### STAFF REPORT

on

# Triennial Review of the Water Quality Control Plan for the Lahontan Region

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
South Lake Tahoe CA 96150

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#### Introduction

The California Regional Water Quality Control Board, Lahontan Region (Water Board) is the state agency responsible for setting and implementing water quality standards in about 20 percent of California - east of the Sierra Nevada crest and in the Northern Mojave Desert (Figure 1). Water quality standards and control measures are contained in the *Water Quality Control Plan for the Lahontan Region* (Basin Plan). The current Basin Plan took effect in 1995, replacing three earlier plans. As of early 2012, 13 sets of amendments to the 1995 plan have received all necessary approvals. The Basin Plan is available on the Water Board's Internet web page at: <a href="http://www.waterboards.ca.gov/lahontan">http://www.waterboards.ca.gov/lahontan</a>.

State and federal laws require periodic review and revision of Basin Plans; the federal process is called "Triennial Review." Due to resource limitations and the complexity of California's plan amendment process, Triennial Review in California is generally limited to identification of the highest priority planning projects to be addressed over the three years between one Triennial Review cycle and the next. Unless it actually involves adoption of plan amendments, Triennial Review is not a regulatory action and does not require environmental analysis under the California Environmental Quality Act. The

Water Board's current Triennial Review priorities were adopted in October 2009 and have been used to allocate resources, including Water Board staff (staff) time, towards accomplishing the priorities as much as feasible.

Two public scoping meetings were held: (1) at the September 12, 2012 regular meeting in Barstow and (2) at the October 11, 2012 regular meeting in South Lake Tahoe. A public hearing for Triennial Review adoption is scheduled for the Water Board's January 17, 2013 meeting in Barstow.

This staff report provides information on the Triennial Review process and on planning projects identified by staff. Additional projects may be identified at the January 2013 public hearing. Staff will make final recommendations regarding priority planning projects following the public hearing. The Water Board will be asked to approve a "short list" of projects to be addressed by staff over the following three fiscal years, and to prioritize the remaining projects for future action as resources allow. The review process does not necessarily mean that specific revisions will be made to the Basin Plan, but after investigation by staff, the identified projects may result in Basin Plan amendments. The Water Board has the ability to change priorities between the Triennial Review cycles.

# **Water Quality Standards**

In California, water quality standards include designated beneficial uses of water, narrative and numerical water quality objectives, and a nondegradation policy. Water quality objectives are similar to federal "water quality criteria," but objectives are regulatory and criteria are not. Water quality standards in the Lahontan Basin Plan are set forth in Basin Plan chapters 2, 3, and 5.

(<a href="http://www.waterboards.ca.gov/lahontan/water\_issues/programs/basin\_plan/reference\_s.shtml">http://www.waterboards.ca.gov/lahontan/water\_issues/programs/basin\_plan/reference\_s.shtml</a>). The plan's beneficial use tables (Basin Plan Chapter 2) include both existing and potential beneficial uses of water. Most of the numerical objectives are based on historical water quality data collected before adoption of the 1975 North and South Lahontan basin plans. Unless criteria for variances to objectives are specifically included in the Basin Plan, variances or exceptions cannot be granted without Basin Plan amendments to revise the objectives.

Applicable water quality standards also include numerical limits for toxic "priority pollutants" promulgated as surface water standards by the U.S. Environmental Protection Agency (USEPA) under the National Toxics Rule and California Toxics Rule. These standards have not yet been physically incorporated into the Basin Plan.

All of the waters of the Lahontan Region are internally drained (i.e., the waters of the Region do not flow into the world's oceans), and many of them are isolated. The U.S. Army Corps of Engineers has determined that some waters within the Lahontan Region are not "waters of the United States" under the federal Clean Water Act. State standards still apply to any "waters of the State" that are determined not to be waters of the United States.

# **Triennial Review Process and Public Participation**

The Water Board's 2012 Triennial Review Process involves:

- Sending staff's draft projects list and the hearing notices to the Water Board's Basin Plan mailing list and to an electronic mailing list for the Triennial Review.
- Making copies of the hearing notice, projects list, and this staff report available on the Water Board's webpage.
- Providing a 45-day public review period for the projects list and the opportunity to submit other projects and written comments.
- Preparing written responses to written public comments. All written comments and responses will be provided to the Water Board before the hearing.
- Testimony at the public hearings.
- Water Board adoption of a resolution identifying priority planning projects to be addressed by staff and projects requiring additional funding.
- Submission of the adopted priority list to the State Water Resources Control Board (State Water Board) and USEPA.

Table 4 shows status of the previous 2009 Triennial Review priority list and project status as of December 2012.

#### **Basin Plan Amendment Process**

The Basin Plan amendment process is summarized in Table 1, adapted from the State Water Board's planning guidance. As the table indicates, the process is lengthy and complex. (The table does not include the revisions that may need to be made in preliminary drafts in response to comments by internal reviewers and in response to scientific peer review.) Chronologically, the process can require six months to more than a year between the end of the "research" period in Step A and Water Board action, and nine months or more can be required after Water Board action for the amendments to receive all needed approvals. "Research" for Basin Plan amendments can include scientific literature review and/or water quality monitoring or special studies. Scientific peer review is required for amendments involving scientific judgment, and the reviewer's comments may result in significant changes to preliminary draft amendments before they are released for public review. Following Water Board adoption, amendments must be approved by the State Water Board, the California Office of Administrative Law (OAL), and (in some cases) the USEPA. To facilitate the OAL review process, staff prepares and indexes a detailed administrative record.

