California Regional Water Quality Control Board
North Coast Region

Response to Comments

Upper Lost River and Clear Lake Reservoir Watershed

Total Maximum Daily Load Analysis Water Temperature and Nutrients

December 27, 2004

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Upper Lost River and Clear Lake Reservoir Watershed: Total Maximum Daily Load Analysis – Water Temperature and Nutrients
Version: June 2004

The following comments, from seven comment letters, on the "Total Maximum Daily Load Analysis: Water Temperature and Nutrients" (the Report) were received by the North Coast Regional Water Quality Control Board (Regional Water Board). Each comment received is shown below with a response. In some cases, as noted, the comment resulted in changes to the Report (see Revision 1 of the Report, December 27, 2004).

1. Commenter:
William, E. Snyder, Deputy Director, Resource Management, California Department of Forestry and Fire Protection

Date:
September 15, 2004

Comment:
"CDF concurs with the report's primary finding, listed as Recommendation 9.1 on page 81. 'The data and analysis support removing the Upper Lost River/Clear Lake Reservoir area from the 303(d) list for temperature and nutrients.' Based upon this finding and other information included in the report, CDF supports the proposed removal or delisting of the Upper Lost River from California's 303(d) list of impaired waterbodies."

Response:
Thank you for your comment.

2. Commenter:
Steve Kirk, Water Quality Specialist, Oregon Department of Environmental Quality

Date:
September 27, 2004

Comments:
(a) ODEQ agrees with the statement "The State of Oregon will conduct a water quality analysis of the Lost River segment in Oregon. If their analysis shows adverse impacts due to conditions upstream in California, the Regional Water Board may wish to conduct additional investigations." ODEQ points out that this statement is in accord with the Memorandum of Agreement between the two agencies and the U.S. EPA.
(b) ODEQ would like an explanation of the term "natural" as it is used in the Report's statements: "Regional Water Board staff has seen no information showing that the natural range of water temperature or nutrient concentrations in the streams draining into Clear Lake Reservoir are outside of the natural range for that environment due to anthropogenic causes. Unlike the streams draining to Clear Lake Reservoir, alterations in the natural hydrologic regime in the Upper Lost River and the Clear Lake Reservoir have impacted the natural temperature and nutrient regimes in the mainstem Lost River."
(c) The Report uses the incorrect citation for the Oregon classification as a cool water ecosystem for purposes of dissolved oxygen and temperature. ODEQ states that the correct citation is Figure 180A of OAR 340-41-0180.
(d) The Report provides an incorrect summary of Oregon's temperature criteria. The correct citation is OAR 340-041-0028, Temperature.
(e) The Report should cite the current Oregon ammonia criteria, which is specified in "1999 Update of Ambient Water Quality Criteria for Ammonia" (EPA-822-R-99-014).

Response:
(a) Thank you for the comment.
(b) In this context, "natural" means that the conditions of the watershed that affect water temperature and nutrient concentrations are not presently being altered by anthropogenic activities. This clarification has been made in Revision 1 of the Report.

(c) through (e) Thank you for providing the updated citations. The corrections have been made in Revision 1 of the Report.

3. Commenter:

Charles H. Hanson, Hanson Environmental, Inc., on behalf of the Langell Valley Irrigation District

Date:

September 28, 2004

Comments:

(a) The commentator concurs with the general recommendation to delist the Upper Lost River/Clear Lake Reservoir watershed as impaired for nutrients and temperature.

(b) The commentator agrees that nutrient concentrations have not resulted in excessive algal growth or other adverse effects on beneficial uses.

(c) The commentator supports the use of site-specific water quality monitoring results when assessing conditions in the watershed.

(d) The commentator is concerned that the scope of the Report extends beyond the TMDL water quality issues of temperature and nutrients. Specifically, the commentator identifies discussions about instream flow, habitat fragmentation, flow fluctuations, and impoundments as outside the scope of the TMDL analysis. The commentator recommends limiting the discussion to nutrients and temperature.

(e) The commentator recommends that the Regional Water Board review additional sources of information regarding the endangered sucker populations, particularly the testimony of Dave Vogel to the House of Representatives Subcommittee on Water and Power and the U.S. Bureau of Reclamation Assessment of Klamath Project Operations.

Response:

(a) through (c) Thank you for your comments.

