how it relates to wetlands protection and mitigation, the work and accomplishments of the Wetlands Recovery Project, etc., in addition to considering appropriate criteria for mitigating impacts to wetland resources. Staff further anticipates this work will be carried out in consultation with stakeholders or in a collaborative work group process in which stakeholder participation will be sought.

Comment:

To develop a narrative on implementation procedures for narrative turbidity and toxicity objectives and to develop waste discharge prohibitions for excessive sedimentation a watershed-specific plan developed in this context may provide a foundation for a comprehensive regional approach.

Response:

Board staff recognizes the desirability of using appropriate Basin Plan amendments as a way to establish regional consistency in how narrative turbidity and toxicity objectives are implemented. A uniformly applied regulatory approach to sediment management, such as a regional sediment discharge prohibition applied at a watershed scale, will likely be the most efficient mechanism for achieving compliance with sediment TMDLs and reducing sediment discharges throughout the region.

Comment:

To, "Consider Water Code Section 13241 factors in relation to compliance with water quality objectives during wet weather," should be reinstated on the 2006 Priority List and given a high priority.

Response:

The final priority list shows that Board staff has re-stated Issue No. 2 to make clear that addressing Section 13241 – related matters remains a high priority.

Comment:

Item 3 (TMDL Basin Plan amendments, newly adopted or revised) and Item 5 (triennial reviews of adopted TMDLs) should be clarified and provide sufficient resources to include a review of beneficial uses and water quality objective during the TMDL development process and prior to finalizing TMDLs.

Response:

While Board staff recognizes that addressing 303(d) listings in the manner described in the comment may eliminate the need for developing some TMDLs, Board staff's Basin Planning and TMDL resource levels currently available do not support this approach.

**7. California Department of Transportation
Michael Flake, Chief – Office of Storm Water Policy
June 2, 2006**

Comment:

Issue No. 2 – “Consider revisions to REC-1 and REC-2 beneficial uses and bacterial water quality objectives...” We strongly support adjusting the REC-1 and REC-2 beneficial uses to correlate more accurately with the recreational uses occurring or not occurring during wet weather. Currently, the Basin Plan does not specify different bacterial objectives based on differing frequency or magnitude of water contact recreational use or the intermittent absence of uses although the resultant health risk may vary significantly.

Response:

The SWQSTF, which includes Regional Board as active members, is recommending adoption of a “Limited REC” beneficial use that is based on frequency of contact recreation exposure, as suggested by the comment.

Comment:

UAAs are expensive and difficult to prepare. We suggest that the Regional Board consider joining with other Boards and the State Board to prepare a statewide UAA.

Response:

The SWQSTF is in the process of developing a template or guidance for UAAs to be used as the basis for revising recreational use beneficial use definitions and designations in the Santa Ana Region. The UAA being developed for this region may be a useful model for other UAAs throughout the state, and perhaps for a state-wide UAA, as well.

Comment:

“Reformat / republish Basin Plan” (Issue No. 18). It may be appropriate to include the TMDLs as an appendix so that the BP does not have to be republished every time a new TMDL is adopted.

Response:

The Basin Plan has not been republished each time a new TMDL, or other Basin Plan amendment is adopted. An appendix approach may be a useful way to proceed with inclusion of TMDLs. Considerable changes to the Basin Plan resulted from the N/TDS management strategy amendments, and these need to be reflected in a clear and concise version of the Plan.

Comment:

Issue No. 7 “ Develop / revise nutrient objectives.” We suggest this is a lower priority.

Response:

Excessive nutrient levels lead to eutrophication and significant impacts to the water quality standards of several water bodies in the region, including Upper Newport Bay, Lake Elsinore, and Big Bear Lake. This has caused large-scale algae blooms and/or growth in macrophytes, resulting in (or contributing to) loss or impairment of recreation and habitat beneficial uses, including fish kills, excessive odor and other aesthetic impacts. The priority assigned to this issue reflects its importance to the Region and identification as an implementation task for already adopted TMDLs.

Comment:

Issue No. 9 “Develop criteria for wetlands impact mitigation.” We would appreciate being included as a stakeholder in this process.

Response:

Please see the response to Commenter 6’s third comment, above.

Comment:

Issues 3, 14, 15 (Issues 10, 13, 14 in the final priority list) – Updating beneficial use and water quality objective (WQO) tables. We suggest that changes directly address possible compliance impacts on storm water discharges.

Response:

Changes to water quality objectives must take into consideration the factors identified in Section 13241 of the Water Code, which includes economics, a significant factor with respect to stormwater compliance.

Comment:

No. 19 – “Revise chapter Beneficial Use Table narrative to incorporate Tributary Rule.” Although increased work is involved in identifying specific beneficial uses for the smaller waterways, this is preferable to applying the tributary rule and possibly assigning inappropriate beneficial uses and the associated water quality objectives.

