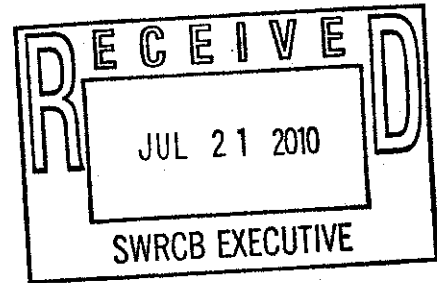




July 21, 2010

Submitted electronically and by U.S. Mail

California State Water Resources Control Board
c/o Jeanine Townsend, Clerk
1001 "I" Street
Sacramento, California 95814
commentletters@waterboards.ca.gov



Re: Comment Letter – Klamath River – TMDLs

Dear Chairman Hoppin and Members of the Board:

Thank you for the opportunity to comment on the proposed State Water Resources Control Board (State Board) approval of an Amendment to the Water Quality Control Plan for the North Coast Region (Basin Plan Amendment) to establish: (1) Site Specific Objectives for Dissolved Oxygen in the Klamath River (DO Objective); (2) an Action Plan for the Klamath River Total Maximum Daily Loads Addressing Temperature, Dissolved Oxygen, Nutrient, and Microcystin Impairments in California (CA Klamath River TMDL); and (3) an Implementation Plan for the Klamath River and Lost River Basins (Implementation Plan). On behalf of its constituent districts and Klamath Project irrigators, the Klamath Water Users Association appreciates your consideration of these comments. The Tulelake Irrigation District, which is a member of the Klamath Water Users Association with operations within the United States Bureau of Reclamation Klamath Project (Klamath Project) in California, hereby individually joins in these comments. The Klamath Water Users Association and Tulelake Irrigation District are collectively referred to herein as "KWUA."

As discussed with State Board staff, KWUA did not become aware of the pending comment period for the proposed Basin Plan Amendment until two days before the deadline. In the meantime, the proposed Basin Plan is substantial and complex, and of significant importance to KWUA. Especially in light of the numerous activities and challenges currently pending in the Klamath Basin and the resulting demands on KWUA staff and counsel this week, we are disappointed that the State Board rejected our request for a short extension of time to complete comments.

KWUA submitted three separate comment letters during the North Coast Regional Water Quality Control Board's (Regional Board) development and consideration of the proposed Basin Plan Amendment, which are attached and incorporated herein by this reference.¹ The Regional Board has not adequately addressed

¹ These comment letters also attached and incorporated by reference the comments that KWUA submitted to Region 9 of the Environmental Protection Agency (EPA) prior to its adoption of the TMDLs for the Lost

these comments, which still apply to the version of the Basin Plan Amendment and related documents now being considered by the State Board. Consistent with the State Board notice related to its consideration of the Basin Plan Amendment, this letter provides additional comments on KWUA's key concerns with said amendment and explains how the Regional Board Staff Report, Appendix 10 (Responses to Comments) failed to address those concerns.

A. CA Klamath River TMDL and Implementation Plan

1. *Application to Klamath Project*

As explained in detail in the prior KWUA comments to the Regional Board (attached), KWUA's constituent districts and irrigators operate within the Klamath Project in Oregon and California. No land within the Klamath Project discharges to the Klamath River in California. As such, the CA Klamath River TMDL cannot impose requirements on the Klamath Project. Rather, Klamath Project discharges are subject to EPA's previously adopted Lost River, California Total Maximum Daily Loads, Nitrogen and Biochemical Oxygen Demand to address Dissolved Oxygen and pH Impairments (EPA Lost River TMDL). In response to KWUA's request that the Regional Board clarify that the CA Klamath River TMDL does not apply to the Klamath Project, the Regional Board suggests that application of the CA Klamath River TMDL to the Klamath Project is appropriate because there are "pollutant loadings identified in the Lost River TMDL, promulgated by the USEPA in 2008, that contribute to the Klamath River water quality impairments." (Responses to Comments, Response H1.) The response fails to provide any reasonable basis for denying KWUA's request and in fact acknowledges that there is another TMDL in existence to address Klamath Project discharges in California. KWUA urges the State Board to consider KWUA's request that the CA Klamath River TMDL clarify that the CA Klamath River TMDL, including the Stateline load allocation set forth therein, does not apply to the Klamath Project.

Similarly, the final staff report accepted by the Regional Board before taking action on the CA Klamath River TMDL (Staff Report) contains various statements suggesting that the load allocations assigned to "Stateline" are intended to address discharges to the Klamath River in Oregon and to the Lost River in California. As such, the Staff Report encourages the Regional Board and State Board to overstep their

River segment in California, which are included in the attachment hereto. These comments are relevant to the Board's consideration of the proposed Basin Plan Amendment because said amendment purports to "implement" Lost River TMDLs established by EPA (despite no substantial analysis of said TMDLs). In addition, on May 27, 2010, KWUA provided comments to Oregon Department of Environmental Quality on its proposed Total Maximum Daily Loads (TMDLs) for the Klamath River in Oregon. The Regional Board staff report and supporting documents for the proposed Basin Plan Amendment include considerable discussion about activities in Oregon and the anticipated TMDLs to be adopted by Oregon in the future. As such, KWUA's comments thereon are relevant to the State Board's consideration of the proposed Basin Plan Amendment and attached hereto for your information.

authority and create additional and conflicting requirements for Klamath Project irrigators. KWUA continues to strongly object to such action.

As acknowledged by the Regional Board in the Responses to Comments, the two TMDLs apply different water quality standards, address different constituents, and establish different load allocations. For example, the DO objective applicable to the Lost River is not subject to the DO objective amendment for the Klamath River mainstem considered along with the CA Klamath River TMDL. Further, the CA Klamath River TMDL establishes load allocations related to temperature, for which the Lost River system has been delisted. The Responses to Comments suggest that the Lost River temperature delisting is irrelevant since discharges to the Lost River system must still adhere to water quality standards for temperature.² Such response entirely misses the point repeatedly raised by KWUA—that is, the Clean Water Act only authorizes the creation of load allocations for constituents (such as temperature) that have been identified as causing impairment to a given water body on the respective Clean Water Act section 303(d) list of impaired water bodies. Moreover, Regional Board authority to adopt implementation plans for a given impaired water body does not extend beyond measures needed to address the 303(d) listed constituents for said water body.

2. *Implementing Lost River TMDL Without Explanation or Analysis*

The Implementation Plan inappropriately segregates the development and consideration of the EPA Lost River TMDL allocations from the proposed implementation measures. As noted in the attached comments to EPA, EPA's technical TMDL for Lost River has significant shortcomings. Relevant here is the fact that EPA developed that TMDL without any consideration of the requirements of the Porter-Cologne Water Quality Control Act, Water Code section 13000 et seq. (Porter-Cologne). The Implementation Plan, however, attempts to "implement" the EPA Lost River TMDL with only a bare reference to the load allocations set forth therein. In response to KWUA comments to that effect, the Regional Board points to one table in the Implementation Plan that lists the applicable loads set forth in the EPA Lost River TMDL. (Responses to Comments, Response H5; see also *id.*, Responses T15 [relying on table and designation of responsible parties as sufficient to address how implementation plan implements Lost River TMDL], KWUA #4 [including additional discussion of measures identified to address Lost River TMDL without any explanation of the relation of those measures and their anticipated ability to satisfy the EPA Lost River TMDL load allocations to the

² In a related response, the Regional Board appeared to accept KWUA's point that the temperature load allocations cannot apply to the Lost River system since it was delisted for temperature in 2006. (Response to Comments, Response H2.) However, that response refers to general revisions in the Staff Report to that effect without providing any page or section references to facilitate identification of such changes. This response does not satisfy KWUA's concern. KWUA urges the State Board to ensure that any Basin Plan Amendment establishing load allocations for the Klamath River segment in California makes it entirely clear that such load allocations do not apply to the Lost River system in California, which is governed by the EPA Lost River TMDL and subject to a different set of water quality impairments.

technical analysis within said TMDL.] This mere table cannot replace the requisite analysis and discussion required to explain how a given TMDL will be implemented. (See *id.*; see also Responses to Comments, Response F1 [failing to even acknowledge the EPA Lost River TMDL in response to KWUA comment that the Regional Board did not adequately link the pertinent TMDL analysis to the requirements in the implementation plan].)

In sum, the Regional Board failed to address KWUA's legitimate concern that the Implementation Plan and Staff Report provide no analysis of how the Implementation Plan will actually achieve compliance with the load allocations in the EPA Lost River TMDL in a reasonable manner. The proposed Implementation Plan for the Lost River segment in California remains wholly inadequate and fails to satisfy California Water Code requirements to analyze TMDL allocations, implementation measures, and water quality levels that can be reasonably achieved. (See, e.g., Wat. Code, §§ 13000, 13001, 13241, 13263.) KWUA urges the State Board to consider KWUA's comments and ensure that any Implementation Plan incorporated into the Basin Plan provides substantive analysis, in conformance with Porter-Cologne requirements, of its ability to ensure compliance with the TMDLs it attempts to implement.

3. "Regulating" in Oregon

KWUA provided detailed comments to the Regional Board (attached) related to the Klamath River TMDL's inappropriate attempts to regulate in Oregon despite the fact that such authority lies with the Oregon Department of Environmental Quality (ODEQ). In response to these comments, the Regional Board suggests that California must explain in the CA Klamath River TMDL how it "expects" Oregon to ensure compliance with California water quality standards at the Stateline. (Response to Comments, Response G3.) Such a response fails to address KWUA's comments and rather reinforces the false notion that the Regional Board somehow has authority to regulate discharges that occur wholly in Oregon. As noted above, since the Klamath Project does not result in any discharges to the Klamath River in California, the Regional Board has no regulatory authority related to any Klamath Project discharges to the Klamath River.

The primary way in which the Basin Plan Amendment attempts to regulate discharges in Oregon is through the assignment of a load allocation to the Oregon-California Stateline and the identification of implementation measures to achieve that allocation. In response to KWUA's comments that assigning a load allocation to the Stateline is inappropriate, the Regional Board actually acknowledges that the Regional Board does not have authority to regulate a river segment, such as that at the Stateline, like a source. However, the response then goes on to explain that the Regional Board can establish a load allocation at that point and require Oregon "to implement that load allocation in the way it deems appropriate." (Responses to Comments, Response G1.) As such, the Regional Board readily admits that the CA Klamath River TMDL imposes a load allocation on Oregon and "requires" Oregon to find a way to implement that load

allocation. As explained in great detail in the attached KWUA comments, California does not have authority to set load allocations for Oregon segments of the Klamath River. Further, in response to KWUA's related comment requesting that the Regional Board remove the load allocation for the Stateline from the TMDL since it constitutes inappropriate regulation of discharges to Oregon segments of the Klamath River, the Regional Board merely restates the implementation measures associated with the inappropriate load allocation at Stateline. (Responses to Comments, Response G2.) Such response completely fails to address the comment and provides no explanation of how the implementation measures associated with Stateline discharges are relevant to the CA Klamath River TMDL or how they implement the EPA Lost River TMDL. As such, KWUA urges the State Board to consider KWUA's comments and remove the Stateline load allocations and related implementation measures from the CA Klamath River TMDL and the Implementation Plan.

In response to KWUA's comments, the Regional Board also attempts to rely on the Draft Klamath River TMDL for Oregon as support for the Stateline load assumptions in the CA Klamath River TMDL. (See Regional Board Staff Report, Appendix 10, at p. S-27, Response A25.) However, as explained in KWUA's responses to said Draft Klamath River TMDL for Oregon (attached), the Draft Klamath River TMDL for Oregon suffers from its own inconsistencies and shortcomings. It assumes, for example, immediate compliance with the Upper Klamath Lake TMDL in simulating background water quality in the Klamath River. However, the load allocations assigned therein do not use the same assumption in calculating appropriate load allocations for features within the Klamath Project in Oregon. To the extent that quantitative load allocations for these features are adopted, they should be applicable only after Upper Klamath Lake water in fact is compliant with the Upper Klamath Lake TMDL, or they should be adjusted such that allowable loading includes only "additions" to compliant incoming water quality. Particularly since the Draft Klamath River TMDL for Oregon is still subject to public review and ODEQ consideration, it is entirely inappropriate for the California Basin Plan Amendment to assume compliance with draft load allocations discussed therein.

The Staff Report and Responses to Comments suggest that the CA Klamath River TMDL can somehow regulate Oregon discharges since discharges to the Lost River system occur in California and subsequently enter into the Klamath River mainstem in Oregon. This working assumption is illogical and will result in inconsistent and redundant regulation of Lost River discharges, which are subject to the EPA Lost River TMDL for the California reach of the Lost River. As noted above and explained in prior KWUA comments (attached), the subject Implementation Plan attempts to regulate the Lost River discharges without adequately recognizing and considering the controlling TMDL. In so doing, the CA Klamath River TMDL, the Implementation Plan, and the Staff Report fail to provide sufficient evidence to justify implementation measures applicable to the Lost River discharges and inject considerable confusion as to the applicability of the CA Klamath River TMDL to the Lost River segment in California.

4. *Irrigation District Authority*

As expressed in the attached prior comments, KWUA is concerned with the CA Klamath River TMDL and Implementation Plan's assignment of responsibility to irrigation districts. As an irrigation district formed and operating under California Irrigation District Law, Water Code section 20500 et seq., Tulelake Irrigation District has no authority to enforce water quality standards and cannot regulate activities of constituent irrigators. KWUA appreciates the Regional Board's attempt to clarify that irrigation districts are only responsible for actual discharges resulting from district activities unrelated to pollutants originating as a result of farming and land management practices within their district. (See Response to Comment, H7.) However, KWUA urges the State Board to amend the Basin Plan Amendment to ensure that the CA Klamath River TMDL and the Implementation Plan clearly acknowledge the narrow responsibility of districts and clarify any confusion as to the responsibility associated with discharges resulting from farming and land management practices on non-district owned lands.

5. *Unachievable Load Allocations*

The Regional Board's development of the CA Klamath River TMDL and the Implementation Plan must be reasonable and take into consideration economics, water quality levels that can be reasonably achieved, and other public interest factors. (Wat. Code, §§ 13000, 13001, 13241, 13263.) As detailed in prior KWUA comments (attached), the Regional Board's superficial analysis of economic factors does not satisfy this standard and completely fails to acknowledge that the assigned loads are impossible to meet in the reasonably foreseeable future. Bare references to analysis of feasibility and probability of success do not suffice to satisfy the stringent requirements of Porter-Cologne. (See e.g., Responses to Comments, Response O22 [dismissing comments about reasonableness without addressing ability of implementation measures to satisfy water quality standards or load allocations], Response O24 [suggesting without any basis that Regional Board need not consider reasonableness of the costs associated with implementation of the TMDL].) Moreover, the Regional Board's bare conclusions of reasonableness are simply counterintuitive given that the Klamath TMDL establishes *negative* load allocations for a number of sources. In response to KWUA comments in this regard, the Regional Board acknowledges that achievement of the load allocations "will require a great amount of time and a lot of effort" but that they "disagree that achieving the load allocations is impossible." (See e.g., Responses to Comments, Response C49.) However, the Regional Board has provided no justification to explain how these negative load allocations will actually be met, taking into consideration economics, water quality levels that can be reasonably achieved, and other public interest factors. As such, the response is wholly inadequate.

As discussed in prior KWUA comments (attached), the real root of this problem is the fact that the underlying water quality objectives are not attainable. In response to KWUA's comments to this effect, the Regional Board acknowledges that the current

Upper Klamath Lake water quality precludes achieving downstream water quality objectives but then goes on to state that the “water quality objective for temperature refers to natural temperatures, thus natural temperatures are by definition compliant with the objective.” (Responses to Comments, Response C52.) KWUA fails to see how this response addresses the comment and urges the State Board to consider the attainability of the underlying water quality objectives forming the basis for the impossible load allocations in the Klamath River TMDL.

6. *Klamath Project as a “Nutrient Sink”*

KWUA appreciates the Regional Board staff’s attempt to recognize recent studies showing that the Klamath Project is a “nutrient sink.” However, KWUA disagrees with the conclusions and characterization of the concentration levels resulting from the Klamath Project set forth in the Staff Report and Responses to Comments. (See e.g., Responses to Comments, Response C21.) As explained in prior comments, to the extent the analysis relies on surrogate data, the Regional Board must explain the origin of the surrogate numbers, the canals to which the data was applied, and the rationale supporting such use. Further, flow data for one single month (August 2002) does not provide an objective or reasonable estimation of impacts. The Staff Report and Responses to Comments do not provide the requested explanation and rather continue to make conclusions without the requisite support and without providing any justification for use of the surrogate data or reliance solely on 2002 flow data. (See Responses to Comments, Responses C21, KWUA #15, and KWUA #16.) KWUA urges the State Board to ensure that assumptions informing the Basin Plan Amendment are reasonable and based upon credible, objective, and relevant data.

7. *Miscellaneous Issues*

The Responses to Comments also fail to address the following miscellaneous KWUA comments on the CA Klamath River TMDL and Implementation Plan:

- KWUA requested that the Regional Board consider the National Research Council conclusions related to the 2002 fish mortality near the mouth of the Klamath River rather than solely relying on information within the California Department of Fish and Game’s hypotheses related thereto. The Regional Board completely dismissed the comment and suggested that such consideration was unnecessary because of alleged “peer review” of said hypotheses, which review the Regional Board fails to explain or summarize in the document. The existence of peer review is not a legitimate reason to wholly ignore credible evidence within the National Research Council on potential causes for this occurrence. (See Responses to Comments, Response B25.)
- KWUA commented that the Staff Report provided no evidence to support the Regional Board’s inference that the Klamath Straits Drain and Lost

River Diversion Channel (which flow into the Klamath River mainstem in Oregon) increase the temperature in the Klamath mainstem. In response to this comment, the Regional Board restates that Klamath Straits Drain and Lost River Diversion Channel are “upstream sources of heating” but provides no evidence to support that statement. This response is wholly inadequate. To the extent that characterization of Oregon water bodies is deemed necessary in documents related to the CA Klamath River TMDL in California (which KWUA does not believe to be appropriate), such characterizations must be supported by actual evidence. (See Responses to Comments, Response C42 and C98.)

