

LAHONTAN REGIONAL
WATER QUALITY CONTROL BOARD

**CLEAN WATER ACT
SECTIONS 305(b) AND 303(d)
INTEGRATED REPORT
FOR THE LAHONTAN REGION**

PUBLIC REVIEW DRAFT

April 2014

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

EXECUTIVE SUMMARY

This Integrated Report provides the draft recommendations of the staff of the California Regional Water Quality Control Board, Lahontan Region (Water Board) for changes to the federal Clean Water Act (CWA) Section 303(d) list of impaired surface water bodies, and, pursuant to CWA section 305(b), analyzes the extent to which all navigable waters in the region are meeting the minimum fishable/swimmable beneficial uses. The water quality assessment applies to surface waters of the United States within the Lahontan Region.

Following a public participation process, the Water Board will consider adopting recommendations to the State Water Resources Control Board (State Water Board) for inclusion in a statewide Section 303(d) list. The statewide list will be submitted to, and considered for approval by, the U.S. Environmental Protection Agency (USEPA). The Lahontan Water Board will not take action on staff's Section 305(b) assessment, but may provide direction to staff. Public comments will be accepted on Section 305(b) issues and included in the administrative record.

This staff report provides background on the assessment process and the methods used. Results and recommendations are summarized in tables in the appendices. The appendices also include "fact sheets" for specific water body-pollutant combinations that provide more detailed information and links to online data and reference documents.

The 303(d) assessment focused on data from the Lahontan Region's Surface Water Ambient Monitoring Program (SWAMP), data submitted by stakeholders, and data affecting the status of current (2010) Section 303(d) listings. This assessment process was more intensive than the Water Board's previous Section 303d list updates. Over 2,320 fact sheets, each assessing a unique water body-pollutant combination, were developed during this evaluation in comparison to the 2010 listing cycle when approximately 1,250 fact sheets were developed. These fact sheets are included in Appendix I of this document. The fact sheets contain over 3,550 lines of evidence. The proposed updates include new listings to the 303(d) list, delistings from the 303(d) list, category changes to existing 303(d) listings, and other modifications. The proposed updates for the section 303(d) list include:

New Listings:

1. Bijou Park Creek: iron, oil and grease,
2. Carson River, West Fork (Headwaters to Woodfords): chloride, sulfates, total dissolved solids, turbidity
3. Carson River, West Fork (Woodfords to Paynesville): chloride, nitrate, sulfates, total dissolved solids, turbidity
4. Donner Lake: chlordane, arsenic
5. Indian Creek: chloride, dissolved oxygen
6. Littlerock Reservoir: mercury, polychlorinated biphenyls (PCBs)
7. Silverwood Reservoir: mercury, polychlorinated biphenyls (PCBs)
8. Lake Arrowhead: mercury
9. Lake Gregory: mercury

New Listings (being addressed by USEPA approved TMDL):

1. Bijou Park Creek: phosphorus, total nitrogen as N, turbidity
2. Indian Creek Reservoir: dissolved oxygen

New Listings (being addressed other than an action of a TMDL):

1. Snowshoe Thompson ditch 1: phosphorus, TKN

Category Changes:

1. Blackwood Creek: phosphorus, nitrogen
2. Heavenly Valley Creek (USFS to Trout Creek): sediment
3. Heavenly Valley Creek (source to USFS boundary): phosphorus
4. Trout Creek (above HWY 50): nitrogen, phosphorus
5. Trout Creek (below HWY 50): nitrogen, phosphorus
6. Truckee River (above Christmas Valley): phosphorus
7. Truckee River (below Christmas Valley): phosphorus
8. Ward Creek: nitrogen, phosphorus, sedimentation/siltation

New Delistings:

1. Clearwater Creek: sedimentation/siltation
2. Amargosa River (Willow Creek confluence to Badwater): arsenic

Modifications:

1. Amargosa River (Upper Canyon to Willow Creek confluence): arsenic (changes to mapping)
2. Amargosa River (Willow Creek confluence to Badwater): arsenic (changes to mapping)
3. Pathogens in some cases changed to fecal coliform to align with our Basin Plan objective
4. All water bodies were remapped using the National Hydrography Dataset (NHD) in 1:24,000 resolution to provide greater flexibility and efficiency when performing analysis using a geographic information system (GIS). As a result the water body size calculations for Integrated Report water bodies will change due to the greater accuracy of this higher resolution data set.