(d) The Report is primarily focused on the issues of temperature and nutrients. In order to understand the impact of land use on water quality and the impact of water quality on beneficial uses, the Report must explore broad land use issues, many of which are related to nutrients and temperature. Additionally, the Report extends beyond the water quality issues of nutrients and temperature for several reasons. It is clear that the beneficial uses (especially the populations of endangered sucker species) in the watershed are adversely impacted. The factors causing the adverse impacts may or may not be related to water quality. In order to justify delisting, especially given the limitations on the data that are discussed in the Report, any plausible causes or plausible adverse factors that may be impacting the beneficial uses must be examined. Even if the factors are found to be outside of the scope of a TMDL analysis, they should be discussed in order to provide some reasonable explanation for the conditions that are seen. Given the limitations of the data on which a delisting recommendation is made, the links between the factors discussed (e.g., habitat fragmentation, land use, water quantity) and water quality must be presented so that a decision about delisting may be made with transparency – that is, with an understanding of the complexity of the factors at work in the watershed. Lastly, including wide-ranging information in the Report is useful because the Report serves as a repository of information on the characteristics of the watershed for the Regional Water Board.

(e) Thank you for the information that you provided. Any additional information or data, especially documented monitoring data, of which you are aware would be appreciated.

4. Commenter:

Dan Keppen, Executive Director, Klamath Water Users Association

Date:

September 29, 2004

Comment:

(a) The commentator states that encroachment by invasive juniper is of great concern in the Upper Lost River watershed.

(b) The comment letter provides information about changes in grazing practices in the watershed, particularly with regard to water quality. The commentator agrees with the USFWS that grazing practices previously impacted aquatic habitat but that the current practices have changed and are now protective of endangered species. The commentator provides information about current grazing practices. Specifically, the commentator discusses rotational grazing, off-stream watering, riparian fencing, and riparian and water quality monitoring. The Byrne Ranch, through which Willow and Boles Creeks flow, is provided as an example of progressive and protective grazing: "We suggest that the Byrnes – in cooperation with public agencies – are already taking the necessary steps towards this end [*protecting aquatic habitat from grazing*], since Boles Creek and Willow Creek both flow through lands that they manage, and benefit from those management practices."

(c) The Report's reliance on the use of the 2001 Biological Opinion (BO) prepared by the U.S. Fish and Wildlife Service on the long-term operations is questioned. "We have serious concerns about the 2001 USFWS BO, in part because of its treatment of emergent vegetated habitat for suckers." The commentator referred to, and attached, the testimony of Dave Vogel to the House of Representatives Subcommittee on Water and Power. The comment letter notes that the 2001 BO quantifies Upper Klamath Lake elevation and emergent vegetation availability, but does not show such relationships for other Klamath Project reservoirs (presumably, such as Clear Lake Reservoir) where emergent vegetation is lacking, but sucker larval recruitment is consistent.

(d) The commentator opines that the Report focuses on habitat alterations to the exclusion of other factors that have contributed to the decline of endangered sucker species. The commentator states that "Immediately after noting that Clear Lake Reservoir appears to possess a healthy population of Lost River and shortnose suckers compared to other populations, it [the Report] includes Moyle's characterization that suckers 'and their principal habitats have been subjected to just about every environmental insult possible, with no end in sight.'" By contrast, the commentator believes that the impact of the sucker snag fishery (terminated in 1987) should receive more attention as "the single most important management action affecting sucker populations." The commentator refers to the aforementioned testimony of Dave Vogel on this subject. It is recommended that the Regional Water Board further analyze the impairments in order to evaluate whether the emphasis that the Report places on physical impairments is justified.

(e) The reviewer states that the Report's statement "this schedule is driven by irrigation needs, not the needs of aquatic life" is too broad and may apply only to the 2001 schedule and not to overall Klamath Project operations. The comment letter states that this position is not consistent with the 2002 – 2012 Biological Opinion on Klamath Project Operations. The commentator states that the water bank established by the U.S. Bureau of Reclamation is intended to provide additional water for "fish and wildlife purposes and to enhance tribal trust resources."

(f) The commentator disagrees with the characterization of the Kuchel Act as complicating the management of the Tulelake Wildlife Refuge.

(g) The commentator discusses the presence or absence of redband trout in the watershed. Although not explicitly stated, the comment indicates that the Report should presume that redband trout do not exist in the watershed and the Report should not discuss dam removal in the context of redband trout. The commentator states "We intend to vigorously engage in any future evaluation of dam removal on the Lost River, since Klamath Project stored water provided by dams is so critical to meeting the demands of irrigation, national wildlife refuges, suckers, coho salmon and other fish and wildlife."