# **Planning Considerations**

**Budget** - The Water Board's planning resources are limited. Some Basin Plan amendments may also require contracted studies for data collection (e.g., special monitoring studies to facilitate update of water quality objectives) or predictive modeling.

**Projects needing additional funding** - The State Water Board's guidance for the Triennial Review process asks Regional Water Boards to identify planning projects that would require additional funding to address. The Lahontan Water Board will be asked to choose a small subset of the planning projects identified by staff and the public for emphasis over the next three years; ideally the total estimated cost of the selected projects should not exceed the resources expected to be available within that time. All of the remaining projects will be identified as projects requiring additional funding in order to be addressed during the next three years.

**Total Maximum Daily Loads (TMDLs)** - The federal Clean Water Act requires states to identify surface water bodies that are not meeting standards due to pollutants (the "Section 303(d) list"), and to determine sources and source loading, then prepare strategies called TMDLs to ensure attainment of standards. In California, TMDLs and TMDL implementation programs are generally (but not always) adopted as Basin Plan amendments. Priorities and schedules for TMDL development are determined through the Section 303(d) list update process and through the Water Board's annual TMDL program workplans. Section 303(d) listing does not necessarily mean that TMDLs (and/or Basin Plan amendments) will be developed for all listed waters; the impairment issues may be addressed in other ways.

Work on Basin Plan amendments to incorporate TMDLs will be supported with state and/or federal TMDL program funds, not Basin Planning funds. Public comments may be submitted on TMDL issues as part of the Triennial Review process. Responses to these comments will be prepared, and they will be added to the Water Board's Triennial Review files. However, the Water Board's action will focus on priorities for use of Basin Planning funds for planning projects other than TMDL development.

Over the next three years, staff will work to address the water quality impairments through the TMDL Program for the following:

- Susan River for toxicity from unknown sources
- Eagle Lake for nutrients
- Donner Lake for polychlorinated biphenyls
- Bodie Creek for metals
- Certain tributaries to Lake Tahoe impaired by nutrients and sediment.

#### Comments

During the public participation process including the Public Scoping meetings in September and October 2012, staff received 16 comment letters or emails addressing 12 planning topics. As part of the Triennial Review process, Water Board staff has responded to these written comments, except for three letters supporting the MUN use de-designation at China Lake Naval Air Weapons Station. These letters support this project (Project #3 in Table 2). Staff recommends this project as a high priority as explained below; no further response is necessary. Comments and responses are in Attachment B.

The purpose of the Triennial Review is to identify high priority planning projects. Commenters suggested that specific proposed projects be given a high priority or suggested that a certain proposed project given less priority as an amendment to the Basin Plan. Many comments received were directly related to the bacteria Water Quality Objective (WQO). Rather than comment specifically on the priority of the planning project, many of the letters advocated specific changes. The Triennial Review process itself does not allow the Water Board to amend the Basin Plan. Its purpose is to prioritize projects for the upcoming three years considering the limitations in staff resources.

Although the Water Board cannot amend the Basin Plan during this process, staff believes it is important that the Board be informed on the bacteria WQO issues raised by commenters and to the staff responses. Staff originally presented three options to approach the bacteria WQO project during the Scoping meetings in September and October 2012. After additional evaluation and consideration of all ongoing efforts, staff recommends continuing with the tasks in Table 3 (Attachment A) and using this information for future evaluation of the bacteria WQO.

Making changes to the current WQO for bacteria is premature. The main reasons for this are as follows:

- 1) The USEPA recently released the <u>2012 Recreational Water Quality Criteria</u> (November 2012). State Water Board staff is considering this new USEPA guidance as it develops its own state recreational water policy with bacteria standards. Lahontan Water Board staff needs to consider this potential statewide guidance as it develops. Since it is uncertain as to how any new criteria will be incorporated statewide, a Basin Plan amendment should not proceed until State Water Board releases its recreational water policy with bacteria objectives.
- 2) The Water Board has invested staff resources and funding to assist in the evaluation of the current bacteria standard in the Basin Plan. With many planned projects in the upcoming three years (refer to Table 3, Attachment A), it would be premature to change the bacteria WQO until these projects

- are complete. This information will assist in informing any changes to the bacteria WQO.
- 3) Many of the comments received are from the Bridgeport ranchers. They suggest a change in the bacteria WQO for the Bridgeport Valley to 200 colony forming units (cfu) per 100 milliliters (mL). Changing the WQO in the Bridgeport Valley to 200 cfu/100mL is not needed while the 2012 Grazing Waiver is in effect and could exhaust limited staff time. The 2012 Grazing Waiver includes a time table for compliance and requires that the enrollees covered under the waiver develop a schedule to implement rangeland water quality best management practices that reduces and/or maintains fecal coliform concentrations to an interim goal of 200 cfu/100mL and attains the highest water quality reasonably achievable.

# 2012 Triennial Review Planning Projects

After reviewing written public comments and testimony, staff prepared a recommended priority list (Table 2) for the Board to consider during the January 2013 public hearing. Staff will request the Water Board choose a subset of projects from Table 2 and from any new projects identified in public comments, and direct staff to investigate these projects over the next three years and develop draft Basin Plan amendments as appropriate.