When adopting recommendations for updated Section 303(d) lists, Regional Water Boards are required to identify dates for completion of Total Maximum Daily Loads (TMDLs). Most of the recommended new listings are likely to be addressed through update of water quality standards or alternative regulatory programs, rather than through development of TMDLs.

The Section 305(b) assessment focuses on attainment of “core” beneficial uses related to protection of aquatic life, human health, and recreation. Water bodies are placed in one of five categories depending on whether or not applicable standards are attained, and whether there is sufficient information to evaluate whether a specific pollutant is exceeding the water quality objectives for a specific water body. In some cases, the water quality objectives in the Basin Plan are set at levels that were representative of ambient conditions, and the ambient water quality is typically higher quality than levels necessary to protect beneficial uses.

Please refer to Appendix L for any modifications to the draft Staff Report since release for public comment on April 4, 2014.

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INTRODUCTION

The federal Clean Water Act (CWA) gives states the primary responsibility for protecting and restoring surface water quality. In California, the State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (Regional Water Boards) administer the CWA and serve as the agencies with the primary responsibility for implementing CWA requirements, including developing and implementing programs to ensure attainment of water quality standards. Water quality standards include designated beneficial uses of water bodies, criteria or water quality objectives (numeric or narrative limits) established to protect those beneficial uses, and policies to prevent or limit the degradation of water bodies.

Section 305(b) of the CWA requires each state to report biennially to the United States Environmental Protection Agency (USEPA) on the condition of its surface waters. CWA Section 303(d) requires each State to develop, update, and submit to the USEPA a list of polluted surface waters or water quality limited surface water body segments (distinct portions of rivers, streams, or lakes) that are “impaired or threatened” – meaning they contain pollutants at levels that exceed protective water quality criteria and standards. The list is commonly referred to as the 303(d) list. Impaired water bodies or segments on the 303(d) list must be addressed through the development of Total Maximum Daily Loads (TMDLs), through alternative regulatory programs (e.g., waivers or National Pollutant Discharge Elimination System Permits), or through revisions in water quality standards.

The requirement to develop TMDLs applies to “pollutants” as defined in the CWA. Pollutants include chemicals, sediment, and temperature. TMDLs are not required for impairment due to “pollution.” Pollution includes factors such as flow alteration, hydromodification, and alterations in aquatic habitat that are not related to specific pollutants.

Under the 2004 Water Quality Policy for Developing California’s Clean Water Act Section 303(d) list (“Listing Policy”), the nine Regional Water Boards assess information and data, conduct public participation processes and adopt recommendations to the State Water Board for inclusion of specific water body-pollutant combinations (“listings”) in a statewide Section 303(d) list. Following additional participation, the State Water Board submits a statewide list to the USEPA. The USEPA may approve or disapprove specific listings, and may add water body-pollutant combinations to the list. The most recent USEPA–approved Section 303(d) list for California is for the 2010 assessment cycle and is available at the State Water Board’s website at [2010 Integrated Report \(Clean Water Act Section 303\(d\) List / 305\(b\) Report\) - Statewide](#).

In coordination with the Section 303(d) assessment, the State Water Board has historically prepared a statewide Section 305(b) Report with information on the total miles of streams, acres of lakes, and areas of other surface water bodies that support or do not support beneficial uses. In the past, the Section 303(d) list has been updated every two years, but the USEPA and the State Water Board have developed a new strategy moving forward to provide for a more efficient Integrated Report process. The strategy involves dividing California into thirds by Regional Water Boards and submitting an Integrated Report for three Regional Water Boards per listing cycle. For the 2012 listing cycle, the Integrated Report will consist only of data submitted for Regional Water Boards 1, 6, and 7 followed by the immediate solicitation for the 2014 listing cycle, which will rely on the continuous submittal capabilities of the California Environmental Data Exchange Network (CEDEN). Though Region 6 would not be included in the Integrated Report process for another six years in 2020, the new process allows for Regional Water Boards in the “off-cycle” to evaluate high-priority data and make decisions related directly to listings and de-listings, which could be submitted for inclusion into the current listing cycle. The Section 303(d)/305(b) assessment process is not a regulatory action, and

