CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

MEETING OF SEPTEMBER 12-13, 2018 SOUTH LAKE TAHOE

ITEM 3

WORKSHOP – 2018 TRIENNIAL REVIEW OF THE WATER QUALITY CONTROL PLAN FOR THE LAHONTAN REGION (BASIN PLAN)

CHRONOLOGY		
Nov. 4, 2015	The Water Board adopted Resolution No. R6T-2015-0051, 2015 Triennial Review of the Lahontan Basin Plan.	
June 4, 2018	Water Board released its notice for the July 2018 and September 2018 Workshops for the 2018 Triennial Review of the Lahontan Basin Plan.	
July 18, 2018	Water Board hosted a workshop to solicit comments on the 2018 Triennial Review of the Lahontan Basin Plan.	

BACKGROUND

Federal and state law require periodic review of Water Quality Control Plans (Basin Plans). This review process is referred to as the "Triennial Review" process. Triennial Review in California is generally limited to identifying high priority basin planning issues and projects to be addressed during the following three years. The prioritized Triennial Review List essentially serves as the three-year work plan for the Water Board's Basin Planning Program; however, project descriptions do not include details of potential methods or strategies to accomplish the prioritized tasks. Adopting the Triennial Review List is not a regulatory action; and, therefore, does not require environmental review (e.g., CEQA). The Water Board's most recent Triennial Review List was adopted in November 2015 (see Enclosure 1) and identified priority basin planning issues and projects to be addressed during the three-year period of 2016 - 2018.

DISCUSSION

Water Board staff has initiated the 2018 Triennial Review process in preparation of presenting a proposed 2018 Triennial Review List for Water Board consideration at its November 14-15, 2018 meeting. The overall process includes:

- Drafting a staff report;
- Holding two public workshops;
- Evaluating all comments received;
- Preparing a proposed 2018 Triennial Review List for Water Board consideration at its November 2018 Board meeting; and
- Water Board adopting its 2018 Triennial Review List.

This workshop is the second of two public workshops that Water Board staff has already publicly noticed (see Enclosures 2 and 3). The purpose of the two workshops is to 1) inform

Water Board members, the public, and other interested parties about the Triennial Review process; 2) discuss the status of priority issues and projects identified in the Water Board's 2015 Triennial Review List; 3) to identify potential priority issues and projects for the 2018 Triennial Review List; and 4) to hear comments from the public and other interested parties. To assist the public and interested parties in participating in the workshops and Water Board's decision-making process, staff has released a draft staff report (Enclosure 4) discussing:

- The overall Triennial Review process;
- Factors the Water Board and its staff consider when developing a Triennial Review List:
- The nature of potential projects that could be identified on the Triennial Review List;
- The status of 2015 Triennial Review List projects; and
- Issues and projects that could be part of the 2018 Triennial Review List.

The Triennial Review materials for the September workshop have been updated following the July workshop to account for the State Water Board adopting a state-wide bacteria water quality objective for the Contact Recreation (REC-1) beneficial use on August 7, 2018 (Enclosure 5), and by adding three additional projects to the draft 2018 Triennial Review List. The three additional projects are:

- 1. Evaluate the need for changes to the water quality objectives for nearshore areas of Lake Tahoe (continued from 2015 Triennial Review);
- 2. Remove the prohibition of new pier construction in fish spawning habitat at Lake Tahoe (project currently underway); and
- 3. Evaluate the need to revise surface water quality objectives for Leviathan and Bryant Creeks (new proposal associated with the Leviathan Mine CERCLA process).

The Triennial Review materials for the September workshop have also been updated by prioritizing the projects currently identified in the draft 2018 Triennial Review List. Table 3 in the draft staff report reflects Water Board staff's current draft recommendation for prioritizing the projects, provides the rationale for the current recommendation, and identifies the priority projects likely to be worked upon based upon available funding. Table 4 in the draft staff report also reflects staff's recommended prioritization and provides project descriptions and status. The draft prioritization is intended to promote discussion about project priorities and may include suggestions to either add or delete items from the list.

With the limited resources for basin planning, staff will evaluate the Triennial Review priorities and determine how best to address as many projects as possible. The Planning and Assessment Unit, which includes the Basin Planning Program, includes three staff members with responsibility for working on basin planning efforts, TMDL projects, and the Integrated Report. In addition to these efforts, staff resources also contribute to Climate Change work and Harmful Algal Bloom response.

PUBLIC OUTREACH/ INPUT

On June 4, 2018, Water Board staff initiated the 2018 Triennial Review process by publicly noticing the two public workshops and inviting the public and other interested parties to provide input regarding the Water Board's future basin planning priorities. The public notice is posted on the Water Board's website under the Announcements section and on its Basin Planning Program webpage. Notice of this posting was also distributed through five separate Lyris lists (Board Meeting, Basin Planning - Regionwide, Basin Planning - Triennial Review, Climate Change, and TMDLs - 303(d) (Impaired Waters)). The public notice also notified recipients that future communication regarding the 2018 Triennial Review process would continue to be posted on the Water Board's web site and distributed through the Basin Planning - Triennial Review Lyris List, with instructions on how to subscribe.

The Water Board hosted a public workshop at the July Board meeting in Bishop, CA. There were no public comments received at the Board meeting, though members of the public and/or other agencies were present.

On August 15, 2018, Water Board staff sent an informal reminder notification regarding the Triennial Review process and associated public comment period parties subscribing to the same five Lyris lists identified, above, and also distributed the notice to representatives of 28 Native American Tribes located within or in close proximity to the Lahontan Region.

On August 23, 2018, Water Board publicly noticed staff's release of its draft prioritized 2018 Triennial Review List. Staff also extended the public comment period for the 2018 Triennial Review process from September 14, 2018 to September 24, 2018, allowing a full 30-day review and comment period for the draft Prioritized 2018 Triennial Review List. The public notice was posted on the Water Board's web site and sent to the parties subscribing to the same five Lyris lists identified, above, and to representatives of 28 Native American Tribes located within or in close proximity to the Lahontan Region.

The public and other interested parties are invited to attend these workshops to provide input on the proposed topics or to recommend other topics be added. The public does not need to attend the workshops to provide input, written comments are also being accepted via email and regular mail.

The deadline for submitting comments is September 24, 2018. Water Board staff will consider all comments received as part of its process to develop a proposed 2018 Triennial Review List for the Water Board's consideration.

The proposed 2018 Triennial Review List and final staff report is currently scheduled for Water Board consideration at the Water Board's November 14-15, 2018 regularly scheduled meeting in Apple Valley. The proposed 2018 Triennial Review List and final staff report will include staff responses to public comments.

RECOMMENDATION

This is an informational item and no formal action is requested. This item provides an opportunity for public input on the 2018 Triennial Review List and provides the Water Board members an opportunity to provide direction to staff.

ENCLOSURE	ITEM	BATES NUMBER
1	Adopted 2015 Triennial Review List	3-5
2	Notice of July 2018 and September 2018 Triennial Review public workshops and request for public input	3-9
3	August 15 Triennial Review notification update	3-15
4	Draft Staff Report on 2018 Triennial Review	3-19
5	State Water Board Resolution 2018-00XX	To be submitted under separate cover
6	Water Board staff presentation	3-71

ENCLOSURE 1

Attachment A 2015 Triennial Review Priority List Triennial Review of Water Quality Control Plan for the Lahontan Region

Priority	Projects With Available Resources	PYs over 3 years	Cumulative PYs
1	Program Manager	0.3	0.3
2	2018 Triennial Review	0.2	0.5
3	Miscellaneous work that will not directly result in Basin Plan Amendments (e.g., regulatory assistance and corrections)	0.6	1.1
4	Bacteria Water Quality Objective revisions	1.0	2.1
5	Lake Tahoe Nearshore	0.5	2.6
6	Mojave River - add BIOL beneficial use to a reach Mojave River - remove COLD beneficial use from a reach Mojave River - SSOs for reach Mojave Basin - SSOs for select groundwater sub-basins	1.8	4.4
7	Squaw Valley groundwater withdrawal & in-stream flow	0.5	4.9
8	Evaluate appropriate statistical methods (e.g. replace Means of Monthly Means with annual averages, where appropriate, such as Truckee River and Pine Creek)	0.5	5.4
9	Riparian Protection Policy	0.6	6.0
Priority	Projects Needing Additional Resources		
10	Hot Creek Water Quality Objectives	0.6	6.6
11	Survey of surface waters to identify those we might want to consider creating in-steam flow requirements for the purposes of protecting beneficial uses	0.1	6.7
12	Biological indicators	0.9	7.6
13	Region-wide approach to TDS Water Quality Objectives for surface waters	1.5	9.1
14	Susan River site specific objectives	2.0	11.1
15	Deposited/embedded sediment standard for Middle Truckee River	0.9	12.0
16	Remove two beneficial uses from Piute Ponds wetlands	0.5	12.5
17	Clarify Lahontan Water Board policy on package plants	0.1	12.6
18	Fish Springs site specific objectives	1.0	13.6
19	Biotic Ligand Model for copper	0.5	14.1
20	Revise PCPs water quality objectives	1.0	15.1
21	Eagle Lake "building moratorium" related to septic systems	0.5	15.6