- In response to comments pertaining to the CA Klamath River TMDL’s characterization of the Klamath Straits Drain and Lost River Diversion Channel (which the EPA Lost River TMDL defines as impaired water bodies) as “sources” of pollution, the Regional Board simply dismisses the comment suggesting that KWUA provided no “basis” for these assertions. KWUA disagrees with the response and urges the State Board to consider KWUA’s comments and ensure that any TMDL adopted by the State does not attempt to regulate impaired water bodies as “sources” of pollution. (Response to Comment, Response H-2.)

B. General Prohibition

As explained in the attached prior comments, KWUA is concerned with the proposal to adopt a broad, general prohibition of any “violations” of water quality objectives through the Basin Plan Amendment. The legislature included prohibition provisions in Porter-Cologne to authorize Regional Boards to prohibit discharge of specific types of waste or discharge into certain areas to protect water quality. (See Wat. Code, § 13243.) The legislature has not authorized broad, general prohibitions against any unlawful discharges and should not be used to replace development of regulatory programs to implement water quality objectives or to circumvent notification requirements for bringing enforcement actions against non-compliant individuals. All persons should be afforded appropriate due process rights, including notification regarding non-compliance before being subject to enforcement. As such, KWUA objects to the inclusion of the proposed general prohibition in the Basin Plan Amendment.

In response to KWUA comments to this effect, the Regional Board merely restates the Water Code requirement giving it authority to adopt prohibitions for certain discharges. (Responses to Comments, Response KWUA #17.) KWUA does not object to the notion that the Regional Board has authority to adopt prohibitions; rather, KWUA maintains that the Regional Board has authority to adopt prohibitions as to *specific* types of discharges. (See Wat. Code, § 13243.) Other than to suggest another regional board has attempted to impose the same type of inappropriate prohibition, the Regional Board has provided no support for the use of such prohibition. (Responses to Comments,

Response KWUA #17.). The proposed prohibition is not within the intent of the legislature and does not provide regulated parties any reasonable indication of what types of activities will result in enforcement actions by the Regional Board. KWUA urges the State Board to ensure that any prohibition included within the Basin Plan Amendment relate to *specific* types of discharges that are known to result in violations of water quality standards.

C. CEQA Analysis

KWUA's comments to the Regional Board (attached) raised specific concerns with the Regional Board's CEQA analysis for the Basin Plan Amendment, including the following: (1) the CEQA analysis fails to consider the environmental setting and regulatory setting associated with the Klamath Project; (2) the CEQA analysis does not meaningfully analyze the potential impacts or provide any explanation of how the mitigation measures will actually ensure that no significant impacts occur; (3) the CEQA analysis inappropriately dismisses any likelihood of impacts to agricultural resources resulting from the proposed actions despite its express recognition of likely loss of some prime farmland as a result of the subject actions; (4) the CEQA analysis fails to discuss the possibility of any economic impacts that would ultimately result in the conversion of farmland (or other associated environmental impacts); (5) the CEQA analysis does not consider the potential climate change and greenhouse gas emissions resulting from the cumulative loss of agricultural lands (which offset carbon emissions) resulting from the proposed actions and other reasonably foreseeable projects affecting agricultural resources in the Klamath Basin; (6) the CEQA analysis inappropriately defers analysis of potential impacts and mitigation measures associated with compliance measures (related to TMDLs and the Proposed DO Objective) at Stateline; and (7) the CEQA analysis inappropriately relies on the "short-term" nature of impacts in making significance determinations. The Regional Board wholly ignored these comments and, as such, the CEQA analysis for the proposed actions remains indefensible. (See e.g., Responses to Comments, Responses S16, S19, T15, KWUA # 19, KWUA #20, KWUA #21, Hamstreet-238 [collectively dismissing CEQA comments and deferring actual analysis to a later time suggesting that the Implementation Plan provides flexibility to study alternatives and treatment options and sets up a "process" for future impact evaluation]; cf., e.g., CEQA Guidelines § 15187 [requiring analysis associated with reasonably foreseeable means of compliance associated with a Basin Plan Amendment].) KWUA urges the State Board to consider KWUA's CEQA comments and ensure that appropriate environmental review is circulated for public review prior to adoption of the Basin Plan Amendment.

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Thank you again for your consideration of these comments.

Sincerely,

By: *Belinda B. Stuart*
for Greg Addington
Executive Director, Klamath Water
Users Association

By: *Tara Jane Campbell*
for Earl Danosky
Manager, Tulelake Irrigation District

Encls.

cc: Klamath Water Users Association Board of Directors
Noemi Emeric, EPA Region 9
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May 27, 2010

Via Electronic & U.S. Mail

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Re: Comments on February 2010 Draft Upper Klamath and Lost River Subbasins
Total Maximum Daily Load (TMDL) and Water Quality Management Plan
(WQMP)

Dear Mr. Kirk:

Thank you for the opportunity to comment on the February 2010 *Draft Upper Klamath and Lost River Subbasins Total Maximum Daily Load (TMDL) and Water Quality Management Plan (WQMP)* (Draft TMDL). Klamath Water Users Association, its members including districts and individual water users within the Klamath Project and the water users within the member districts, have a strong interest in the TMDL. Ady District Improvement Company (Ady), Klamath Irrigation District (KID), Klamath Drainage District (KDD), Tulelake Irrigation District (TID), Pioneer District Improvement Company (PDIC), and Poe Valley Improvement District (PVID) are members of Klamath Water Users Association with operations within the Klamath Project and individually join in these comments. This letter collectively refers to the Klamath Water Users Association, Ady, KID, KDD, TID, PDIC, and PVID as "KWUA."

KWUA appreciates the Oregon Department of Environment Quality's (ODEQ) efforts to improve water quality in the Klamath Basin collaboratively with the United States Environmental Protection Agency (EPA), California North Coast Regional Water Quality Control Board (Regional Water Board)¹, and other interested and affected parties. We also recognize that development of this TMDL requires ODEQ to consider matters that are complex in many respects. These complexities include regulatory issues associated with the interstate nature of waters, the physical and hydrologic circumstances of the Klamath Project, naturally poor water quality conditions, and various other technical matters. However, we

¹ KWUA has submitted comments on the TMDLs prepared by EPA and the Regional Water Board. We provided ODEQ with copies of those comments and they should be considered, as applicable.

Steve Kirk

Re: KWUA Comments on Draft Upper Klamath and Lost River Subbasins TMDL & WQMP

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believe the Draft TMDL requires considerable reworking and changed analysis, and that different approaches should be considered, as explained more fully below.

A. General Comments

KWUA supports the goals of water quality improvement in the Klamath and Lost River watersheds. We believe that collaborative and well-focused efforts are the most likely means to achieve results. We are hopeful that tools will be brought to bear that improve water quality in the areas of greatest concern. However, we have a number of overarching concerns with the Draft TMDL.

The overall circumstances leading to the Draft TMDL are a significant concern. It is clear that the adopted water quality standards are unrealistic, but the exceedance of those underlying standards led to the listing of waters under Clean Water Act (CWA) section 303(d), frequently on a year-round basis. The Draft TMDL thus must simulate a separate "natural conditions" baseline for the purposes of establishing load allocations. We believe a more comprehensive planning process, that first looks to determine appropriate water quality standards, would be more appropriate. That is not to say that there would be no TMDL development; rather, it would help to identify where, and the time periods for which, TMDLs would actually be appropriate, and to focus resources in a cost-effective manner.

The Draft TMDL is deficient in its consideration of feasibility and costs. With respect to feasibility, the Draft TMDL does recite the provisions of Oregon Administrative Rules (OAR) to the effect that WQMPs must explain how implementing management strategies will result in attainment of water quality standards. *See* Draft TMDL at 5-2, 5-5, 5-7, 5-10. But ultimately on this point, the Draft TMDL says little other than if specific assumptions used in modeling in fact occur, water quality standards will be met. *See, e.g., id.* at 3-31. We believe this falls short of the explanation required by the regulations. Any number of assumptions could be made. Without a linkage of an assumption to reality or feasibility, such conclusions are not valuable.

With respect to costs, the Draft TMDL unfortunately avoids even the bare "general discussion" required by OAR 340-042-0040(4)(I)(N), let alone the analysis of costs described in OAR 340-042-0040(6). The Draft TMDL provides no sense of what the costs and other consequences of implementation would be. We cannot stress enough that the TMDL should serve as a useful informational document for the public and policymakers and not merely a description of model assumptions and outputs. ODEQ actions related to water quality requirements must be reasonable and necessary. ORS § 468B.020(2)(b); *In the Matter of: Richard Eckerle*, OAH Case No. 112032, Agency Case No. WQ/SW-WR-03-079 (2004) at 22, 25 (methods used to safeguard water quality must be reasonable). We emphasize that we do not believe ODEQ has authority to require specific compliance with load allocations. However, a more complete cost analysis is required.

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KWUA also believes that the Draft TMDL threatens to inhibit, not promote, meaningful water quality improvement. For example, while expressing general support for activities such as "trading" (*see, e.g.*, Draft TMDL at 5-23 to 5-25), the Draft TMDL, and the other TMDLs adopted or being developed, would seem to make trading impossible. There are TMDLs that cover virtually all of Lost River within the Klamath Project area (and Klamath Straits Drain (KSD) and the Klamath River, resulting in a load allocation of one sort or another almost anywhere one looks. Thus, if there were, for example, a project or undertaking that would decrease loading from KSD, there would still exist a load allocation further up in the system. In short, if one were to devise a functional plan for providing the most benefit for beneficial uses, a very different approach would be used. Recognizing that the CWA applies, we nonetheless urge that ODEQ give meaningful attention to how plans and programs could be structured to realize cost-effective benefits.

The observations above also relate to the CWA section 303(d) list itself. As a general matter, the historic exceedance of water quality standards has occurred during certain months of the summer. It appears that listings are overly broad as to season in several circumstances. There are daunting water quality challenges in the Basin under the best of circumstances, but if the scope of the TMDLs is unnecessarily broad, the challenges are magnified unnecessarily. Thus, we urge ODEQ to revisit the CWA section 303(d) list itself (as well as the underlying standards) as part of a necessary effort to tailor water quality planning and actions to realities and needs.

The Draft TMDL does not recognize potential conflicts with water conservation efforts. The Klamath Project as a whole is highly efficient in its use of water, and this should be recognized and supported. Similarly, individual water users continually improve on-farm efficiencies. Less efficient practices would in many instances lead to higher quality drainage waters.² Thus, to the extent the Draft TMDL promotes changes in water quality throughout the entire Klamath Project; it may also promote inefficient water use. Additionally, ODEQ must ensure that nothing in the TMDL impairs water rights.

Additionally, we believe there are inconsistent and inappropriate assumptions in the Draft TMDL. To a significant degree, inconsistencies appear to result from the fact that the Draft TMDL is model-driven. There is a need to take a broader perspective and reconcile the current inconsistencies. Some of these issues are addressed in more specific comments that follow. However, there is a general inconsistency between the various TMDLs developed or under development, which also manifests as an internal inconsistency in this Draft TMDL. That is, other TMDLs and this Draft TMDL treat certain waters as both impaired waters under the CWA for which TMDLs are developed *and* discharges subject to load allocations. For example, EPA and the Regional Water Board have adopted TMDLs for KSD and Lower Klamath Lake (and Ady Canal). The Draft TMDL identifies KSD and impoundments as nonpoint "sources" of water quality impairments. *See, e.g.*, Draft TMDL at 2-6, 2-23, 2-45.

² Also, for example, higher water use efficiency can result in less water in Lost River.

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At the same time, the Draft TMDL and the EPA and Regional Water Board TMDLs treat KSD as an impaired water body or receiving water, and the Draft TMDL treats impoundments as receiving waters. *See, e.g., id.* at 1-5, 1-6, 2-6, 3-3. KWUA submits that a water body cannot be both a nonpoint source of pollution and impaired receiving water.³ This is the equivalent of assigning a load allocation to a tributary of a river. The identification of KSD, Lost River Diversion Channel (LRDC), or any other feature as a pollutant source is inappropriate if these waters are themselves "impaired" receiving waters. In addition, and related to the comments above concerning feasibility, certain features such as LRDC provide flood control. The Draft TMDL does not take this important practical function into account in any meaningful manner.

Further, designation of a given water body as a nonpoint source in no way identifies the true cause of the impaired water quality. *See, e.g.,* Draft TMDL at 2-6, 3-3. If ODEQ cannot identify actual sources, the TMDL should explain the related data deficiencies. KWUA recognizes that ODEQ does not have sufficient information to identify the impairing constituents' actual sources. However, the failure to identify sources within the TMDL can shift the burden to certain parties inappropriately and minimize the utility of any TMDL.

In this regard, with the many TMDLs that have been or are being developed, it is difficult for anyone, let alone the parties who would be most directly affected, to understand each TMDL's ramifications. Accordingly, ODEQ, EPA, and the Regional Water Board should publish a summary of each existing and proposed TMDL, the waters it covers, the geographic areas to which it assigns allocations, the specific loads it allocates, the existing or anticipated regulatory document establishing implementation measures assigned to that TMDL, and the specific areas covered by any such implementation measures.

The Draft TMDL was prepared without sufficient data to support the load allocations, sources, and natural background assumptions. Any TMDLs or implementation plans adopted for water bodies within the Klamath River Basin must be based on accurate, current data and reasonable assumptions. We understand that the report completed by the U.S. Geological Survey, *Review of Revised Klamath River Total Maximum Daily Load Models from Link River Dam to Keno Dam, Oregon* (2010) has been or will be provided to ODEQ. We are also aware that the Bureau of Reclamation (Reclamation) will submit technical comments, and join in technical concerns expressed by Reclamation. Other comments below also highlight certain technical issues.

As a last general matter, it is critical to coordinate the implementation of pending and completed TMDLs and other water quality activities in the Klamath Basin. Klamath farmers and ranchers are on the receiving end of various TMDL processes. ODEQ should coordinate implementation of the Draft TMDL with the implementation of other TMDLs and other

³ KWUA questions the extent to which a TMDL may identify a reservoir as a source of discharge subject to load allocations. *See, e.g.,* Draft TMDL at iii, 2-52.

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planning actions to ensure the requirements are consistent, feasible, and based on reasonable water quality standards. For example, KWUA has concerns about the combined effects of Oregon's use of implementation plans prepared by Designated Management Agencies (DMAs), which include KWUA members, California's use of conditional waivers of waste discharge requirements, and interim WQMPs. We, and the water users, also have concerns related to imposing WQMPs where there already exists an Agricultural Water Quality Management Area Plan developed in part and overseen by the Oregon Department of Agriculture (ODA). Farmers and ranchers may have even further responsibilities under programs of the Natural Resources Conservation Service or other agencies. ODEQ should go to whatever lengths are necessary to avoid inconsistency, confusion, regulatory overlap, inefficiency, and unnecessary costs.

Comments on specific sections of the Draft TMDL follow.

B. Comments Regarding the Executive Summary, Introduction, and TMDLs (Chapters 1-4) of the Draft TMDL

1. Load Allocations

KWUA has a number of concerns related to the Draft TMDL's proposed load allocations for various sources and impoundments. As discussed in the general comments, the currently-existing and proposed TMDLs are inconsistent in their treatment of certain features such as LRDC, KSD, and impoundments. These cannot be both impaired "waters of the United States" for which TMDLs are prepared and nonpoint sources of pollutants.

The Draft TMDL also makes inconsistent assumptions related to implementation of TMDLs. It assumes, for example, immediate compliance with the Upper Klamath Lake TMDL in simulating background water quality in the Klamath River. However, the load allocations do not use the same assumption in calculating appropriate load allocations for features within the Klamath Project such as KSD or the small nonpoint sources⁴ discharging to Klamath River (including PDIC and others), LRDC, discharges to Lost River, or Anderson Rose impoundment. In particular, it appears that, if water diverted from Upper Klamath Lake does not in fact meet the Upper Klamath Lake TMDL, the load allocations for these other sources could not be met unless they reduced loading that originated from a noncompliant Upper Klamath Lake. That is, the quantitative load allocations for these features would point to the Klamath Project "dischargers" if Upper Klamath Lake failed to meet standards. To the extent that quantitative load allocations for these features are adopted, they should be applicable only after Upper Klamath Lake water in fact is compliant with the Upper Klamath Lake TMDL, or they should be adjusted such that allowable loading includes only "additions" to compliant incoming water quality.

⁴ KWUA believes that there are various, relatively small discharges to the Klamath River that have not been enumerated in the TMDL. Whether these are ultimately identified individually or collectively, the TMDL should make clear that discharge is allowed from these sources.

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It also appears that the Draft TMDL, while assuming Upper Klamath Lake meets its TMDL, does not assume that the TMDLs that have been adopted for KSD in California, Lower Klamath Lake, or other features have been fully implemented.

KWUA finds the load allocations in Tables 2-9, 2-11, 2-14, 2-15, 3-11, 3-12, and 3-13 difficult to understand. In addition, assuming it is proper to assign allocations to KSD and LRDC, consideration should be given, in consultation with Reclamation, to expressing the load allocation as the combined loading from these two sources, to promote management flexibility.