does not require environmental analysis under the California Environmental Quality Act (CEQA) because the Water Board is not taking a discretionary action that may affect the environment. Project-specific CEQA documents will be prepared as appropriate for TMDLs and other regulatory actions used to address water body-pollutant combinations on the Section 303(d) list.

This staff report summarizes Water Board staff's recommendations and provides background on the assessment process. The appendices to this report included more detailed "fact sheets" with recommendations for specific water body-pollutant combinations. Fact Sheets are used in the creation of and are included in the Integrated Report.

DATA AND INFORMATION USED FOR THE ASSESSMENT

Solicited information and data. The Integrated Report process begins with a formal "Notice of Public Solicitation of Water Quality Data and Information for the California Integrated Report (Notice of Public Solicitation)" sent to interested parties subscribed to the Region 6 [TMDLs – 303\(d\) List \(Impaired Waters\) e-mail subscription list](#). A copy of the 2012 data solicitation letter can be found here: [2012 Notice of Public Solicitation of Water Quality Data and Information](#). The State Board sent the Notice of Public Solicitation for the 2012 Integrated Report on January 19, 2010 and specified June 30, 2010 as the data submission deadline. The deadline was extended from June 30 to August 30, 2010. Information gathered was used for assessing overall surface water quality conditions and identifying impaired waters (waters not meeting water quality standards), for the development of the 2012 California Integrated Report. State Water Board received over 100 data submissions. Each data submission includes multiple data sets for one or more pollutants. Data sources included government agencies, municipalities, environmental groups, citizen groups, and receiving water data from the National Pollutant Discharge Elimination System (NPDES) dischargers.

Electronic copies of the submitted data are included in the electronic administrative record of the assessment process. The stakeholder data and data collected through the State Water Board's Surface Water Ambient Monitoring Program (SWAMP) include:

Stakeholder data:

- Data for turbidity in Truckee River collected July 2008-August 2010, submitted by the California Department of Water Resources (2010).
- Data from discharger self-monitoring reports for the Heavenly Mountain Resort ski area at Lake Tahoe collected October 2007–September 2009, submitted by Heavenly Valley Ski Resort (2010).
- Data for temperature in Rush Creek (below Grant Lake) and Lee Vining Creek collected Oct. 1999-October 2008, submitted by Los Angeles Department of Water and Power (2009).
- Data for temperature, nutrients, and bacteria in Heavenly Valley Creek (USFS boundary to Trout Creek) and various water bodies in Alpine County collected July 1980-June 2010, submitted by South Tahoe Public Utility District (2010).

SWAMP. In addition to various stakeholder data submissions, data collected through the State Board's Surface Water Ambient Monitoring Program (SWAMP) were also considered during the 2012 listing cycle. SWAMP conducts carefully designed, externally reviewed, monitoring programs conducted at both the statewide and regional levels that support water resource management in California. SWAMP produces high-quality information that State and Regional Water Board staff use to evaluate the condition of all surface waters throughout California.

SWAMP data:

- SWAMP. RWB6 Donner Lake Fish Bioaccumulation Status.
- SWAMP. RWB6 Trend Monitoring for 2006 and 2007.
- SWAMP. Statewide Lakes Sportfish Contamination Study 2007 2008. Contaminant concentrations measured in fish tissue throughout waters of the state.
- SWAMP. Statewide Perennial Streams Assessment 2008.
- SWAMP. Statewide Reference Condition Management Plan 2008.
- SWAMP. Stream Pollution Trends Study 2008. Sediment toxicity and sediment contaminant concentrations measured in selected large rivers throughout California.
- SWAMP. Statewide Project Urban Pyrethroid Status Monitoring.