The Table 2 priority list differs from the priority list presented during the scoping process of the last few months. Some proposed projects will not be completed during the current triennial period and their personnel-year (PY) estimates have been reduced (e.g., the Antelope Valley and Mojave basin Salt and Nutrient Management Plans). Some staff resources have been re-allocated from other programs such as TMDL implementation to Basin Planning activities (e.g., Update Chapter 5 to reflect revisions from the Tahoe Regional Planning Agency's regional land use and water quality plans). Because of these reductions of PY project estimates and staff resource reallocations, the total PYs available for Basin Planning activities for the three-year period is 6.6 PYs.

*High Priority Projects* - Staff recommends the Board rate eleven Basin Planning projects as high priority (Table 2) to receive the current funding for staff resources that allow 6.6 PYs over the three-year period that began on July 1, 2012 and ends June 30, 2015. All of the recommended high priority projects are underway.

- The project described as "prohibitions amendments" (Project #1 in Table 2) is nearing the public scoping stage and should continue to completion during calendar year 2013.
- The bacteria WQO project (Project #2) should receive high priority because of the important economic considerations, including grazing and recreation concerns, and the related strong public interest. Additionally, staff has spent

considerable time and effort on this project, including sampling, contracting, analysis, assessments, and public outreach.

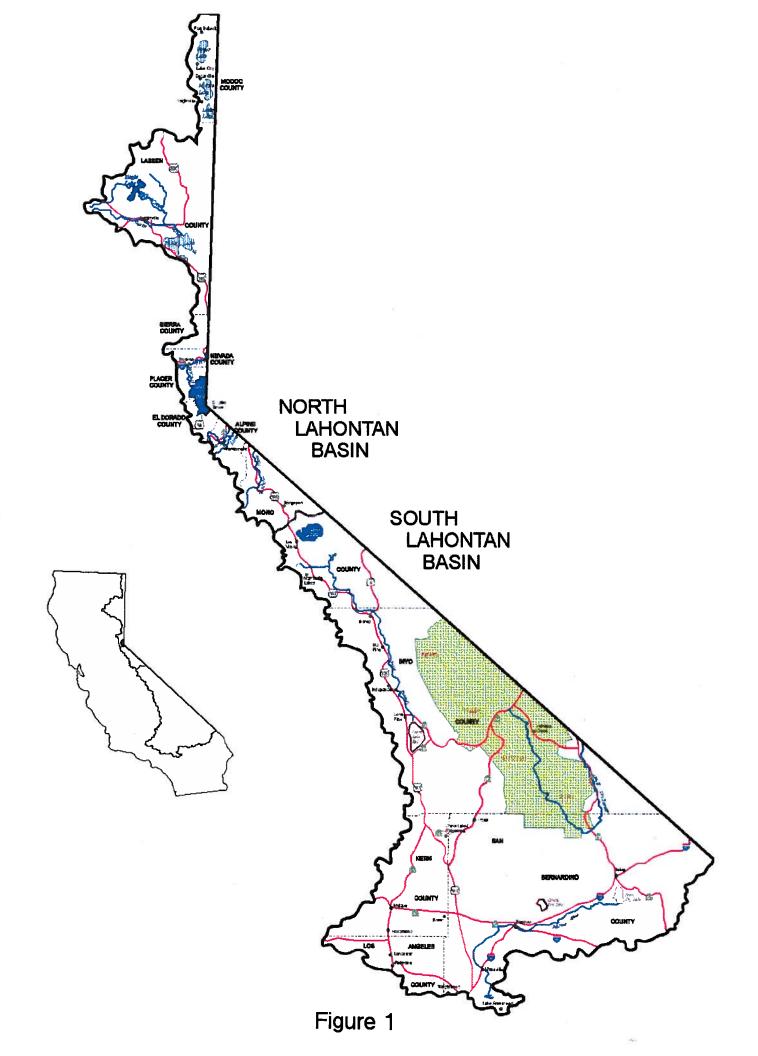
- De-designation of MUN beneficial use at certain groundwater basins at China Lake Naval Air Weapons Station (Project #3) has undergone considerable investigation and date collection by the US Navy and is ready to begin the Basin Plan amendment process. Additionally, the project receives local support, based on current Triennial Review comments received.
- The State Board requires all regions adopt the Septic System Policy, also known as the Onsite Wastewater Treatment system Policy (Project #4). Staff is evaluating the Policy and any changes necessary to the Basin Plan as a result of adopting the State Board Policy.
- Three of the projects are programmatic (Projects #5, #6, and #7). They are
  necessary to maintain management of the Basin Planning program, perform
  inevitable but unpredictable miscellaneous Basin Planning tasks, and to perform
  the next Triennial Review in 2015. These three projects total 0.8 PYs of the total
  6.6 PYs available.
- The "Tahoe nearshore project" (Project #8) was initiated by a legislative directive and has strong local support. Staff recommends this project as high priority.
- Salt and nutrient groundwater management plans (Projects #9 and #10) are required under State Board's Recycled Water Policy and are key components to assess possible changes in groundwater Water Quality Objectives for our Region's priority groundwater basins.
- An amendment to Chapter 5 of the Basin Plan is required to incorporate revisions to Tahoe Regional Planning Agency's Regional Plan Update so that the Regional Plan is consistent with the Lake Tahoe TMDL (Project #11).

**Moderate and Low Priority Projects** - Staff recommends the Board assign moderate priority status to Projects #12 through #21 and low priority to the remaining Projects #22 through #25. Moderate and low priority projects are numbered in order of recommended priority, but subject to change based on ongoing and future investigations and information, and public and Board input.