We question the "allocations" for impoundments, for various reasons. First, we do not believe ODEQ has authority to assign a load in this manner, where the impoundment itself does not add any pollutants. Second, the Draft TMDL tables regarding impoundments for dissolved oxygen describe "necessary increases." Draft TMDL at 3-32, 3-33, 3-35. This does not represent a "load allocation" and is confusing. Third, we do not understand inclusion of KSD as an "impoundment." Fourth, the Draft TMDL does not appropriately take into consideration the origin of water behind the impoundments, or the sources of pollutants in that water. For example, water behind Anderson-Rose Dam, at least in the irrigation season, will likely be water diverted from Upper Klamath Lake. Again, if Upper Klamath Lake does not in fact meet water quality standards, the "impoundment" should not be assigned an allocation based on mitigating that problem. Finally, to the extent the purpose of a load allocation for "impoundments" is to address the quality of downstream waters, ODEQ must consider that water bypassed at Wilson Reservoir and Anderson-Rose Dam has not necessarily been impounded at all or affected by having been "impounded"; and limited if any water may be released below Anderson-Rose Dam during the irrigation season.

Further, if load allocations for impoundments relate to improved water quality downstream of the impoundment, there should be a load allocation for Upper Klamath Lake, based on its influence on the water quality of all the waters that are subjects of the Draft TMDL. Upper Klamath Lake's water quality can affect the quality of Lost River or KSD directly. In fact, there is not necessarily any intervening use of water released from Upper Klamath Lake, most particularly with respect to influences of Upper Klamath Lake on Lost River water quality. Upper Klamath Lake, in other words, should not be treated differently than other impoundments for the purposes of this TMDL. Again, the effect of the load allocations as proposed in the Draft TMDL is to make the Klamath Project "responsible" for poor water quality conditions in Upper Klamath Lake.

KWUA questions the assignment of loads to a district or other governmental agency rather than to actual sources. *See, e.g.,* Draft TMDL at 3-35. The federal and state regulations do not contemplate that states will delegate source identification to other governmental agencies. Rather, the regulations suggest that a load allocation should be "attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources." 40 C.F.R. § 130.2(g); OAR 340-041-0002(30); *see* OAR 340-042-0040(4)(h). In accordance with the regulations, when individual nonpoint

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sources cannot be quantified or distinguished from natural background sources, the TMDL should assign a "gross allotment" to all the nonpoint and natural background sources contributing to a receiving water. 40 C.F.R. § 130.2(g); OAR 340-041-0002(30); OAR 340-042-0040(4)(h). However, rather than assign a gross allotment to all nonpoint and natural background sources to the Lost River system, the Draft TMDL attempts to assign loads to governmental agencies and water bodies. *See, e.g.*, Draft TMDL at 2-45, 3-34, 3-35. ODEQ must re-evaluate load allocations to ensure it appropriately applies the federal and state regulations.

2. Description of the Klamath Project

We are concerned by an apparent lack of objectivity in the Draft TMDL's discussion of the Klamath Project generally and KSD specifically. The Draft TMDL does recognize that the Klamath Project is a "net sink" of nutrients, but appears to go out of the way to identify the Klamath Project as a source of impairment. In this regard, the Draft TMDL's argumentative discussion related to KSD includes a temporary shift from discussion of loads, to discussion of concentrations in order to advance a point. Draft TMDL at 2-30 to 2-32. The Draft TMDL also draws a generalized conclusion related to effects on assimilative capacity of the Klamath River (*id.* at 2-33) that does not take into account that the Klamath Project does not affect the volume of water in Lake Ewauna or the consequences of mass loading for factors such as sediment oxygen demand in the context of Lake Ewauna/Keno Reservoir. Finally, the Draft TMDL selects information from a single month (August 2002) to advance its arguments. *Id.* at 2-31. We understand that this lone month is the most extreme situation for which information exists. The Draft TMDL's focus on that specific month of record lacks objectivity. We encourage ODEQ to provide a more objective analysis. Further, as noted above, if the most significant periods of time are the summer months, it is inappropriate, and may detract from sensible management strategies, to generalize information for one month to justify load allocations for every month of every year.

KWUA appreciates that the Draft TMDL recognizes that the Klamath Project supports the region's agricultural economy. Draft TMDL at 1-10. Given the importance of the Klamath Project to the region, the Draft TMDL should clearly and accurately describe the Klamath Project. In particular, KWUA disputes the Draft TMDL statements with respect to Klamath Project irrigation practices affecting the quality of the waters at issue. *Id.* at 2-6, 2-23, 2-26, 2-30, 2-31, 2-34, 3-3, 3-14, 3-15, 4-12, 4-15, 4-17. We are not aware of scientific evidence to support that irrigated agriculture within the Klamath Project increases nutrient loads to the Klamath River or Lost River. Given that the Klamath Project's source water is the nutrient-rich Upper Klamath Lake and passes through two wildlife refuges, it is unclear what Klamath Project irrigation practices cause loading.

Similarly, the Draft TMDL states without sufficient support that the KSD and LRDC⁵ caused a greater than 0.075°C impact on the Klamath River for periods between June and

⁵ Note also that discharge from LRDC to the Klamath River during this period is rare.

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September. Draft TMDL at 2-56. Also without sufficient support, the Draft TMDL concludes, "reservoirs and irrigation ditches which, through their operations, increase water temperatures or otherwise modify natural thermal regimes in downstream river reaches." *Id.* at 4-12. ODEQ must support any statements regarding water quality effects with facts and provide the data.

In addition, certain concentration assumptions applied to the Draft TMDL analysis are inappropriate. Draft TMDL at 2-30 ("When concentration data were not available for a specific canal, a nearby river concentration was used as a surrogate."). To the extent the analysis relies upon surrogate data, the Draft TMDL must explain the origin of the surrogate numbers, the canals to which the data were applied, and the rationale supporting such application. OAR 340-042-0040(5)(b). The Draft TMDL does not do so, and instead makes conclusions without the requisite support.

3. Natural Background Assumptions

The Draft TMDL does not sufficiently distinguish between natural background loads and nonpoint source loads for the Klamath and Lost River TMDLs. Since Upper Klamath Lake is a large source of nutrients in waters subject to the TMDLs, any success hinges on the application of a reasonable, scientifically sound estimate of natural background. Federal regulations and policy require ODEQ to base load allocations on sound science and appropriately account for natural background conditions. 40 C.F.R. § 130.2(g); *see Protocol for Developing Nutrient TMDLs*, EPA 841-B-99007 (Nov. 1999) at 3-7 ("load allocations and wasteload allocations are calculated using the best available data and information"). Applicable law requires ODEQ to gather and analyze the data necessary to develop TMDLs appropriate for the subject water bodies.

The model uses current flow data for Upper Klamath Lake, LRDC, and KSD to maintain consistency with the existing conditions scenario. Draft TMDL at 2-41, 2-42. However, the model assumes that water quality and temperature levels for LRDC and KSD are equal to those of Upper Klamath Lake under TMDL-compliant conditions. *Id.* at 2-42. These natural background assumptions are inappropriate and undermine the Draft TMDL. Basing the natural background conditions for these distinct channels on assumed compliance with the Upper Klamath Lake TMDL is unreasonable. There is no adequate justification in the TMDL or model for the use of these levels as the natural baseline. The Draft TMDL additionally does not adequately take into account the effects on water quality of factors such as waterfowl and other wildlife, and natural hot springs.

KWUA is also concerned with other aspects of the temperature TMDL for the Upper Klamath River and Lost River Subbasins. The Draft TMDL states that the cumulative effects of nonpoint source heating *cannot exceed 0.2°C*. Draft TMDL at 4-27. However, in identifying the responsibilities of DMAs with regard to TMDL compliance, the Draft TMDL states: "The sum of the nonpoint source impacts including agriculture, forestry, urban areas, irrigation, dam operations, and hydroelectric projects must be *less than 0.2°C*." *Id.* at 4-28

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(emphasis added). Initially, then, there is a slight discrepancy in the Draft TMDL's assignment of the load allocation to water management agencies. Moreover, the Draft TMDL reads: "Because of the complexity and size of the irrigation system, it was not possible to quantify the thermal impact of each district's irrigation withdrawals, delivery and return into the Klamath River and Lost River tributaries." *Ibid.* If ODEQ does not fill this data gap, water management districts will lack the baseline to which to compare any management actions that might be available.

C. Comments Regarding the Proposed WQMP

1. Assignment of Implementation Responsibilities

The Draft TMDL inappropriately assigns expectations and responsibilities to water management agencies as DMAs to implement the TMDLs. *See, e.g.*, Draft TMDL at 5-7 (defers required WQMP elements to water management agencies to develop and implement), 5-8 to 5-9, 5-11 to 5-13. Water management agencies include irrigation districts and other public agencies. *Id.* at 1-20, 5-15. Under Oregon law, a DMA is "a federal, state, or local governmental agency that *has legal authority over a sector or source contributing pollutants*, and is identified as such by the Department of Environmental Quality in a TMDL." OAR 340-042-0030(2) (emphasis added). Irrigation districts (*e.g.*, KID) and drainage districts (*e.g.*, KDD) must operate in accordance with Oregon's Irrigation District Law (ORS § 545.001 *et seq.*) and Drainage District Act (ORS § 547.005 *et seq.*), respectively. Neither of these statutes provides irrigation or drainage districts authority to enforce water quality standards with respect to constituent irrigators or pollutant loads in their system. Within the Klamath Project, there are also District Improvement Companies, Improvement Districts, a Ditch Company, and other entities, all of which also lack such authority. Additionally, these entities also lack the expertise and other resources to enforce water quality standards. ODEQ cannot expect or require water management agencies to assume the role of a water quality regulator. Inappropriately assigned actions are unlikely to be carried out effectively, if at all.

Irrespective of the authority or obligations of such entities under state law, we wish to point out that the Draft TMDL is unclear as to expectations as to works which are owned and operated by the Reclamation and those owned by Reclamation but operated by a district. For example, within KID, canals and drains are owned by Reclamation but operated by KID under contracts. We encourage ODEQ to gain a more complete understanding of this issue. We also have concerns related to DMA responsibilities that may be proposed for Reclamation, since Reclamation's costs may or will be passed on to the districts and water users.

In addition, ODEQ cannot assign responsibility for certain discharges unless the assignee is actually responsible for the subject discharges. The *TMDL Implementation Guidance* issued by ODEQ recognizes this limitation: "DMAs required to submit a plan are not responsible for pollution arising from land management activities that occur outside of their jurisdictional authority." *TMDL Implementation Plan Guidance*, ODEQ (May 2007)

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at 7 (emphasis in original). In the WQMP, the Draft TMDL states; "Also with regard to TMDL responsibilities, [ODEQ] recognizes that organizations are not responsible for land use activities or load allocations outside of their area of jurisdictional authority." Draft TMDL at 5-14. This statement is vague and should be revised to conform to the language in the *TMDL Implementation Guidance*. The WQMP discussion should also state that the DMAs have no responsibility to improve the water quality coming into their systems.

Similarly, the Draft TMDL's WQMP should clearly state that DMAs are not responsible for regulating activities that occur on private lands within the DMAs' service areas or addressing these lands in the DMAs' TMDL Implementation Plans. Put differently, additional implementation plans related to on-farm practices are unnecessary. As explained, identified DMAs have no legal authority to regulate such activities. It isn't clear how ODEQ distinguishes between a DMA and a "responsible party".

Certain private land is already covered by water quality plans. With assistance from other parties⁶, ODA developed the *Lost River Subbasin Agricultural Water Quality Management Area Plan (AWQMP)* (revised April 28, 2006) as a comprehensive water quality management plan for agricultural activities within the Lost River Subbasin.⁷ See OAR 603-090-0000. The AWQMP covers the water bodies at issue in the Draft TMDL, including those in the Klamath Project area.⁸ See AWQMP at 7, 8, 12. The AWQMP applies to agricultural, rural, and forest lands and lands that support agricultural activities but are not strictly in agricultural use (e.g., private roads).⁹ *Id.* at 6. The AWQMP addresses bacteria, nutrient, and temperature¹⁰ concerns based on relevant water quality standards. *Id.* at 9; see

⁶ ODA received assistance from the Lost River Local Agricultural Water Quality Advisory Committee and Klamath Soil and Water Conservation District. Lost River AWQMP at 1.

⁷ Principles used to guide the AWQMP's development included using scientifically credible data and techniques; recognizing background water quality; recognizing that proper agricultural practices improve water quality; recognizing that the economic viability of agriculture is necessary to achieve improvements; emphasizing maintenance, restoration, education, and monitoring; maintaining a non-threatening, positive atmosphere; and using common sense to develop cost-effective, practical, flexible, and realistic solutions. AWQMP at 11.

⁸ More specifically, the AWQMP covers the Klamath River from Link River Dam downstream to Keno Dam (including Lake Ewauna), Oregon portions of the Lost River and its tributaries, and Swan Lake Valley. AWQMP at 12.)

⁹ The Lost River AWQMP does not apply to agricultural activities on lands held by the federal government or in trust for tribes. AWQMP at 9.

¹⁰ Notably, Oregon law establishing the temperature criteria at issue in the Draft TMDL reads:

For farming or ranching operations on State or private lands, water quality standards are intended to be attained and are implemented through the Agricultural Water Quality Management Act (ORS 568.900 to 568.933) and rules thereunder administered by the Oregon Department of Agriculture. Therefore, farming and ranching operations that are in compliance with the Agricultural Water Quality Management Act requirements will not be subject to DEQ enforcement under this rule. DEQ will work with the Oregon Department of Agriculture to revise the Agricultural Water Quality Management program to attain water quality standards.

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OAR 603-090-0030(1). The AWQMP finds that, "reductions in nutrient levels [in accordance with the AWQMP] are expected to alleviate concerns related to low dissolved oxygen, high pH, chlorophyll *a*, and ammonia toxicity" that are the subjects of the Draft TMDL. AWQMP at 11. Accordingly, the AWQMP was developed to ensure that landowners conduct agricultural-related activities to protect beneficial uses. *See id.* at 18-21.

The AWQMP calls for landowners to undertake voluntary activities to protect water quality and beneficial uses (*e.g.*, best management practices). AWQMP at 9. ODA has substantial authority under statute to promote water quality improvement related to private land. *See, e.g.*, ORS §§ 568.912(2), 568.915(1) ORS § 568.921; OAR 603-090-0040. ODA also has certain authority to use regulatory tools when voluntary efforts are not taken or are deemed insufficient. ORS § 568.930; OAR 603-090-0000(5)(d), 603-090-0060(3), 603-090-0080, 603-090-0110; AWQMP at 9.

To implement the AWQMP, ODA adopted "Area Rules." OAR 603-095-3900 *et seq.*; AWQMP at 23. The Area Rules provide a straightforward way for landowners to determine if their agricultural management protects water quality in accordance with the AWQMP. AWQMP at 23. The Area Rules are based on a scientific relationship between the land condition and specific water quality problems. *Ibid.* For example, Area Rule (3)(a) addresses those characteristics of riparian areas that provide water temperature moderation and filtration of potential pollutants. OAR 603-095-3940(3)(a); AWQMP at 23. Area Rule (3)(a) states: "agricultural activities must allow the establishment or improvement of vegetation to provide bank stability and shading of natural streams consistent with the vegetative capability of the site." OAR 603-095-3940(3)(a). Area Rule (3)(b) authorizes weed control in riparian areas where such activities are consistent with Area Rule (3)(a). OAR 603-095-3940(3)(b).¹¹ Area Rule (5) is a general waste management rule that reinforces Oregon law prohibiting pollution of public waters. OAR 603-095-3940(5); AWQMP at 23; *see* ORS §§ 468B.025, 468B.050. The purpose of Area Rule (5) is to clarify that ODA has direct enforcement authority under the Area Rules, and has additional authority as necessary, to assess civil penalties for water quality violations. AWQMP at 23. "[Area] Rule (5) is used when agricultural activities cause conditions that significantly limit attainment of water quality standards or threaten beneficial uses of the water." *Ibid.*

ODA may modify the AWQMP and Area Rules to fit changed circumstances or when new information becomes available supporting modifications. *See* AWQMP at 25. A local advisory committee reviews the AWQMP biennially, and amendments to the AWQMP and Area Rules must occur through a public review process. *Id.* at 30. Moreover, the AWQMP

OAR 340-041-0028(12)(f).

¹¹ Based on ODEQ's statements at the March 16, 2010, Draft TMDL workshop in Klamath Falls, it is our understanding that ODEQ's primary concern in requiring TMDL Implementation Plans is that trees and other vegetation that provide shade to water bodies not be removed. As demonstrated, this is also a high priority of the AWQMP.

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states: "When a TMDL is established for the Lost River, the Area Plan [*i.e.*, AWQMP] and [Area] Rules will be re-evaluated and revised to address the load allocation assigned to agriculture. DEQ will also evaluate the success of the Area Plan upon implementation of the TMDL." *Ibid.* Thus, the AWQMP satisfies the adaptive management component of the Draft TMDL. *See, e.g.*, Draft TMDL at 5-5 to 5-6.

At the March 16, 2010, workshop on the Draft TMDL, ODEQ intimated that TMDL Implementation Plans should focus on shading, weed removal, and best management practices (BMPs). If this is ODEQ's intent, the WQMP needs to be straightforward and specific in this regard and limit such plans to addressing activities and BMPs related to shading and weed control. Further, the Draft TMDL should clearly reflect that aquatic pesticides used in weed removal operations are highly regulated and that it is difficult to use these substances in Oregon at all, substantially hindering weed control operations. The WQMP should also establish a timeline for implementing the TMDL Implementation Plans, including a schedule of reasonable and achievable actions. The WQMP requires DMAs to prepare TMDL Implementation Plans within 18 months from the Draft TMDL's adoption.¹² This timeframe is unreasonable, especially given that KWUA members generally lack the resources to develop such plans. The Draft TMDL should clearly reflect that use of aquatic pesticides for weed removal in conveyance facilities is highly regulated and that it is difficult to use these substances in Oregon at all, substantially hindering such weed control operations.