ENCLOSURE 2





Lahontan Regional Water Quality Control Board

June 4, 2018

****NOTIFICATION****

CALIFORNIA REGIONAL WATER QUALITY CONTROL **BOARD LAHONTAN REGION**

NOTICE OF PUBLIC WORKSHOPS AND OPPORTUNITY TO **COMMENT ON THE 2018 TRIENNIAL REVIEW OF THE** WATER QUALITY CONTROL PLAN FOR THE LAHONTAN **RFGION**

NOTICE IS HEREBY GIVEN that the Lahontan Regional Water Quality Control Board (Water Board) has begun the Triennial Review process for its Water Quality Control Plan for the Lahontan Region (Basin Plan). The purpose of the Triennial Review is to identify key Basin Plan issues that will guide Basin Planning efforts for the following three years. The Basin Plan identifies beneficial uses of surface and ground waters, establishes water quality standards for protecting the beneficial uses, and describes implementation programs for achieving water quality standards. The Basin Plan covers all watersheds located in the Lahontan Region, including eastern California from the Oregon border to the northern Mojave Desert, east of the Sierra Nevada crest.

The Water Board will hold two public workshop meetings to receive comments on Basin Plan elements that may need amendment. Potential amendments can include, but are not limited to, revising water quality standards and beneficial uses for specific water bodies, revisions reflecting plans and policies adopted by other agencies, and revisions clarifying existing Basin Plan elements. The Water Board welcomes public participation in its decision-making processes and encourages the public and others to submit comments on issues that could be addressed in future Basin Plan amendments. The Triennial Review process does not include consideration of waste discharge requirements, waivers of waste discharge requirements, National Pollutant Discharge Elimination System permits, or other regulatory matters.

The public workshops will be held during the Water Board's regularly scheduled July 2018 and September 2018 meetings at the locations shown.

PETER C. PUMPHREY, CHAIR | PATTY Z. KOUYOUMDJIAN, EXECUTIVE OFFICER



DATES:	July 18-19, 2018	September 12-13, 2018
TIME:	July 18, 2018, 7:00 p.m. Potentially continuing to July 19, 2018, 8:30 a.m.	To be determined.
PLACE:	Bishop City Hall West Line Street Bishop, CA 92311	Lahontan Water Board Annex 971 Silver Dollar Ave. South Lake Tahoe, CA 96150

Dates and times are subject to change. Final dates and approximate times will be identified in the Water Board's agenda for each meeting, which are posted on the Water Board's web site at: www.waterboards.ca.gov/lahontan, a minimum of 10 days prior to each meeting. Meeting rooms will be accessible to people with disabilities. Individuals who require special accommodations or have special language needs are requested to contact Michelle Avila at (530) 542-5414 (Michelle.Avila@waterboards.ca.gov) at least five (5) working days prior to the meeting. TTY/TTD/Speech to Speech users may dial 7-1-1 for the California Relay Service.

REQUEST FOR PUBLIC INPUT

Water Board staff anticipates releasing a draft 2018 Triennial Review List and related information on or about **June 15, 2018**. The draft 2018 Triennial Review List identifies high priority Basin Planning issues that will direct Basin Planning efforts for the following three years. The List will include many of the topics from the 2015 Triennial Review and new priorities that have emerged since that time. This information will be available on the Water Board's website at:

http://www.waterboards.ca.gov/rwqcb6/water_issues/programs/basin_plan/index.shtml.

All written comments must be received by 5:00 p.m. on September 14, 2018. Please email your written comments to: Lahontan@waterboards.ca.gov and include "2018 Triennial Review Comments" in the subject line. If you do not have access to the Internet, please mail your written comments to:

Daniel Sussman Lahontan Regional Water Quality Control Board 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Following the two workshops, Water Board staff will review both oral and written comments and prepare recommendations for the Water Board to consider at its regularly scheduled meeting in November 2018. The Water Board will have the options of (1) adopting staff's recommendations unchanged, (2) adopting staff recommendations with

revisions, or (3) directing staff to make substantial revisions and return before the Water Board at a later date. Adoption of the Triennial Review List does not mean that the Water Board will adopt any proposed Basin Plan amendment identified on the Triennial Review List. Such Basin Plan amendments will proceed through a separate development and evaluation process, including future public hearings and opportunities for the public and others to provide comments. Additional information regarding the Triennial Review is available in PDF format from the Water Board's website at:

https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/#triennial.

Persons wishing to subscribe to the Water Board's electronic mailing list regarding the Triennial Review can do so through the Water Board's website by clicking on the "Subscribe" button on the right side of the following webpage:

https://www.waterboards.ca.gov/resources/email_subscriptions/reg6_subscribe.html.

Check the box titled "Basin Plan - Triennial Review."

If you have already signed up for the mailing list in the past, you need not sign up a second time. All future information and notifications pertaining to this Triennial Review will be provided electronically through this subscription service, and to those interested parties who have requested notification via US mail.

Please bring the above information to the attention of anyone you know to be interested in this matter.

DS/ma/T: 2018 Triennial Review-Workshop Notice

File Under: WQ Control Plans and Policies/Triennial Review/Public Notice/Workshop Notice

ENCLOSURE 3

From: <u>Lahontan</u>

To: reg6 basinplanning triennial@swrcb18.waterboards.ca.gov;

reg6 basinplanning regionwide@swrcb18.waterboards.ca.gov;

reg6_board_meeting@swrcb18.waterboards.ca.gov; reg6_climate_change@swrcb18.waterboards.ca.gov;

reg6 tmdls 303dlist@swrcb18.waterboards.ca.gov

Subject: Update – Lahontan Regional Water Quality Control Board 2018 Triennial Review Process

Date: Wednesday, August 15, 2018 11:26:05 AM

The Lahontan Regional Water Quality Control Board (Water Board) is currently reviewing its Basin Plan and identifying Basin Plan-related projects for the following three years (Triennial Review Process). The Lahontan Water Board jurisdiction covers California lands that drain east from the Oregon border south to the Mojave. A link to regional board boundaries is here: https://www.waterboards.ca.gov/waterboards_map.html

The Water Board held a public workshop regarding its Triennial Review process on July 18, 2018 in Bishop, CA, and is scheduled to hold another workshop during its September 12-13, 2018 Board meeting in South Lake Tahoe, CA. Comments, including suggested basin planning projects, from the public and other interested parties are due by September 14. 2018. Emailed comments should be sent to Lahontan@waterboards.ca.gov with "2018 Triennial Review" in the subject line.

More information on the 2018 Triennial Review, including announcements, a draft staff report, and a list of proposed projects, is available on the Water Board's website at: https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/#triennial

For continued updates, please subscribe to the "Basin Planning – Triennial Review" email list subscription: https://www.waterboards.ca.gov/resources/email_subscriptions/reg6_subscribe.html

Sandra Lopez
Office Technician
Lahontan Regional Water Quality Control Board
15095 Amargosa Road, Bldg. 2, Suite 210
Victorville, CA 92394
760-241-6583

ENCLOSURE 4

DRAFT STAFF REPORT

2018 Triennial Review of the Water Quality Control Plan for the Lahontan Region

California Regional Water Quality Control Board Lahontan Region

August 2018

Contact Person:

Daniel Sussman Chief, Planning and Assessment Unit

Telephone: (530) 542-5466

Email: daniel.sussman@waterboards.ca.gov

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 approximately 20 percent of California, which is located east of the Sierra Nevada crest, from the Oregon border into 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. Sixteen sets of amendments to the 1995 Basin Plan have received all necessary approvals. The Basin Plan is available on the Water Board's Internet web page at: http://www.waterboards.ca.gov/lahontan.