Staff does not anticipate working on low priority projects unless it can be incorporated into another project. It is possible that several of the moderate or low priority projects will receive attention for various reasons. Some may be incorporated into a high priority project. For example, Project #22 (Eagle Lake "building moratorium") may be addressed by adopting State Board's Septic System Policy (Project #4). Project #21 (Clarify Basin Plan Table 2-1) may be addressed by including it in the prohibition amendment project (Project #1).

Other Resources - Besides incorporation into another project, moderate priority projects may receive resources from other sources besides the 6.6 PYs devoted to Basin Planning. For example, interested parties may provide technical assistance that free up Water Board PYs allotted to a high priority project for use in a moderate priority project. Also, with mutual agreement between a Discharger and the Water Board, a Supplemental Environmental Project (SEP) may be used to support technical assistance, including a Basin Planning project. Previous student contracts and the current Scientific Aide program add valuable personnel to some Basin Planning tasks without drawing from the Basin Planning funds. In addition, other Water Board programs, such as the Surface Water Ambient Monitoring Program (SWAMP), Nonpoint Source (NPS) program, and other regulatory programs, may provide monitoring data and/or other information that advances certain planning projects without the direct expenditure of planning resources.

Schedules for completion of public draft amendments and Water Board action on specific projects will depend upon the complexity of the selected projects. Some of the projects may be worked upon between Fiscal Years 12-13 and 15-16, with Board action on plan amendments after 2016. If important new projects arise before the next Triennial Review, planning priorities may be changed by the Water Board. Projects not selected for emphasis in the next three fiscal years will be identified as projects requiring additional funding. If additional funding is received or outside support provided, staff will attempt to address more projects. Staff will reconsider these projects during the next Triennial Review process and may recommend them as priorities at that time.



# **Table 1 Summary of Basin Plan Amendment Process**

(Refer to page 37 in the hyperlink)

		DOES WHAT?
REGIONAL BOARD	A.	IDENTIFY THE NEED for a Plan amendment based on the Triennial Review, public concerns, new or revised laws, regulations or policies, etc.  Undertake work to develop solutions - research, field work (e.g. collect chemical, physical and/or biological monitoring data; data analysis), etc.
	B.	PLAN the Administrative Record for the amendment.
	C.	PREPARE NECESSARY DOCUMENTS  STAFF REPORT on the proposed amendment; reasonable alternatives, mitigation, economic considerations, and anti-degradation as required  • If addressing beneficial uses  • If addressing water quality objectives  • If addressing an implementation plan  THE CEQA CHECKLIST  DRAFT AMENDMENT  DRAFT RESOLUTION
	D.	EXTERNAL SCIENTIFIC PEER REVIEW
	E.	PUBLISH A HEARING NOTICE / NOTICE OF FILING at least 45 days prior to the hearing
	F.	RESPOND to comments – revising the draft amendment and staff report as necessary
	G.	ADOPTION HEARING
	H.	REGIONAL BOARD TRANSMIT two copies of the complete administrative record to the State Board; and PARTICIPATE in SWRCB Workshop and Board Meeting
STATE BOARD	I.	APPROVE AMENDMENT at a public meeting (or return it to the Regional Board for further consideration)
REGIONAL BOARD	J.	TRANSMIT approved amendment to Office of Administrative Law (OAL) for review and approval of the regulatory provisions
	K.	TRANSMIT the OAL approved amendment to US EPA, if needed, for review and approval of surface waters standards and their implementing provisions
	L.	<ol> <li>FILE CEQA NOTICE OF DECISION with the Secretary of Resources after final approval by OAL or US EPA.</li> <li>Either pay Department of Fish &amp; Game filing fee or submit Certificate of Fee Exemption.</li> </ol>
ļ	M.	PRINT and DISTRIBUTE Amendment

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects with Available Resources	Description	Resource Needs (PY)	Estimated Completion Time (or year, if known)
#1 Prohibition amendments (Ongoing work)	This project would amend Basin Plan Chapters 4 and 5 to make editorial revisions to remove inconsistencies regarding waste discharge prohibitions and exemption criteria affecting the entire Lahontan Region, add or clarify exemption criteria, and would include some unrelated changes to other parts of the plan.	0.2 (Additional resources from management, not accounted for in Basin Planning, will be used.)	Fall 2013
#2 Revise water quality objectives for bacteria	Based on the results of ongoing field sampling in the Lahontan Region, revisions to federal criteria for recreational waters, and a proposed State Water Board policy (anticipated in early 2013), revisions will be proposed to the current regionwide objectives for "Bacteria, Coliform" specific to our region to incorporate new information including the use of E. coli as an indicator.  Staff recommends data be collected and analyzed to determine whether bacteria site specific objectives for Bridgeport Valley are warranted. Furthermore, data should be collected and analyzed region-wide, staff should evaluate the State Board and USEPA's E. Coli and enterococci standard setting process, and staff should evaluate options for modernizing bacteria standards.	3.5	2016 - 2017  (see Table 3 for detailed listing of tasks)