2. Implementation of the Memorandum of Agreement

KWUA appreciates that ODEQ plans to coordinate with EPA (Regions 9 and 10) and the Regional Water Board to implement the Klamath TMDLs. *See* Draft TMDL at 5-3 to 5-4. KWUA understands that ODEQ and these parties developed a Memorandum of Agreement (MOA) in 2009 for joint implementation of the Klamath River and Lost River TMDLs. *Ibid.* The WQMP's discussion of the MOA implies that implementation of the TMDLs may occur through commitments made in the MOA. *See ibid.* One such commitment is for the agencies to work jointly with "implementation parties" such as KWUA to develop effective implementation plans and achieve water quality standards. *Id.* at 5-4. KWUA is pleased that ODEQ seeks to involve KWUA in such efforts. However, it is inappropriate at this time for ODEQ to rely upon the MOA commitments to implement the TMDLs. Rather, the WQMP should be clear that the information regarding the MOA is for informational purposes only and provide for an amendment to the TMDLs in the event these types of efforts come to fruition.

Another commitment in the MOA is that the parties will explore engineered treatment options, such as treatment wetlands and algae harvesting. Draft TMDL at 5-4. With regard to treatment wetlands, KWUA notes that any wetland filtration effort would require careful

¹² KWUA is unsure which water management districts must create a TMDL Implementation Plan. ODEQ should more clearly assign implementation responsibilities.

consideration of temperature effects and effects on water quantity. It is crucial that any wetland filtration area created not affect water availability for the Klamath Project. It is also crucial that the costs of the project be carefully considered in respect to how effectively it mitigates water quality concerns. With regard to algae harvesting, KWUA notes that any plan to harvest algae from the Klamath River Basin to produce biofuels would be technically infeasible. The available scientific evidence demonstrates that algae in the Klamath River Basin are not suitable for such a purpose. In addition, there is concern over the financial feasibility of construction and operation of algae harvesting projects.

The MOA also states that its parties will develop and implement a basin-wide water quality tracking and accounting program. Draft TMDL at 5-4. This program is to establish a framework to track water quality improvements, facilitate planning and coordinated TMDL implementation, and enable appropriate water quality offsets or trades. *Ibid.* The WQMP encourages the Klamath Basin DMAs to develop a basin-specific, water quality credit program to meet the TMDL allocations for the Upper Klamath and Lost River Subbasins. *Id.* at 5-12. KWUA does not oppose the concept of offsets. However, KWUA does not fully understand how ODEQ intends to carry out the proposed trading program and is unclear as to where offset opportunities may exist for the subject TMDL as structured. Accordingly, KWUA cautions that ODEQ should not rely upon a trading option in lieu of adequately modeling alternative load reduction scenarios and establishing technically appropriate and equitable allocations. Further, the WQMP states that a water quality credit trading program, "would allow for collaboration among basin stakeholders on common projects while earning credit towards their regulatory requirements related to TMDLs and other mandated programs . . ." *Id.* at 5-24. The WQMP should clearly acknowledge the potential application of any such trading program to the Klamath Project. In particular, the WQMP should ensure that irrigation discharges that reduce loading to water bodies receive a credit against any load allocation assigned in the respective TMDL.

3. Consideration of Factors Related to Implementation Feasibility

As previously suggested, the WQMP should identify implementation measures necessary to carry out the underlying TMDLs. *See* section A above. Based on the measures identified, the WQMP should address financing, the time needed to implement the TMDL Implementation Plans (*i.e.*, attain water quality standards), and the economic, social, and environmental impacts of plan implementation. *See, e.g.*, 40 C.F.R. § 130.6(c)(6); *see* OAR 340-042-0040(4)(I)(N), (6). The WQMP should address these measures in great detail. However, the WQMP lacks meaningful discussion of the economic and social impacts. For example, the WQMP should address the economic and social impacts of the potential measures DMAs will have to take to manage the known or suspected sources of pollution. *See TMDL Implementation Guidance* at C-4 to C-5. Such measures could require DMAs to conduct studies and performance monitoring, otherwise collect and analyze data, conduct public outreach, implement BMPs, or hold noticed public hearings to consider issues and

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adopt resolutions. DMAs may also have to update their implementation plans periodically, potentially at substantial cost. *See id.* at C-5; OAR 340-042-0030(6).

In addition, while KWUA appreciates the list of potential funding sources identified in the WQMP, we request ODEQ explain in more detail how ODEQ or others would assist individual dischargers in identifying and obtaining funding for the proposed implementation measures. *See* 40 C.F.R. § 130.6(c)(6); Draft TMDL at 5-21; *see also Protocol for Developing Nutrient TMDLs*, EPA 841-B-99007 (Nov. 1999) at 7-5 (nonpoint source controls must be supported by adequate funding). We also request a more complete list of funding sources rather than a "partial list of assistance programs." *Ibid.* Further, ODEQ must recognize obstacles outside of individual farmers' control, such as regulatory limitations, power rates, and costs associated with water operations.

4. Performance Standards

The WQMP should establish unambiguous performance standards. This is particularly important in the Klamath Basin where natural background and current conditions make attainment of water quality standards impossible in the foreseeable future. The WQMP recognizes that nonpoint source implementation would take several years to several decades after full implementation to reduce and control pollution (e.g., heat loads) effectively. Draft TMDL at 5-5. In this instance, we recommend that it be made clear that any responsibility ends with implementation plans, not the specific load allocations of the Draft TMDL.

In addition, the WQMP does not adequately recognize that sources out of the control of DMAs or any entity within the Klamath Project are likely to prevent attainment of the water quality standards and TMDLs, and may require DMAs to waste resources to meet impossible load allocations. Nonpoint sources are to implement the TMDLs through TMDL Implementation Plans prepared by DMAs. Draft TMDL at 5-5. The WQMP states: "Where implementation of the implementation plan or effectiveness of the management techniques are found to be inadequate, ODEQ expects management agencies to revise the components of the plan to address these deficiencies." *Id.* at 5-6; *see* WQMP at 1-9 ("If ODEQ determines that all appropriate measures are being taken by the DMAs, and water quality criteria are still not being met, ODEQ may reopen the TMDL and revise as needed."). This implies that DMAs may have to expend scarce resources on measures that do not meaningfully improve water quality, if at all. Such a requirement removes resources from actual measures to improve water quality in the subbasin.

Similarly, the WQMP states:

If and when ODEQ determines that implementation plans have been fully implemented, that all feasible management practices have reached maximum expected effectiveness, and a load allocation cannot be achieved, the Department shall reopen the TMDL and adjust the load allocation and its associated water quality standard(s) as necessary.

Steve Kirk

Re: KWUA Comments on Draft Upper Klamath and Lost River Subbasins TMDL & WQMP

May 27, 2010

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Draft TMDL at 5-5.

While KWUA appreciates ODEQ's assurances that the TMDLs adopted may be revised, ODEQ should reasonably ensure that the TMDLs are appropriate *at the time they are adopted*. Parties should not have to spend scarce resources based on TMDLs destined to fail. No amount of plan implementation by the DMAs will change the water quality coming into their conveyance systems. ODEQ should carefully consider now whether the TMDLs are achievable, especially considering the shortcomings of the natural background assumptions and modeling.

D. Conclusion

We reiterate that KWUA understands that water quality concerns in the Klamath Basin deserve focused attention. However, the Draft TMDL as proposed overemphasizes regulatory philosophies and defers to a modeling exercise, which, even if it were perfect, is divorced from practicality.

The Draft TMDL should not be adopted as proposed. We believe a more logical and effective approach for ODEQ is to consider a phased approach to TMDL development which does not result in applicable numeric load allocations in its first phase. This would allow for integrated, sensible, and effective water quality planning and implementation, which would allow for consideration of appropriate standards, targeted resource allocation, and a much higher likelihood of buy-in from the affected communities. Failing that, any final TMDL should be revised based on the comments above, and further revised to state that load allocations will be effective only after Upper Klamath Lake and other source waters meet water quality standards, and that any such allocations will be revisited prior to becoming applicable.

Steve Kirk

Re: KWUA Comments on Draft Upper Klamath and Lost River Subbasins TMDL & WQMP

May 27, 2010

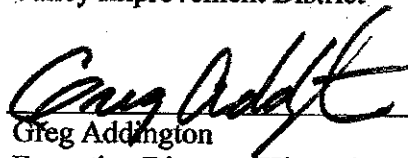
Page 16

Again, KWUA appreciates the opportunity to comment on the Draft TMDL. Thank you for considering these comments.

Sincerely,

Ady District Improvement Company
Klamath Irrigation District
Klamath Drainage District
Klamath Water Users Association
Tulelake Irrigation District
Pioneer District Improvement Company
Poe Valley Improvement District

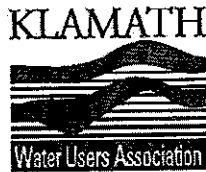
By:



Greg Addington

Executive Director, Klamath Water Users
Association

cc: KWUA Board of Directors and Alternates
Bureau of Reclamation, Klamath Area Office
California North Coast Regional Water Quality Control Board



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February 9, 2010

Via Electronic Mail

Catherine Kuhlman
Executive Officer
North Coast Regional Water Quality Control Board
c/o Katharine Carter
5550 Skylane Boulevard, Suite A
Santa Rosa, CA 95403
kcarter@waterboards.ca.gov

Re: Comments on December 2009 Updated Public Review Draft for the Klamath River TMDLs, Proposed Site Specific Dissolved Oxygen Objectives, and the Klamath River and Lost River Implementation Plans

Dear Ms. Kuhlman:

Thank you for the opportunity to comment on the updated public review draft of the Staff Report for the Klamath River Total Maximum Daily Loads Addressing Temperature, Dissolved Oxygen, Nutrient, and Microcystin Impairments in California, the Proposed Site Specific Dissolved Oxygen Objectives for the Klamath River in California, and the Klamath River and Lost River Implementation Plans (Staff Report) and the proposed basin plan language associated therewith (Proposed Basin Plan Amendment). On behalf of its constituent districts and Klamath Project irrigators, the Klamath Water Users Association appreciates your consideration of these comments. The Tulelake Irrigation District, which is a member of the Klamath Water Users Association with operations within the United States Bureau of Reclamation Klamath Project (Klamath Project) in California, hereby individually joins in these comments. The Klamath Water Users Association and Tulelake Irrigation District are collectively referred to herein as "KWUA."

KWUA submitted comments on the June 2009 Public Review Draft for the Klamath River TMDLs and Action Plan Addressing Temperature, Dissolved Oxygen, Nutrient, and Microcystin Impairments in California, which are attached and incorporated herein by this reference. KWUA recognizes that the updated Staff Report provides additional information and/or clarification which include an effort to address some of KWUA's concerns. However, the concerns addressed in KWUA's prior comments have not been resolved and still apply to the updated information in the Staff Report. This letter provides additional comments on some of

Catherine Kuhlman

Re: Comments on Public Review Draft Klamath River TMDL, etc.

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the new information and analysis set forth in the Staff Report and Proposed Basin Plan Amendment.

KWUA offers the following specific comments on: (1) the draft TMDL assigning load allocations to the mainstem of the Klamath River in California (Draft TMDL), which is explained in the Staff Report and summarized in the Proposed Basin Plan Amendment; (2) the Klamath River and Lost River Implementation Plans (Proposed Implementation Plan), which is explained in Chapter 6 of the Staff Report and included in the Basin Plan Amendment; (3) the Proposed Site-Specific Dissolved Oxygen Objective for the mainstem of the Klamath River in California (Proposed DO Objective), which is explained in Appendix 1 of the Staff Report and included in the Proposed Basin Plan Amendment; (4) the proposed prohibition on discharges in violation of water quality objectives in the Klamath River Basin (General Prohibition), which is included in the Proposed Basin Plan Amendment; and (5) the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq., analysis set forth in Chapter 9 of the Staff Report (CEQA Analysis).

A. Draft TMDL and Proposed Implementation Plan

1. *Application to Klamath Project*

KWUA's constituent districts and irrigators operate within the Klamath Project in Oregon and California. No land within the Klamath Project discharges to the Klamath River in California. As such, the Draft TMDL cannot impose requirements on the Klamath Project.

In prior comments, KWUA objected to the confusion concerning the scope of the proposed implementation plan and statements throughout the prior document suggesting, but not directly stating, that the Regional Board would implement EPA's Lost River TMDL and the Oregon TMDLs through the proposed implementation plan. In response, the Proposed Implementation Plan and Proposed Basin Plan Amendment have been superficially changed to state intent to implement the Lost River, California Total Maximum Daily Loads, Nitrogen and Biochemical Oxygen Demand to address Dissolved Oxygen and pH Impairments (EPA Lost River TMDL) through the Proposed Implementation Plan.¹ Further, the Staff Report contains additional scattered statements suggesting that the load allocations assigned to "Stateline" are intended to address discharges to the Klamath River in Oregon and to the Lost River in California. (See, e.g., Staff Report, p. 9-7 ["[w]aters entering California from Oregon at Stateline, which includes . . . the Lost River watershed that drains the Klamath Irrigation Project

¹ However, the Staff Report and Proposed Basin Plan Amendment continue to make vague and confusing references to "watershed-wide" measures and application to minor and/or major "tributaries." The applicability or inapplicability to the Lost River segment in California cannot be discerned by these references. If the Regional Board is going to adopt a basin plan amendment that attempts to include new implementation measures for the Lost River segment in California, the Regional Board must clearly distinguish the implementation measures and Basin Plan requirements that apply to the Lost River segment in California.

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area”].) In both instances, the Staff Report encourages the Regional Board to overstep its authority and create additional and conflicting requirements for Klamath Project irrigators. KWUA continues to strongly object to such action.

It is inappropriate to segregate the development and consideration of TMDL allocation from the proposed implementation. EPA’s technical TMDL for Lost River has significant shortcomings. Further, that TMDL was developed without any consideration of the requirements of the Porter-Cologne Water Quality Control Act, Water Code section 13000 et seq. (Porter-Cologne). The Staff Report, however, attempts to “implement” the EPA Lost River TMDL with only a bare reference to the load allocations set forth therein. (See Staff Report, p. 6-23.) The Proposed Implementation Plan contains no analysis of how the proposed implementation measures, designed to address various constituents including temperature (for which part of the Lost River was delisted in 2006), will address compliance with the Lost River TMDL in California. (See, e.g., *id.*, p. 5-3 [identifying “watershed-wide” and “Stateline” temperature targets and allocations].) Moreover, the Proposed Implementation Plan does not address the inconsistency between various water quality standards applicable to the waters that the Proposed Implementation Plan attempts to address. (See, e.g., Proposed DO Objective at Staff Report, p. 1-4 of Appendix 1 [proposing to change the DO objective applicable at “Stateline” to a narrative objective based on saturation levels]; see also, e.g., EPA Lost River TMDL, p. 30 [explaining numeric DO objective applicable to Lost River, which is based on minimum DO levels].)

KWUA disagrees with the Staff Report’s suggestion that this segregation is appropriate because “[t]he Regional Board may apply any existing authorities available in a basin plan amendment, and is not necessarily constrained by the scope of the technical TMDL process.” (Staff Report, p. 6-2.) If the Regional Board intends to adopt a basin plan amendment that establishes a “broad based nonpoint source approach” for the entire Klamath Basin, as suggested in the Staff Report, then the Regional Board should notice such a program and engage stakeholders in order to develop a program that takes into consideration the various water quality standards, TMDL allocations and implementation measures, and water quality levels that can be reasonably achieved in the various hydrologic areas within the basin. (See, e.g., Wat. Code, §§ 13000, 13001, 13241, 13263.) The Regional Board staff’s proposal has not done so, and rather continues to try to impose broad-based regulatory restrictions on the entire basin under the label of a mainstem Klamath River TMDL process. Further, Regional Board staff has not identified the specific authority upon which the Regional Board could rely to establish a broad-based non-point source program without taking into consideration the applicable water quality standards and existing TMDLs affecting individual regions within the basin.

2. “Regulating” in Oregon

In attempting to assert Regional Board authority in Oregon, the Proposed Implementation Plan puts responsibility on the Oregon Department of Environmental Quality (ODEQ) to achieve compliance with the Draft TMDL, particularly the load allocations at Stateline. (See, e.g.,

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Proposed Basin Plan Amendment, p. 12; see also Staff Report, p. 6-10.) Though KWUA appreciates the need for interjurisdictional efforts to address Klamath Basin-wide water quality issues, such attempts to impose requirements on ODEQ are not appropriate for a Regional Board implementation plan addressing discharges to waters in California. Further, the Draft TMDL characterizes the Oregon TMDL requirements, without recognizing that Oregon has not yet adopted a Klamath River TMDL or implementation plan. (See, e.g., Staff Report, p. 5-25.) Though KWUA appreciates that Regional Board and Oregon staff have been coordinating on the development of the TMDLs, the Draft TMDL must not assume anything about Oregon's Klamath River TMDL because the decision making body has not adopted any such TMDL. (See Staff Report, p. 6-20 ["Since the Lost River discharges to the Klamath River in Oregon, the allocations are included as part of ODEQ's Klamath River TMDLs and therefore are included in this TMDL through allocations and targets at stateline"].)

3. "Voluntary" Agreement

Similarly, the Proposed Implementation Plan proposes that the United States Bureau of Reclamation (Reclamation) and Tulelake Irrigation District, among others, develop and implement a Management Agency Agreement (MAA) that includes specific action items. (Proposed Basin Plan Amendment, p. 12.) Though the Staff Report suggests that this would be a "voluntary and cooperative means of implementing the TMDL," the Draft TMDL firmly states that the parties would enter into an MAA within six months of TMDL adoption. (Staff Report, p. 6-25; cf. Proposed Implementation Plan, p. 12.) KWUA appreciates the need for interagency coordination. However, it should be made clear the Regional Board cannot force any public agency to enter into an agreement that it has not seen and considered as a public decision making body. Rather, the Proposed Implementation Plan should recommend the MAA as a voluntary measure consistent with the State Water Resources Control Board Non Point Source Policy (State NPS Policy), which encourages voluntary measures to address water quality issues. (State NPS Policy, p. 56.) Further, we believe it inappropriate to list items which any MAA "should" contain. Such expression may be too broad or too narrow. If the Regional Board desires to pursue an MAA, it can of course express its general objectives, but the TMDL should not presume any outcome of any MAA.