State and federal laws require periodic review of Basin Plans; the federal process is called "Triennial Review." Due to resource limitations and the complexity of California's Basin Plan amendment process, Triennial Review in California is generally limited to identifying high priority basin planning topics to be addressed over the three years between one Triennial Review cycle and the next. Examples of such topics include, but are not limited to, developing new or revising existing water quality objectives; evaluating, adding, or removing beneficial use designations for specific surface water bodies and/or ground water basins; and developing new or revising existing control measures such as waste discharge prohibitions. The prioritized Triennial Review List serves as the three-year work plan of the Water Board's Basin Planning Program. Triennial Review is not a regulatory action and does not require environmental analysis under the California Environmental Quality Act, unless Triennial Review actually involves adopting Basin Plan amendments. The Triennial Review is a list of Basin Planning priorities and does not include a description of the method or strategy staff will take in evaluating or addressing prioritized issues. The Water Board's current Triennial Review priorities were adopted in November 2015 following a September 17, 2015 public workshop, and have been used to allocate resources towards accomplishing the priorities.

This staff report provides information on the Triennial Review process and on basin planning topics identified by Water Board staff. Additional topics may be identified in written public comments or testimony at the July 2018 and September 2018 public workshops, and the currently scheduled November 2018 public hearing. Staff will make final recommendations regarding basin planning topics at the November 2018 public hearing. The Water Board will consider staff's proposed 2018 Triennial Review List and could adopt the list as proposed or with modifications, or request staff to revise the list and return at a later Board meeting. Upon adoption, the 2018 Triennial Review List will identify its high priority basin planning work for the following three years (2019 - 2021), and will likely identify future basin planning issues and projects to be addressed as future resources allow. The adopted 2018 Triennial Review List may or may not identify Basin Plan amendments. Basin Plan amendments, if identified in the adopted 2018 Triennial Review List, are required to proceed through a separate development and evaluation process, including future public hearings and opportunities for the public and others to provide comments. Additionally, the

Executive Officer or the Water Board has the ability to change priorities between the Triennial Review cycles.

Water Quality Standards

Under the Clean Water Act, water quality standards include designated uses, water quality criteria, and an antidegradation policy. The *Porter-Cologne Water Quality Control Act* (Porter-Cologne) modifies the federal language to refer to designated uses as *beneficial uses* and water quality criteria as *water quality objectives*, which includes the State Water Board's antidegradation policy (Resolution 68-16). Porter-Cologne also requires a *program of implementation* for water quality protection in California. A program of implementation includes actions necessary to achieve objectives, a time schedule for the actions to be taken, and monitoring to determine compliance with water quality objectives and protection of beneficial uses of water.

Water quality standards are set forth in Basin Plan Chapters 2, 3, and 5 of the Basin Plan and can be viewed at:

(http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml).

The Basin Plan's beneficial use tables (Tables 2-1 and 2-2) include both existing and potential beneficial uses. Changes to water quality objectives require a Basin Plan amendment.

Triennial Review Process and Public Participation

The Water Board's 2018 Triennial Review Process involves:

- Publicly noticing two Triennial Review workshops to be held in July 2018 and September 2018 through the Water Board's electronic mailing lists for: Basin Planning – Regionwide, Triennial Review, Board Meetings, Climate Change, and TMDLs – 303(d) List, and notified recipients that future correspondence would be delivered to the Triennial Review electronic mailing list.
- Publishing the hearing notice, brief list of potential issues, 2015 Triennial Review List status update, and this draft staff report on the Water Board's webpage.
- Providing a public review and comment period for the topics list, and solicitation for additional 2018 Triennial Review topics and written comments.
- Preparing written responses to public comments. All written comments and responses will be provided to the Water Board before the November 2018 hearing.

- Publish hearing notice for November 2018 public hearing where the Water Board will consider adopting the 2018 Triennial Review List.
- Public comment at the July 2018 and September 2018 public workshops, and the November 2018 public hearing.
- Water Board adoption of a resolution identifying priority basin planning topics to be addressed by staff.
- Submission of the adopted 2018 Triennial Review List to the State Water Resources Control Board (State Water Board) and U.S. Environmental Protection Agency (USEPA).

Planning Considerations

Budget. The Water Board's basin planning resources are limited. The Planning and Assessment Unit, which is largely responsible for implementing the Water Board's Basin Planning, Total Maximum Daily Load (TMDL), and Surface Water Ambient Monitoring (SWAMP) Programs, includes four Environmental Scientists, a Water Resources Control Engineer, and a Scientific Aide, who are supervised by a Senior Environmental Scientist. These staff are responsible for water quality monitoring and assessment (SWAMP and Integrated Report), and addressing impaired waters for the entire Lahontan Region (TMDL program), in addition to basin planning projects, as prioritized by the Triennial Review List. Meeting some of the Unit's responsibilities, including those identified in the Triennial Review List, may require contracted studies for data collection (e.g., special monitoring studies to facilitate updating water quality objectives) or predictive modeling.

Topics Needing Additional Funding. The State Water Board's guidance for the Triennial Review process asks Regional Water Boards to identify planning topics that would require additional funding to address. The Water Board will be asked to identify basin planning projects targeted for completion during the following three years (2019-2021), and those requiring additional funding in order to be addressed during this time period. Ideally, the total estimated cost of the identified basin planning projects should not exceed the resources expected to be available within that time.

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 prepare strategies called TMDLs to ensure attainment of standards. In California, TMDLs 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 work plans, as informed by the *Guidance for the Prioritization of the Lahontan 303(d) List of Impaired Waters* presented to the Water Board at its July 2015 Board meeting. 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.

In 2013, the U.S. Environmental Protection Agency (USEPA) announced a new collaborative framework for implementing the Clean Water Act (CWA) Section 303(d) program called the *Long-Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program* (The Vision). The Vision focuses attention on priority watersheds with known water quality problems and acknowledges a suite of flexible restoration tools beyond traditional Total Maximum Daily Loads (TMDLs) broadly considered TMDL-Alternatives, and requested that states identify Vision projects that can be completed by 2022. In 2015, Water Board staff identified two waters as candidates to be addressed through the Vision program, likely as TMDL-Alternatives. As alternatives to a TMDL, these projects do not require a Basin Plan amendment. However, if their implementation does not prove successful after a defined time period, staff will create formal TMDLs for the waterbodies. The Triennial Review does not directly address these projects and their resource needs.

Public comments may be submitted on additional or potential 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, when considering the Triennial Review List, the Water Board will focus on priorities for use of Basin Planning funds for planning topics other than TMDL development.

Basin Plan Amendment Process

In many cases, issues and projects identified in a Triennial Review List will subsequently lead to Basin Plan amendments. The Basin Plan amendment process is summarized in Table 1, attached, adapted from the State Water Resources Control Board's (State Water Board) 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. An additional 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.

Status of 2015 Triennial Review Project List

Table 2, attached, shows the status of the 2015 Triennial Review projects, as of June 2018. Though this period did not include the completion of any Basin Plan amendments, staff is participating several statewide and regional basin planning efforts, as shown in Table 2, plus two projects in the TMDL program. In addition to the projects described in Table 2, staff resources are also being applied toward the development of a Basin Plan amendment related to the Tahoe Regional Planning Agency's shorezone program.

2018 Triennial Review Planning Topics

Table 3, attached, summarizes 27 currently proposed basin planning topics for the 2018 Triennial Review.

These include:

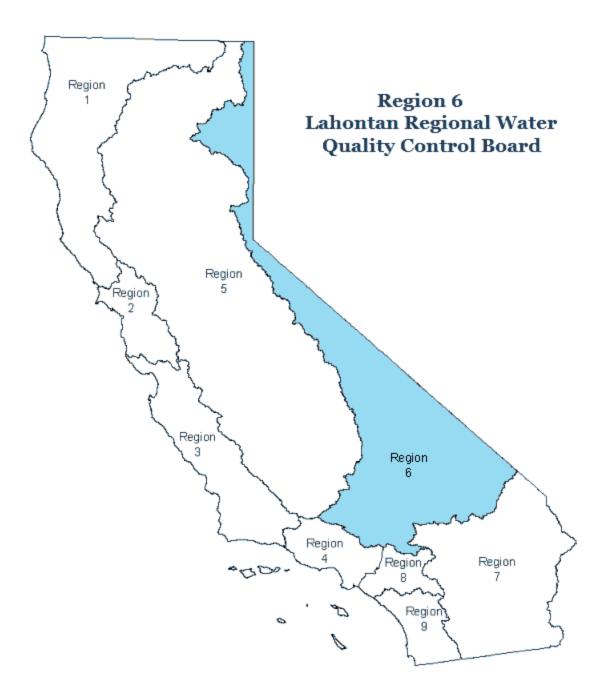
- Priorities carried over from those identified in the 2015 Triennial Review List;
- Ongoing work; and
- New priorities identified by staff and stakeholders.

