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CENTENNIAL RANCHES 652 W. Cromwell, Suite 103 Fresno, CA 93711 **Respond to:** **William J. Thomas** **500 Capitol Mall, Suite 1700** **Sacramento CA 95814** **(916) 325-4000** October 5, 2012 Don Jardine, Board Chair Peter Pumphrey, Vice Chair Jack Clarke, Board Member Keith Dyas, Board Member Amy Horne, Ph.D., Board Member Eric Sandel, Board Member Patricia Kouyoumdjian, Executive Officer Bruce Warden, Ph.D California Regional Water Quality Control Board Lahontan Region 2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150 **RE: COMMENTS RE BASIN PLAN AMENDMENTS – TRIENNIAL REVIEW** **FECAL COLIFORM PATHOGEN OBJECTIVE** Dear Board Chair, Board Members, Ms. Kouyoumdjian, and Dr. Warden: **INTRODUCTION** John and Mark Lacey, David Wood, Marcus Bunn and I submit the following comments as to the Triennial Review issues on behalf of Centennial Ranches. **I. PRIORITIZE THE BACTERIA OBJECTIVE REVIEW** We strongly support the Regional Board prioritizing the Basin Plan bacteria objective for review, modification and clarification in the triennial review process. The reasons for such prioritization are numerous. 1. This issue was among the issues identified during the last triennial review, but it was not acted upon, notwithstanding that this has been continually sought by the region's ranchers since 2004. Throughout this time period the ranchers in the Bridgeport Valley have been totally engaged in water quality mitigation, and making extensive management commitments which have improved water quality. 82226.00001\7579442.1	**CentennialOct5-1:** The Lahontan Water Board has been dedicated to gathering and evaluating data/information for reviewing the bacteria standard. In this past Triennial Review cycle, the Lahontan Water Board executed a contract with UC Davis for $60K to evaluate fecal coliform and *E. coli*, initiated internal bacteria monitoring in the region, is currently soliciting willing ranchers to participate in a grant funded grazing management practices implementation project, and has contracted for additional lab analysis of bacteria at the Sierra Nevada Aquatic Research Laboratory through UC Santa Barbara. Please also refer to Table 3, Water Quality Bacteria Objectives tasks (2012 Triennial Review Staff Report, Attachment A)

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a. Land operators have implemented many best management practices during this period in complete cooperation with the Regional Board staff and the University of California. b. As a result of these best management practices, water monitoring results have evidenced significantly improved water quality. It is further notable that: 1) The water coming into irrigated lands in the Bridgeport Valley often exceeds the existing basin plan standard of 20 col FC/100 mL, and at times even exceeds the interim 200 col FC/100mL level; 2) The periods of water quality exceedances have consequently narrowed during the waiver period to a couple of mid-summer months and now only involve a couple of the Valley's watercourse segments; and, 3) Best practical control practices (including rotational grazing, armor crossings, fence off riparian pastures, cattle management, vegetative buffer zones, control of irrigation runoff) have all been employed by our ranch and have contributed to these water quality improvements; however, additional management practices or technologies will have to yet be developed by our ranch and the other Bridgeport landowners working with the University to achieve consistent compliance with a reasonable water quality objective. (Exhibit A) 2. This Basin Plan bacteria objective was never intended for application to agricultural water when promulgated. It was never reviewed for application to agricultural pastures (discussed further below). 3. When the last agricultural waiver for the Bridgeport Valley was adopted in 2007 the ranchers were promised that this standard would be reviewed and amended, but that was never accomplished. The Board itself stated in the previous waiver: Finding 4: "Fecal Coliform Water Quality Objective. The Water Board has set the Region-wide water quality objective for fecal coliform at 20 colonies per 100 ml, ten times more stringent than the Federal standard at 200 colonies per 100 ml and any other Region in California, recognizing that waters in the Lahontan Region are generally pristine, and recreation is the major use of these waters. USEPA finds the Federal standard to be protective of water contact recreational beneficial uses. However, during the Grazing workshop and Triennial review of the October 11, 2006 Water Board meeting, the Water Board heard public comments regarding revising the fecal coliform standard to be consistent with Federal standards for areas, such as Bridgeport Valley, where beneficial uses have historically been predominantly agricultural. If, during the time of this Waiver, the Water Board has sufficient information to propose a Basin Plan Amendment for fecal coliform, Waiver conditions, milestones, and timelines may be revised accordingly." 