Among the "actions" identified for a potential MAA, the draft documents refer to "Lost River and Klamath River" TMDL allocations and targets. Again, the Regional Board has no regulatory authority related to Klamath Project discharges to the Klamath River. In addition, the Proposed Basin Plan Amendment (p. 12) refers to a management plan to meet "or offset" Lost River and Klamath River TMDL allocations. While we do not oppose the general concept of offsets, it is not clear where offset opportunities may exist for Lost River *or* Klamath River TMDLs as structured.

For these reasons and others, we recommend that the concept of an MAA be revised.

4. *Irrigation District Authority*

The Draft TMDL inappropriately assigns responsibility to irrigation districts. (See, e.g., Proposed Basin Plan Amendment, pp. 12, 18.) As an irrigation district formed and operating under California Irrigation District Law, Water Code section 20500 et seq., Tulelake Irrigation District has no authority to enforce water quality standards and cannot regulate activities of constituent irrigators. Under Porter-Cologne, the Regional Board has authority over the actual "dischargers" responsible for discharges to waters of the state. (See, e.g., Wat. Code, § 13260.) The Regional Board cannot assign responsibility for certain discharges unless the assignee is actually responsible for the subject discharge. The Regional Board cannot expect or require Tulelake Irrigation District to take on the role of a water quality regulator.

5. *Natural Background Assumptions*

The Draft TMDL continues to assume immediate compliance with the Upper Klamath Lake TMDL. Despite prior comments suggesting that the baseline applied in the prior draft Klamath River TMDL was too low, the updating process appears to have resulted in further reductions to the assumed baseline. As a result, the "negative" load allocations have dropped to even lower levels, increasing the unreasonableness of the proposed load allocations. (See, e.g., Staff Report, pp. 4-14, 5-17; cf. *id.*, pp. 4-13, 5-16.)

The Regional Board's development of this TMDL must be reasonable and take into consideration economics, water quality levels that can be reasonably achieved, and other public interest factors. (Wat. Code, §§ 13000, 13001, 13241, 13263.) The current superficial analysis of economic factors does not satisfy this standard and completely fails to acknowledge that the assigned loads are impossible to meet in the reasonably foreseeable future. Bare references to analysis of feasibility and probability of success do not suffice to satisfy the stringent requirements of Porter-Cologne. (See, e.g., Staff Report, p. 6-6.)

The Staff Report also suggests that responsible parties may need to "improve and increase" their implementation efforts as necessary where ongoing implementation efforts are insufficient to ultimately achieve the allocations and numeric targets. (Staff Report, p. 7-1.) This statement fails to take into account the fact that circumstances beyond the control of "responsible parties" will likely affect what can be accomplished. Further, the Proposed Implementation Plan places the burden on the regulated parties to "demonstrate that although water quality objectives are not being achieved in receiving waters, controllable sources of pollutants are not contributing to the exceedance." (*Id.*, p. 7-2.) Requiring the regulated community to make such a showing is inappropriate, and contradicts the State Board's policy requiring Regional Board staff to review water quality standards during the TMDL process to "ensure that the standards are amenable to an appropriate implementation plan." (*Id.*; cf., State TMDL Policy, p. 4.) As currently drafted, the Draft TMDL and Proposed Implementation Plan set the regulated parties up for failure, and then place the obligation on them to prove that the failure is not their fault. (See, e.g., Staff Report, p. 7-2 ["dischargers will be required through

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their permits to meet the TMDL allocations and targets”].) This is unacceptable and will create unnecessary conflict that takes resources away from actual measures to improve water quality in the basin.

6. *Klamath Project as a “Nutrient Sink”*

KWUA appreciates the Regional Board staff’s attempt to recognize recent studies showing that the Klamath Project is a “nutrient sink.” However, KWUA disagrees with the Staff Report’s conclusions and characterization of the concentration levels resulting from the Klamath Project. (See, e.g., Staff Report, pp. 4-20 - 4-22.) The analysis on the subject is cursory, limited, and appears end-oriented. In addition, while Klamath Straits Drain concentrations may at times be higher than Klamath River flows, there is no meaningful consideration of the effects of the Klamath Project on loads. Further, certain concentration assumptions applied to such analysis are inappropriate. (*Id.*, p. 4-21 [“[w]hen concentration data were not available for a specific canal, a nearby river concentration was used as a surrogate”].) To the extent the analysis relies on surrogate data, the Staff Report must explain the origin of the surrogate numbers, the canals to which the data was applied, and the rationale supporting such use. The Staff Report does not do so and rather makes conclusions without the requisite support.

KWUA further questions the use of flow assumptions explained within the Staff Report. (See, e.g., Staff Report, p. 4-22.) Flow data for one single month (August 2002) does not provide an objective or reasonable estimation of impacts. Any such analysis or conclusions about flow levels should consider varying hydrology, and further take into account the most current data available. Specifically, KWUA disagrees with the suggestion that Klamath Straits Drain discharge accounts for approximately half of the flow of the Klamath River at Keno Dam. (*Id.*) Even if this condition may have occurred on some occasion, such a single occurrence does not support the Staff Report’s broad conclusions.

B. General Prohibition

KWUA is concerned with the proposal to adopt a conditional prohibition through the Proposed Basin Plan Amendment. (See Proposed Basin Plan Amendment, p. 8.) The legislature included prohibition provisions in Porter-Cologne to authorize Regional Boards to prohibit discharge of certain types of waste or discharge into certain areas to protect water quality. (See Wat. Code, § 13243.) General prohibitions against any unlawful discharges were not authorized and should not be used to circumvent notification requirements for bringing enforcement actions against non-compliant individuals. All persons should be afforded appropriate due process rights, including notification regarding non-compliance before being subject to enforcement. As such, KWUA objects to the inclusion of the proposed general prohibition in the Proposed Basin Plan Amendment.

C. CEQA Analysis

The CEQA analysis fails to consider the environmental setting and regulatory setting associated with the Klamath Project. (See Staff Report, pp. 9-6 - 9-9.) Specifically, the CEQA analysis does not take into account the potentially conflicting water quality measures provided for in the Klamath Project through the various TMDLs, the current efforts undertaken to address these issues, and the existing water use and drainage activities within the Klamath Project. Without this important information, it is impossible to actually analyze the potentially significant impacts of the proposed actions and the reasonably foreseeable actions taken in response. Likely due to this information dearth, the CEQA analysis associated with the proposed waiver program for irrigated agriculture is inadequate. (See *id.*, pp. 9-55 - 9-60.) The analysis improperly dismisses, without explanation, any potential impacts associated with pesticide and nutrient management compliance measures. With respect to other anticipated compliance measures, the analysis identifies potentially significant impacts and vague potential mitigation measures, but does not provide any explanation of how the mitigation measures will actually ensure that no significant impacts occur. (See, e.g., *id.*, pp. 9-57 - 9-58.) Despite recognition that reasonably foreseeable compliance measures could involve change in application and transport of irrigation water and use of runoff and tailwater and drainwater management (all which have the potential to alter existing water management practices), the CEQA analysis fails to meaningfully analyze the potential impacts and necessary mitigation measures associated with changes to ongoing irrigation operations. (*Id.*, pp. 9-58 - 9-60.) Further, the CEQA analysis fails to discuss the possible impacts to existing water supplies resulting from these water management measures. (*Id.*, p. 9-105.)

The CEQA analysis inappropriately dismisses any likelihood of impacts to agricultural resources resulting from the proposed actions. Despite recognizing that "there may be incidental loss of agricultural use in lands mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance," the CEQA analysis concludes no significant impact to agricultural resources. (See Staff Report, p. 9-76.) Regional Board staff suggests that this loss is insignificant because there are very few lands mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the basin. (*Id.*) Even if this is true, then the loss of any such lands is all the more significant and should be avoided or, at the very least, properly mitigated. Further, any incidental loss of farmland has the potential to be a significant impact.

Further, CEQA requires the Regional Board to analyze economic impacts that may result in physical changes leading to an environmental impact. Despite the use of conflicting and unachievable load allocations and water quality standards as a benchmark for compliance with the Proposed Implementation Plan, the CEQA analysis fails to discuss the possibility of any economic impacts that would ultimately result in the conversion of farmland (or other associated environmental impacts). (*Id.*, p. 9-77.) The CEQA analysis must also consider the potential climate change and greenhouse gas emissions resulting from the cumulative loss of agricultural lands (which offset carbon emissions) resulting from the proposed actions and other reasonably foreseeable projects affecting agricultural resources in the Klamath Basin.

Catherine Kuhlman

Re: Comments on Public Review Draft Klamath River TMDL, etc.

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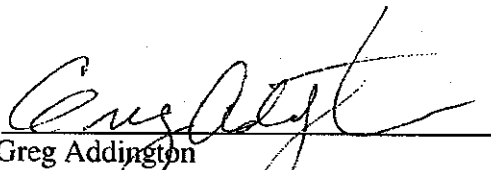
The CEQA analysis inappropriately defers analysis of potential impacts and mitigation measures associated with compliance measures (related to TMDLs and the Proposed DO Objective) at Stateline. (Staff Report, pp. 9-17 - 9-18.) The Regional Board must analyze potential impacts associated with the proposed actions based on reasonably foreseeable circumstances. As such, the CEQA analysis should at the very least consider potential impacts associated with the suggested centralized treatment options. The Regional Board must establish mitigation measures with specific performance standards to ensure that future actions will incorporate mitigation to reduce potential impacts to less than significant.

The CEQA analysis concludes with a general statement that the Proposed Basin Plan Amendment and Proposed DO Objective will not have a significant effect on the environment because the identified impacts are "short-term." The duration of impacts does not bear upon their significance. Dismissing impacts as temporary in nature is inappropriate. The Regional Board must analyze potentially significant impacts to the environment and identify feasible mitigation measures to reduce such impacts. (14 Cal. Code Regs., § 15126.2(a).)

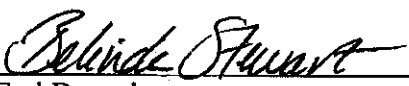
Thank you again for your consideration of these comments.

Sincerely,

By:


Greg Addington
Executive Director, Klamath Water Users
Association

By:

bor 
Earl Danosky
Manager, Tulelake Irrigation District

Encls.

cc: Klamath Water Users Association Board of Directors
Noemi Emeric, EPA Region 9
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August 27, 2009

Via Electronic Mail

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Re: Comments on Public Review Draft for the Klamath River TMDLs and
Action Plan Addressing Temperature, Dissolved Oxygen, Nutrient, and
Microcystin Impairments in California

Dear Ms. Carter:

Thank you for the opportunity to comment on the public review draft of the Staff Report for the Klamath River Total Maximum Daily Loads and Action Plan Addressing Temperature, Dissolved Oxygen, Nutrient, and Microcystin Impairments in California (Staff Report) and the proposed basin plan language for the Klamath River Basin Total Maximum Daily Load Action Plan Addressing Temperature, Dissolved Oxygen, Nutrient, and Microcystin Impairments in California (Proposed Basin Plan Amendment). On behalf of its constituent districts and Klamath Project irrigators, the Klamath Water Users' Association appreciates your consideration of these comments. The Tulelake Irrigation District, which is a member irrigation district of the Klamath Water Users' Association with operations within the United States Bureau of Reclamation Klamath Project (Klamath Project) in California, also individually joins in these comments. The Klamath Water Users Association and Tulelake Irrigation District are collectively referred to herein as "KWUA".¹

¹ KWUA previously submitted comments on the Review Draft Water Quality Restoration Plan for Klamath River Basin in California, which are attached and incorporated herein by this reference.

Katharine Carter

Re: Comments on Public Review Draft Klamath River TMDL and Action Plan

August 27, 2009

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In general, KWUA appreciates the Regional Water Quality Control Board's (Regional Board) efforts to improve water quality in the Klamath Basin in collaboration with other involved parties, such as the Oregon Department of Environmental Quality (ODEQ), Regions 9 and 10 of the Environmental Protection Agency (EPA), and other interested and affected parties. KWUA recognizes that the development of total maximum daily loads (TMDLs) requires consideration of matters that are complex in many respects. One such complexity involves regulatory issues related to the interstate nature of waters, which are particularly complicated in the Klamath and Lost River and Lower Klamath Basins as they relate to the Klamath Project.

KWUA appreciates the Regional Board's attempt to coordinate the implementation of the various pending and completed TMDLs in the Klamath Basin. KWUA believes that implementation of the Draft TMDL should be coordinated with the implementation of other TMDLs and other required planning actions to ensure the requirements are consistent and feasible, and based on reasonable water quality objectives. With the multiplicity of TMDLs that have been or will be developed, it is extremely difficult for anyone, let alone the parties who could be most directly affected, to understand the ramification of each TMDL. For this reason, it would be of great service to the public for ODEQ, the Regional Board, and EPA to publish a simple summary of each existing and proposed TMDL, the waters it covers, the geographic areas to which it assigns allocations, the specific loads it assigns, the existing or anticipated regulatory document establishing implementation measures assigned to that TMDL, and the specific areas covered by any such implementation measures. Further, KWUA urges the Regional Board to unequivocally state the intended scope of any TMDL and implementation plan at each point in the development process.

As explained in more detail in specific comments below, KWUA believes that the Regional Board has prepared the Draft TMDL and Proposed Implementation Plan without sufficient data to support the load allocations, sources, and natural background assumptions. KWUA understands that there are time constraints imposed by a Consent Decree, but KWUA urges the Regional Board to pursue an extension of this deadline to ensure that any TMDLs or implementation plans adopted for water bodies within the Klamath River Basin are based on accurate, current data and reasonable assumptions. In the event the Regional Board adopts a TMDL or implementation plan without sufficient data, the Regional Board must expressly and unambiguously acknowledge the limitations of the data and assumptions.

KWUA offers the following specific comments on: (1) the draft TMDL assigning load allocations to the mainstem of the Klamath River in California (Draft TMDL),

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which is explained in the Staff Report and summarized within the Proposed Basin Plan Amendment; (2) the Klamath River Implementation Plan (Proposed Implementation Plan), which is explained in Chapter 6 of the Staff Report and included within the Basin Plan Amendment; and (3) the proposed site-specific objective for dissolved oxygen (Site-Specific DO Objective) explained in Appendix 1 of the Staff Report.

A. Draft TMDL for Mainstem Klamath River in California

KWUA's constituent districts and irrigators operate within the Klamath Project. Since no land within the Klamath Project discharges to the Klamath River in California, KWUA believes that the Draft TMDL does not apply to the Klamath Project. Given that reality, KWUA's comments are limited to the following²:

1. Load Allocation to Stateline

The Regional Board's authority over the mainstem of the Klamath River, to which the Draft TMDL solely relates, is limited to the stretch of the river downstream of the California-Oregon border (Stateline). The Regional Board does not have authority over discharges to the Klamath River associated with the Klamath Project in Oregon. However, the Draft TMDL appears to assign load allocations to the portion of the Klamath River that occurs at the Stateline. (See e.g., Staff Report at pp. 4-6 through 4-10 [assigning loads to Stateline that account for 45.4% of total phosphorus (TP), 36.4% of total nitrogen (TN), and 23.1% of carbonaceous biological oxygen demand (CBOD) in California]; see also Basin Plan Language at p. 5.) Further, the monitoring program set forth in chapter 7 of the Staff Report provides regulatory monitoring of the Stateline as a "compliance point" to ascertain compliance with the Draft TMDL. (Staff Report at p. 7-24 through 7-26.) KWUA recognizes the desire to provide information about the upstream waters for informational purposes. However, the Regional Board simply does not have authority to assign a load to the Stateline.

ODEQ has not yet adopted a TMDL for the Klamath River, and the Draft TMDL cannot rely on estimates of ODEQ's intended load allocations to impose a "load allocation" to the Klamath River at the Stateline. KWUA appreciates Regional Board

² To the extent the Klamath River TMDL, including any load or wasteload allocations therein and the site-specific dissolved oxygen objective set forth in the Proposed Basin Plan Amendment proposed in connection therewith, is interpreted to apply to the Klamath Project in California, KWUA reserves the right to provide additional comments beyond the limited scope addressed herein. In this regard, KWUA is concerned by overly broad statements in the Draft TMDL, such as the suggested "watershed-wide" allocations related to temperature. (See Staff Report at p. 6-17 ["two temperature-related load allocations and associated targets that apply watershed-wide, i.e., to the entire Klamath River watershed, including all tributaries, in California"]; see also Staff Report at p. 5-2.) Notably, the Lower Lost River segment in California was delisted for temperature in 2006. (See e.g., Staff Report at p. 1-4, Table 1.2.)

Katharine Carter

Re: Comments on Public Review Draft Klamath River TMDL and Action Plan

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staff's verbal confirmation that the Regional Board recognizes it cannot bind ODEQ through the Draft TMDL. However, KWUA cautions the Regional Board from overstepping its authority by attempting to assign a load to the Stateline. The Stateline is not a discharge. KWUA requests that the Regional Board remove the load allocation to the Stateline and clarify that the Draft TMDL, including its load allocations and wasteload allocations, does not apply to the Klamath Project in any way. The Regional Board may deem it necessary to discuss the ODEQ's efforts to enact a TMDL for the Klamath River segment upstream of the Stateline or make certain assumptions for informational purposes only. However, the Draft TMDL must stop short of assigning loads to the Stateline. [See e.g., Staff Report at p. 5-15 ["these anticipated reductions in Oregon-source loads are identified in this TMDL as *load allocations* that reflect anticipated water quality at the Oregon/California border once the Oregon TMDLs are fully implemented"], emphasis added].)