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects with Available Resources	Description	Resource Needs (PY)	Estimated Completion Time (or year, if known)
#3 Remove the MUN beneficial use designation from 2 groundwater basins at China Lake Naval Air Weapons Center	Water Board staff is reviewing technical information provided by the U.S. Navy. If the MUN use is shown not to be an existing or feasibly attainable use of the affected ground waters, Table 2-2 of the Basin Plan may be amended to remove the MUN use designation for portions of two groundwater basins.	0.4 (The Navy will provide technical support)	Spring 2014
#4 Incorporate State Water Board wastewater treatment policy into the Basin Plan and revise existing language and associated changes if needed.	The State Water Board adopted a policy including statewide control measures for onsite wastewater treatment systems (septic systems) on June 19, 2012. The policy directs Regional Water Boards to incorporate it into their Basin Plans within 12 months of its effective date.  Revisions to Chapter 4 and the appendices of the Lahontan Basin Plan may also be necessary for compatibility. Staff may consider and recommend other Basin Plan revisions related to onsite wastewater treatment systems, including additional monitoring and treatment.	0.5	By April 2014  (May be completed in conjunction with Project #1 Prohibition Amendment effort)
#5 Program Manager	The Basin Planning Program Manager participates in State/Regional Water Board Roundtable activities, and workplan development, provides information to the public, etc.	0.3 (0.10 PY per year)	Ongoing

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects with Available Resources	Description	Resource Needs (PY)	Estimated Completion Time (or year, if known)
#6 2015 Triennial Review	Prepare the 2015 Triennial Review staff report and priority list. Host scoping meetings and hearings, as necessary, for Water Board consideration.	0.2	October 2015
#7 Miscellaneous work that will not directly result in Basin Plan amendments	Staff resources are needed for work such as: coordination with other states, other agencies, and Native American tribes regarding water quality standards; development and management of contracts related to planning; staff training, etc.	0.3 (0.1 PY per year)	Ongoing
#8 Review new scientific information to consider changes to the water quality objectives for nearshore areas of Lake Tahoe.	Evaluate research findings in late 2012 and propose next steps to set nearshore assessment indicators as a first step to developing new nearshore water quality standards. Resource needs listed here only include staff evaluation of research findings, interagency coordination, public meetings, stakeholder outreach, and development of a workplan.	0.3	2013

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects Requiring Additional Resources	Description	Resource Needs (PY)	Estimated Completion Time (or year, if known)
#9 Incorporate Antelope Valley Salt and Nutrient Management Plan into the Basin Plan	The State Water Board's Recycled Water Policy directs Regional Water Boards to incorporate Salt and Nutrient Management Plans (SNMPs) completed by stakeholder groups into the Basin Plans. The Antelope Valley SNMP is expected to be submitted to the Lahontan Water Board in 2014. Consider revising groundwater objectives to account for expected changes in salt and nutrients.	0.3	FY 15-16
#10 Incorporate Mojave Basin Salt and Nutrient Management Plan into the Basin Plan	The State Water Board's Recycled Water Policy directs Regional Water Boards to incorporate SNMPs completed by stakeholder groups into the Basin Plans. The Mojave Basin SNMP is expected to be submitted to the Lahontan Water Board in 2014. Consider revising water quality objectives for Mojave groundwater and river to account for expected changes in salt and nutrients.	0.3	FY 15-16

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects Requiring Additional Resources	Description	Resource Needs (PY)	Estimated Completion Time (or year, if known)
#11 Update Chapter 5 of the Basin Plan to reflect pending revisions to the Tahoe Regional Planning Agency's (TRPA's) regional land use and water quality plans.	Chapter 5 of the Lahontan Basin Plan incorporates the regulatory provisions of TRPA's 1988 Water Quality Management Plan for the Lake Tahoe Region ("208 Plan").  TRPA adopted revisions to its regional land use plan on 12/12/12, and is beginning revisions to the 208 Plan. Staff resources are needed to coordinate with TRPA to ensure consistency with the Lake Tahoe TMDL. Changes to Basin Plan Chapter 5 may be necessary to reflect the TRPA plan revisions as finally adopted.	0.3	9 months  (May be completed in conjunction with Project #1 Prohibition Amendment effort)
	PY Totals for Projects #1 through #11	6.6	

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects Requiring Additional Resources	Description	Resource Needs (PY)	Estimated Completion Time (or year, if known)
#12 Hydromodification (Riparian Protection Policy)	Revise Basin Plan to include specific implementation measures to protect all beneficial uses or ground and surface waters from the effects of development and hydromodification. Specific emphasis is needed on protecting desert surface waters, including measures to control or prevent excessive erosion of soft soils and subsequent down stream sediment deposition, adversely impacting Aquatic and Wildlife Habitats.	1.0	One year  (To begin following USEPA grant funded projects)
#13 Biological indicators	Revise existing narrative water quality objective for protection of aquatic communities (nondegradation of aquatic communities objective).	1.5	Two years
#14 Squaw Valley groundwater withdrawal	Evaluate the effects of potential increased groundwater withdrawal in Squaw Valley on the water quality of Squaw Creek and its tributaries. In particular, examine the interplay of water supply and water quality influencing biological conditions and a consideration of flow requirements for Squaw Creek.	0.5	6 months (to begin after receiving data evaluation from ground water study)
#15 Revised Hot Creek water quality objectives	Develop revised objectives for Hot Creek (Owens River HU) based on changes in water quality related to increased constituent levels emanating from the natural groundwater flows entering the creek.	1.0	9 months

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects Requiring Additional Resources	Description	Resource Needs (PYs)	Estimated Completion Time (or year, if known)
#16 Adopt or revise site- specific water quality objectives for Fish Springs in the Owens Valley to facilitate NPDES permitting for a state fish hatchery.	The Department of Fish and Game (DFG) operates Fish Springs hatchery in the Owens Valley where source water is ground water and the discharge from the hatchery forms Fish Springs Creek. The Basin Plan currently has an objective for Fish Springs Creek above the hatchery, however, water no longer exists at that location. Water Board proposes removing this objective from the Basin Plan and setting an objective for Fish Springs creek below the hatchery. This effort may involve gathering additional water quality information from LADWP.	1.0	One year
#17 Susan River site specific objectives	Develop revised objectives for section of the Susan River and its tributaries downstream of Susanville's Community Services District (District). Consider lowering water quality while ensuring continued protection of beneficial uses. Staff will need to involve the District, current downstream agricultural users, and the Department of Fish and Game in evaluating alternatives including: increased treatment, increased land disposal capacity, and establishing or ensuring minimum flows in Susan River and its tributaries.)	2.0	One and a half years