(h) The commentator notes the Report's limitations on data and offers to provide assistance in future data collection, including coordination with local landowners.

(i) The Klamath Water Users Association supports the decision to delist the watershed for nutrients and temperature.

Response

(a) Thank you for your comment on Western Juniper encroachment. If the Regional Water Board conducts further investigations of the watershed, this factor will be explored and you will be contacted for additional information.

(b) The information that is provided on current grazing practices in the watershed is appreciated. Information relevant to the Report has been included in Revision 1of the Report.

(c) The use of the U.S. Fish and Wildlife Service 2001 Biological Opinion (BO) is appropriate for the Report. In the Report, the 2001 BO was used largely as a reference for actual events (e.g.: the east lobe of Clear Lake Reservoir dried up in 1992; prior to the dam the normal flows in the Lost River were higher in the winter months than in the summer; a description of the sucker fishery), for background on the biology and habitat requirements of the suckers, for a general discussion of the impacts of land uses on water quality, and for background on flows in the watershed. The conclusions of the 2001 BO are cited in the Report because of their relevance (e.g.: commercial forestry in the watershed is not a threat to the suckers; grazing practices are compatible with sucker protection; there is concern about low winter dissolved oxygen under ice cover in the reservoir). The Report does not discuss the 2001 BO statements about emergent vegetation, although this is not because of concerns by the Regional Water Board over the appropriateness of relying on the 2001 BO. In fact, the Report discusses the successful juvenile recruitment in the reservoir in spite of the lack of emergent vegetation, perhaps because of the turbidity levels. The situation may have to be more completely addressed if the impacts of turbidity become an issue in the watershed. Thank you for providing a copy of the testimony of David Vogel.

(d) The role of harvest was not discussed in detail in the Report. An additional sentence, "The role of the now-closed fishery on the abundance and distribution of suckers is unclear." was added to the Report in response to this comment. Over-harvest was listed as one of the potential factors leading to the decline of the suckers in the 1988 listing, and is mentioned in the Report as one of the factors leading to the decline of the sucker populations. The fishery was terminated in 1987. The commentator, through the attached testimony of Mr. David Vogel, states that the population estimates made before the listing were inaccurate and the populations were more robust than previously thought. Comparison of the various population estimates is difficult, in part because the estimation methodologies are different and the confidence intervals are large. Even if the populations were larger than thought at the time of the ESA listing, population estimates using comparable methodologies that were made after the listing and after the fishery was terminated do not show an increasing trend. In 2001, the U.S. Fish and Wildlife Service was petitioned to delist the suckers based on information similar to that presented by the commentator. The U.S. FWS stated:[1] "Comparisons between current estimates and those made during the fishery, prior to its termination in 1987, are not informative due to extreme differences in methodology. Population estimates made since listing, while numerically higher than earlier, show no overall trend for increasing populations within the last decade." They also concluded that: "The endangered status of the suckers is based on continuing threats to the populations. The 2001 status review identifies continuing threats to the two species which warrant maintaining their listing as endangered under the Endangered Species Act, including but not limited to habitat loss, degradation of water quality, periodic fish die-offs, and entrainment into water diversions." Others reached this conclusion, as well. For example, in 1993, a USGS report[2] listed and ranked possible causes of the decline of suckers in Upper Klamath Lake. Over-harvest

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[1] U.S. Fish and Wildlife Service. 2001. Endangered and threatened wildlife and plants; Notice of 90-Day Finding on a Petition to Delist the Lost River Sucker and Shortnose Sucker. Federal Register 67: 34422-34423. May 14, 2002.

[2] Bortleson, G. and M. Fretwell. 1993. A review of possible causes of nutrient enrichment and decline of endangered sucker populations in Upper Klamath Lake, Oregon. U.S. Geological Survey Water Resources Investigations Report 93-4067. Portland, Oregon.

was postulated as a cause. This cause was assigned a low priority for testing because, "Furthermore, harvesting has been banned, but the sucker species have not recovered." Moyle's statement (that the suckers "and their principal habitats have been subjected to just about every environmental insult possible, with no end in sight") was included in the Report to show the biological resiliency of the suckers and to stress the importance of supporting the relatively healthy population in Clear Lake Reservoir.