2. Receiving Waters as "Sources"

The Draft TMDL appears to assign a load to the mainstem of the Klamath River at the Stateline. At the same time, however, the Draft TMDL acknowledges that the Regional Board identified the Klamath River segment upstream of Iron Gate Reservoir to the Stateline as an impaired water body (i.e., a receiving water). (See Proposed Basin Plan Amendment at p. 1.) Similarly, the Draft TMDL refers to Klamath Straits Drain as a nonpoint source of pollution. (See Staff Report at p. 3-10, section 3.3.3.1; see also Proposed Implementation Plan at p. 5.) However, in the Lost River, California Total Maximum Daily Loads, Nitrogen and Biochemical Oxygen Demand to address Dissolved Oxygen and pH impairments (EPA Lost River TMDL)³, EPA analyzes the Klamath Straits Drain as an impaired segment (i.e., receiving water). (See e.g., EPA Lost River TMDL at p. 8.) KWUA does not believe it is possible for a water body (i.e., the Klamath River or Klamath Straits Drain) to be both a receiving water and a nonpoint source of pollution.⁴ The identification of Klamath Strait's Drain or a segment of the mainstem of the Klamath River (or specific point therein) as a "pollutant source" is inappropriate, if these waters are themselves receiving waters.

Moreover, the portions of the Klamath River at the Stateline and at the Klamath Straits Drain fall within the jurisdiction of ODEQ. ODEQ, not the Regional Board, has

³ KWUA provided comments on the EPA Lost River TMDL, which are attached and incorporated herein by this reference.

⁴ KWUA further questions the extent to which a TMDL may identify a reservoir as a source of discharge subject to load allocations. (See e.g., Proposed Basin Plan Amendment at p. 4 ["additional dissolved oxygen load and allocations are assigned to the reservoirs for the period of May through October to ensure compliance with the DO and temperature objectives within the reservoirs"].)

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the obligation and authority to identify the specific sources—both pollutant and natural background—affecting water quality in these Klamath River segments.

3. Misinformation about Klamath Project

KWUA is concerned with the Draft TMDL's overall treatment of the Klamath Project. The Draft TMDL includes statements about the Klamath Project with which we do not agree. More importantly, however, we do not understand why the Draft TMDL singles out the Klamath Project uniquely among the factors that affect the mainstem of the Klamath River in California.

KWUA disputes the Draft TMDL's statements with respect to how the Klamath Project irrigation practices affect the water quality of Klamath River in California. (See e.g., Staff Report at pp. 2-40, 4-13, 6-18.) We are aware of no evidence or scientific research supporting the notion that irrigated agriculture within the Klamath Project increases nutrient loading to the Klamath River. Given that Klamath Project source water comes from the nutrient-rich Upper Klamath Lake and passes through two wildlife refuges, it is unclear what Klamath Project irrigation practices cause loading to the Klamath River via the Klamath Straits Drain. Further, the Staff Report provides no evidence to support the inference that Klamath Straits Drain and the Lost River Diversion Channel are primarily responsible for a 9 degree Fahrenheit increase in temperature. (See Staff Report at p. 4-11.) To the extent the Draft TMDL seeks to characterize upstream loading on the Klamath River in Oregon, supporting facts and data should be provided.

In this regard, we submit that the Draft TMDL all but buries a significant point. Specifically, the Draft TMDL states: "[w]hile current condition mass loading estimates indicate that the Klamath Project area provides some seasonal net nutrient load reductions when comparing input and output waters to and from the Klamath Project area, compared to natural conditions baseline, current practices within the Klamath Project area contribute loading to the Klamath River at Klamath Straits Drain and intermittently at the Lost River Diversion Channel." (Staff Report at p. 4-13; see also, e.g., Proposed Implementation Plan at 6-18.) As alluded in the Draft TMDL, but for the Klamath Project, nutrient loading to Klamath River would far exceed current conditions.⁵ Put simply, the Klamath Project is a nutrient sink.⁶

⁵ KWUA understands that Reclamation will submit technical documentation to this effect during the public comment period for the Draft TMDL, and KWUA incorporates that technical documentation herein by this reference.

⁶ KWUA also notes the following miscellaneous informational gaps in the Draft TMDL:

- The Draft TMDL refers to estimated unimpaired flows at Seiad Valley, citing a particular 2005 Reclamation report. (See e.g., Figure 1.11.) We believe this is an overestimate. The proposed TMDL does not recognize that the National Research Council conducted a review of the estimates

To the extent that the Regional Board attempts to describe the Klamath Project's effect on the mainstem of the Klamath River in California, the Draft TMDL must emphatically recognize the positive contribution to overall water quality provided by the Klamath Project. The purpose of this point is not to argue about how the Oregon Klamath River TMDL addresses Klamath Straits Drain. We simply believe that if the Regional Board wishes to go beyond the Stateline for informational purposes, it should be fair and cautious.

4. Natural Background

The Draft TMDL does not provide any data to distinguish natural background loads from nonpoint source pollutant loads. Since the Upper Klamath Lake is a large source of nutrients on the Klamath River,⁷ the success of any Klamath River TMDL hinges on the application of a reasonable and scientifically sound estimate of natural background in the Draft TMDL. (See e.g., Staff Report, Appendix 7 at p. 1 ["the upper Klamath River region has a high natural nutrient load that historically caused significant blooms of phytoplankton and other forms of algae".])

Based on our review of the Draft TMDL and discussions with Regional Board staff, it appears that the natural background estimates developed by the Klamath River Model for TMDL Development prepared by Tetra Tech in June 2009 (Model)⁸ are based on the applicable water quality standards and assumed compliance with upstream TMDLs. (See Staff Report at p. 3-9 [explaining that the Model assumed that the natural background water quality characteristics and temperature at the Stateline were at levels necessary to comply with the Upper Klamath Lake TMDL].) These fictional natural

in the cited USBR report, which significantly calls into question the reliability of the estimates. (See Natural Research Council, *Hydrology, Ecology, and Fishes of the Klamath River Basin*, 2008].)

- Similarly, the Draft TMDL quotes extensively as to what "CDFG hypothesized" with respect to the significant fish mortality that occurred near the mouth of the Klamath River in 2002. (Draft TMDL at p. 2-75.) It would add credibility to the report if the Draft TMDL recited other hypotheses as well as the conclusions of the National Research Council (NRC 2004) as to this issue. The Draft TMDL states that this event was directly responsible for fishery restrictions in 2006. (*Id.* at p. 2-87). There does not appear to be any source cited for this specific statement.

⁷ Notably, the Draft TMDL inappropriately suggests that the Klamath River water quality impairments are primarily caused by upstream nonpoint pollutant sources. (Staff Report at p. 4-1 ["unlike other river systems, the Klamath River pollutant loads are largest (~40%) in the upper half of the basin".])

⁸ KWUA understands that the Oregon Department of Environmental Quality intends to use the Model in its development of a TMDL for the Klamath River in Oregon. KWUA intends to provide additional comments on this Model to ODEQ during the public comment period on said TMDL.

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background estimates do a disservice to the Regional Board's efforts to improve water quality in the Klamath River basin as they form the basis for impossible load allocations. (See e.g., Proposed Basin Plan Amendment at p. 5 [assigning negative and "zero" load and wasteload allocations].)⁹ Moreover, the Regional Board's development of a TMDL must comply with the Porter-Cologne Water Quality Control Act, Cal. Wat. Code §§ 13000 et seq. (Porter-Cologne), which requires all Regional Board actions to be reasonable and subject to consideration of economics, water quality that can reasonably be achieved, and other public interest factors. (Porter-Cologne, §§ 13000, 13001, 13241.)

Similarly, the Model uses current flow data for Upper Klamath Lake, Lost River Diversion Channel, and Klamath Straits Drain to maintain consistency with the existing conditions scenario. (Draft TMDL at p. 3-9.) However, the Model assumes that water quality and temperature levels for Lost River Diversion Channel and Klamath Straits Drain are equal to those of Upper Klamath Lake under TMDL compliant conditions. (*Id.*) These natural background assumptions are inappropriate and undermine the Draft TMDL. Basing the natural background conditions for these distinct engineered channels on assumed compliance with the Upper Klamath Lake TMDL is unreasonable. Additionally, the Draft TMDL and Model provide no justification for using a fictional compliance level as the natural baseline.¹⁰ The Draft TMDL should also analyze and disclose the uncertainties associated with ever achieving the Upper Klamath Lake TMDL. This sentiment prevailed throughout the peer review comments on the Model. For example, the peer review commenters stated: "the National Research Council... recommends explicit treatment and discussion of uncertainty as a part of the TMDL process[;] ... some quantification and presentation of the uncertainty associated with these estimates would greatly facilitate more informed decisions[;]... [t]he Model is not based on great spatial and temporal detail, and an analysis of model uncertainty is absolutely warranted." (See Staff Report, Appendix 7 at pp. 6, 7, 25.) Respectfully, KWUA finds Regional Board staff's determination that an uncertainty analysis is "infeasible" wholly unresponsive to this important concern. (See Staff Report, Appendix 7 at p. 8 [Regional Board Staff response to comments suggesting that uncertainty analysis is "not feasible".])

⁹ See also, Staff Report, Appendix 7 at p. 12 [peer review comment stating "the concept of a 'zero' allocation target is a difficult one to conceive of in any natural context, and even if it were possible, the evidence presented does not provide a high level of confidence that the biological endpoints will be reached"]; see also, *id.* at pp. 1, 7, 26 [peer review comments questioning the feasibility of zero load allocations].

¹⁰ During an August 24, 2009 Regional Board presentation to KWUA, Steve Kirk of ODEQ suggested that OAR 340-041-0007(2) requires the natural background level to be set at the levels established by the applicable water quality standards. We read OAR 340-041-0007(2) differently. OAR 340-041-0007(2) suggests that where natural background exceeds a water quality standard, the natural background level becomes the applicable standard. However, in this case, the Model does not estimate natural background levels but instead assumes that the water quality standards are natural background levels.

Even if the assumed natural Upper Klamath Lake water quality characteristics and temperature were accurate, the Model should not apply those same levels to Klamath Straits Drain and Lost River Diversion Channel because water quality and temperature change as water flows in the Klamath River between the outlet of the Upper Klamath Lake and the point of discharge from the Lost River Diversion Channel. In this regard, the background estimate should incorporate water quality loading data for the Upper Klamath Lake diversion point to the Klamath Project (i.e., the "A" Canal) and one at the return point of that water to the Klamath River. The difference would inform the Model by indicating what effect the return flows from irrigation practices have on the overall nutrient condition and allowing an informed estimate of what the natural nutrient conditions were prior to the Klamath Project.¹¹

5. Unachievable Water Quality Objectives

The TMDL process should begin with an evaluation of whether the water quality objectives are attainable. The State Water Resources Control Board's Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options (State TMDL Policy) states the following:

If the water body is impaired, the cause of the impairment must be ascertained. There are five common reasons (see below) that standards are being exceeded. In most cases, a pollution reduction strategy of some sort will be warranted. *However, in some instances part or the entire cause of the impairment will be due to problems with the standards themselves.* While in most cases the existing standards are appropriate and amenable to TMDL development, periodically investigation during the development of a TMDL or its implementation plan may reveal that the standards may be *inappropriate or imprecise, thus rendering water quality attainment impossible unless standards are modified.* In such cases, staff will undertake a limited review of the standards. The purpose of standards review during the TMDL process is not to reassess the Water Boards' previous policy determinations that underlie the Beneficial Use Designations or Water Quality Objectives, but rather to *ensure that the standards are amenable to an appropriate implementation plan...* If staff determines that the policies underlying the existing standards should be revisited, *in lieu of crafting an implementation plan under this policy, the impaired water shall be referred to the Water Quality Standards staff for consideration of an appropriate standards action, through the appropriate processes.* Irrespective, it is always necessary to

¹¹ KWUA has significant technical concerns about the Model. KWUA understands that the Reclamation will submit technical comments on the Model during the public comment period for the Draft TMDL, and KWUA incorporates Reclamation's comments (and any attachments thereto) herein by this reference.

review the standards applicable to the listed water body in order to determine the appropriate target or targets. Three typical examples of where standards may need modification are where:

- a). Natural conditions alone are incompatible with the Standards: This occurs either when natural background levels of a pollutant exceed water quality objectives, or natural background conditions are incompatible with the beneficial uses assigned in the basin plan, or natural background conditions are degrading the water body.

In each of the above situations, revision of the standards themselves may be the best (*or only*) way to address the impairment. Revision of the standards can include removing uses, establishing subcategories of uses, establishing seasonal uses (all of which may require a Use Attainability Analysis (UAA), establishing a Site-Specific Objective (SSO), or other modification of the water quality standard).

(State TMDL Policy at p. 4, emphasis added.)

Before assigning loads to achieve water quality objectives, the Regional Board should recognize that the Basin Plan water quality objectives for the Klamath River are not achievable due to natural or historic conditions. (Basin Plan at p. 3-600.) The current quality of Upper Klamath Lake makes the downstream water quality objectives simply unattainable. The Draft TMDL fails to recognize this reality. KWUA urges the Regional Board to evaluate the water quality objectives in light of the current conditions. (State TMDL Policy at p. 4; see e.g., Staff Report at p. 4-12 ["Figure 4.6 compares the current annual TP, TN, and CBOD loads at [S]tateline to those estimated loads under the natural conditions baseline, reflecting 585%, 169%, and 62% increases in annual loads from natural conditions baseline for TP, TN, and CBOD, respectively".]) At the very least, the Draft TMDL must disclose the current water quality conditions that will prevent attainment of the water quality objectives and compliance with the assigned loads in the foreseeable future or (possibly) ever.

B. Proposed Implementation Plan

Despite the continued reference to the development of a TMDL for the California segment of the mainstem of the Klamath River in public notices provided in the development of the Draft TMDL, the Proposed Implementation Plan appears to establish implementation measures for the Klamath Project in Oregon and in the Lost River basin of California. As specifically addressed herein, KWUA believes that any discussion of Oregon's TMDLs or Lost River TMDLs or their implementation should be provided as

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context or information elsewhere in the document, not in the implementation section of the Klamath River TMDL for California.

1. Implementation of EPA Lost River TMDL

Pursuant to the public notices issued for the development of the Draft TMDL and Proposed Implementation Plan, KWUA understands the Regional Board's current regulatory efforts to involve the mainstem of the Klamath River in California. Irrigation return flows from the Klamath Project do not discharge to this segment of the Klamath River. As noted above, these return flows only have the potential to discharge to the Lost River in California. The Proposed Implementation Plan, however, suggests that it is intended to apply to discharges within the "watershed" or the "Klamath Basin." (Proposed Basin Plan Amendment at p. 1 ["[t]his [TMDL] ... describes the implementation actions necessary to achieve the TMDLs and attain water quality standards in the Klamath River basin"]; see also *id.* at p. 10.) In one instance, the Proposed Implementation Plan states that "[t]he Klamath TMDL implementation measures described in Section 6.5 apply to dischargers in the Lost River basin in California and ... are sufficient to implement the Lost River TMDL in California. (Staff Report at p. 6-20.) Based on Regional Board staff's response to an inquiry about the scope of the Proposed Implementation Plan during a Regional Board presentation on August 24, 2009, KWUA now understands that the Regional Board staff intends for the Proposed Implementation Plan to implement the EPA Lost River TMDL.

The State NPS Policy requires that any "nonpoint source control implementation program must be specific as to the water quality requirements it is designed to meet." (State NPS Policy at p. 14.) The Proposed Implementation Plan, however, is at best vague as to its application to the watershed outside of the Klamath River in California. In fact, the Proposed Implementation Plan states "there is currently no implementation plan for the Lost River TMDL for California." (Staff Report at p. 6-17.) The Proposed Implementation Plan does not even describe the water quality standards applicable to the Lost River in California. The Regional Board staff's attempt to sweep the EPA Lost River TMDL implementation into the implementation plan for the Klamath River TMDL without any substantive analysis of its ability to ensure compliance with the EPA Lost River TMDL is wholly inappropriate. Moreover, the Regional Board's economic analysis of the Proposed Implementation Plan fails to specifically and meaningfully address the reasonableness of the costs associated with implementing the EPA Lost River TMDL. (See Staff Report, Chapter 10.)

To the extent the Regional Board intends for the Proposed Implementation Plan, including the sediment prohibition adopted in connection therewith, to apply to discharges to the Lost River in California as an implementation plan for the EPA Lost

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River TMDL, the Regional Board must: (1) provide specific notice¹² to all affected parties, consistent with the California Administrative Procedures Act (APA) that the current effort includes an implementation plan for the EPA Lost River TMDL¹³; (2) clearly explain how the Proposed Implementation Plan ensures attainment of the load and wasteload allocations in the EPA Lost River TMDL; (3) discuss the specific water quality standards, including applicable beneficial uses, and wasteload and load allocations assigned to the Lost River system in California; (4) conduct California Environmental Quality Act, Pub. Resources Code section 21000 et seq, (CEQA) analysis and scoping based on a clearly defined project description that expressly includes the EPA Lost River TMDL implementation; (5) clearly distinguish the implementation measures that apply to the specific constituents addressed by the EPA Lost River TMDL as compared to those addressed within the Klamath River TMDL; and (6) comply with Porter-Cologne, including sections 13000, 13141, 13241, and 13242.