82226.00001\7579442.1	**CentennialOct5-2**: The data indicates that the 30-day log-mean fecal coliform concentration in waters entering Bridgeport Valley generally meets the standards, except when livestock are allowed unrestricted access to water in the upstream areas. Please refer to the bacteria monitoring data in Nilson, C., and others, 2012. Bacteria Monitoring in the Eastern Sierra Nevada, Summary of Results for 2011—Staff Report. Lahontan Regional Water Quality Control Board, South Lake Tahoe, CA. March 27, 2012. 34 pp.) **CentennialOct5-3**: Water quality exceedances for fecal coliform are generally when livestock are present, during the spring through the fall grazing period. According to the memorandum on February 9, 2012 sent by Centennial Ranches to Dr. Bruce Warden, exceedances of both 20 cfu/100m and 200 cfu/100mL have and do occur. **CentennialOct5-4**: The Basin Plan objective is applicable to all waters of the state in Region 6. Water quality objectives are set for beneficial uses of the waters, and do not vary based on the type of contamination at issue. **CentennialOct5-5**: The 2012 Triennial Review Staff Report (see Attachment A) recommends that Water Board staff continue to work on the water quality bacteria objectives as one of its highest basin planning priorities over the next three years. The Triennial Review Staff Report does not include a recommendation for choosing one of the three options previously listed in a scoping report. Rather, the 2012 Triennial Review Staff Report describes specific tasks that need completion as part of continuing focus on the water quality bacteria objectives project. State Water Board Resolution No. 68-16 requires that before changes to standards that maintain high quality water can be done, it must be "demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies." Changes to numeric water quality objectives must be scientifically defensible and be consistent with Resolution 68-16. Please refer to Table 3, Water Quality Bacteria Objectives tasks.

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4. This Board scheduled and held a workshop on this very issue (September 12) and throughout that discussion Board members acknowledged this objective is a recognized problem and indicated further that the existing 20 col FC/100mL objective would not be enforced against agriculture, and additionally expressed that this objective would be reviewed and amended. For these and other reasons, we feel this objective should be a prioritized item for amendment during the present triennial basin plan review. We come to that position being fully cognizant that basin plan amendments involve the commitment of scarce resources. **II. RESPONDING TO THE BOARD'S NOTICE OF POSSIBLE TRIENNIAL REVIEW ISSUES** 1. Competing Issues. We recognize that there are several issues appropriate for triennial review and there is competition for personnel and resources. Some of these issues are ongoing projects with committed resources leaving only a few available personnel year resources for new projects. However, as we look across the other possible issues under review, none seem to be as compelling as fixing the region's problem with clarifying the pathogen objective. The pathogen/bacterial objective is more than ripe for immediate review and modification. It has been a holdover item from the past triennial review, where it was not addressed. The Board has stated it would revise this objective and has heard considerable testimony as to the need for and appropriateness of a timely amendment. Further, there is a full supportive database to do so. 2. The Existing Objective is Not Applicable to These Waters. The existing waiver, with its generally applicable 20 col FC/100 mL objective, is an extreme bacteria objective, totally inappropriate for agricultural waters. No other water in the state or nation is regulated to the 20 col FC/100 mL objective. We compared this Region's pathogen objective to those other Regional Boards basin plan objectives, virtually all of which have the base objective of 200 col. FC/100 mL for municipal and contact recreation, and, in fact, most have non-contact recreation objective at 2000 col. The Bridgeport Valley waters do not have either municipal (MUN) or contact recreation (REC 1) beneficial uses. 3. Extensive Supportive Data Has Been Collected. The SWRCB SWAMP program, University of California and the Regional Board have all engaged extensive monitoring over the last six years. The USGS has also collected data in the Bridgeport area. Moreover, the Bridgeport Ranchers in coordination with the University of California and the Regional Board have collected six years of water monitoring data throughout the Bridgeport Valley area. This constitutes an enormous data base and certainly enough on which to base an adjustment in the Basin Plan clarifying that the originally adopted 20 col FC/100 mL objective should only be applicable to Lake Tahoe and pristine waters of the region which it was designed to protect and set a 200 col/100 mL (the same as virtually all other regional waters in the state) in the agricultural areas of the Lahontan Region. 