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects Requiring Additional Resources	Description	Resource Needs (PYs)	Estimated Completion Time (or year, if known)
#18 Revise Chapter 3 language on determining compliance with water quality objectives.	The proposed revisions would change water quality objectives expressed as "means of monthly means" to annual means and define minimum sample numbers and sampling frequencies for determining compliance with objectives. This could avoid the need for new Clean Water Act Section 303(d) listings based on very small sample numbers, and facilitate delisting.	1.0	One year
#19 Dairies Strategy	Revise the Basin Plan, Section 4.10, to include an updated Dairy Regulatory Strategy to address groundwater pollution from dairies. (It may be possible to implement an appropriate strategy without a Basin Plan amendment.)	0.5	One year
#20 BIOLOGICAL Beneficial Use for Mojave River	Add the Biological Use (BIO) for specific reaches of the Mojave River with remaining viable habitat, specifically from Bear Valley Road to Helendale.	0.3	9 months

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects Requiring Additional Resources	Description	Resource Needs (PYs)	Estimated Completion Time (or year, if known)
#21 Clarify Table 2-1, for Hydrologic Unit 628 (Mojave River)	Correct duplicative features of list of beneficial uses between the major and sub-watershed of the Mojave River Hydrologic Unit.	0.3	9 months
#22 Eagle Lake "building moratorium"	Amend the Basin Plan to lessen restrictions on building density for septic systems. (See Comment Letter "Eagle Lake" dated 10/9/12 in Attachment A.) This project may be addressed by incorporating State Board's new Onsite Wastewater Treatment Systems Policy.	0.5	One year
#23 Biotic Ligand Model for copper	Incorporate the USEPA national criteria for copper into water quality standards program using the Biotic Ligand Model. (See Comment Letter "Copper water quality standards" dated 10/1/12 in Attachment A.)	0.5	One year
#24 Revise PCPs water quality objectives	The USEPA recommends a revision of water quality objectives for pentachlorophenol (PCPs), where appropriate. The USEPA believes existing objectives are not sufficiently protective of early life stages of salmonids. (See Comment Letter "Triennial Review" dated 10/18/12 in Attachment A.)	1.0	Two years

Table 2 - 2012 TRIENNIAL REVIEW RECOMMENDED PRIORITY LIST

Projects Requiring Additional Resources	Description	Resource Needs (PYs)	Estimated Completion Time (or year, if known)
#25 Remove two beneficial uses from Piute Ponds wetlands	This project would involve removal of Groundwater Recharge (GWR) and Agricultural Supply (AGR) beneficial uses from the Piute (also known as Paiute) Ponds and wetlands in the Amargosa Creek watershed eastern Los Angeles County. The ponds and wetlands are maintained with effluent from the Los Angeles County Sanitation District No. 14 (Lancaster) wastewater treatment facilities. (See Comment Letter "Groundwater recharge and agricultural supply beneficial use designations" dated 9/27/12 in Attachment A.)	1.0	One and a half years
	PY Totals for Projects #12 through #25	12.1	

**Table 3 Bacteria Water Quality Objective Tasks** 

Task	Details	Staff PYs and Contract Funds (if applicable)	Timeline
(1) Proposition 84 grant	<ul> <li>(1) Rivers and Ranches- (a) implementation of grazing management practices on private ranch properties</li> <li>(2) UC Davis subcontract- (b) pre and post- management practices implementation bacterial monitoring bacterial source tracking in priority</li> </ul>	(a) \$352,840 (b) \$400,000 (c) \$56,000	Grant concludes March 1, 2016
	watersheds to determine source of impairment (Trout Crk, Tallac Crk, Susan River, Bishop Crk, Swauger Crk);  (3) UC Santa Barbara subcontract – (c) establishment of a bacterial analysis lab near Mammoth Lakes; receive and run water samples  (4) Grant management  (5) Outreach	0.15 PY/year	
(2) Grazing Advisory Group (GAG)	Internal R6 working group that coordinates efforts and shares data between Non-point Source (NPS), Surface Water Ambient Monitoring Program (SWAMP), and basin planning projects in relation to grazing/bacteria. Coordinate on projects/contracts and determine/delegate work tasks. This is the platform for sharing information, coordinating projects in the region, and planning new/future projects.	0.05 PY/year	Monthly/Quarterly during development of bacteria basin plan amendment
(3) Eastern Sierra Bacteria monitoring (internal)	Monitoring performed by R6 planning, Non Point Source, and SWAMP staffs during the grazing season, including pre- and post- grazing. Based on data, monitoring sites may change or additional sites may be added. This monitoring ensures Lahontan staff is evaluating possible impairments due to grazing and tracking seasonal/annual variations.	0.60 PY/year	May through October/ November annually
(4) Compile all bacterial data and map it	This data should include data from the UC Davis contract #08-076-160 (completed July 15, 2010) which includes 337 stream water samples collected from 35 sample locations and analyzed for <i>E. coli</i> and fecal coliform. Additional data to be analyzed includes the Bridgeport ranchers Grazing Waiver data, internal Eastern Sierra Bacteria data, SWAMP data, permittee data (?), and data from future grants/contracts.	0.10 PY	Initial task could be completed by June 30, 2013; additional data entry completed by June 30, 2016