7. Assigning Implementation Measures for Oregon Compliance

KWUA recognizes that the Regional Board is attempting to coordinate regulatory efforts throughout the Klamath Basin to avoid inconsistencies and ensure basin-wide improvements to water quality. (See e.g., Staff Report at p. 6-16.) However, KWUA disagrees with the Proposed Implementation Plan's assignment of specific implementation measures for TMDL compliance in Oregon. ODEQ has the obligation to establish and implement TMDLs for the Klamath River in Oregon. The Regional Board has no obligation or authority to develop an implementation plan for Oregon segments of the Klamath River or to draft the implementation plan for ODEQ.¹⁴ In providing a

¹² The sediment prohibition triggers additional public notice and publication requirements under Porter-Cologne. (See Cal. Water Code, § 13244.)

¹³ In this regard, the State TMDL Policy requires:

Consistent with the APA, any policy, plan, or guideline must be adopted as a regulation in the proper manner before it may be applied.... The APA requirements ensure that persons subject to regulations have the opportunity to participate in the process during which the assumptions underlying an implementation plan are derived. If there were no such process, every regulated person would be subject to subsequent requirements based upon assumptions determined in a previous proceeding to which they were not a party. Accordingly, when an implementation plan would require multiple actions of the Regional Board, the plan itself must be adopted as a separate action to enable interested persons to comment upon the assumptions of the plan, before they are imposed, one by one, on members of the public at large.

(State TMDL Policy at p. 6.)

¹⁴ See e.g., Staff Report at p. 6-10 ["it is important for ODA to effectively use its authority in order to achieve the Klamath and Lost River TMDL load allocations and targets in Oregon with oversight by

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specific implementation plan that includes directives to ODEQ, the United States Bureau of Reclamation (Reclamation), individuals, and irrigation districts that do not fall under its jurisdiction, the Regional Board is inappropriately exceeding its authority.¹⁵ ODEQ, not the Regional Board, has authority to propose action items to address nonpoint sources discharging to the mainstem of the Klamath River in Oregon. ODEQ has yet to adopt TMDLs for the upstream segment of the Klamath River in Oregon, let alone approve specific implementation measures. KWUA cautions the Regional Board not to predetermine ODEQ's regulatory efforts with respect to the mainstem of the Klamath River in Oregon, including irrigation return flows from the Klamath Project in Oregon. The Regional Board cannot impinge upon ODEQ's exercise of its discretion.

Rather than assign specific implementation measures for compliance with the anticipated TMDL for the Klamath River in Oregon, KWUA encourages the Regional Board to include specific terms applicable to the Regional Board and regulated entities discharging to the Klamath River in California to ensure consistency, equity, and consideration of the basin-wide water quality situation. For example, the Proposed Implementation Plan should expressly acknowledge that the Regional Board may certify water quality management plans created to satisfy other TMDL implementation requirements within the basin as sufficient to comply with the implementation plan for the Klamath River TMDL. (See e.g., State Water Resources Control Board, Addressing Impaired Waters: Regulatory Structure and Options—Water Quality Control Policy, June 15, 2005, Adopted by Resolution 2005-0050, Approved by OAL in April 2006, at p. 3 [establishing a certification process whereby the Regional Boards can formally recognize regulatory or nonregulatory actions of other entities as appropriate implementation programs when the Regional Boards determine those actions will result in attainment of standards].)

ODEQ.... Achieve the Klamath and Lost River TMDL load allocations and targets in Oregon. Regional Water Board staff support the following measures to coordinate the Oregon SB 1010 water quality program with TMDL implementation: Update the Oregon Administrative Rules for the Lost River subbasin Area to address nutrients and organic matter in irrigation tailwater; incorporate TMDL implementation measures into the Lost River Agricultural Water Quality Management Plan...."].)

¹⁵ KWUA specifically objects to any designation of irrigation districts as "responsible parties" to ensure compliance with the TMDL for irrigation activities within the Klamath Basin. (See e.g., Staff Report at p. 6-9 ["DMA's designated in ODEQ's TMDL will likely include... Irrigation Districts"]; see also, Proposed Basin Plan Amendment, Table 4-17 at p. 18 [assigning responsibility to "any party conducting activities associated with irrigated agriculture in the Klamath River basin.] Under Porter-Cologne, the Regional Board has authority over the actual "dischargers" responsible for discharges to waters of the state. (See e.g., Water Code § 13260.) The Regional Board cannot assign responsibility for certain discharges unless the assignee is actually responsible for the subject discharge. Moreover, irrigation districts do not have authority to enforce water quality standards and cannot be called upon to ensure that their constituent irrigators comply with a TMDL. (See generally, Irrigation District Law, Cal. Water Code, § 20500 et seq.)

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In this regard, we would like to see a streamlined approach to compliance and regulatory mechanisms between the two states, especially as it relates to the Klamath Project. There is a large and valid concern about the state of California using a waiver of WDRs (including interim water quality management plans (WQMPs) required by the Proposed Implementation Plan) and the state of Oregon using Agricultural WQMPs. It could prove quite costly to obtain waivers and create WQMPs for the Klamath Project as its territory encompasses land in both Oregon and California. What we suggest, and have voiced to both the Regional Board and ODEQ, is that it would be appropriate and efficient to have the same criteria required for both California's waiver of WDRs (including any interim WQMPs required by the Proposed Implementation Plan) and Oregon's Agricultural WQMPs.

8. Feasibility

The Proposed Implementation Plan should identify implementation measures necessary to carry out the underlying TMDLs, including financing, the time needed to carry out the plan (i.e., attain the water quality standards), and the economic, social, and environmental impact of carrying out the plan. (See e.g., 40 C.F.R. § 130.6(6); see also Cal. Water Code, § 13141 [requiring cost considerations prior to imposing any agricultural water quality management plan].) KWUA appreciates the list of potential funding sources identified within Chapter 10 of the Staff Report, but the Proposed Implementation Plan must explain in greater detail how the Regional Board or others would assist individual dischargers in locating funding sources for the proposed implementation measures. Further, the Regional Board must recognize obstacles outside of individual farmers' control, such as regulatory limitations on algae and aquatic weed removal, power rates, and water costs.

9. Performance Standards

The Proposed Implementation Plan must establish unambiguous performance standard(s). This is particularly important in the Klamath Basin where natural background and current conditions make attainment of water quality standards impossible in the foreseeable future. The State recognizes that nonpoint source implementation programs will take a long time to achieve their objectives and, for this reason, implementation assessment may, in some cases, be used to measure nonpoint source control progress. (See Water Code, §§ 13242[b] and § 13263[c]; see also State Water Resources Control Board Nonpoint Source Implementation and Enforcement Policy at pp. 14, 15, 17, 18.) As such, the Proposed Implementation Program must explain that compliance with the required implementation measures imposed on specific dischargers through permits or waivers is sufficient to establish compliance with the respective TMDL.

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Specific "basin-wide TMDL implementation measures" incorporating anticipated future actions contemplated by the Memorandum of Agreement between the Regional Board, ODEQ, and EPA (e.g., "KlamTrack"¹⁶ program and potential basin-wide trading/offset programs, and a future management agency agreement with Reclamation) are inappropriate and cannot be relied upon to ensure implementation of the Draft TMDL. (See e.g., Staff Report at pp. 6-1, 6-2.) Rather, the Staff Report should summarize those efforts for informational purposes and provide for an amendment to the Klamath River TMDL Basin Plan in the event any of the anticipated measures come to fruition. (See e.g., Staff Report at p. 6-20.) At this point, the Regional Board has no basis to find that these potential basin-wide programs will ensure attainment of water quality standards.

10. Insufficient CEQA Analysis

The CEQA analysis set forth within Chapter 9 of the Staff Report is insufficient to inform the Regional Board's consideration of the Proposed Implementation Plan. The CEQA analysis was conducted based on an ambiguous project description that does not clearly define the geographic reach of the Proposed Implementation Plan or an explanation of what load and wasteload allocations will be implemented through the Proposed Implementation Plan. Further, the superficial evaluation of potential environmental consequences of reasonably foreseeable future actions to comply with the Proposed Implementation Plan does not satisfy CEQA. For example, the mere identification of possible costs of compliance with the Proposed Implementation Plan is not sufficient analysis of economic impacts that may result in physical changes leading to an environmental impact. Similarly, the broad discussion of possible mitigation efforts is not sufficient to satisfy the mitigation requirements of CEQA, CEQA Guidelines (14 Cal. Code Regs., §15000 et seq.) or the State Water Resources Control Board's CEQA regulations (23 Cal. Code Regs., § 3777), and simply does not support the Regional Board staff's proposed determination that the Proposed Implementation Plan will not result in a significant impact.

C. Site-Specific DO Objective

The Regional Board's adoption of a Site-Specific DO Objective for the Klamath River in California must comply with Porter-Cologne, state and federal antidegradation

¹⁶ To the extent the Proposed Implementation Plan contemplates the development of a basinwide accounting program for loads to Klamath Basin water bodies, the Proposed Implementation Plan should acknowledge the potential application of the anticipated accounting system to the Klamath Project such that irrigation discharges that reduce the nutrient load to water bodies receive a "credit" against any load allocation assigned in the respective TMDL.

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policies, and CEQA (including CEQA implementing regulations). The superficial evaluation of the ramifications of the proposed Site-Specific DO Objective set forth in the Staff Report and its appendices does not satisfy the stringent requirements of these laws. (See e.g., Cal. Water Code, §§ 13000, 13241, 13242; cf. Staff Report, Appendix 1.)

Furthermore, the Draft TMDL and any basin plan language adopted to effectuate the Site-Specific DO Objective must unambiguously declare the limited geographic scope to which this Site-Specific DO Objective applies (i.e., the mainstem of the Klamath River in California).

D. Conclusion

With these things said, we support collaborative efforts to address water quality issues in a prudent manner, and agree that practically, the Stateline need not dictate how such efforts should proceed. On page 6-20, Regional Board staff proposes a Management Agency Agreement with federal agencies related to TMDLs. While we offer no opinion on the specific approach suggested at this time, we are supportive overall of cooperative efforts and would be willing to further engage with both states as well as the federal agencies on this subject. We also support the proposed Klamath Basin Restoration Agreement, referenced in the draft TMDL, which contemplates measures to address water quality issues on a holistic basis.

As discussed previously, we believe that both states must give attention to comprehensive water quality planning that goes beyond TMDLs. In particular, the periodic review of water quality standards is both proper and legally required. It is clear that many water quality standards were established without consideration of feasibility or site-specific conditions. With respect to waters in California, California Water Code section 13241 requires that water quality objectives be reasonable. The states' obligation to review and refine water quality standards is no less binding or important than the obligation to prepare TMDLs. Further, parties who are potentially affected by implementation measures would likely participate more willingly if the end point of implementation were reasonable.

Thank you again for your consideration of these comments.

Sincerely,



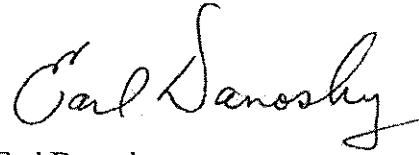
for Greg Addington
Executive Director of KWUA

Katharine Carter

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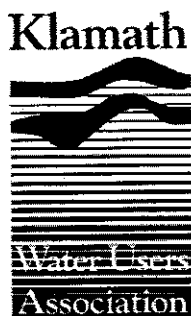
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A handwritten signature in cursive script that reads "Earl Danosky".

Earl Danosky

General Manager of Tulelake Irrigation District

cc: KWUA Board of Directors
Noemi Emeric, EPA Region 9
Matt St. John, Regional Board
Steve Kirk, ODEQ
Oregon Department of Agriculture
Ron Cole, United States Fish and Wildlife Service
Sue Fry, United States Bureau of Reclamation



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kwua@cvcwireless.net
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July 6, 2007

Via Electronic and U.S. Mail

Gail Louis
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street, WTR-3
San Francisco, California 94105

**Re: Comments on Public Review Draft: March 2007 Lost River, California
Total Maximum Daily Loads**

Dear Ms. Louis:

Thank you for the opportunity to comment on the public review draft of the Lost River Total Maximum Daily Loads (TMDL) for nitrogen and biochemical oxygen demand to address dissolved oxygen (DO) and pH impairments (Draft TMDL). On behalf of its constituent districts and Klamath Project farmers and ranchers, the Klamath Water Users Association (KWUA) appreciates your consideration of our concerns and offers the following suggestions for (1) the Draft TMDL; and (2) the implementation and monitoring recommendations that you have included as Chapter 7 of the Draft TMDL (Proposed Implementation Plan).

I. Draft TMDL

Based on our review of the Draft TMDL, KWUA believes that Region 9 of the Environmental Protection Agency (EPA) has prepared the Draft TMDL without sufficient data to support the load allocations, sources, or baseline condition assumptions. KWUA understands that time constraints imposed by the Consent Decree require EPA to release the Draft TMDL prior to completion of appropriate data gathering and analysis, but KWUA urges EPA to pursue an extension of this deadline to ensure that any TMDLS adopted for the Lost River are based on accurate, current data and reasonable assumptions. In the event EPA adopts a TMDL without sufficient data, EPA must expressly and unambiguously acknowledge the limitations of the data and assumptions. Specifically, the TMDL should acknowledge that: (1) the technical model created to support the load allocations does not consider all factors affecting the environment, including natural background levels and significant contributions from waterfowl and aquatic fecal material; and (2) substantial discrepancies between the model and the actual water quality

conditions, particularly the inputs into Lost River from Oregon, likely exist. (See Draft TMDL, at pp. 25-31.)

KWUA offers the following specific comments and suggestions for the TMDL:

A. "Lost River" Designation and Identified Water Bodies

The Draft TMDL fails to sufficiently explain the basis for directing the TMDL at the "Lower Lost River hydrologic area."¹ In fact, the Regional Board and California have not defined a "Lower Lost River hydrologic area." Rather, the applicable hydrologic area is the Lost River hydrologic area, which is further divided into HSAs. EPA should clarify that the Tule Lake and Mount Dome HSAs, which comprise the area addressed by the TMDL (as depicted in Figure 1 of the Draft TMDL), are collectively referred to as the "Lower Lost River."

EPA has not sufficiently explained the basis for defining the "Lost River Hydrologic Area" listed on the California 303(d) list as: the Lower Lost River from the Oregon Border to Tule Lake Refuge; the Tule Lake Refuge (including the sumps and surrounding lease lands); the Lower Klamath Refuge; and the Straits Drain from Lower Klamath Refuge to the Oregon Border. (Draft TMDL, p. 4.) The Draft TMDL does not reference any specific 303 (d) listing for Straits Drain. Further, the Basin Plan does not specifically include Straits Drain or the leased lands within any given hydrologic area or subarea. As a practical matter, the leased lands comprise agricultural lands and do not fall subject to Clean Water Act regulation as a "water body"; thus, the leased lands are not the proper subject of a 303(d) listing or a TMDL. Moreover, the Draft TMDL provides no basis for suggesting that the Consent Decree requires a TMDL to be created for Straits Drain or the leased lands. KWUA acknowledges that the Basin Plan includes the Lower Klamath Lake National Wildlife Refuge within the Mount Dome HSA of the Lost River hydrologic area, even though it is in a distinct drainage basin from the Lost River. However, the Draft TMDL appears to address only the "Lower Lost River," which comprises the Mount Dome and Tule Lake HSAs, not the "Lost River hydrologic area." (Cf. Draft TMDL, p.4; Draft TMDL, p. 1, Figure 1.) To avoid misinterpretation and confusion, KWUA recommends that EPA state the specific 303(d) listing of each water body addressed by this TMDL and provide all applicable water quality objectives directed at such water bodies (with specific reference to the Basin Plan).

B. Water Quality Objectives

In assigning the loads to achieve state water quality objectives, EPA should recognize that the Basin Plan water quality objectives for the Lost River hydrologic area are not achievable due to natural or historic conditions. (Basin Plan, p. 3-6.00.) For

¹ This TMDL effort is based on the State of California's continual 303(d) listing of the "Lost River System." (Draft TMDL, p. 1.) The Draft TMDL appropriately states that California has listed "Tule Lake and Lower Klamath Lake National Wildlife Refuge for pH" and the Tule Lake and Mount Dome Hydrologic Sub Areas (HSA) of the Klamath River Hydrologic Unit, Lost River Hydrologic Area for nutrients. (Draft TMDL, p. 1.)

example, the Ady Canal during summer months diverts water from Klamath River, which fails to meet water quality objectives for temperature, pH, DO, nutrients, and chlorophyll-a; all of which are attributable to loading from Upper Klamath Lake. If the water quality objectives are simply unattainable, preparing a TMDL is a futile exercise.

C. Beneficial Uses

By grouping the refuges and the "Lost River" in California as a general "Lower Lost River" designation, the Draft TMDL fails to appropriately consider the applicable beneficial uses. The Basin Plan separately identifies beneficial uses for the Mt. Dome HSA and the Tule HSA; however, the Draft TMDL provides a table of beneficial uses for the "Lower Lost River Subbasin" that does not match up with the separately designated beneficial uses in the Basin Plan. (Draft TMDL, p. 9; cf. Basin Plan, 2.700.)²

D. Source Identification

The Draft TMDL designates entire stream segments as "sources" of the water quality problems. These segments are described as "irrigation drain flow," which in no way identifies the source of any water quality impairment. The one unique "source" identified by EPA is the "Ady Canal," which is a mere diversion of water. If EPA cannot identify actual sources, the TMDL should explain the related data deficiencies. Moreover, the TMDL should explain that the identified sources "Ady Canal" and "irrigation drain flow" point to various irrigation, farming, and other land use practices applied along those stream segments, the specifics of which contributions EPA fails to understand. KWUA recognizes that EPA does not have sufficient information to identify actual sources of the contaminants. However, this failure to identify sources within the TMDL effectively shifts that burden to other parties. This lack of information will minimize the utility of any TMDL.