The individual fact sheets for each assessed water body-pollutant combination contain specific references to the data upon which each proposed 303(d) listing decision is based. The electronic versions of these fact sheets also contain Internet links to the files and documents containing the actual data and information used.

Data for future listing cycles will be required to be submitted through CEDEN (California Environmental Data Exchange Network) except in the few instances that CEDEN cannot accept the data type (i.e. flow data, qualitative data, narrative data). This is to ensure adequate quality assurance measures are taken and provided with the data.

WATER QUALITY STANDARDS AND CRITERIA USED FOR ASSESSMENT

Water Board staff assessed data using regulatory limits, when available. Regulatory limits used include water quality objectives (numeric and narrative) in the [Water Quality Control Plan for the Lahontan Region](#) (Basin Plan), and standards for toxic chemical promulgated by the USEPA under the California Toxics Rule (40 CFR 131.27). Water Board staff also used the USEPA's National Recommended Water Quality Criteria, and California water quality criteria developed by the Department of Public Health and the Office of Environmental Health Hazard Assessment (OEHHA). California drinking water standards (Maximum Contaminant Levels or MCLs) apply as regulatory limits to most ambient, untreated surface and ground waters under the narrative water quality objectives for "Chemical Constituents" and "Radioactivity" in the Basin Plan.

Most of the Lahontan Region is undeveloped public land where natural water quality is not expected to be significantly affected by human activities. Very good water quality occurs in many of the high elevation lakes and streams of the eastern Sierra Nevada. Most of the narrative and numeric water quality objectives in the Basin Plan are based on protection of natural background quality, rather than on state or federal criteria for protection of specific beneficial uses. The Basin Plan contains hundreds of numeric site-specific objectives (SSOs) for individual water bodies, for constituents such as Total Dissolved Solids (TDS), chloride, nitrogen, phosphorus, and sulfate. According to the "Tributary Rule", numeric water quality objectives for specific surface water bodies apply upstream to tributaries that do not have SSOs. In many cases the Lahontan Region's SSOs are much more stringent than the state or federal criteria for the same constituents established in connection with specific beneficial uses. Exceedances of antidegradation-based SSOs do not necessarily indicate that beneficial uses are impaired as water quality levels may be of higher quality than that needed to provide for the beneficial use.

Most of the current SSOs were developed using monitoring data available in the early 1970s. In some cases, individual SSOs are based on very limited data, and they probably do not reflect the full range of seasonal, annual, and inter annual variability in constituent concentrations. Due to this limitation, some Section 303(d) listings for exceedances of SSOs may be addressed

through update of the SSOs (using more recent data to define reference conditions), rather than through TMDLs or other regulatory programs.

DEVELOPMENT OF THE PROPOSED SECTION 303(D) LIST CHANGES

Listing Policy. The State Water Board's 2004 Listing Policy, which provides a standardized approach for developing California's section 303(d) list, can be viewed and downloaded here: [State Water Board's Listing Policy](#). The policy was developed through a stakeholder process and reflects political compromises in addition to statistical and scientific considerations.

The Listing Policy establishes requirements for data quality, data quantity, and administration of the listing process. The Policy provides standard rules for making listing or delisting decisions based on different kinds of data and a standard statistical test identifying impairments in water. The Listing Policy mandates listing for toxicants if water quality standards or criteria are exceeded more than three percent of the time, and mandates listing for "conventional" or other pollutants if standards or criteria are exceeded more than ten percent of the time. The Policy includes tables based on a "binomial model" that summarize the numbers of allowable exceedances associated with specific ranges of sample numbers. The number of exceedances required for listings is calculated using hypothesis testing based on binomial statistics. The minimum sample numbers required for listing are smaller than those statistically required by the model. As few as two samples with two exceedances are needed to list for toxicants (defined to include nutrients), and five samples with five exceedances are needed to list for "conventional" pollutants. The Listing Policy is structured so it is more difficult to delist a water body-pollutant combination than to list it; more samples and fewer exceedances are required to delist.

The Listing Policy includes other "listing factors" that may be used in certain situations where specific conditions apply. For example, data related to an antidegradation-based standard may be assessed by evaluating baseline-trend conditions. Water Board staff used the baseline-trend provisions to evaluate compliance with antidegradation-based water quality objectives such as those for temperature, pH, and suspended sediment. The Listing Policy also allows the Water Boards to make "weight of evidence" arguments for or against listing and delisting.