Response:

Board staff recognizes the near impossibility of assigning water quality standards to every drainage feature that exhibits attributes of existing or potential beneficial uses. Staff always endeavors to use the most comprehensive information available when applying the tributary rule to designate beneficial uses of waters that have not been specifically referenced or identified in the Basin Plan. Clarification concerning how the tributary rule is to be used and applied has significant importance with respect to implementing proposed revisions of beneficial uses (e.g., proposed REC revisions) and water quality objectives (e.g., proposed revisions to bacteria objectives that support REC uses).

Comment:

Issue No. 20 – “Consider revisions to make it clear that water quality standards apply to intermittent waters, as well as perennial waters”. Determining appropriate WQS for smaller or intermittent waters is difficult and has major ramifications. Effluent dominated waterways (EDW) may reasonably not be able to support the same beneficial uses as waterways with natural flows... This is a statewide issue which should more appropriately be addressed at the statewide level.

Response:

EDWs, which are often are perennial and support habitat and recreational beneficial uses, are not at issue here. With Issue No. 20, Board staff's focus is the numerous intermittent surface waters in the Region that are, by definition, waters of the state, often are also waters of the United States (within the jurisdiction of the U.S. Army Corps of Engineers), and are tributary to perennial surface waters. These waters support (or potentially support) beneficial uses that must be protected and not be allowed to be degraded, in part to protect the water quality standards of downstream receiving waters. Additional discussion is needed in Basin Plan, Chapter 3, “Beneficial Uses,” to sufficiently explain the basis and use of this principle.

There have been statewide efforts to address water quality standards for EDWs, but, to date, no specific requirements have been developed that would appreciably affect the Regional Board's consideration of appropriate beneficial uses and water quality objectives pursuant to existing regulation.

Comment:

Issue No. 22 – “Develop waste discharge prohibitions for excessive sedimentation. “ We would appreciate being a stakeholder in the development of these BP changes if this issue is pursued.

Response:

Comment noted. This issue is in the lower tier of the priority list. If this issue is pursued we will notify all interested parties.

Comment:

“Develop and adopt biological criteria for managing water quality.” We support consideration of the use of biocriteria as a possible alternative to the use of numeric concentration-based objectives.

Response:

Comment noted. The SWRCB has been directing a statewide effort to develop biological criteria for managing water quality. This effort is not yet completed. It is unlikely that this issue will be considered for Basin Plan revisions during this triennial review period.

Comment: The following issues were not included in the table attached to the announcement; however, they are important issues for the Department.

- Issue A - variance for groundwater from dewatering operations.

Response:

Wastes discharged to surface waters, including those from groundwater dewatering operations, are subject to the Clean Water Act's NPDES permit program. There are no provisions for waiving issuance of NPDES permits. Furthermore, the chemical character of groundwater dewatering wastes, and the manner in which they are discharged, can affect the water quality standards of receiving waters. The Santa Ana Regional Board has established a general deminimus permit that facilitates and streamlines permitting of groundwater dewatering waste discharges.

- Issue B – Need for storm water implementation and compliance procedures. The Santa Ana Basin Plan does not appear to describe how any particular storm water discharge is to be compared with the receiving water standards. Develop an evaluation that would focus on whether beneficial uses are being impacted rather than on exceeding numeric objectives.

Response:

This is a concern that may be best addressed by a stakeholder-based work group, on a state-wide level.

Comment:

- Issue C – Review of Selenium objectives, develop a site-specific selenium objective. We believe the current CTR objective is not well supported.

Response:

Regional Board staff actively participate in the Nutrient / Selenium Management Plan Working Group, a stakeholder group working to address a number of issues related to management and control of discharges containing selenium, including possible selenium SSOs. The commenter is encouraged to participate in this work group.

Comment:

- Issue D – Probable vs. potential beneficial uses. We are concerned that some of the identified beneficial uses may not, in fact, be probable.

Response:

In considering whether to assign or revise beneficial use designations for specific waters, the Regional Board will consider all relevant evidence. The commenter

is encouraged to participate in the development and consideration of relevant Basin Plan amendments.

8. The Friends of the Northern San Jacinto Valley

Ann L. Turner McKibben, President

June 5, 2006

Comment:

We are pleased to see the Regional Board will be considering Beneficial Use designations for Mystic Lake. Recognition and inclusion of Mystic Lake in the Basin Plan will be an important step in realizing improved water quality at Mystic Lake.

We suggest that you eliminate (the proposed) REC-1 as full body contact would conflict with the biological / conservation / wetland beneficial uses recommended for Mystic Lake. We suggest that you also assign Limited Warm Fresh Water Habitat (LWRM) and Preservation of Biological Habitats of Special Significance (BIOL) to Mystic Lake.