**Table 3 Bacteria Water Quality Objective Tasks** 

Task	Details	Staff PYs and Contract Funds (if applicable)	Timeline
(5) Compile all Bridgeport Valley Grazing Waiver information	Evaluate the Bridgeport Waiver information, including the "Section 13267" information submitted last year by the ranchers. This evaluation can and should include reporting on miles of property fenced from waterways, miles of streams still exposed to uncontrolled access by livestock, acres of various implementation actions completed, proportion of irrigation return flows treated or eliminated, money spent, Grazing Management Practices (GMPs) in relation to distance to monitoring sites, etc. This information will assist in evaluating efforts of Bridgeport Valley ranchers and determine if they have completed all feasible GMPs on their properties. If this information is not readily available, additional PYs would be needed to gather this information from the ranchers.	0.07 PY	Task could be completed by June 30, 2013; additional information input completed annually
(6) UC Santa Barbara SNARL contract No. 12-067-160	At no fewer than 8 watersheds, conduct longitudinal (i.e., headwaters-to-mouth) stream surveys for bacterial indicators. This design can provide site-specific data for many watersheds and the data analysis could reveal trends (and quantification) of bacteria levels in headwaters (i.e., "background"), above/below grazing areas, above/below urban/residential areas, etc.	\$130,000 (0.05 PY/yr from SWAMP to manage contract)	Contract concludes March 20, 2015 (or sooner)
(7) Track USEPA/StBd bacteria standards	USEPA recently announced its release of new Water Quality Criteria for Recreational Waters. The State Board is in the process of creating a new bacteria amendment based on USEPA's recent announcement. Staff will need to evaluate the new USEPA guidance and possibly provide input to State Board for our regional interests/considerations.	0.05 PY/year	Possibly next 1-3 years

**Table 3 Bacteria Water Quality Objective Tasks** 

Task	Details	Staff PYs and Contract Funds (if applicable)	Timeline
(8) Internal working group to evaluate basin plan amendment options	This group evaluates the information gathered and tasks completed (in this table) to define feasible options for a regionwide basin plan amendment to present to upper management and Lahontan's Grazing Advisory Group.	0.10 PY/year (years 2 and 3)	Next 3 years
(9) Possible future contract (FY 13-14): UC Santa Barbara SNARL contract	Currently a contract request as priority ranking 1. If funded, the contractor will test and employ library-independent microbial source tracking approaches to determine bacteria sources in surface waters. Specifically, the contractor will test and refine recently developed animal feces-specific <i>Bacteriodes spp.</i> qPCR primers, and use the assays to determine bacteria sources in the Region.	\$190,000 requested  0.05 PY/yr to manage contract; program to be determined)	Contract may conclude June 30, 2016
	TOTAL PYs (next 3 years)		3.5

TABLE 4 STATUS OF 2009 TRIENNIAL REVIEW PRIORITIES FOR BASIN PLANNING ACTIVITIES

Topic No.	Topic	2009 Description and Estimated Completion Date	Status in December 2012
0	Complete Lake Tahoe TMDL and associated amendments to Chapter 5	Ongoing work that will use TMDL program rather than Basin Planning program resources.	The TMDL was adopted by the Regional Water Board on 11/16/10 and the State Board on 4/19/11. The U.S. Environmental Protection Agency approved the TMDL on 8/16/11 and is now in effect.
1	Complete amendments to the water quality objective for pesticides	Ongoing work (in FY 09-10 workplan). The estimated completion date was May 2010.	The pesticide Basin Plan amendment was adopted by the Regional Water Board on 12/7/11 and the State Board on 5/15/12. The Office of Administrative Law (OAL) approved the Amendment on 9/6/12. It will become effective pending OAL and USEPA approval.
2	Complete amendments to plan provisions affecting the shorezone of Lake Tahoe.	Ongoing work (in FY 09-10 workplan). The estimated completion date was July 2010.	Further work on these amendments has been suspended pending the resolution of the litigation.

TABLE 4 STATUS OF 2009 TRIENNIAL REVIEW PRIORITIES FOR BASIN PLANNING ACTIVITIES

Topic No.	Topic	2009 Description and Estimated Completion Date	Status in December 2012
3	Complete Tahoe/Truckee Prohibition/forestry amendments.	Ongoing work (in FY 09-10 workplan). Revise exemption criteria for 100-year floodplain waste discharge prohibitions in the Lake Tahoe and Truckee River watersheds to be consistent and to clarify application of exemption criteria to forest fuel reduction activities. Update Chapter 4 and 5 discussions on timber harvest and vegetation management. The estimated completion date was October 2010.	The scope of this project has been expanded to include update of waste discharge prohibitions and exemption criteria for the entire Lahontan Region. The tentative schedule calls for CEQA scoping in winter 2012, release of public drafts in April, and Water Board action in Fall 2013.
4	Complete Chapter 5 amendments to incorporate Tahoe Regional Planning Agency's (TRPA's) new 20 year Regional Plan	Ongoing assistance to TRPA to ensure that TRPA Regional Plan is consistent with the Lake Tahoe TMDL. Additional water quality programs and implementation measures will be incorporated into Chapter 5 of the Basins Plan following TRPA's adoption of its Regional Plan. The estimated completion date for the Basin Plan amendments was early 2012.	TRPA Governing Board approved its Regional Plan Update on 12/12/12. Staff recommends the Chapter 5 Basin Plan amendments project as high priority in the 2012 Triennial Review.