For water quality standards that are expressed as annual means (or some other measurement of central tendency) the Listing Policy requires that data be transformed before being assessed. Thus annual mean "data points" are treated as if they were single samples when evaluating numbers of exceedances in relation to numbers of samples. Most of the SSOs in the Basin Plan are expressed as annual means.

The Listing Policy allows data to be rejected in assessment decisions if acceptable quality assurance/quality control (QA/QC) procedures were not followed or if the data are not spatially or temporally representative of the water body. Some the datasets assessed for the 2012 had inadequate documentation of QA/QC, and some of the datasets were not temporally representative.

The Regional Water Boards first took action on Section 303(d) list recommendation in the 1990 assessment cycle. Some of the Lahontan Region's current listings date from that time. Assessment criteria have changed over time, and some of the older listings would not be required under the current Listing Policy. Delisting is allowed in these circumstances.

The Listing Policy requires the data assessed and staff recommendations for specific water body-pollutant combinations to be documented in water body "fact sheets." Fact sheets consist of "lines of evidence" (LOEs) summarizing the applicable standards and the data for a water

body of segment in relation to a specific beneficial use, and “decisions,” including staff recommendations regarding listing and beneficial use support.

CalWQA Database. In 2007, the web-based interface known as California Water Quality Assessment (CalWQA) database was developed to support the creation of the California Integrated Report (CWA Section 303(d) List / 305(b) Report). The State Water Board manages CalWQA which stores detailed water quality assessment information to evaluate California water bodies. State and Regional Water Board staff uses the CalWQA database to store LOEs and make decisions on pollutants found in water bodies within their respective regions. The database is designed so information can be exported to the USEPA’s Assessment Database at the end of each assessment cycle and the information can be stored for future assessment cycles.

REGION-SPECIFIC ASSESSMENT ISSUES

Sampling frequency and environmental variability. Most of the data assessed for the 2010 Integrated Report cycle is from the SWAMP. The 2006-2010 SWAMP samples were limited to quarterly collection and analysis due to funding restraints. The data is collected to illustrate long-term trends and changes in water quality but quarterly sampling is not comprehensive enough to accurately determine impairments in water quality. In some cases, such as dry streams due to drought in the upper Mojave River watershed, fewer than four SWAMP samples per year per station were collected. Because most of the Lahontan Region’s SSOs are expressed as annual means, the low sampling frequency resulted in averages based on only one to four samples per year.

Annual averages based on samples collected at quarterly or less frequent intervals do not adequately reflect the range of diel, seasonal and annual variations in pollutant concentrations and the environmental conditions (including streamflows) that typically affect pollutant concentrations.

In addition to year to year variations between wet and dry years, and normal seasonal temperature extremes, surface waters of the Lahontan Region are affected by extreme climatic and hydrological conditions that can change over short time periods. Water chemistry can be affected by rapid spring snowmelt, flooding from rain on snow events, severe summer thunderstorms, desert flash floods, and atmospheric deposition of smoke from wildfires. Seasonal changes in land use, such as the timing of diversions for pasture irrigation, the dates when summer livestock grazing begins and ends, and the timing of surges in recreational use (e.g., hiking, mountain biking, informal camping, user created trails) can have significant effects on pollutant concentrations.

Diel variations in flows during the snowmelt season can cause corresponding variation in constituent concentrations. The timing of peak snowmelt varies from year to year depending on factors such as air temperature, snowpack depth, precipitation (e.g., rain-on-snow storms.)

To meet monitoring objectives, according to USEPA:

“States should ensure that the selected monitoring design yields scientifically valid results and meets the needs of the decision maker. The monitoring design should incorporate appropriate methods to control decision errors and balance the possibility of making incorrect decisions. The levels of precision and confidence should be appropriate to the monitoring objective and the type of data collected.”

(cited from the [Recommended Elements of a State Monitoring Program](#)).