After reviewing public comments and testimony, staff will prepare final recommendations for the Water Board consideration at its November 14-15, 2018 public hearing. In adopting the 2018 Triennial Review List, the Water Board will identify the basin planning issues and projects Water Board staff will focus its limited resources upon during the following three years.

Schedules for addressing the issues and completing the projects identified will depend upon the complexity of the selected matters and available resources. As discussed, above, additional basin planning activities may be identified as a result of completing work on issues and projects identified in the 2018 Triennial Review List. Work on such basin planning activities could be initiated during the 2018 Triennial Review period, or later depending upon available resources and Water Board priorities. Additionally, if important new topics arise before the next Triennial Review, basin planning priorities may be revised by the Water Board or its Executive Officer. If additional funding is received or outside support provided, staff will attempt to address more topics.

Attachments

Figure 1.	Map of the Lahontan Region
Table 1.	Summary of Basin Plan Amendment Process
Table 2.	June 2018 Status of 2015 Triennial Review List
Table 3.	Draft 2018 Triennial Review Proposed Topics* – Draft Prioritization and Rationale
Table 4.	Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status



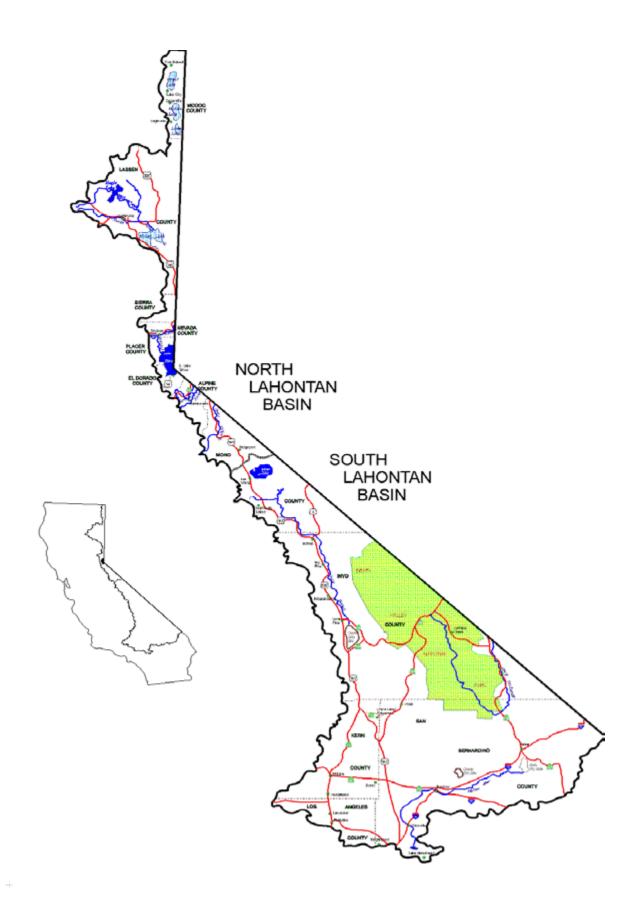


Table 1 Summary of Basin Plan Amendment Process

WHO... DOES WHAT?

REGIONAL	A.	IDENTIFY THE NEED for a Plan amendment based on the Triennial Review, public		
BOARD		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 / No hearing		PUBLISH A HEARING NOTICE / NOTICE OF FILING at least 45 days prior to the hearing		
F. RESPOND to comments – rev		RESPOND to comments – revising the draft amendment and staff report as necessary		
G. ADOPTION HEARING		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.	 FILE CEQA NOTICE OF DECISION with the Secretary of Resources after final approval by OAL or US EPA. Either pay Department of Fish & Game filing fee or submit Certificate of Fee Exemption. 		
	M.	PRINT and DISTRIBUTE Amendment		

Table 2 Status of 2015 Triennial Review List

Table 2 – Status of 2015 Triennial Review List

Topic	Description	Status
#1 Program Manager	Description: The Basin Planning Program Manager participates in State/Regional Water Board Roundtable activities, workplan development, provides information to the public, etc.	Status: The Program Manager's duties are ongoing.
#2 2018 Triennial Review	Description: Prepare the 2018 Triennial Review staff report and priority list. Host scoping workshops and hearings, as necessary, for Water Board consideration.	Status: Scoping workshops scheduled for July 2018 in Bishop and September 2018 in South Lake Tahoe. Water Board consideration scheduled for November 2018 in Apple Valley.
#3 Miscellaneous Work that will not Directly Result in Basin Plan Amendments	Description: 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, coordination with stakeholders involved with aquatic invasive species, etc. Assist regulatory staff in follow-up and implementation of new Basin Plan changes. Miscellaneous corrections and improvements (e.g., editorial revisions, correct references to new policies and plans, consistent use of terms) occasionally are necessary and will "accompany" other Basin Plan amendments to minimize staff resources.	Status: Miscellaneous planning related work is ongoing. Some of the work described in the task description has transferred to other programs, such as coordination with stakeholders involved with aquatic invasive species. Other work, such as assisting with response to Harmful Algal Blooms and bioassessment efforts have also taken staff time.

Table 2 – Status of 2015 Triennial Review List

Горіс	Description	Status

Revise Water

#4

Quality **Objectives for Bacteria**

Description: The current objective of 30-day log mean of 20 colony forming units of fecal coliform per 100 mL in the Lahontan Basin Plan applies to all surface waters in the region and is the most stringent objective in the State of California. 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 to incorporate the use of E. coli as an indicator (anticipated in late 2016), revisions to the Lahontan Basin Plan may be proposed to establish sitespecific objectives.

Water Board staff and contractors are collecting, and analyzing data to evaluate the current condition of water body reaches in the Lahontan region and determine what applicable objective should be applied based on beneficial uses. Staff is evaluating the State Board proposed standard and USEPA's guidance. Staff will consider the effects of climate change on land uses and water quality. Staff is coordinating with State Board in the development of the statewide applicable objective to ensure the Lahontan region is accurately represented.

Status: Staff efforts to advance this item have primarily been limited to participation in the State Water Board project to create a statewide bacteria standard for the REC-1 beneficial use. That effort, which focuses on creating an *E. coli* standard informed by epidemiological studies and the USEPA guidance, resulted in the State Water Board adopting provisions establishing a new statewide bacteria standard for the REC-1 beneficial use on August 7, 2018. The adopted provisions do not affect the Lahontan Water Board's existing fecal coliform standard for

surface waters. for consideration at a late summer 2018 meeting of the State Water

Board.

The adoption of a statewide REC-1 objective will did not complete this priority task. The State Water Board in adopting the new bacteria standard encouraged the Lahontan Water Board to evaluate with input from relevant stakeholders its current fecal coliform standard and to prioritize this effort during the 2018 Triennial Review process. The current regional water quality objective, which is not beneficial use-specific, will only be superseded for the REC-1 beneficial use. The Water Board may still prioritize revisions to the current objective.

Topic	Description	Status
#5	Description: Evaluate research findings, including the effects	Status: Nearshore research and monitoring
	of climate change, and begin collecting data to establish	continues to focus on periphyton growth
Review New	baseline and assess trends using agreed upon nearshore	drivers. Additional work includes a lake-wide
Scientific	assessment indicators as a first step to evaluating the need for	aquatic invasive plant survey and a targeted
Information to	new nearshore water quality standards and determining the	study to evaluate bacteria and toxic
Evaluate the	most appropriate standards.	compounds at popular beach sites during mid-
Need for		summer 2018. Future efforts will (1) continue
Changes to	Resource needs listed here only include staff evaluation of	long-term periphyton assessment; (2) assess
the Water	research findings, interagency coordination, public meetings,	how introduced macroinvertebrates are
Quality	stakeholder outreach, and contract management (including	influencing nearshore conditions; and (3)
Objectives for	developing scopes of work for indicator monitoring, causal	consider how warmer lake temperatures and
Nearshore	assessments, and understanding nearshore processes).	associated lake dynamic changes are affecting
Areas of Lake		Lake Tahoe.
Tahoe.		
		Some research activities are underway with
		more being planned. Research findings are
		likely to be limited during the 2018 Triennial
		Review cycle (2019-2021). Tasks will be more
		focused on coordination, contracts
		management, and outreach. Evaluating
		research findings and determining what, if any,
		basin planning activities are necessary are
		more likely to occur in the 2021 Triennial
		Review cycle (2022-2024). It is uncertain if this
		work will result in a need to revise water quality
		objectives for nearshore areas of Lake Tahoe.
		For these reasons the 2018 Proposed Topics
		List does not include this topic.