Response:

Staff is proposing to add Mystic Lake to the Basin Plan to acknowledge the beneficial uses associated with the Lake and to protect and/or enhance those uses. The Clean Water Act directs the States to assign "swimmable" and "fishable" beneficial uses to all surface waters, unless a use attainability analysis is completed showing that these uses are not attainable. Therefore, we propose assigning recreation (REC1 and 2, currently), warm water aquatic habitat (WARM), wildlife habitat (WILD), and rare, threatened and endangered species (RARE) beneficial uses, to protect the uses in and around Mystic Lake that can be shown to exist. Note that Regional Board staff are engaged in an effort with the Stormwater Quality Standards Task Force to consider recommendations for revisions to recreation-related water quality standards. If any such changes are approved, they would likely affect the recommendations for recreation-related designations for Mystic Lake.

We agree that the BIOL beneficial use is appropriate. WARM will be more protective of the aquatic organisms found in the lake than LWRM. We believe that the current REC-2 (non-water contact recreation) designation is appropriate, and that a water contact recreation designation (either REC-1, or the "Limited REC" use (that is now being considered by the Stormwater Quality Standards Task Force) may also be needed. We understand that the California Department of Fish and Game (CDF&G), the operator of the San Jacinto Wildlife Area that includes Mystic Lake and surrounding lands, does not allow water contact activities in the lake and we will encourage designation of beneficial uses that recognize this restriction. Any Mystic Lake amendments to the Basin Plan will likely include a discussion concerning CDF&G rules and regulations that apply to use of the waters of Mystic Lake.

9. Santa Ana Watershed Project Authority (SAWPA)
Daniel B. Cozad, General Manager
June 6, 2006

Comment:

SAWPA requests that an additional item be added to the Triennial Review Priority List to request RWQCB staff support, in an advisory and collaborative role, to assist in the development of the next update to SAWPA's Integrated Watershed Plan and to address watershed-wide salt management strategies.

Response:

Regional Board planning staff will participate in processes to update SAWPA's Integrated Watershed Plan, to the extent that resources and priorities allow, recognizing that resources for Basin Planning are quite limited.

Staff acknowledges the importance of developing and implementing viable salt management strategies. As a result, we have added Issue No. 4 to the priority list, to amend the Basin Plan to incorporate a Reclamation Guidance Document and other direction needed to effectively implement the 2004 Nitrogen – TDS Management Plan and related Basin Plan amendments. These activities would include working in an advisory and collaborative role with stakeholders to a) Incorporate a Reclamation Guidance Document; b) Develop an agreement for collaborative implementation of management strategies, by proponents of projects to recharge groundwater using imported waters and inter-basin groundwater transfers, to assure compliance with TDS and nitrogen WQOs; and, c) Revise waste load allocations for the Santa Ana River to correspond with the actual or projected POTW discharges.

10. Orange County Water District
Virginia Grebbien, General Manager
July 27, 2006

Comments:

OCWD supports the high priority assigned in the draft priority list to considering recommendations of the Storm Water Quality Standards Task Force (SWQSTF). In particular, OCWD requests that the Regional Board place a high priority on adding rationale to the Basin Plan for the 2.2 mpn/100 ml coliform discharge limit for POTWs discharging to the Santa Ana River and its tributaries. The related language in the existing POTW discharge permits regarding tertiary treatment and 5-log virus reduction should be added to the Basin Plan.

One item that is not on the draft priority list that is currently receiving an extensive amount of attention in the Santa Ana River Watershed is the use of imported water to recharge groundwater basins and how this recharge relates to the Basin Plan. The workgroup that is now starting to work on this issue may recommend changes to the Basin Plan; this item should be given high priority on the triennial review priority list.

Response:

Staff has placed action on the recommendations of the SWQSTF as Issue No. 2, the second highest priority of this triennial review. This issue includes adding rationale to the Basin Plan for the 2.2 mpn/100 ml coliform discharge limit and related discussion and language.

As stated in our response to Comment No. 9, staff remains committed to working with stakeholders on the issue of the use of imported water to recharge groundwater basins. Triennial Review Issue No. 4 has been added to focus on this matter.