82226.00001\7579442.1	**CentennialOct5-6**: The 2012 Grazing Waiver includes a time table for compliance and requires that the enrollees covered under the waiver develop a schedule to implement rangeland water quality best management practices that reduces and/or maintains fecal coliform concentrations to an interim goal of 200 cfu/100mL and attains the highest water quality reasonably achievable. The 2012 Grazing Waiver does not include 20 cfu/100mL as a compliance standard. Staff is committed to evaluating the current bacteria objective as is demonstrated in the proposed tasks for this upcoming Triennial Review cycle (Attachment A/Table 3). **CentennialOct5-7:** same as Response CentennialOct5-1. **CentennialOct5-8:** The state of California recognizes distinct geographic differences exist across the state so it developed nine, geographically-based, regional boards. Each regional board is responsible for developing standards to protect the region's beneficial uses. For example, the North Coast Region has a bacteria WQO of 50 cfu/100mL which is different than other Regions. The 1975 Water Quality Control Plan (Basin Plan) for the North Lahontan Basin applied the 20 cfu/100mL standard to ten water bodies, including the East Walker River which is in the Bridgeport Valley. The existing 20 cfu/100mL standard has a risk to human health of less than one person in 1000 to become ill who contact waters containing fecal contamination. The 20 cfu/100mL standard was extended to the rest of the Region in the 1995 Basin Plan update. REC-1 is a beneficial use for the Bridgeport Valley waterbodies. **CentennialOct5-9**: The 2012 Triennial Review Staff Report (see Attachment A) recommends that Water Board staff continue to work on the water quality bacteria objectives as one of its highest basin planning priorities over the next three years. The Staff Report does not include a recommendation for choosing one of the three options previously listed in a scoping report. Rather, the 2012 Triennial Review Staff Report describes specific tasks that need completion as part of continuing focus on the water quality bacteria objectives project. Changing an existing water quality objective must be scientifically defensible and must comply with State Water Board Resolution No. 68-16.

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It is totally unreasonable that MUN waters in Sacramento, San Francisco and Los Angeles have a 200 col pathogen objective, and the cattle meadows of Bridgeport, or elsewhere for that matter (i.e., Mammoth, Owens Valley, Willow Creek Valley), would be held to 20 col FC/100mL.	**CentennialOct5-10**: The state of California recognizes distinct geographic differences exist across the state so it developed nine, geographically-based, regional boards. Each regional board is responsible for developing standards to protect the region's beneficial uses. In recognition of such differences among the state, the informational document *Public Scoping Meeting for Proposed Revision to the Bacterial Standards for Water Contact Recreation in Fresh Waters in California* circulated in September 2008 by the State Board states, "The proposed policy may be applied statewide or may exclude waters under the jurisdiction of the Los Angeles Water Board and the Lahontan Water Board."
4. History of the Existing Fecal Objective. We had officially served a Public Record Act request on the Regional Board for all records and documents relating to the development of the present basin plan objective. The earlier records confirm that the early focus was principally limited to the waters surrounding Lake Tahoe and in the Lake waters themselves. It is very instructive that the water data from 1966-1971 indicated fecal standards in Lake Tahoe itself of 32, 64, 240 and 700 fecal colonies depending on lakeshore development and distance from shore. The early Basin was bifurcated and referred to as the North and the South Lahontan Regions. The Lahontan Board for the North Lahontan Region in 1973 set forth an REC 1 objective of 200 FC/100 mL for most Regional waters, including the East Walker and Lake Tahoe, and the non-contact REC 2 standard was set at 2000 FC/100mL. In December 1974, the Lahontan South Basin also referenced the U.S. Department of Interior federal standard of 1000 FC/100mL. In 1975 the State Board stated: "State Board has indicated the desire to achieve uniform wording and presentation of water quality objectives in the basin plans." At that time, the State Board set 200 col FC/100mL as the REC 1 standard, but also stated: "As a minimum requirement, fecal coliform limits should be established for all waters using the language provided. Alternative, more stringent limits for individual waters or groups of waters may be included if substantiated by local epidemiological experience or evidence of existing water quality." In 1976, the US EPA recommended revising the North Lahontan areas near Lake Tahoe to be the then present Lake Tahoe water quality, whatever that actually was. The Region's response was that the Lake may be near zero in the middle, but is far higher at shore, so the Regional staff merely arbitrarily settled on a single 20 FC/100mL value for the Lake. In 1983, the North Lahontan Region set this 20 FC/100 mL standard for the Truckee River to protect from "human wastes". In 1994, the North and South Lahontan Regions were combined and the 20 FC/100mL objective was thereby simply retained in the basin plan as applicable throughout the Region and simply add the words "and livestock" (without any analysis) so that thereafter it read to deal with "human and livestock waste." Notwithstanding the State Board's directive for uniformity, the Lahontan Region, which had been nearly exclusively focused on Lake