Topic	Description	Status
#6 Mojave WQOs and Beneficial Uses, (i.e., Mojave River and Basin Project)	Status: This topic is a combination of topics continued from the 2012 Triennial Review List and new ones, known as "Mojave River and Basin" project. Description: All of the proposed projects from the 2015 Triennial Review scoping efforts related to the Mojave River or Mojave groundwater Basin and sub-basins were combined and modified to efficiently use staff and stakeholder resources. The major change from the scoping effort was to reduce the scope of the proposed project known as "site specific WQOs for specific groundwater basins." Instead of evaluating the need and consequences of revising site-specific objectives (SSOs) for multiple groundwater basins throughout the region, staff recommends focusing on the sub-basins of the Mojave Basin for the next three years and using the experience gained to evaluate site specific objectives for other basins and sub-basins. The Mojave Basin is the best candidate for evaluating site specific objectives for a sub-basin because its sub-basins are delineated, the Basin is adjudicated, there is a large database of water quality and water quantity information and modeling, and the Basin is subject to an increase in population and effects of climate change. Staff resources for the three Mojave River proposed projects from the 2015 Triennial Review scoping effort are combined (along with the site specific WQOs for Mojave sub-basins) for a total of 1.8 PYs over three years. The four projects are described separately below:	 Status: The 2015 Triennial Review combined multiple projects into four Mojave River tasks: Adding BIOL to specific reaches of the River Re-evaluate COLD for portions of the River Establish objective for the floodplain aquifer Establish groundwater quality site specific objectives for certain Mojave sub-basins The first three items are being addressed in a Basin Plan amendment currently under development. The project proposes to: Add BIOL and RARE to specific reaches of the River and its tributaries Develop a Use Attainability Analysis to remove COLD designation for portions of the River Amend the Implementation Chapter to clarify use of existing objectives for purposes of permitting in a portion of the river The project is scheduled to be presented as a workshop in Winter/Spring 2019, with consideration before the Water Board in May or June 2019. An initial examination of groundwater protection needs in the Mojave Basin and sub-basins was completed November 2017. Further investigation and analysis are ongoing and necessary to develop recommendations related to establishing groundwater quality site-specific objectives.

Topic	Description	Status
BIOLOGICAL Beneficial Use for Mojave River (sub-task)	BIOL Description: Add the Biological Use (BIOL) for specific reaches of the Mojave River with remaining viable habitat, including but not limited to, upstream of the Mojave Forks Dam, from Bear Valley Road to Helendale, at Waterman Fault, and in Afton Canyon.	
	BIOL beneficial use will increase protection of the most important source of water and wildlife habitat in the high desert area.	
	BIOL beneficial use in reaches of the Mojave River that maintain perennial flow will increase protection of unique biology (but may limit some recreational activities). In addition, Water Board staff will consider groundwater management and climate change to maintain or restore base flow to the River.	
Site Specific Objectives for a Reach of the Mojave River (sub-task)	SSOs for a reach of the Mojave: Establish Site Specific Objectives for groundwater in the Mojave River Floodplain Aquifer and surface water in the perennial reach of the Mojave River downstream of Victor Valley Wastewater Reclamation Authority (VVWRA) to Silver Lakes (Helendale).	
(out tusk)	Compounds of interest are salt, nutrients and general minerals. Surface water objectives are of primary interest to develop appropriate effluent limitations for the VVWRA's NPDES permit. Currently, surface water quality objectives for the Mojave Hydrologic unit set at Barstow for Total Dissolved Solids (TDS) and nitrate would apply at VVWRA by the tributary rule. However, because the Mojave River is ephemeral in the section from Helendale to Barstow, the river water quality cannot be measured on a perennial basis (especially under dryer climatic conditions) and the surface water quality objectives may not be relevant or appropriate for developing applicable objectives in this area.	

Topic	Description	Status
Re-evaluate the COLD Beneficial Use Designation for a Reach of the Mojave River (sub-task)	Re-evaluate COLD beneficial use designation for a reach of the Mojave: Victor Valley Wastewater Reclamation Authority requested the Board re-evaluate the COLD beneficial use designation for the Mojave River from the Upper Narrows to Helendale. A beneficial use assessment determined it was uncertain whether the Mojave River in that reach can support cold weather ecosystems. Staff will consider the assessment's conclusion and other possibilities such as establishing COLD and WARM beneficial uses for different times of the year.	
Site Specific Water Quality Objectives for Mojave Sub- basins (sub-task)	Mojave Groundwater Sub-basins SSOs Description: Interested parties, especially authors of Salt & Nutrient Management Plans required by State Board's Recycled Water Policy, are assessing the assimilative capacity in portions of the Mojave groundwater basin for Total Dissolved Solids (TDS) and nitrogen. The Taste and Odor Threshold for drinking water is the Secondary Maximum Contaminant Level for TDS and is the current applicable Water Quality Objective (WQO). Where TDS and nitrogen concentrations exceed WQOs, or are projected to exceed WQOs, Water Board staff will evaluate whether more control measures are needed and/or whether it is appropriate to consider site-specific objectives for portions of the Mojave groundwater basin. Additionally, some stakeholders are interested in preserving higher quality groundwater and support development of more protective groundwater sub-basin objectives to limit discharges of TDS and nitrogen. (Perhaps using Region 8's "Groundwater Management Zones" with "maximum benefit objectives" as a model for Region 6.) This project would focus on the Mojave groundwater basin and sub-basins.	

Topic	Description	Status
	Staff will use available data to evaluate groundwater quality, assimilative capacity, effects of climate change, and the ability to maintain higher quality waters for specific groundwater subbasins. Staff will evaluate the data and recommend whether it is appropriate to set specific WQOs. The Resource Needs estimate does not include producing a basin plan amendment.	

Table 2 – Status of 2015 Triennial Review List

Topic	Description	Status
#7 Squaw Valley Groundwater Withdrawal	Description: 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. This topic may also involve a consideration of flow requirements for Squaw Creek possibly in the form of flow objectives, with regulatory effect, to protect certain beneficial uses.	Status: In November 2017, the Water Board hosted a workshop addressing management of the Squaw Valley aquifer, coupled with presentations on the development of in-stream flow criteria in Region 1 waters and in the context of the Cannabis Program.
#8 Evaluate Appropriate Statistical Methods (E.G., Replace Means of Monthly Means with Annual Averages, Where Appropriate, such as Truckee River and Pine Creek)	Description: 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.	Status: Staff is currently researching the history of the "mean of monthly means" objectives, and anticipates providing staff recommendations late summer/early fall 2018.

Table 2 – Status of 2015 Triennial Review List

Горіс	Description	Status
#9	Description: Revise Basin Plan to include specific implementation measures to protect all beneficial uses or	Status: This project would codify the importance of protecting riparian areas for
Riparian Protection Policy	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	purposes of source water protection, groundwater recharge, and other important roles of riparian areas. Work on this task is
(Protecting and Enhancing Watershed Resiliency)	excessive erosion of soft soils and subsequent down stream sediment deposition that adversely impacts Aquatic and Wildlife Habitats. Staff will consider the effects of climate change that may produce more frequent and more severe flashy events.	included in the climate change program and other work by regulatory programs. Work on a comprehensive Basin Plan amendment to clarify and incorporate this Water Board priority will likely follow adoption of the Water Board's Climate Adaptation and Mitigation Strategy.
,	Other enhancements could include improving meadows and floodplains to increase groundwater storage and improve flood attenuation.	3

Table 2 – Status of 2015 Triennial Review List

Topic	Description	Status
#10 Revise Hot Creek Water Quality Objectives	Description: 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. This effort would assist the Department of Fish and Wildlife in complying with its permit requirements for the Hot Creek Hatchery. The Department of Fish and Wildlife has collected water quality data for this effort.	Status: This project was below the line in the 2015 Triennial Review. Basin planning and permitting staff are meeting to identify a strategy for the Hot Creek Hatchery permit that may include development of site specific objectives.
#11 Survey of Surface Waters to Identify Those Staff Might Want to Consider Creating In- Stream Flow Requirements for the Purposes of Protecting Beneficial Uses	Description: This item is described in the project title.	Status: California Water Code section 85087 directs the State Water Board to submit to the Legislature a prioritized schedule and estimate of costs to complete instream flow studies for two categories of rivers and streams, with two deadlines for study completion: 1. By 2012, high priority rivers and streams in the Delta watershed that were not covered in the State Water Board's "Final Report on Development of Flow Criteria for the 3-2 Sacramento-San Joaquin Delta Ecosystem"; and 2. By 2018, all major rivers and streams outside the Sacramento River watershed. In response, the State Water Board submitted a report, "Instream Flow Studies for the Protection of Public Trust Resources: A Prioritized Schedule and Estimate of Costs" (December 2010). The report includes table D, listing High Priority Rivers and Streams that Support Only Non-Anadromous Species. Table D includes twenty-one streams (eight of which