11. Risk Sciences
Tim Moore
September 13, 2006

Comments:

On behalf of several water agencies in the upper Santa Ana River watershed, I write to request minor modifications to the proposed Triennial Review Priority List. Item #10 (now Item #11) on the priority list identifies several creeks that may be resegmented and reclassified as a result of the FERC relicensing process. The water agencies believe that it is appropriate to update the designated uses for these streams and look forward to working with staff on this issue. We are concerned that the current wording of item #10 may, unintentionally, limit the range of alternatives that should be investigated or that can be adopted by the Regional Board. We recommend that the item #10 be revised as follows:

“A regional Task Force will be formed to recommend stream segmentation strategies and determine how best to describe the existing and potential beneficial uses for each segment (e.g. WARM and/or COLD, Intermittent or Perennial, etc.). “

Response:

Staff intends to collaborate with the several water agencies and other stakeholders to appropriately resegment, reclassify and assign beneficial uses to reaches of Lytle Creek, Santa Ana River, and Mill Creek that have been affected by the FERC relicensing. Staff agrees with your comment on limiting the range of alternatives that should be investigated. As a result, we have changed the wording to be more general to reflect an interest in exploring all reasonable alternatives. Please see Issue No. 11 on the final Priority List (updated November 13, 2006). In addition, we have noted that the Upper Santa Ana Water Resources Association – Triennial Review Committee is expected to support work on this issue.

12. City of Riverside
Rodney M. Cruze, Wastewater Operations Manager
(commenting as president of SARDA, the Santa Ana River
Discharges Association)
September 18, 2006

Comments:

SARDA has identified at least three pollutants for which site-specific objectives may be warranted. SARDA will be asking Board staff to participate in a recalculation effort relative to the aluminum water quality criteria and adoption of a site-specific objective as a long term objective. If the State adopts the proposed chlorine residual standards, it may be appropriate and necessary for the dischargers to request site-specific standards for chlorine.

When and if issues related to the proper measurement and implementation of cyanide standards are finalized, a critical assessment of what constitutes an appropriate site-specific standard for that chemical may also be warranted.

Response:

Staff has added Issue No. 12 to the final priority list to study the proposal to remove and/or adopt site-specific objectives for the Santa Ana River. Staff is open to working with SARDA and other stakeholders on this issue.

13. California Trout
Jim Edmondson, Southern California Manager
September 21, 2006

Comments:

California Trout (CT) supports retaining the COLD designation for the Mill Creek reaches. CT strongly supports the addition of new reaches and the designation of appropriate beneficial uses. CT supports the designation of Mill Creek from SAR to Highway 38 as Reach 1 and keeping it I-COLD. CT supports the designation of Mill Creek from Highway 38 to Mountain Home Creek confluence as Reach 2 and keeping it COLD. CT supports the designation of Mill Creek from Mountain Home Creek confluence to upper diversion in Forest Falls as Reach 3 and I-COLD. CT recognizes that the artificial hydrology due to water diversion upstream of Forest Falls currently imposes an intermittent designation, and supports a non-intermittent designation for this reach, which reflects the original and potential future hydrology of this reach for salmonids. CT supports the designation of Mill Creek from the upper SCE diversion to headwaters as Reach 4 and keeping it COLD. This reach currently supports salmonids, and is designated as Critical Habitat for the Southwestern Willow Flycatcher.

Response:

In the final triennial review priority list, Issue No. 13 is stated in more general terms than in the draft priority list on which CT commented. As noted in staff's response to Comment No. 11, above, our intention is not to limit the possible beneficial use alternatives to be considered. Staff has committed to work with the Upper Santa Ana River Water Agencies to determine the appropriate beneficial uses that should be designated for Mill Creek. Other stakeholders are invited and encouraged to participate in this effort and contribute information and expertise needed to designate the beneficial uses that are appropriate for all Mill Creek reaches.

**14. Center for Biological Diversity (CDB)
Ileene Anderson
September 22, 2006**

Comments:

1) The Center specifically supports retaining the COLD designation for the Mill Creek reaches. (Remaining comments are similar to California Trout's comments).

Response:

See Staff's response to Comment 13, above.

Comments:

2) The Center opposes revision of fluoride WQO for consistency with the Department of Health Service's MCLs. We request that staff re-consider the effects of elevated fluoride on aquatic organism based on the best available science.

Response:

The revision of the fluoride WQO issue has been placed in the lower tier of the priority list, at Issue No. 31, and it is likely that it will not be reviewed during this triennial review period. When this matter is considered, all relevant science will be reviewed and considered in developing proposed revisions to the fluoride WQO.

Comment:

The Center supports the following components of the 2006 Triennial Review Priority List, Issues 3, 7, 9, 10, 11, 12, 13, 15, 16, 18, 19, 20, 21, 22, 23, 24, 28, 29, 33, 34, 35 (*Note: Board staff has revised the issue numbers to correspond with the final priority list*). On Issue No. 29, while the Center supports establishing dissolved oxygen objectives in waters for beneficial uses, CBD supports objectives that would restore salmonid waters throughout the watershed. Historically, salmonids ran throughout the reaches of the Santa Ana River. By establishing "non-salmonid waters" criteria, the Regional Board would effectively preclude re-establishing salmonid runs in those areas, preventing recovery. Additionally, other rare aquatic species, including the Santa Ana Sucker and the

Speckled Dace, would benefit from dissolved oxygen objectives.