Because our region has such wide fluctuations, more than two to four samples per year are necessary to characterize ambient conditions and provide staff with confidence in determining impairment.

Natural Sources of Pollutants. The geology and climate of the Lahontan Region leads to local high concentrations of “pollutants” that come entirely from natural sources. These include arsenic, fluoride, boron, and mercury from geothermal and volcanic sources, and radioactive elements and elemental phosphorus from the Sierra Nevada granitic soils. Due to evaporative concentration, salts and trace elements such as arsenic can accumulate to very high concentrations over geologic time in internally drained saline lakes and groundwater basins. Because of the undeveloped nature of most of the Lahontan region and the consequent lack of industrial or agricultural sources of metals and trace elements, it is relatively easy to conclude that exceedances

of standards in geothermally influenced and inland saline waters are entirely due to natural sources.

In 1989, the Water Board adopted Basin Plan amendments designating most waters of the Lahontan Region, including waters with poor quality due to natural sources, for the Municipal and Domestic Supply (MUN) beneficial use. The Water Board’s rationale was that, because of the scarcity of water in much of the Region, even poor quality water might be in demand for treatment and domestic use in the future. Since the Basin Plan applies drinking water standards (MCLs) to untreated ambient waters that are designated for the MUN use, the unforeseen result of the designation was the potential for Section 303(d) listing of “naturally impaired” waters.

In past assessment cycles, Water Board staff justified delisting or not listing waters with standards exceedances entirely due to natural sources of pollutants. The 2004 Listing Policy is silent on natural sources.

PROPOSED CHANGES TO THE SECTION 303(d) LIST

Appendices A through B show the proposed changes the Section 303(d) list for the 2012 assessment cycle. The rationales for Section 303(d) listing and delisting decisions are documented in “fact sheets” in Appendix I. Appendices A, B, and C group water bodies by watershed from north to south in the Lahontan Region; appendices D through I, produced by the CalWQA database, list water bodies alphabetically by name.

Proposed new listings to the current 303(d) list includes new water body segment-pollutant combinations where a TMDL is needed, or are otherwise being addressed by a USEPA approved TMDL or pollution control requirements other than a TMDL. Proposed new listings include:

- List on 303(d) list (TMDL required list): 21
- List on 303(d) list (being addressed by a USEPA approved TMDL): 4
- List on 303(d) list (being addressed by an action other than a TMDL): 2

Proposed new delistings can be found in Appendix B and include 2 water body-pollutant combinations.

Proposed Category Changes to current 303(d) list. A number of water bodies- pollutant combinations considered this listing cycle were changed from requiring a TMDL (Category 5) to

being addressed by a USEPA approved TMDL. For additional information, refer to the water body-pollutant “fact sheets” in Appendix I.

New listings are not recommended for 10 water body-pollutant combinations where standards were exceeded according to the statistical provisions of the Listing Policy’s binomial model, but where the data are not temporally representative. Additional reasons for not listing apply in some cases. These water body-pollutant combinations and justification for not listing as impaired are shown in Appendix C.

WATER BODIES OF SPECIAL INTEREST EVALUATED THIS LISTING CYCLE

Truckee River TMDL. This TMDL requires reductions in sediment loading to the Truckee River and specifically sets the following targets to achieve the TMDL: 1) water column target is an annual 90th percentile value of less than or equal to 25 milligrams per liter (mg/L) suspended sediment, as measured at Farad (USGS gauge 10346000); 2) implementation targets to restore legacy disturbed sites, apply road deicing and traction materials using BMPs and recover it to the maximum extent practicable, implement BMPs at ski areas to control erosion and sedimentation into streams, and decommission or improve dirt roads. Several responsible parties have implemented projects and sediment reducing activities over the past several years, but a comprehensive assessment and evaluation of the implemented actions has not been completed relative to the TMDL targets. Though the total suspended sediment data shows the Truckee River meets the TMDL sediment target since 2004, consistent exceedances of the turbidity water quality objective for the past several years raises concern about effectiveness of the implemented actions and the other TMDL targets. Because total suspended sediment is closely related to turbidity, the fact that the total suspended sediment target is met while the turbidity objective is not met must be further investigated. Either additional implementation measures are needed to reduce loads or the current sediment and turbidity water quality objectives may not accurately account for natural conditions. Therefore, Lahontan Water Board staff determined that the Truckee River is not ripe for delisting for sedimentation/siltation at this time.