Tahoe, (a) collapsed the North and South Regions together, (b) came up with an arbitrary Lake Tahoe standard of 20 col FC, notwithstanding that much of the Lake itself exceeded that level even then, (c) expanded its scope to also deal with livestock waste (no mention of wildlife contribution) and (d) imposed the 20 col FC/100 mL objective throughout the Region. It did so without any supportive epidemiological experience or 82226.00001\7579442.1	**CentennialOct5-11**: The 1975 Water Quality Control Plan (Basin Plan) for the North Lahontan Basin applied the 20 cfu/100mL standard to ten water bodies, including the East Walker River which is in the Bridgeport Valley. The existing 20 cfu/100mL standard is associated with a risk to human health of less than one person in 1000 to becoming ill when they come into contact with waters containing fecal contamination. The 20 cfu/100mL standard was extended to the rest of the Region in the 1995 Basin Plan update. Based on concerns about the compatibility of the 20 cfu/100mL standard with areas with historic agricultural uses, such as the Bridgeport Valley, Water Board staff began conducting studies in the past couple years on both fecal coliform and E. coli, covering a wide range of land use types in the region, including agriculture. State Water Board Resolution No. 68-16 requires that before changes to standards that maintain high quality water are done, it must be "demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies." Changes to numeric water quality objectives must be scientifically defensible and be consistent with Resolution 68-16.

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water data or any consideration of the agricultural areas of the Region, as the State Board had expressly directed that they do since their order in 1975. This Board had no data to support that this objective would ever be applied to agricultural water. Moreover, it is important to recognize that we are not proposing to amend the objective for Lake Tahoe or other pristine waters. Therefore, we are "not reducing" a present applicable health standard, and furthermore, there is no MUN or REC1 use of the Bridgeport Valley waters. We are merely pointing out to the Board that this 20 col objective was set with no supportive data, is improper, and must be immediately amended as to the agricultural waters so as to harmonize this region with other regions of the state. 5. Best Management Practices. Best management practices will continue to be developed and implemented by Bridgeport ranchers, notwithstanding any amendment to the Basin Plan. In fact, best practical control practices (i.e., crossings, fence off riparian pastures, cattle management, vegetative buffer zones, control irrigation runoff, etc.) have been employed and have directly contributed to water quality improvements; however, additional practices or technologies will have to yet be developed by the landowners working with the University to achieve consistent compliance with a reasonable water quality objective. Centennial has installed nearly 15 miles of riparian protective fences and have fenced off a vegetative filter along the entire three to four mile south side of US 395. We have also installed many miles of temporary fencing for water protection and to allow for improved cattle management. We have also gone to more intense short-term grazing in key areas all governed by consideration of water quality. These capital, operational and management costs have exceeded several hundred thousand dollars of commitment by Centennial Ranches to water quality. 6. Impact of Continuing Inaction. Should the Board fail to take action to amend the existing bacteria objective and proceed to apply the existing basin plan pathogen objective, the Bridgeport ranchers cannot possibly comply with the 20 col FC objective. Doing so will give rise to Notices of Violation and Cease and Desist orders, which will prevent the valley's continued commercial cattle operations, which in turn will give rise to abandoning the spreading of irrigation water in the valley or continuing to retain irrigation waters in Twin Lakes. This would be devastating to the county, the ranch community, Bridgeport residents and those at Twin Lakes, Bridgeport businesses, recreationists, campers, boaters and fishermen. **III. REVIEW OF THE THREE OPTIONS FOR REFORM OF THE BACTERIA OBJECTIVE** The staff report advances three options by which the Board, through the triennial review, may remedy the problem with the bacteria objective. The bacteria objective options vary widely in the effective date and the commitment of resources. 82226.00001\7579442.1	**CentennialOct5-12**: Funds are currently available through the Rivers and Ranches Proposition 84 grant to assist ranchers in implementing grazing management practices on their properties by offering financial and technical assistance. **CentennialOct5-13** The 2012 Grazing Waiver includes a time table for compliance and requires that the enrollees covered under the waiver develop a schedule to implement rangeland water quality best management practices that reduces and/or maintains fecal coliform concentrations to an interim goal of 200 cfu/100mL and attains the highest water quality reasonably achievable. The 2012 Grazing Waiver does not include 20 cfu/100mL as a compliance standard.