Response:

Many of the issues that are supported by the commenter have a high priority on the Triennial Review list. Available staff resources will likely limit the issues studied during this triennial review to those with the highest priority.

Reconsideration of beneficial uses and stream reaches of Mill Creek, Lytle Creek, and the upper Santa Ana River, as proposed in Issue No. 11, will include recognition that these waters support coldwater habitat, i.e., the COLD beneficial use, needed by salmonids and other cold water fish species.

Comment:

Critical Habitat is a federal designation of habitat that is essential to the persistence and recovery of species. CBD supports the recognition of these important areas as a Beneficial Use in the Basin Plan, and supports the BIOL beneficial use or RARE beneficial use designation for them. CBD requests that all federal Critical Habitat Designations be included as a beneficial use in the following Inland Surface Streams... (The commenter listed several waters bodies that have Critical Habitat Designations for aquatic organisms, birds, or plants.)

Response:

We believe that the RARE beneficial use designation is appropriate for waters that are included in locations with a Critical Habitat Designation. Since a "critical habitat" designation does not set up a preserve, a park, or a special conservation zone for listed species, the BIOL use does not appear to be appropriate for areas subject to the critical habitat designation. Issue No. 13 "Update Beneficial Use Table 3-1..." in the final priority list has been revised to include all the waters listed in the original comment regarding Critical Habitat, and to consider adding the RARE beneficial use to the waters listed.

California Regional Water Quality Control Board
Santa Ana Region

RESOLUTION NO. R8 – 2006 - 0085

Adoption of Prioritized List of Issues to be Addressed
in the Basin Plan Triennial Review

WHEREAS:

1. Section 303 (c) of the Clean Water Act requires that states hold public hearings for review of water quality standards (beneficial uses, water quality objectives and antidegradation policy) at least once every three years.
2. California Water Code Section 13240 requires that water quality control plans be periodically reviewed. Water quality control plans specify the state's water quality standards.
3. An updated Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was adopted by the Regional Board on March 11, 1994, and approved by the State Water Resources Control Board (SWRCB) on July 21, 1994. The updated Basin Plan was approved by the Office of Administrative Law (OAL) and became effective on January 24, 1995. The United States Environmental Protection Agency, Region 9 (USEPA) has approved most of the 1994 Basin Plan but has reserved action on certain water quality standards.
4. On April 18, 1997, the Regional Board adopted an amendment to the Basin Plan deleting the bacterial quality objectives specified for ocean waters. This amendment became effective upon approval by the SWRCB and OAL and has been approved by the USEPA.
5. On May 19, 2000, the Regional Board adopted another amendment to the Basin Plan to incorporate language authorizing the inclusion of compliance schedules in NPDES permits. The SWRCB , OAL and USEPA have approved this amendment, which became effective on July 15, 2002.
6. On January 22, 2004, the Regional Board adopted amendments to the Basin Plan to incorporate an updated total dissolved solids (TDS) and nitrogen management plan, including revised groundwater subbasin boundaries and TDS and nitrate-nitrogen objectives, revised surface water quality objectives for certain waters, and revised waste load allocations for TDS and nitrogen. The surface water standards changes are awaiting USEPA approval, while other components of these amendments became effective upon approval by the SWRCB and OAL.
7. To comply with the federal and state requirements for review of water quality standards/basin plans, Regional Board staff prepared a proposed list of issues to be addressed in the current triennial review of the Basin Plan. The issues on this list were prioritized, by fiscal year, to reflect both water quality concerns and the availability of needed resources.

8. Copies of the proposed list were distributed to all interested parties for their review and comment.
9. Regional Board staff conducted public meetings with interested stakeholders on June 6, 2006 and September 13, 2006, to consider the proposed prioritized list of Basin Planning Issues to be addressed in the next three years. Notice of the public workshop was given to all interested parties.
10. The Regional Board conducted a public hearing on December 1, 2006, to consider the adoption of staff's prioritized list. Notice of the public hearing was given to all interested parties and published in accordance with Water Code Section 13244.
11. The Regional Board considered all testimony at the public hearing regarding the prioritized list of identified Basin Plan Triennial Review issues.