Table 2 – Status of 2015 Triennial Review List

Topic	Description	Status
		are listed as first priority) in the Lahontan Region for which instream flow studies are recommended to determine if minimum flow criteria are needed to protect habitat for sensitive fish species (enclosure 3). This list may serve to address priority project #11 from the 2015 Basin Plan Triennial Review.
#12 Biological Indicators	Description: This topic was originally described as "Revise existing narrative water quality objective for protection of aquatic communities (nondegradation of aquatic communities objective)." The current topic description is "Develop narrative and/or numeric biological objectives (i.e., biocriteria) to protect the biological integrity of the Region's surface waters. This may	Status: Staff participates in the State Water Board's effort to develop biological objectives through the Biostimulatory Substances Objective and Program to Implement Biological Integrity quarterly updates and meetings. Lahontan Water Board staff are also monitoring the San Diego Regional Water Quality Control Board's efforts to develop a biological standard.
	include development of new objectives, applying a California Stream Condition Inventory score (CSCI), and/or revising and/or expanding the applicability of the Basin Plan's current narrative objectives for "Nondegradation of Aquatic Communities and Populations" (which currently apply only to wetlands).	Additionally, the Lahontan Water Board staff is expanding bioassessment data collection over a three-year period. The bioassessment data will eventually be used to support development of biological objectives in the Lahontan Region.

Table 2 – Status of 2015 Triennial Review List

Горіс	Description	Status
#13	Description:	Status: SWAMP and TMDL program staff
	Site specific TDS objectives for surface waters were developed	collaborated to monitor multiple 303(d) listed
Region-Wide	based on limited samples and protect/maintain high quality	waters from Susanville south to Tom's Place
Approach to	water but are typically more stringent than needed to protect	for three water years (fall 2014 to fall 2017) on
TDS Water	beneficial uses. Development of the original TDS objectives did	a monthly basis to improve staff's
Quality	not consider the effects of a changing climate on water quality	understanding of existing TDS levels.
Objectives for	objectives (WQOs).	Collections duration included a drought year, a
Surface		year of 80 percent of average precipitation, and
Waters	Two possible options are proposed:	record precipitation winter of 2016-17. Staff performed preliminary analysis of this data as it
	(A) Adopt a regionwide TDS WQO that would supersede the existing site-specific objectives.	relates to water quality objectives for TDS. Additional work is still necessary and will require prioritized resources.
	(B) Adopt new site-specific objectives for TDS that are based	
	on protection of beneficial uses, and adopt a more stringent value, if applicable that is based on new data, for maintaining	
	high quality water.	

Topic Descr	ription	Status
#14 Susan River Site- Specific Objectives	Description: Consider 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. This project is in a preliminary evaluation stage. Staff will need to involve the District, current downstream agricultural users, and the Department of Fish and Wildlife in evaluating alternatives including: increased treatment, increased land disposal capacity, winter storage of treated wastewater, and establishing or ensuring minimum flows in Susan River and its tributaries in light of possible effects from climate change.)	Status: No Progress
#15 Adopt a Standard for Deposited/Embedded Sediment for the Middle Truckee River	Description: The Truckee River Watershed Council and David Herbst requested the Board consider adopting a standard for deposited/embedded sediment for the Middle Truckee River. They submitted deposited/embedded sediment data showing beneficial use impairment is occurring, supporting a conclusion that the current TMDL target is not sufficient to detect actual impairment from excess sediment.	Status: No Progress
#16 Remove Two Beneficial Uses from Piute Ponds Wetlands	Description: This topic 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 in eastern Los Angeles County. The ponds and wetlands are maintained with effluent from the Los Angeles County Sanitation District (LACSD) No. 14 (Lancaster) wastewater treatment facilities. LACSD believes these beneficial uses do not actually exist for these receiving waters and could become an urgent issue for LACSD's activities. The existing waste discharge permit expires in 2020. Application of drinking	Status: No Progress

Topic De	escription	Status
	water or salt-sensitive agriculture-based limits to end of pipe discharges and the receiving water would likely require the construction and implementation of advanced treatment facilities.	
#17 Clarify Lahontan Water Board Policy on Package Plants		Status: No Progress
#18 Adopt or Revise Si Specific Water Quality Objectives for Fish Springs Creek in the Owen Valley	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	Status: No Progress

Topic Desci	ription	Status
#19 Biotic Ligand Model for Copper	Description: Incorporate the USEPA national criteria for copper into water quality standards using the Biotic Ligand Model.	Status: No Progress. USEPA favors use of the Biotic Ligand Model (BLM) to the Water Effects Ratio (WER) method and will check WER results against BLM models before project approvals.
#20 Revise PCPs Water Quality Objectives	Description: 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.	Status: No Progress
#21 Eagle Lake "Building Moratorium"	Description: Amend the Basin Plan to lessen restrictions on building density for septic systems. (Currently, 20-acre minimum for new development)	Status: No Progress

Table 3

Draft 2018 Triennial Review Proposed Topics –
Draft Prioritization and Rationale

Table 3 – Draft 2018 Triennial Review Proposed Topics* – Draft Prioritization and Rationale

Priority	Topic	Rationale for Draft Priority	
1	Revise Water Quality Objectives for Bacteria	This project is continued from the 2015 Triennial Review List, where it was the top (non-administrative) priority project. Work on this priority project did not proceed, as it was largely dependent upon the State Water Board first completing its efforts to establish a state-wide water quality objective for bacteria. The State Water Board adopted a new state-wide bacteria objective for the REC-1 beneficial use in August 2018. In adopting the new bacteria objective, the State Water Board encouraged the Lahontan Water Board to prioritize evaluating the region's fecal coliform water quality objective during the Lahontan Water Board's 2018 Triennial Review. Lahontan Water Board staff can now evaluate and clarify how bacteria standards will be implemented in the Lahontan Region taking the State Water Board's action into consideration.	
2	Climate Change Adaptation and Mitigation Strategy Implementation	Developing and implementing a Climate Change Adaptation and Mitigation Strategy for the Lahontan Region continues to be one of the Water Board's top priorities. Water	
3	Source Water Protection	Board members also expressed at the July 2018 workshop, their preference to prioritize these three interrelated projects (2, 3, and 4).	
4	Protecting and Enhancing Watershed Resiliency (Riparian Protection Policy)	These three projects, in part, seek to protect and enhance water resources in the face of climate change, population growth, and other forthcoming challenges.	
5	Mojave River Surface Water Beneficial Use Revisions	Projects 5, 6, 7, and 8 are currently underway, with projects 5, 6, and 8 carrying over from the 2015 Triennial Review List. Project 7 was initiated to maintain consistency with updated	
6	Site Specific Objectives for Mojave Ground Water Sub-basins		
7	Remove the Prohibition on New Pier Construction in Fish Spawning Habitat at Lake Tahoe	regional land use regulations at Lake Tahoe.	

Table 3 – Draft 2018 Triennial Review Proposed Topics* –
Draft Prioritization and Rationale

Priority Topic Rationale for Draft Priority Revise Chapter 3 Language on **Determining Compliance with Water Quality Objectives Currently Expressed as "Means Of Monthly** Means" to "Annual Means" 9 Tribal Beneficial Uses Staff does not anticipate sufficient Basin Planning resources to address 10 **Review New Scientific Information to** projects 9 through 23. These projects **Evaluate the Need for Changes to the** are presented with prioritization Water Quality Objectives for Nearshore based on anticipated interest from the Areas of Lake Tahoe public, internal requests, or in recognition of existing efforts, be it 11 **Biological Indicators** from Lahontan Water Board or State 12 Region-wide Approach to TDS Water Water Board staff. **Quality Objectives for Surface Waters** 13 **Susan River Site-Specific Objectives** 14 **Evaluate Revising TDS and Sulfate Water Quality Objectives for Leviathan** and Bryant Creeks 15 **Revise Hot Creek Water Quality Objectives** 16 Adopt or Revise Site-Specific Water **Quality Objectives for Fish Springs to Facilitate NPDES Permitting for State Fish Hatchery** 17 **Evaluate New or Revised Section** 304(a) Recommended Criteria for Incorporation into the Basin Plan as **Water Quality Objectives** 18 **Instream Flow Criteria** 19 **Biotic Ligand Model for Copper** Eagle Lake "Building Moratorium" 20 **Clarify Lahontan Water Board Policy** 21 on Package Plants 22 **Revise PCPs Water Quality Objectives**

Remove Two Beneficial Uses from

Piute Ponds Wetlands

^{*}This Prioritization Summary does not include administrative projects or efforts, such as program management and preparing the 2021 Triennial Review, which are required Basin Planning Program elements.