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These options vary by resource needs and time to complete the effort, and both of these are critical as the Board has limited resources presently available for new basin plan amendments. Further, this issue has been with the Board since before 2006, and it was on the previous triennial review issue list, but was not able to be addressed in that review.	**CentennialOct5-14**: The Lahontan Water Board has been dedicated to gathering and evaluating data/information for reviewing the bacteria standard. In the past Triennial Review cycle, the Lahontan Water Board executed a contract with UC Davis for $60K to evaluate fecal coliform and *E. coli*, initiated internal bacteria monitoring in the region, is currently soliciting willing ranchers to participate in a grant funded grazing management practices implementation project, and has contracted for additional lab analysis of bacteria at the Sierra Nevada Aquatic Research Laboratory through UC Santa Barbara. Please also refer to Table 3, Water Quality Bacteria Objectives tasks (2012 Triennial Review Staff Report, Attachment A)
The range of these three alternatives run from .5 to 5 personnel years of commitment (tenfold), and from 6 months to 5 years to make an amendment (also tenfold). It is instantly apparent that the 6-month time line committing only .5 personnel years is exceedingly attractive, so long as it makes sense on a more detailed analysis. Follows is such an analysis which bears out that Option 2, the 6 months amendment for Bridgeport is responsible management. The existing pathogen objective may make sense for Tahoe and the pristine regional waters of the region, however, we have been seeking the Board's addressing and setting an objective for the agricultural areas of the region for eight years. For the last six years (now, almost seven years), the Bridgeport valley ranchers have been extensively monitoring water quality for fecal coliform. The protocol for such monitoring has been jointly coordinated with experts from the University of California and Regional Board staff. In short, that monitoring has been of waters 1) before reaching the valley's agricultural uses (often exceeding the 20 col FC objective, and occasionally exceeding the 200 col FC interim objective), 2) midway across the valley, 3) before reaching the Bridgeport Reservoir (improving and now reducing exceedances of 200 col FC to only a couple of water courses during the heart of the summer), and 4) leaving the Bridgeport Reservoir (always below the 20 col FC objective, and most often without any fecal detectable). These data comport with data independently generated by each USGS, SWAMP, Lahontan Board, and University of California. Consequently, the data base presently available is robust and supports bringing the Bridgeport agricultural waters in line with all other water quality pathogen objectives in the state, as Option 2 reflects. By comparison, Option 1 would equate to making no changes in the objective for three years (totally irresponsible), and spend 5 PYs in doing so (which the Regional Board does not have available, and cannot commit to). Option 3 is divided into two phases with Phase 1 addressing Bridgeport only, however, taking two years (four times as long as Option 2 to do so) and requiring 3.5 personnel years to do so (7 times more costly than Option 2). This would consequently also be a poor management decision. The advantage of Option 2 would be to actually commence a remedy within six months of a problem the Board created long ago, and to be able to actually complete part of this assignment on a timely basis. Moreover, it could turn out that US EPA settles on a new federal bacteria standard, and the State Board may then adopt it as a statewide objective so as it will be included in all basin plan, which may preclude the Board from fully implementing Phase II of Option 2. Therefore, the Board would save this further commitment of resources, and not have	**CentennialOct5-15**: The options presented at the Board meeting in September/October were provided as possible avenues for amending the basin plan for bacteria. Although PYs are taken into account when developing options for a basin plan amendment, defensible science to provide recommendations is necessary. The 2012 Triennial Review Staff Report (see Attachment A) recommends that Water Board staff continue to work on the water quality bacteria objectives as one of its highest basin planning priorities over the next three years. The Triennial Review Staff Report does not include a recommendation for choosing one of the three options previously listed in a scoping report. Rather, the 2012 Triennial Review Staff Report describes specific tasks that need completion as part of continuing focus on the water quality bacteria objectives project, including demonstrating compliance with State Water Board Resolution No. 68-16, the State's Non-degradation policy.

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to abandon efforts that would have already been started, as would be the case with engaging either Option 1 or Option 3. Upon analysis, therefore, it seems clear that Option 2 should be selected and Phase 1, thereunder be commenced forthwith. **IV. ADMINISTRATIVE RECORDS** We hereby request that all documents, submittals, testimony and records submitted by Centennial, our representatives, and those of all other Bridgeport Ranchers be included as part of this Administrative Record. This expressly includes all such documents submitted within the last year addressing the ag waiver, monitoring results, our request and the Board's response to our Public Records Act request, transcripts of the Board meeting of September 12, 2012, and transcripts for each of these Triennial Review scoping hearings. Sincerely, WILLIAM J. THOMAS WJT:lmg 82226.00001\7579442.1	