THEREFORE BE IT RESOLVED THAT:

1. The California Regional Water Quality Control Board, Santa Ana Region, adopts staff's prioritized list of issues to be addressed in the current Triennial Review.
2. Areas of the Basin Plan not identified as needing investigation and possible revision are reaffirmed as adequate at the present time. The Basin Plan remains in effect until subsequent amendments are adopted and approved.
3. The Executive Officer is directed to forward copies of this resolution to the State Water Resources Control Board in fulfillment of the requirement of Section 13245 of the Water Code.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Santa Ana Region, on December 1, 2006

Gerard J. Thibeault
Executive Officer

Attachment A -- Resolution R8-2006-0085

Final 2006 Basin Plan Triennial Review Priority List
Revised November 15, 2006

Issue No.	Issue Description	Estimated Basin Planning Staff Resources ¹				Total PYs
		FY 06-07	FY 07-08	FY 08-09	FY 08-09	
1.	Amend the Basin Plan to include a prohibition on the use of septic tank subsurface disposal systems in the Quail Valley area.	[0.5]	[0.1]			[0.6] ²
2.	Consider changes to beneficial uses and associated objectives, taking the Water Code Section 13241 factors into account, in relation to standards compliance during wet weather. The immediate focus is to consider revisions to REC-1 and REC-2 beneficial uses and bacterial water quality objectives for surface waters based on USEPA's national criteria (<i>E.coli</i> and/or enterococci) and the recommendations of the Storm Water Quality Standards Task Force (SWQSTF). SWQSTF recommendations are now likely to include: 1) adoption of recreational use subcategory beneficial use definitions and redesignation of certain waters; 2) adoption of a high flow suspension of REC-1 standards; 3) removal of REC from certain waters ³ . Add rationale for the 2.2 mpn/100 ml Coliform discharge limit for POTWs discharging to the Santa Ana River and its tributaries. The SWQSTF has indicated its commitment to assist with other tasks identified in this list. Commencement of this support work is contingent on the schedule for completion of the ongoing REC-related standards review.	0.5	0.5	0.5		1.5 ⁴

¹ Basin Planning resources, unless otherwise noted. 2.0 personnel years (PY) per year of Basin Planning resources are currently available.

² Enforcement program staff resources.

³ A Use Attainability Analysis will be required for these activities.

⁴ Ongoing work supported by the SWQSTF.

Final 2006 Triennial Review Priority List
Revised November 15, 2006

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07 [8.0]	FY 07-08 [8.0]	FY 08-09 [8.0]	Total PYs [24] ⁵
3.	Add TMDL Basin Plan amendments, newly adopted or revised (e.g., for Newport Bay/San Diego Creek, Middle Santa Ana River Watershed, Big Bear Lake, Canyon Lake and Lake Elsinore).	0.2	0.2		0.2 ⁶
4.	Amend the Basin Plan to incorporate the following, recommended or needed to facilitate implementation of the 2004 Nitrogen - TDS Basin Plan amendments: <ul style="list-style-type: none"> • A Reclamation Guidance Document. • An agreement for collaborative implementation by proponents of recharge projects involving imported water and/or interbasin water transfers of management strategies necessary to assure compliance with the Basin Plan TDS and nitrogen objectives. • Revise waste load allocations for the Santa Ana River to correspond with the actual or projected surface water POTW discharges 				
5.	Reviews of adopted TMDLs (per TMDL schedules/requirements).	[0.2]	[1.0]	[1.0]	[2.2] ⁷
6.	Consider revisions to SHEL beneficial use definition (addition of beneficial use for shellfish harvesting for bait purposes, not human consumption) and re-designation of appropriate waters.	0.1	0.25		0.35 ⁸
7.	Develop/revise nutrient objectives for region, focusing on 303(d) - listed waters, including Newport Bay, San Diego Creek, Lake Elsinore, Canyon Lake, Big Bear Lake and its tributaries. This may include reviewing ammonia objective for specific water bodies based on 1999 USEPA national criteria.	[1.0]	[1.0]	[1.0]	[3] ⁹
8.	Amend the Basin Plan to include a prohibition on the use of septic tank subsurface disposal systems in the Cherry Valley area.	0.1			

⁵ TMDL program resources

⁶ Some work already underway

⁷ TMDL program resources

⁸ Supported by County of Orange resources.

⁹ TMDL resources.