(e) The statement was not meant to apply to overall Klamath Project operations. It was particularly directed to the dam at Clear Lake Reservoir, which routinely has been opened only from April to October with no releases to the Upper Lost River in the winter. As described in the Report, this schedule does not mimic natural flows and was established to provide irrigation water. The commentator is correct, however, that the statement is too broad. That statement has been removed from Revision 1 of the Report. The statement is too broad because it considered only the adverse effects on fish in the Upper Lost River and failed to consider the beneficial effects that the artificial flow regime might have on the fish in Clear Lake Reservoir, which have the potential to suffer low dissolved oxygen under icing conditions in the reservoir if minimum lake elevations are not maintained.

(f) The management of the refuge is complex, in part because of the unique requirements of the Kuchel Act; however, the word "complicated" has been removed from Revision 1. The statement now reads merely that management of the refuge is complex and that the Kuchel Act requires balancing the needs of waterfowl with full consideration for optimum agriculture uses that are consistent with that goal.

(g) The intent of the discussion in the Report was not to recommend dam removal. Nor did the Report indicate that dam removal would result in the re-establishment of redband trout. Your willingness to engage in any evaluation or discussion of watershed issues is welcome and appreciated.

(h) Thank you for your comment – the Regional Water Board will contact you if additional studies are planned for the watershed. If you have collected data or have an interest in monitoring water quality or related parameters apart from Regional Water Board studies, we would appreciate the opportunity to review the data and discuss data collection and analysis techniques with you.

(i) Thank you for your comment.

5. **Commenter**:

Craig Bettandorff, President, Modoc County Farm Bureau

Date:

October 1, 2004

Comments:

(a) The commentator argues that the "greatest threat to water quality in this watershed is the rapid and massive encroachment of Western Juniper."

(b) The Modoc County Farm Bureau is concerned about the discussion of grazing in the Report. The Byrne Brothers Ranch is offered as an example of the progressive grazing practices practiced in Modoc County. The commentator states, "…there is no place in the report to talk about overgrazing that is not occurring now or in the recent past."

(c) The Modoc County Farm Bureau is concerned that the Report discusses the potential presence of redband trout in the watershed. The Report states that such presence cannot be confirmed, and the commentator replies that "It is clearly time to move past the 'cannot be confirmed' status to stating they aren't there."

(d) The commentator states that the "discussion of dam removal to create redband trout habitat is totally without merit. This stored water provides enormous environmental benefits downstream to national wildlife refuges, endangered suckers and Coho salmon and other wildlife as well as providing the lifeblood for irrigators and the communities on the Tulelake and Klamath Basins."

(e) The Modoc County Farm Bureau supports the Report's recommendation to delist the Clear Lake Reservoir and Upper Lost River area for nutrients and temperature.

Response

(a) Thank you for your comment on Western Juniper encroachment. If the Regional Water Board conducts further investigations of the watershed, this factor will be explored and you will be contacted for additional information.

(b) The discussion of grazing is important to the Report because the analysis must investigate the effects of land use activities on water quality. The primary land use activity in the area is grazing. The soils of the watershed are especially erosive and sensitive to land management activities. Out of a 124-page Report, there are three pages discussing the general effects of grazing, and several miscellaneous references to grazing, which does not constitute an excessive discussion about the primary land use activity in the watershed. The Report includes a general discussion of the regulation of grazing activities in the watershed and mentions the U.S. Fish and Wildlife Service determination that past practices have adversely affected aquatic habitat, but that current practices should be protective of endangered species. There is a discussion in the Report about how a grazing exclusion project showed significant riparian area recovery in Mowitz and Willow Creeks. The Report includes two recommendations regarding protection of waterbodies from the adverse effects of grazing. Given the uncertain state of the endangered sucker species, the value of Willow Creek to the survival of the species, and the potential for soil erosion, the Report's discussion of grazing can serve to remind landowners and resource agencies of the ongoing importance of practicing protective grazing. The discussion of the grazing along the shoreline of Clear Lake Reservoir may have to be revisited and extended if the turbidity in the Lost River becomes an issue. None of the Report's discussions or references to grazing are incompatible with the commentator's statement that the area is a model for progressive grazing practices. If that is the case, then the participants and landowners are to be commended and urged to continue their protective practices.