Table 4

Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
1	Revise Water Quality Objectives for Bacteria	The current objective of 20 colony forming units of fecal coliform per 100 ml in the Lahontan Basin Plan applies to all surface waters in the region and is the most stringent objective in the state of California. Water Board staff to propose recommendations to the Water Board following that consider evaluation of ongoing field sampling in the Lahontan Region, and federal criteria for recreational waters, and the results of State Water Board efforts to develop a the statewide objective for the REC-1 beneficial use adopted by the State Water Board (Resolution 2018-00XX) on August 7, 2018, and other factors, as identified.	Continued from 2015 Triennial Review List
2	Climate Change Adaptation and Mitigation Strategy Implementation	The Water Board is currently developing a Climate Change Adaptation and Mitigation Strategy that could include basin planning activities related to watershed resiliency, critical groundwater recharge areas, and floodplain areas. Water Board staff to review direction regarding basin planning activities provided by the Climate Change Adaptation and Mitigation Strategy, upon its adoption, and then develop appropriate course of action.	New project proposal

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
3	Source Water Protection	There are multiple efforts to enhance source water protection at the state and regional level that Water Board staff continue to monitor, and in some situations, participate in. As these efforts continue to proceed, Water Board staff will identify potential basin planning activities necessary to further improve source water protection within the Lahontan Region. Such activities could include, but not be limited to, revising the Basin Plan to further encourage restoration and enhancement of headwater environments, and actions that facilitate implementing such activity (e.g., streamlined regulatory process for qualifying habitat restoration projects).	New project proposal
4	Protecting and Enhancing Watershed Resiliency (Riparian Protection Policy)	Revise Basin Plan to include specific implementation measures to protect all beneficial uses of ground and surface waters from the effects of 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 that adversely impacts aquatic and wildlife habitats. Staff will consider the effects of climate change that may produce more frequent and more severe flood events. Other enhancements could include improving meadows and floodplains to increase groundwater storage and improve flood attenuation.	Continued from 2015 Triennial Review List

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
Priority 5	Topic Mojave River Surface Water Beneficial Use Revisions	Description The 2015 Triennial Review combined multiple projects into four Mojave River tasks: Adding BIOL to specific reaches of the River Re-evaluate COLD for portions of the River Establish objective for the floodplain aquifer Establish groundwater quality site specific objectives for certain Mojave sub-basins This project combines the first three items. In addition, staff found while investigating BIOL that it	Continued from 2015 Triennial Review List. The project proposes to: • Add BIOL and RARE to specific reaches of the River and its tributaries • Develop a Use Attainability Analysis
		is appropriate to also designate RARE at some Mojave sites. BIOL beneficial use will increase protection of the most important source of water and wildlife habitat in the high desert area. RARE will be applied to these sites where research shows the presence of listed species. COLD is proposed for removal where research shows it has never been an existing use and does not presently exist. Instead of establishing objectives for the floodplain aquifer, the project will clarify where to apply existing standards for that effluent dominated reach downstream of VVWRA operations and upstream of Barstow.	to remove COLD designation for portions of the River Amend the Implementation chapter to clarify use of existing objectives for purposes of permitting in a portion of the river The project is scheduled for Water Board consideration in May or June 2019.

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

6	Site-Specific Water Quality Objectives for Mojave Ground Water Sub-basins	Interested parties, especially authors of Salt & Nutrient Management Plans required by State Water Board's Recycled Water Policy, are assessing the assimilative capacity in portions of the Mojave groundwater basin for Total Dissolved Solids (TDS) and nitrogen. The Taste and Odor Threshold for drinking water is the Secondary Maximum Contaminant Level for TDS and is the current applicable Water Quality Objective (WQO). Where TDS and nitrogen concentrations exceed WQOs, or are projected to exceed WQOs, Water Board staff will evaluate whether more control measures are needed and/or whether it is appropriate to consider site-specific objectives for portions of the Mojave groundwater basin. Additionally, some stakeholders are interested in preserving higher quality groundwater and support development of more protective groundwater subbasin objectives to limit discharges of TDS and nitrogen. (Perhaps using Region 8's "Groundwater Management Zones" with "maximum benefit objectives" as a model for Region 6.) This project would focus on the Mojave groundwater Basin and	Continued from 2015 Triennial Review List. An initial examination of groundwater protection needs in the Mojave Basin and sub-basins was completed November 2017. Further investigation and analysis are ongoing and necessary to develop recommendations related to establishing groundwater quality site-specific objectives.
		Staff will use available data to evaluate groundwater quality, assimilative capacity, effects of climate change, and the ability to maintain higher quality waters for specific groundwater sub-basins. Staff will evaluate the data and recommend whether it is appropriate to set specific WQOs. The Resource Needs estimate does not include producing a basin plan amendment.	

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
7	Remove the Prohibition on New Pier Construction in Fish Spawning Habitat at Lake Tahoe	The prohibition on shoreline development in fish spawning habitat is a remnant of previous land use restrictions and the associated 208 Plan. Once TRPA amends its Code of Ordinances, the Water Board Basin Plan will be inconsistent with the updated regional land use regulation. With the pending amendment to TRPA's Code of Ordinances and a proposed amendment to the Water Board Basin Plan in place, new pier construction projects at Lake Tahoe will continue to receive sufficient review, oversight, and appropriate mitigation measures to ensure adequate fish habitat and water quality protection.	New project proposal This project is already underway. CEQA Scoping will be conducted at the September 2018 Water Board meeting. The project is on schedule for Water Board consideration at the January 2019 Board meeting.
8	Revise Chapter 3 Language on Determining Compliance with Water Quality Objectives currently expressed as "means of monthly means" to "annual means". (Means of Monthly Means)	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.	Continued from 2015 Triennial Review List

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
9	Tribal Beneficial Uses	Add the Tribal Cultural, Tribal Subsistence Fishing, and Subsistence Fishing beneficial uses (CUL, T-SUB, SUB) to the Basin Plan. These beneficial uses were created by State Water Board with the adoption of mercury objectives. State Water Board Resolution No. 2017-0027 provides guidance to the Regional Boards for incorporating these beneficial uses into the Basin Plan. Designating these beneficial uses would require the Water Board to conduct outreach to California recognized tribal governments to determine waterbodies to designate, supported by appropriate evidence or tribal claims. Additionally, the Water Board would conduct outreach to appropriate organizations (counties, DFW, etc.) about non-tribal subsistence fishing activities and determine waterbodies to designate with this beneficial use.	New project proposal
10	Review New Scientific Information to Evaluate the Need for Changes to the Water Quality Objectives for Nearshore Areas of Lake Tahoe	Evaluate research findings, including the effects of climate change, and begin collecting data to establish baseline and assess trends using agreed upon nearshore assessment indicators as a first step to evaluating the need for new nearshore water quality standards and determining the most appropriate standards. Activities include staff evaluation of research findings, interagency coordination, public meetings, stakeholder outreach, and contract management (including developing scopes of work for indicator monitoring, causal assessments, and understanding nearshore processes).	Continued from 2015 Triennial Review List. No basin planning work is anticipated for the 2018 Triennial Review cycle.