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
9.	Develop criteria for wetlands mitigation. Revise narrative to expand wetland definitions and description of 401 process.	0.2	0.1		0.3 ¹¹
10.	<p>Add the following water bodies to Tables 3-1 and 4-1 and designate appropriate beneficial uses and water quality objectives (expanded from 2002 Basin Plan Triennial Review list):</p> <ul style="list-style-type: none"> a. Add Santa Ana Delhi Channel and divide into appropriate reaches; assign REC-1 or recreational use subcategory¹² or remove REC-1¹³, REC-2, WILD, and/or WARM, as appropriate; b. Add Mystic Lake (San Jacinto Wildlife Reserve) and assign intermittent REC-1 or recreational use subcategory, REC-2, RARE, WARM, WILD and/or BIOL, as appropriate; c. Add Los Cerritos Wetlands (Seal Beach) and assign REC-1, REC-2, WILD, BIOL, RARE, SPWN, MAR, and/or EST, as appropriate; d. Add Buck Gully, Los Trancos Canyon Creek, Muddy Canyon Creek, Pelican Point Creeks (Corona Del Mar and Crystal Cove State Park), and assign REC-1 or Recreational use subcategory, REC-2, WARM, and/or WILD, as appropriate; e. Add East Garden Grove-Winterburg and Bolsa Chica/Anaheim-Barber City flood control channels and assign REC-2, WILD, WARM, and REC-1 or recreational use subcategory, as appropriate; f. Add Carbon, Fullerton, and Brea Creeks (San Gabriel River watershed) and assign REC-2, WILD, WARM, and REC-1 or recreational use subcategory, as appropriate. 	0.2	0.1		0.3 ¹⁴

¹¹ Partially funded by a USEPA grant.

¹² Approval of the recreational use subcategory (through a Basin Plan amendment, see item #2). Use Attainability Analysis (UAA) required to address recreational use subcategory designations for this and other surface waters.

¹³ UAA required to remove REC-1 use for this and other surface waters.

¹⁴ SWQSTF is expected to support work on this Task.

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
10.	g. Add Laguna Lake (City of Fullerton) and assign REC-1 or recreational use subcategory, REC-2, WARM, WILD, COMM as appropriate.				
11.	Add new reaches and designate appropriate beneficial uses ¹⁵ (Table 3-1 and Table 4.1): Changes needed as a result of FERC relicensing (modified from 2002 Basin Plan Triennial Review List): a. Lytle Creek: 1) From 1-15 to Korean Christian Camp Bridge or SCE diversion - designate new reaches and COLD or WARM beneficial uses, as appropriate. Designate reaches Intermittent as appropriate. 2) From Korean Christian Camp Bridge or SCE diversion to headwaters of South, Middle, and North Fork - designate as a separate reach and keep COLD. b. Mill Creek, from SAR to Valley of the Falls Road Bridge or upper SCE diversion - Designate new reaches and assign COLD or WARM beneficial uses, as appropriate. Designate reaches Intermittent as appropriate; c. SAR from Seven Oaks Dam to Power House 1 – designate as COLD or WARM, and existing or intermittent, as appropriate, and list as Reach 6; d. SAR from Power House 1 to headwaters – list as Reach 7 and keep COLD. Consider adopting and/or removing existing site-specific objectives for the Santa Ana River. The Santa Ana River Dischargers Association (SARDA) has identified at least three pollutants, including aluminum, chlorine and cyanide, for which site-specific objectives may be warranted. It may be appropriate to remove site-specific objectives for copper, cadmium, and lead for middle Santa Ana River reaches and their tributaries, as well.	0.1	0.1		0.2 ¹⁶
12.		0.1	0.1		0.2 ¹⁷

¹⁵ In addition, include narrative description of localized flow conditions including effects of diversions, perennial and intermittent flows and springs.
¹⁶ Upper Santa Ana Water Resources Association – Triennial Review Committee is expected to support work on this Task.
¹⁷ Supported by SARDA.

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
13.	<p>Update Beneficial Use Table 3-1 and Water Quality Objectives Table 4-1 (modified from 2002 Basin Plan Triennial Review list), as appropriate, including consideration of:</p> <p>Add beneficial use designations (Table 3-1):</p> <ol style="list-style-type: none"> a. Add COMM to appropriate lakes, reservoirs, and streams; b. Add RARE to appropriate waters, including all reaches of San Diego Creek, Sand Canyon Wash, valley reaches of Lytle, Cajon, and City Creeks, Day Creek, Barton Creek, Waterman Creek, Fish Creek, Reaches 4, 5, 6, and 7 of the San Jacinto River, Strawberry Creek, North Fork of San Jacinto River, Sunnyslope Creek, Reach 4 and 6 of the Santa Ana River, Reach 1 & 2 of Mill Creek, Oak Glenn Creek, Reach 1, 3, and 4 of San Timoteo Creek, Bear Creek, the Shay Meadows wetland and Baldwin Lake; c. Add SPWN to appropriate waters, such as Mountain Home Creek, Lytle Creek, San Antonio Creek, San Jacinto River – North Fork, and Reach 7, and Santa Ana River Reach 3 & 4; d. Add WILD to San Jacinto River Reaches 4 & 5. <p>Changes needed to reflect existing hydrology:</p> <ol style="list-style-type: none"> e. San Diego Creek from upper Newport Bay to drop structure at MacArthur Blvd - designate as a separate reach and add EST; f. Erwin Lake - revise beneficial uses to intermittent. 	0.1	0.2	0.1	0.4