(c) The Water Quality Control Plan for the North Coast Region lists a cold water beneficial use for the Clear Lake Reservoir. In order to analyze the impacts of water quality to all listed beneficial uses, the cold water use must be examined. Lacking information about the basis of the cold water listing, trout seemed likely because these species are found in adjacent watersheds. The Report clearly discusses the problems associated with ascertaining whether redband trout are present in the watershed. The Regional Water Board could not find any investigation whose purpose was to determine the presence or absence of redband in the watershed, only reports or investigations with different objectives that listed fish species observed and did not include specific mention of redband trout. Reports of this sort cannot be used to conclude that redband are not present, only that the species could not be confirmed or is unlikely to be present. The Report must address potential cold water species, but concludes that the presence of redband trout could not be confirmed because that is what the evidence obtained by the Regional Water Board can support. The Report concludes that the open question of whether redband are present in the watershed should not be used to mandate more stringent water quality than that present naturally: "Meanwhile, the possibility of the presence of a cold water species should not be used to mandate more stringent water quality requirements where the natural environment does not support those conditions." The Regional Water Board would appreciate receiving copies of any reports or data of which the commentator is aware that provide more direct evidence.

(d) The only mention of dam removal is one sentence in the recommendations section (and the executive summary that summarized the recommendations). The recommendation <u>did not</u> recommend dam removal, but recommended that the cold water beneficial should be evaluated in light of the questions about its appropriateness in the watershed. Such an evaluation would require consideration of the existing and <u>potential</u> beneficial uses. Reasonably potential conditions include the conditions present under natural flows (i.e., the no-dam condition). The Report does not recommend dam removal and the role of the dam in the watershed would be part of any discussions regarding the dam and water quality.

(e) Thank you for your comment.

6. **Commenter**:

Patricia Cantrall, Chairman, Modoc County Board of Supervisors

Date:

October 6, 2004

Comments:

(a) The commentator argues that the Report should not discuss the problems of overgrazing because the "area is a national model for progressive riparian grazing practices." Monitoring reports support the improved riparian conditions and the recovery of sucker populations.

(b) The commentator argues that one of the "most significant factors relating to both water quality and quantity in this watershed is the massive encroachment of Western Juniper."

(c) The commentator suggests that the Regional Water Board not repeat the mistakes made in the Goose Lake area in trying to document whether redband trout are present in the watershed.

(d) The Modoc County Board of Supervisors suggests a more complete analysis, using a broader sample set, of the connections between habitat fragmentation and water quality.

(e) The commentator agrees that the Regional Water Board should examine its authority regarding the impact of habitat fragmentation and water quantity on water quality.

(f) The commentator believes that the grazing practices in the watershed are compatible with water quality goals. The condition of the watershed has been "on a sharp upward trend as it relates to grazing."

(g) The Regional Water Board should terminate the effort to identify redband trout in the watershed. In relation to the redband trout, the discussion of dam removal is unwarranted because the dam provides essential water storage.

(h) The Modoc County Board of Supervisors supports the recommendation to delist the watershed for nutrients and temperature.

Response

(a) Thank you for your comment. Please see the response to Mr. Bettandorff, above.

(b) Thank you for your comment on Western Juniper encroachment. If the Regional Water Board conducts further investigations of the watershed, this factor will be explored and you will be contacted for additional information.

(c) Thank you for your comment. Please see the response to Mr. Bettandorff, above.

(d) The Regional Water Board agrees that a more complete analysis would be helpful to understanding the watershed. For this analysis, the data, although limited, were sufficient to recommend delisting for temperature and nutrients. If the watershed is found to be impaired for other parameters, or if additional data show impairments not revealed in the Report, a broader sample set illuminating the connections between beneficial uses, habitat fragmentation, and water quality would be helpful.

(e) Thank you for your comment.

(f) Thank you for your comment on grazing practices in the watershed. The Report discusses grazing as the primary land use in the watershed. The Regional Water Board would like to have copies of monitoring data that you have that demonstrate the watershed trends related to grazing.

(g) Thank you for your comment. Please see the response to Mr. Bettandorff, above.

(h) Thank you for your comment.

7. **Commenter**:

Rick R. Dowd, Chairman, Resighini Rancheria

Date needed

Comment:

(a) The commentator agrees with the Report's recommendations for delisting for temperature and nutrients and for additional data collection; however, "The question of whether redband trout inhabit the upper tributaries above Clear Lake remains open; therefore, support for de-listing for temperature must be qualified." The comment letter states that the lower tributaries, such as Willow Creek, "are naturally warm because of lack of topographic shading as they flow across the hot, arid Modoc Plateau." However, if there are any tributaries in California at higher elevations, the cold water standards in the Region's Basin Plan should apply.