TABLE 4 STATUS OF 2009 TRIENNIAL REVIEW PRIORITIES FOR BASIN PLANNING ACTIVITIES

Topic No.	Topic	2009 Description and Estimated Completion Date	Status in December 2012
5	Revise water quality objectives for the Mojave River	Initial effort to gather information from Mojave Water Agency and other entities. Prepare workplan and resource estimate to complete Basin Plan amendment to revise objectives. The estimated completion date for the investigation was June 2012.	A staff report on the investigation was completed in October 2011. It concludes that currently available surface water data for the Mojave River and tributary streams are inadequate to serve as the basis for updated objectives.
6	Modify waste discharge prohibitions to protect additional prime groundwater recharge areas of arid basins	Initial effort during this Triennial Review cycle. Prepare scope, workplan and resource estimate to complete basin plan amendment. The estimated completion date was June 2012.	No work on this topic has been done to date. The need for these amendments should be clarified upon completion of ongoing work by stakeholders on salt/nutrient management plans and Integrated Regional Water Management Plans for specific watersheds. Funding sources other than Basin Planning are being used for Water Board staff participation in these stakeholder planning efforts.

TABLE 4 STATUS OF 2009 TRIENNIAL REVIEW PRIORITIES FOR BASIN PLANNING ACTIVITIES

Topic No.	Topic	2009 Description and Estimated Completion Date	Status in December 2012
7	Revise bacteria objectives	Initial effort includes managing contract to collect data and compare fecal coliform bacteria levels to E. coli levels in waters of the Lahontan Region, and reviewing proposed State Water Board and USEPA criteria. Basin Plan amendment (post 2013 at the conclusion of a Proposition 84 grant study) will incorporate the State Water Board's bacteria policy when final and consider revisions to the Lahontan Region's bacteria- related objectives. The estimated completion date was June 2013.	The State Water Board has not yet released a public draft of its proposed bacteria policy. The USEPA issued final revised criteria for recreational waters (including inland waters) in November 2012. Bacteria sampling by UC Davis in 2009-2010 has been completed. The Proposition 84 funded study will involve further assessment by UC Davis. Revised objectives for E. coli are now expected to be developed by 2017.
8	Miscellaneous work that will not directly result in Basin Plan amendments	Work includes coordination with other states, agencies, tribes and TRPA regarding standards revisions, contract management for plan-related work, staff training, administrative staff updates of electronic plan, coordination with State Water Board Division of Water Rights and water purveyors in Squaw Valley, Placer County regarding ground water management issues, work with third parties on nutrient and salt management plans developed under State Water Board's Recycled Water Policy, etc.	Miscellaneous planning-related work, including coordination with stakeholders involved with aquatic invasive species, is ongoing.

TABLE 4 STATUS OF 2009 TRIENNIAL REVIEW PRIORITIES FOR BASIN PLANNING ACTIVITIES

Topic No.	Topic	2009 Description and Estimated Completion Date	Status in December 2012
9	Update of entire Basin Plan	Update of the plan to improve its usability for staff and the public. Revisions will address new and revised State Water Board plans and policies, California Toxics rule standards, Nonpoint Source Plain, waiver and enforcement provisions, Surface water Ambient Monitoring Program, Watershed Management Initiative, revised maps, a revised beneficial use table reflecting the CalWater watershed numbering system, etc. Salt/nutrient management plans completed in response to the State Water Board's recycled water policy may be incorporated into the Basin Plan as part of this project if they are available before public drafts are completed. Estimated completion date was Spring 2012.	Work on this topic has been delayed due to resource limitations and other planning priorities. Staff maintains a list of needed editorial and regulatory plan changes on an ongoing basis. Some of these changes (e.g., updated reference to the current Water Code waiver provisions, the State Water Board Nonpoint Source Plan, NPDES compliance schedules, and the California Toxics Rule) will be proposed as part of the prohibition amendments (Topic No. 3). The State Water Board has contracted for preparation of revised Basin Plan maps in Geographic Information System (GIS) format as part of an effort to provide "Web Portal" access to the Basin Plans.

TABLE 4 STATUS OF 2009 TRIENNIAL REVIEW PRIORITIES FOR BASIN PLANNING ACTIVITIES

Topic No.	Topic	2009 Description and Estimated Completion Date	Status in December 2012
10	Remove MUN use from Eastern Indian Wells Valley and Salt Wells Valley Basins	This project was requested in comments from the China Lake Naval Air Weapons Center. Staff will rely upon the Navy to provide adequate information and data to justify the amendments. Depending on the availability of data the project may or may not be completed within the next 3 years. The estimated completion date was "after 2012."	After indicating in 2010 that it was no longer interested in pursuing these amendments, the Navy expressed renewed interest in 2011 and delivered a technical justification report in May 2012 in response to a detailed staff letter requesting more information. Staff has reviewed the report and is evaluating whether de-designation of MUN use in portions of the two groundwater basin is appropriate.
11	2009 and 2012 Triennial Review	Resources are needed to develop a draft priority list and related documents, respond to public comments, and prepare agenda materials and administrative records.	Work on the 2012 Triennial Review process is expected to begin in late Fiscal Year 2011/2012.
12.	Program Manager	Program manager participates in State/Regional Board roundtable meetings, aids in workplan development, provides information to the public, etc.	The Program Manager's duties are ongoing.