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
14.	Remove Laguna and Lambert Reservoirs from Lakes and Reservoirs section of Table 3-1 and Table 4-1. Add the creeks that remain to Table 3-1 and 4-1, and assign appropriate WQS.	0.1			0.1
15.	Add waters in the Goodhart Canyon Watershed to Santa Ana Region and assign water quality standards. (Drainage has been altered by the construction of Diamond Valley Reservoir's East Dam). Add or subtract waters that would change as a result of realigning Region's boundary (to accurately reflect watershed boundaries) with Region 9 in the area of Laguna Hills.	0.1			0.1
16.	Add a water quality objective narrative regarding the excessive growth of macrophyte aquatic plants or combine with existing algae narrative objective.		0.1		0.1
17.	Revise numeric objective for residual chlorine for discharges to surface waters.		0.5	0.5	1.0
18.	Republish basin plan in updated electronic format with updated maps based on CalWaters data and reflecting changes in watershed boundaries.		0.1		0.1 ¹⁸
19.	Add narrative on implementation procedures for narrative turbidity and toxicity objectives.		0.3	0.3	0.6
20.	Revise Chapter 5 Prohibitions Applying to Inland Surface Waters (saline and sewage discharges) and modify to explicitly include lakes.			0.1	0.1

¹⁸ State Water Resources Control Board contract funds will be used to complete the majority of this task.

Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
21.	Revise Chapter 3 Beneficial Use Tables narrative to incorporate Tributary Rule.			0.1	0.1
22.	Consider narrative revisions to make clear that water quality standards apply to intermittent surface waters, as well as perennial waters.			0.1	0.1
23.	Consider revisions to recognize importance of headwaters as a separate class or category of waters, and of protecting their WQS.			0.1	0.1
24.	Develop waste discharge prohibitions for excessive sedimentation resulting from controllable water quality factors (targeted at excessive sedimentation in upper Newport Bay, Big Bear Lake, and Lake Elsinore Watersheds).		0.3	0.2	0.5
25.	Consider need for clarification of Chapter 5 Minimum Lot Size Requirements and Exemption Criteria for New Developments (using on-site sewage disposal systems).			0.25	0.25
26.	Non-regulatory, descriptive updates and revisions, including: <ul style="list-style-type: none"> a. Add narrative on Alaska Rule; b. Update information on approved policies (e.g., Nonpoint Source Enforcement Policy, 303(d) Listing Policy) (Chapter 2); c. Update Chapter 5 "Disposal of hazardous and Nonhazardous Waste" to reflect loss of SWAT program; d. Update SLIC Program Discussion; e. Update Animal Confinement Facilities (Dairies) discussion in Chapter 5; f. Update Nonpoint Source Program discussion in Chapter 5; g. Add narrative on the efforts to remediate perchlorate contamination in the region. 		0.25		0.25
27.	Update the discussion of implementation of the antidegradation policy in Chapter 2 to address non-point source pollution.		0.1	0.1	0.2

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Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
28.	Reevaluate temperature criteria to ensure full protection of aquatic life.			0.25	0.25
29.	Update dissolved oxygen objectives for WARM/COLD beneficial uses.			0.25	0.25
30.	Review silver water quality objective for groundwater.			0.25	0.25
31.	Revise fluoride WQO to be consistent with DHS MCLs.			0.25	0.25
32.	Review ammonia objective based on 1999 USEPA national criteria.		0.1		0.1
33.	Develop and adopt biological criteria for managing water quality.		1.0	1.0	2.0 ¹⁹
34.	Santa Ana River, Reach 3 – add TOC WQO.			0.1	0.1
35.	Review Methylene Blue-Activated Substances (MBAS) water quality objective for surface waters.			0.1	0.1

¹⁹ SWRCB directing statewide effort

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Issue No.	Issue Description	Estimated Staff Resources (PYs)			
		FY 06-07	FY 07-08	FY 08-09	Total PYs
36.	Santa Ana River, Reach 3 – clarify the COD water quality objective.			0.1	0.1
	<u>SUBTOTAL: Resource needs to address Triennial Review issues</u>	11.7	14.4	14.65	
	Resources used for conducting Triennial Review	0.2			
	Funding supported by TMDL resources	[9.2]	[10]	[10]	
	Funding supported by Enforcement resources	[0.5]	[0.1]	[0]	
	<u>TOTAL TRIENNIAL REVIEW RESOURCES NEEDED (2.1 PY available)</u> (Subtotal Resources less resources for Triennial Review, less resources provide by TMDL and Enforcement programs)	1.8	4.3	4.65	