(b) The commentator supports the Report's decision to eliminate redband trout from the TMDL analysis despite the potential for the species to be present in the higher elevation headwaters of Willow Creek, because the headwaters of Willow Creek are in Oregon and not in the Regional Water Board jurisdiction.

(c) The commentator argues for the protection of the sucker species in the Clear Lake Reservoir/Upper Lost River area, since these populations are some of the last viable populations in California. The commentator refers to these as "extremely important for conservation."

(d) The commentator concurs with the Report's findings that, although grazing practices have been substantially improved on tributaries of Clear Lake Reservoir, further protection of the Clear Lake Reservoir shoreline may be warranted. " We expect to see the recommendations within the report supported by the Board and appropriate studies and actions undertaken in a timely fashion." The commentator provided photographs showing cattle in riparian zones of Boles Creek and on shoreline areas adjacent to Clear Lake Reservoir as support for the contention that "access to cattle is still allowed in some seasons in Boles and Willow Creek and this still allows for potential degradation."

(e) The commentator recommends that turbidity, as a water quality issue, needs to be addressed further. "While the high turbidity may prevent algae blooms in Clear Lake Reservoir, it is likely that it also reduces emergent and submerged aquatic vegetation which can provide essential habitat for juvenile suckers." The commentator suggests that the USFWS re-evaluate the grazing practices on the shorelines of Clear Lake Reservoir in order to reduce the turbidity and to support emergent vegetation.

(f) The commentator notes that the past temperature problems related to grazing in the watershed are sufficient reason to "stress the need for continuing riparian protection from grazing on National Forest lands."

(g) The commentator makes several suggestions for ongoing monitoring and assessments:
   1) "The most important work needed is a study by USFWS to determine if wildlife habitat benefits for bird species provided by grazing in the margins of Clear Lake Reservoir out weigh the harm done to water quality and potential sucker habitat."
   2) "Grazing allotments need continuous monitoring to make sure that all riparian functions that might effect sucker survival be protected;"
   3) A complete analysis of limiting factors in the watershed, including the relationship between nutrients, dissolved oxygen and biomass.
   4) An analysis of soils in the watershed and the impact of soils on the levels of nutrients (notably phosphorus).
   5) Periodic reports with photo points, cross sections and trends in riparian tree height and shade to document the impact of the improved grazing practices.
   6) NCRWQCB should work with the California Department of Fish and Game and ODFW to make a final determination on the distribution of redband trout.

(h) "The Resighini Rancheria should be concerned about the sparse data used by the NCRWQCB in this report to support conclusions. However, because of the clear, logical methods of inference, the de-listing position should be supported. "

Response

(a) Thank you for your comment. We agree that in areas where existing or potential cold water beneficial uses are appropriate, related water quality standards apply. We also agree that it is appropriate to qualify the delisting for water temperature so that the

decision is revisited if a cold water beneficial use is identified. This is done in the Report. See for example, recommendation 9.7.

(b) through (c) Thank you for your comments.

(e) We agree that turbidity should be addressed. The issue of turbidity will be complex because, as described in the Report, it may prevent algal blooms and it may provide protective cover for juvenile suckers. At the same time, turbidity may reduce the establishment of emergent aquatic vegetation and have adverse downstream impacts. We will forward the revised Report, along with your comment letter, to the U.S. Fish and Wildlife Service for their evaluation of grazing practices.

(f) Comment noted.

(d) and (g) Thank you for your comments and suggestions for ongoing monitoring and assessments. Regarding the suggestion for the evaluation of the grazing impacts on water quality and beneficial uses, we will forward the revised Report, along with your comment letter, to the U.S. Fish and Wildlife Service for their evaluation of grazing practices along the shores of Clear Lake Reservoir. We agree that the additional studies that you recommend – a limiting factors analysis, soils and nutrients analysis, trend monitoring, and a final determination of the distribution of redband trout – would be useful. Some of the studies that you suggest are in the jurisdictional purview of other resource agencies, such as the U.S. Fish and Wildlife Service , California Department of Fish and Game, Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife – your letter and the Report will be forwarded to these agencies. Other studies that you suggest, while within the scope of the Regional Water Board authority, are beyond what is needed for the TMDL analysis for temperature and nutrients. If additional studies are needed for downstream TMDL analyses, we may expand the studies in the area, and we would appreciate the opportunity to review and discuss any data or information that you have on the watershed.

(h) Thank you for your comment. The Regional Water Board recognizes the limitations posed by the data used in this analysis and appreciates your implied caution.