TMDL SCHEDULING

The Listing Policy requires that dates for completion of TMDLs are identified for all listed water body-pollutant combinations, and includes a list of criteria for determining dates.

For water bodies that still need TMDLs, the proposed TMDL completion dates shown in the fact sheets are the years that TMDLs are expected to be brought before the Water Board (TMDLs are often, but not always, adopted as Basin Plan amendments). The USEPA expects TMDLs to be completed no later than 13 years after the list update cycle when the water body-pollutant combination was first listed. The TMDLs for listing on the current 2008 303(d) list are projected to be completed no later than 2021. TMDLs for proposed new listings in the Lahontan Region are projected to be completed no later than 2025.

Short term priorities for Regional Water Board work on TMDLs are set one-year at a time with annual workplans for the TMDL program. Priorities and estimated completion dates can change from year to year based on factors such as budget limitations and the need for additional monitoring to confirm impairment and/or provide data for use in TMDL development.

Most of the existing and new listings for the Lahontan Region are likely to be addressed in ways other than TMDLs. Some of the older listings were based on limited information and data, and additional monitoring may justify delisting. Other listings are likely to be addressed through changes in water quality standards or recognition that the listings are being addressed through alternative regulatory programs.

DETERMINATION OF BENEFICIAL USE SUPPORT AND INTEGRATED REPORT WATER BODY CATEGORIES

The 2012 assessment under CWA Section 305(b) of whether beneficial uses are being supported focuses primarily on a group of “core” beneficial uses related to human health, aquatic habitat, and recreation, although other beneficial uses may be assessed. For each LOE in the CalWQA database, Regional Water Board staff must enter a beneficial use rating of “Fully Supporting,” “Not Supporting,” or “Insufficient Information.”

The database uses the beneficial use support ratings together with recommendations regarding listing to place each water body-pollutant combination into one of five Integrated Report categories. Brief descriptions of the categories are as follows:

- Category 1: Evidence shows that all core beneficial uses are supported in relation to the specific pollutants assessed.
- Category 2: Evidence shows that at least some core beneficial uses are supported in relation to the specific pollutants assessed. Other core uses either were not assessed, or the available data were rated insufficient for assessment of beneficial use support.
- Category 3: Evidence is insufficient to support determinations in relation to the specific pollutants assessed.
- Category 4A: Evidence shows at least one use is not supported but a TMDL has been developed and approved by the USEPA (This category applies only to waters with all of their listings addressed by USEPA-approved TMDLs).
- Category 4B: Evidence shows at least one use is not supported but a TMDL is not needed because an existing regulatory program is reasonably expected to result in the attainment of the water quality standard within a reasonable, specified time frame (The category applies only to waters with all of their listings addressed by alternative regulatory programs).
- Category 4C: Evidence shows at least one use is not supported but a TMDL is not needed because the impairment is not caused by a “pollutant” as defined by CWA.
- Category 5: Evidence shows at least one use is not supported (and a TMDL is needed).

Categories 4A, 4B, and 5 comprise the Section 303(d) list. For listings in categories 4B and 5C, the fact sheets include projected attainment dates for water quality standards.

The USEPA’s category system equates exceedances of water quality standards or criteria with non-support of beneficial uses. In the Lahontan region, the data assessed are too limited to support conclusions that uses are “fully supported.” For example, most of the assessed waters have no biological data available to evaluate support of aquatic habitat uses. Staff used the “Insufficient Information” use rating for most LOEs, and most water bodies are recommended for Category 3. The water body-pollutant combinations in Category 2 are mostly the result of “Fully Supporting” use ratings assigned by State Water Board staff for water body-pollutant combinations that were delisted during the 2006 assessment cycle.

Appendices D through H are reports produced by the CalWQA database that summarize all the recommended beneficial use category classifications. There are no water bodies recommended for Category 1 or Category 4C.