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
11	Biological Indicators	Develop narrative and/or numeric biological objectives (i.e., biocriteria) to protect the biological integrity of the Region's surface waters. This may include development of new objectives, applying a California Stream Condition Inventory score (CSCI), and/or revising and/or expanding the applicability of the Basin Plan's current narrative objectives for "Nondegradation of Aquatic Communities and Populations" (which currently apply only to wetlands). The State Water Board has an active project entitled the Biostimulatory Substances Objective and Program to Implement Biological Integrity which, in part, seeks to establish biological indicators for use statewide. The San Diego Regional Water Board is developing biological indicators for that region, which may be instructional for developing region specific biological indicators in the Lahontan Region. SWAMP staff is currently adding to the bioassessment monitoring library of the Lahontan Region.	Continued from 2015 Triennial Review List

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
12	Region-Wide Approach to TDS Water Quality Objectives for Surface Waters	Site specific TDS objectives for surface water were developed based on limited samples and protect/maintain high quality water but are typically more stringent than needed to protect beneficial uses. Development of the original TDS objectives did not consider the effects of a changing climate on water quality objectives (WQOs). Two possible options are proposed: (A) Adopt a regionwide TDS WQO that would supersede the existing site specific objectives. (B) Adopt new site specific objectives for TDS that are based on protection of beneficial uses, and adopt a more stringent value, if applicable that is based on new data, for maintaining high quality water.	Continued from 2015 Triennial Review List

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
13	Susan River Site- Specific Objectives	Develop revised objectives for sections of the Susan River and its tributaries downstream of Susanville's Community Services District (District). The WQO for TDS is 185 mg/L and is not associated with any beneficial use at Litchfield. Altering the numeric objective of TDS and other constituents could still be protective of beneficial uses (Drinking water standard for TDS is 500 to 1,000mg/L).	Continued from 2015 Triennial Review List
		Staff will need to involve the District, current downstream agricultural users, and the Department of Fish and Wildlife in evaluating alternatives including: site specific objectives, increased treatment, increased land disposal capacity, conducting Use Attainability Analysis and removing uses, establishing or ensuring minimum flows in Susan River and its tributaries in light of possible effects from climate change.	
14	Evaluate Revising TDS and Sulfate Water Quality Objectives for Leviathan and Bryant Creeks	Water quality standards consist of water quality objectives, beneficial uses, and non-degradation. This project will evaluate current water quality objectives for sulfate and TDS in Leviathan and Bryant creeks to determine if existing objectives are appropriate for the sites. The project will evaluate the objectives in consultation with the USEPA, Atlantic Richfield Company, and interested parties/stakeholders within the context of CERCLA.	New project proposal
15	Revise 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. This effort would assist the Department of Fish and Wildlife in complying with its permit requirements for the Hot Creek Hatchery.	Continued from 2015 Triennial Review List

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
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 Wildlife operates Fish Springs hatchery in the Owens Valley where source water is groundwater 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	Continued from 2015 Triennial Review List
17	Evaluate New or Revised Section 304(a) Recommended Criteria for Incorporation into the Basin Plan as Water Quality Objectives	Revisions to the federal Water Quality Standards (WQS) regulations at 40 C.F.R. Part 131 direct states and authorized tribes to consider for adoption as water quality objectives, new or updated CWA section 304(a) water quality criteria recommendations published by the USEPA since May 30, 2000 during their next triennial review.	New project proposal
18	Instream Flow Criteria	The Water Board has the authority to regulate minimum flows to protect beneficial uses. In November 2017, the Water Board hosted a workshop with presentations from Region 1 staff and State Water Board Cannabis Unit staff discussing the development and use of instream flow criteria. State Water Board staff indicated that draft language would be ready for public distribution some time in 2019 or 2020. This project would prioritize staff to engage with the State Water Board efforts and consider developing general (likely narrative) or site-specific flow criteria. This project may also be influenced by the Lahontan Water Board's Climate Change Adaptation and Mitigation Strategy.	Continued from 2015 Triennial Review List

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
19	Biotic Ligand Model for Copper	Incorporate the USEPA national criteria for copper into water quality standards program using the Biotic Ligand Model.	Continued from 2015 Triennial Review List
20	Eagle Lake "Building Moratorium"	Amend the Basin Plan to lessen restrictions on building density for septic systems. This topic may be addressed by incorporating State Water Board's new Onsite Wastewater Treatment Systems Policy.	Continued from 2015 Triennial Review List
21	Clarify Lahontan Water Board Policy on Package Plants	The current Basin Plan indicates all package plants will be regulated under Waste Discharge Requirements (WDRs). Los Angeles County (and potentially other counties and local municipalities) believes small aerated package plants are considered "alternative" systems and are authorized under their local authority and do not require additional authorization from the Water Board. Clarification on the applicability and specific authorization is necessary and may result in a Basin Plan amendment, clarification memo, or through Water Board approvals of Local Area Management Plans	Continued from 2015 Triennial Review List
22	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.	Continued from 2015 Triennial Review List
23	Remove Two Beneficial Uses from Piute Ponds Wetlands	This topic 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.	Continued from 2015 Triennial Review List

Table 4 – Draft 2018 Triennial Review Proposed Topics (Prioritized August 22, 2018) - Descriptions and Status (Updates since July workshop shown in strikeout/underline).

Priority	Topic	Description	Status
24	Editorial Revisions, Factual	Miscellaneous corrections and improvements, such as:	Continued from 2015 Triennial Review List
	Corrections, and Incorporation of Adopted State Water Board Policies	 Correcting the incorrect square mile number for the size of the region Features that are in the wrong watershed Consistent use of terms Correct references to new policies and plans 	Review List
		Consider a format change from two to one column of text, similar to Region 5. Some of these actions may be incorporated into larger amendments for purposes of resource efficiency.	
25	Program Manager	The Basin Planning Program Manager participates in State/Regional Water Board Roundtable activities, and workplan development, provides information to the public, etc.	The Program Manager's duties are ongoing.
26	2021 Triennial Review	Prepare the 2021 Triennial Review staff report and priority list. Host scoping meetings and hearings, as necessary, for Water Board consideration.	To complete in November 2021
27	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, coordination with stakeholders involved with aquatic invasive species, etc.	Miscellaneous planning related work is ongoing.

ENCLOSURE 5

(To be submitted under separate cover)

ENCLOSURE 6



Presentation Overview

- Background
- Status of 2015 Triennial Review projects
- Proposed Projects List
- Schedule
- Request for Input

Background-Triennial Review

- Water Quality Control Plan (Basin Plan)
 - Regulatory (standards, implementation)
 - Informational (maps, program info., etc.)
- Triennial Review of the Basin Plan
 - Clean Water Act requirement
 - Work Plan for Basin Planning Program



Background-Triennial Review

- Triennial Review (continued)
 - Public Process and Input
 - Water Board and staff input
 - Prioritization

https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/#triennial



2015 Triennial Review – Status Highest Priority Projects

Project	Status
Squaw Valley Groundwater and Flow	Complete
Bacteria Objectives	Ongoing
Lake Tahoe Nearshore	Ongoing
Mojave WQOs and BUs	Ongoing
Appropriate statistical methods (MoMM)	Ongoing
Riparian Protection Policy	Ongoing



Bacteria Objectives

- Statewide Water Quality Objective
 - Applies to REC-1 beneficial use only
 - Geomean: 100 cfu *E. coli* /100 ml
 - Statistical Threshold Value of 320 cfu E. coli/ 100 ml
- Lahontan Water Board Fecal Coliform Objective Remains in Effect

Bacteria Objectives

- State Board Resolution
 - Encourages the Lahontan Water Board to evaluate its fecal coliform objective
 - Encourages the Lahontan Water Board to prioritize the evaluation in current Triennial Review Process (Fall 2018)



2015 Triennial Review – Status Pending Additional Resources

Project	Status
Survey for in-stream flow consideration	Complete
Revise Hot Creek water quality objectives	Ongoing
Biological indicators	Ongoing
Regionwide approach for TDS WQOs for surface waters	Ongoing
All other projects	No progress



2018 Triennial Review Proposed Topics

- 21 Projects Continued from 2015 List
 - Includes Evaluating Fecal Coliform Standard
- 6 New Projects



2018 Triennial Review

New Proposed Topics

- Tribal and Subsistence Beneficial Uses
 - State Water Board, Resolution 2017-0027
- USEPA 304(a) Recommendations
 - Statutory requirement
- Removing Prohibition of New Pier Construction in Lake Tahoe Fish Spawning Habitat

2018 Triennial Review

New Proposed Topics

- Climate Change Adaptation and Mitigation
- Source Water Protection
- Evaluate Revising Water Quality
 Objectives for Leviathan and Bryant
 Creeks



2018 Triennial Review

Highest Priority Projects

Priority	Project
1	Revise Water Quality Objectives (WQOs) for Bacteria
2	Climate Change Adaptation and Mitigation Strategy Implementation
3	Source Water Protection
4	Protecting and Enhancing Watershed Resiliency (Riparian Protection Policy)
5	Mojave River Surface Water Beneficial Use Revisions
6	Site-Specific WQOs for Mojave Ground Water Sub-basins
7	Remove the Prohibition on New Pier Construction in Fish Spawning Habitat at Lake Tahoe
8	Revise Chapter 3 Language on Determining Compliance with WQOs Currently Expressed as "Means Of Monthly Means" to "Annual Means"



Schedule

- July 2018 Public Workshop
- Update Staff Report and Proposed Topics List
- Sept. 2018 Public Workshop
- November 2018 Board Meeting
 - Water Board consideration of Proposed Triennial Review List

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Comments lahontan@waterboards.ca.gov