We also question the "assignment" of loads to a district or other governmental agency rather than to actual "sources." (E.g., Draft TMDL, pp. 23-24.) EPA regulations do not contemplate the delegation of source identification to other governmental agencies. Rather, the regulations suggest that a load allocation should be "attributed either to one of its existing or future nonpoint sources of pollution or to natural background sources." (40 C.C.R., § 130.2(g).) As the Draft TMDL recognizes, when individual nonpoint sources cannot be quantified or distinguished from natural background sources, the TMDL should assign a "gross allotment" to all the nonpoint and natural background sources contributing to a receiving water. (Draft TMDL, p. 33; 40 C.C.R., § 130.2(g).) However, rather than assign a gross allotment to all nonpoint and natural background sources to the Lost River, the Draft TMDL attempts to assign loads to governmental agencies, diversion points, and other water bodies. The load allocations must be reevaluated to ensure that the EPA regulations are appropriately applied.

² Similarly, the Draft TMDL does not acknowledge that the Basin Plan identifies specific water quality objectives for "Lower Lost River", "Tule Lake", "Lower Klamath Lake", and "Other Streams" of the Lost River Hydrologic Area. (Basin Plan, p. 3-6.00.)

Further, it is highly unusual for a TMDL to identify a diversion structure (e.g., Ady Canal) as a source. The water quality in Ady Canal is a function of the quality of the Klamath River water that it diverts (in Oregon). Identification of the Ady Canal as a source is in practical effect no different than identifying the Klamath River as a source. The Draft TMDL also does not explain the parameters by which established water quality objectives even apply to Straits Drain.³ Additionally, the Draft TMDL does not appear to identify Lower Klamath Lake or Lower Klamath National Wildlife Refuge as a source of loading to Straits Drain. KWUA asks that EPA address and reconcile these issues.⁴

E. Background (Upstream Segment) Loads:

The Draft TMDL assumes that the water coming into the Lost River in California will meet the 50% load reduction. The reliance on “the State of Oregon[’s] plans to develop TMDLs for DIN and CBOD for Lost River in Oregon in the near future” is not sufficient assurance that specific load reductions will be met. (Draft TMDL, p. 22.) Put simply, a failure to achieve the load reduction at the top of the California system will inevitably create a ripple effect whereby each downstream source will not be able to ensure the total load requirement assigned to its respective segment is met. EPA must account for the actual nature of incoming contaminants and their effect on achieving the load allocations throughout the Lost River segments in California. (Draft TMDL, at pp. 32-36.) On the other hand, it is not clear how the Draft TMDL has taken into consideration the TMDL for Upper Klamath Lake. Reduction in loads to (and from) Upper Klamath Lake would reduce pollutants both in drainage waters entering Lost River in California and in Klamath River water that enters the Lost River basin directly. In addition, the Draft TMDL does not appear to recognize that drainage waters from Oregon enter California by means other than the Lost River itself. For example, drains flow under the J Canal from Oregon into California. KWUA also urges EPA to reexamine the assumption of specific loads to Lost River between the state line and Tule Lake.

EPA should reconsider the fictional “background load” that the Draft TMDL assigns to outflow from Tule Lake Refuge to Lower Klamath Refuge and from Lower Klamath Refuge to Straits Drain. The Draft TMDL reduces the existing load for these identified “sources” to 50% and then requires an additional 50% load reduction under the TMDL. (Draft TMDL, pp. 34-35.) The Draft TMDL does not provide sufficient justification for the inequitable treatment of these segments.

KWUA recognizes that the Draft TMDL attempts to address the background load concerns by explaining that the same method is used in other areas and that “[e]ven if projected load reductions are not met upstream, [downstream source] allocations will still

³ Notably, KWUA has previously been advised that Straits Drain would be treated as a “source” in any Klamath River TMDL.

⁴ Due to the recent United States Supreme Court decision in *Rapanos v. United States*, 126 S.Ct. 2208 (2006) and subsequent guidance put out by the United States Army Corps of Engineers and Environmental Protection Agency, it may be appropriate for EPA consider whether any of these waters are subject to the federal Clean Water Act.

be applicable.” (Draft TMDL, p. 33.) However, this language does nothing to ensure that the loads assigned to the downstream sources, potentially affected by upstream contributions that exceed the assumed loads, will be adjusted to consider the failed assumption of 50% reductions to sources not addressed by this, or any other, TMDL.

F. Identification of Non-Agricultural Contributions

The Draft TMDL identifies load allocations to reduce the (estimated) existing loads of all agricultural sources by 50%, but does not treat all contributions similarly. Though the Draft TMDL assigns the 50% load reduction to all nonpoint sources and one existing National Pollutant Discharge Elimination System (NPDES) permittee, the Draft TMDL does not assign the “equitable” 50% reduction to all point sources. (Draft TMDL, at p. 33.) As a further example, the Draft TMDL fails to clearly articulate load reductions for bird defecation in refuges. The Draft TMDL does not specifically estimate natural background levels and rather appears to assume that each “background load” somehow incorporates the unknown natural background levels entering each segment. (Draft TMDL, p. 21.) The 50% load reduction assigned to all background loads and nonpoint sources inherently assumes a 50% load reduction to natural background without any analysis or rationale for reducing the natural background levels. (Draft TMDL, p. 36.) The failure to explicitly consider natural background levels must be remedied in this Draft TMDL.

G. Coordination and Consistency with Other TMDLs in Region

EPA must recognize that Klamath farmers and ranchers are on the receiving end of various TMDL processes. The Lost River TMDL for California cannot be prepared without proper and substantial coordination with Upper Klamath Lake and Klamath River TMDLs. At the very least, the iterative processes set forth in the implementation of those TMDLs must inform the assumptions about water quality in this California Lost River TMDL. Though EPA maintains that California irrigators will not be held accountable for non-California sources, the Draft TMDL does not expressly provide such assurances.

H. Assumptions

The Draft TMDL hinges the success of the TMDL effort on the “reductions in DIN and CBOD loadings of approximately 50% from the estimated baseline loads from 1999” to attain the applicable pH and dissolved oxygen water quality standards in California. (Draft TMDL p. 6.) The Draft TMDL and supporting Model Configuration and Results, Lost River for TMDL Development, August 29, 2005 (“Model”) suffer from three fatally flawed assumptions: (1) Oregon source inputs into the Lost River system will also see reductions of 50% without any regulatory program or other assurance that such reductions will be made; and (2) the incomplete data from eight years ago has set an appropriate baseline by which to judge all success in attaining the water quality standards; and (3) the natural background conditions are such that the water quality standards are in fact attainable.

EPA regulations require TMDLs to incorporate a "margin of safety" to account for uncertainties in the data, modeling, or other information used to develop the TMDL. (40 C.F.R., §§ 130.2(g)-(i), 130.7(c)(1); EPA-440-4-91-01, Apr. 1991.) The model relied on to support the Draft TMDL, however, does not explain or justify the margin of safety and merely states that "no margin of safety (MOS) was explicitly considered in the modeling." (Model, p. 55.) Given that the Model admittedly has "extensive data limitations" and critical data sets are simply "not currently available," the Model should apply and consider explicit margins of safety to address severe uncertainties and data gaps. (Model, p. 4; see also Draft TMDL, pp. 22-23 ["additional water quality and flow monitoring in the supply and drainage system is needed to more accurately characterize the loading contributions from the different irrigation districts and refuge areas. . . . insufficient data are currently available to distinguish pollutant loads from TID and Refuge operations"].) The TMDL does not sufficiently justify the absence of a calculated margin of safety. (Draft TMDL, p. 35.) "Conservative assumptions" do not serve as an appropriate margin of safety when based solely on guesswork derived from eight-year old data.

II. Proposed Implementation Plan

KWUA appreciates the Draft TMDL's statements that the recommendations within the Proposed Implementation Plan are not mandatory and are without effect. (Draft TMDL, pp. 3, 4, 37.) However, KWUA respectfully disagrees with the characterization of the Proposed Implementation Plan, which assigns responsible parties and contains aggressive timelines, as "a few recommended general strategies." (Draft TMDL, p. 37.) KWUA objects to the inclusion of Proposed Implementation Plan within the Draft TMDL and respectfully urges EPA to remove Chapter 7 from the Draft TMDL.

KWUA recognizes that EPA has put some effort into the discussion of implementation measures, and reasonable recommendations may well arise from the suggestions therein. To the extent EPA wishes to provide the North Coast Regional Water Quality Control Board (Regional Board) or interested parties some ideas or recommendations, EPA should develop and furnish any such recommendations outside of this TMDL document. The Regional Board could, pursuant to its authority under California law, then consider the recommendations, obtain the necessary information, and rely on local resources to formulate workable implementation measures. (See California Water Code, § 13240 [requiring that Regional Board consult with and consider recommendations from State and *local* agencies in amending or devising basin plans].) The Regional Board has authority to formulate implementation measures. In doing so, the Regional Board must comply with various state laws that EPA has ignored in devising Proposed Implementation Plan. Thus, inclusion of Proposed Implementation Plan as Chapter 7 of this TMDL evades state law and allows for complete avoidance of any accountability.

KWUA recognizes that EPA has an existing obligation and authority to devise the Draft TMDL. However, EPA has no obligation to develop an implementation plan and, in

fact, has no authority to draft the implementation plan for the Regional Board. (33 U.S.C. § 1313(e) [States in charge of defining the method for ensuring “adequate implementation” of TMDLs]; *Pronsolino v. Nastri*, 291 F.3d 1123, 1129 (9th Cir. 2002); *Pronsolino v. Nastri*, 91 F.Supp.2d 1337, 1355-56 [implementation of TMDLs for nonpoint sources is subject only to state regulation].)⁵ EPA cannot step into the shoes of the State in regulating nonpoint sources. In providing a specific implementation plan including directives to individuals and districts that unquestionably fall under the State nonpoint source jurisdiction, EPA is inappropriately exceeding its legal authority. The Regional Board, not EPA, has authority to propose regulations or “action items” to address nonpoint sources in the Lower Lost River system. EPA simply cannot impinge upon the Regional Board’s exercise of its discretion to regulate nonpoint sources by “assist[ing] local stakeholders in targeting actions to address suspected causes of water quality impairment in the Lost River system.” (Draft TMDL, p. 3.)

KWUA respectfully requests that EPA consider the following suggestions for any implementation recommendations provided to the Regional Board:

- Discuss the Relationship Between the Various TMDLs in the Region: EPA has made it clear that EPA is preparing this TMDL now only because of the schedule within the Consent Decree. In the meantime, other TMDLs for interrelated waters in both California and Oregon that will be prepared at some undetermined time in the future. Any implementation recommendations should include specific terms to ensure consistency, equity, and consideration of the larger regulatory picture.
- Remove Timeframes: The timeframes within the Proposed Implementation Plan must be removed because: (1) they suggest that these “recommendations” are mandatory; and (2) the dates are arbitrarily created without the appropriate studies and data to support the feasibility or necessity of completing the “suggested” measures by that date. To the extent EPA seeks to evaluate the feasible timing of actions, KWUA suggests EPA recommend that the Regional Board coordinate work groups and prepare models to determine appropriate timeframes for carrying out any appropriate implementation measures. Any timeframes created must recognize the iterative nature of other water quality efforts upstream of the Lost River in California. The timelines set forth in the Proposed Implementation Plan suggest that EPA defines success as taking uninformed quick action rather than acquiring sufficient understanding of the water quality conditions to use in formulating reasonable solutions. (Draft TMDL, p. 45 [“even though there is uncertainty regarding how long the river system may take to fully recover and how much past practices may be influencing current conditions, given the current conditions of the river there is need to speed up recovery to the extent practicable”].) KWUA urges EPA to reconsider the inclusion of timeframes to ensure that appropriate time is allowed to ascertain the existing water quality

⁵ EPA’s authority “related to implementation of nonpoint source pollution control measures are generally limited to education and outreach as provided by” Clean Water Act section 319. (See California Continuing Planning Process Report, at p. 31.)

conditions and coordinate with the various other water quality efforts in the Klamath Basin.

- **Form Work Group:** The current attempt to assign responsibilities to the districts, agencies, and individual growers will not ensure a successful TMDL. For example, districts have no authority to enforce water quality discharges or change farming practices of their constituents. Rather than attempt to assign tasks to various parties without a full understanding of the local dynamic in the Klamath Basin, EPA should recommend that the Regional Board form a work group of local stakeholders (irrigators, districts, KWUA, UC Cooperative Extension) to, among other things, gather more site-specific data about Lost River impairments and consider workable solutions. (See California Continuing Planning Process Report, p. 7.) Rather than EPA attempting to dictate new requirements for federal lessees⁶ and force Reclamation to initiate a monitoring program, the work group could further coordinate with the Bureau of Reclamation and U.S. Fish and Wildlife Service to consider potential measures for addressing federal involvement and management activities to improve water quality. The work group could also analyze implementation possibilities on a regional level or, at the very least, coordinate with other water quality efforts in the region.
- **Consider Technical and Economic Feasibility:** Any implementation plan should identify implementation measures necessary to carry out the plan, including financing, the time needed to carry out the plan, and the economic, social, and environmental impact of carrying out the plan. (See e.g., 40 CFR 130.6(6).) KWUA appreciates EPA's willingness to assist in locating funding sources, but any implementation recommendations should discuss in more detail how EPA or others would assist with locating funding sources. EPA must recognize obstacles outside of Klamath farmers' control, such as regulatory limitations on algae and aquatic weed removal, power rates, and water costs. This feasibility analysis is especially important with respect to aquatic plant removal. As drafted, the Proposed Implementation Plan assumes that individual growers will remove aquatic plants, but does not sufficiently account for limitations on individual's authority or ability to do so.
- **Consider Other Efforts:** Any implementation recommendations should consider other efforts in the Klamath Basin to improve water quality, such as the Oregon Department of Agriculture's Lost River Subbasin Agricultural Water Quality Management Area Plan and the Klamath River and Upper Klamath Lake TMDLs. EPA should suggest that the Regional Board coordinate with other agencies (EPA (including Regions 9 and 10), State Water Resources Control Board, Oregon

⁶ KWUA finds EPA's attempt to require management plans for federal leased lands especially troubling. The Proposed Implementation Plan, as currently drafted, treats growers with leased lands differently by mandating special requirements for federal leases. Though KWUA understands that EPA is trying to get all actors focused on resolving water quality issues, KWUA urges EPA to instead recommend that the potential water quality improvements related to federal land management practices be considered by the local federal land managers and lessees.

Department of Agriculture, and Oregon Department of Environmental Quality, Natural Resource Conservation Service, California Resource Conservation Districts), before finalizing an implementation plan, to avoid inconsistent and potentially conflicting regulation or efforts. Considering the limitations of the Draft TMDL, the concerns identified herein, and various other regulatory activities in the region, KWUA does not believe that it is prudent or good public policy for EPA to suggest that the Regional Board adopt the Proposed Implementation Plan.

Encourage Non-Regulatory Measures: KWUA appreciates the inclusion of non-regulatory measures (as provided for in the Basin Plan) within the Draft Implementation Plan (See e.g., North Coast Basin Plan, 4-31.00, 4-32.00; see also “(40 CFR 130.6(c)(4)(ii) [“Regulatory programs shall be identified where they are determined to be necessary by the State to attain or maintain an approved water use or where non-regulatory approaches are inappropriate in accomplishing that objective”].) KWUA supports the pursuit of nonregulatory measures to gain an understanding of the water quality conditions in the Lower Lost River system, including:

- Development of Memoranda of Understanding with other agencies and organizations;
 - Coordination with local government and non-profit organizations and individuals to develop control strategies;
 - Incentives for organizations and individuals to control waste discharges and conduct watershed restoration activities;
 - Focus on public outreach and education;
 - Development of a guidance document;
 - Develop a monitoring strategy for filling gaps in current data and for ensuring progress with implementation measures.
-
- Review Criteria: Any implementation recommendations must recognize that the Regional Board has started considering the appropriateness of its DO objective due to the infeasibility of meeting the DO standards in light of natural conditions. EPA should recommend that the Regional Board consider the water quality objectives through Basin Plan amendments based on site-specific data for the watershed. (See e.g., North Coast Basin Plan, 4-34.00.)
 - Reconsider Recommendation to Reduce Return Flows: Return flows are an important part of water management in the Klamath Basin. Return flows provide water to wildlife refuges and downstream irrigators as well as assimilative capacity for pollutants. Rather than focus on reducing return flows, any implementation recommendations should instead focus on studying any impacts from return flows and studying appropriate measures to enhance the water quality of return flows.
 - Implement Adaptive Management: Adaptive management and phasing is imperative due to the lack of information and the high contribution to water quality impairment from natural and historic conditions.

- Discuss Past and Current Efforts: The implementation plan should take into account and discuss voluntary actions taken by landowners and others in the Klamath Basin to address water quality issues. These actions were taken subsequent to the data gathering in 1999 upon which the Draft TMDL and Proposed Implementation Plan rely.
- Remove Inappropriate Responsible Party Designations: The Proposed Implementation Plan obligates individuals and governmental agencies to duties that are not necessarily within their legal authority or area of competence. These inappropriately assigned actions, if incorporated into an adopted implementation plan, will likely not be carried out effectively or at all. KWUA suggests that EPA remove these inappropriate responsible party designations in Table 8 of the Proposed Implementation Plan. (E.g, Draft TMDL, p. 38 [requiring irrigation districts to assist with development and implementation of nutrient and residue management plans].)

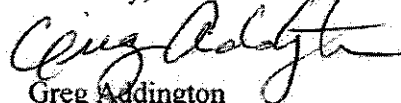
EPA should not recommend implementation measures devised without appropriate data or modeling of implementation measures. Any planning efforts must be informed and take into account the unique nature of the Lower Lost River system and the surrounding region.

III. Summary of KWUA Recommendations

KWUA recognizes that water quality impairments within the Upper Klamath Basin exist and require attention. However, from a public policy perspective, the most appropriate course of action for EPA is to amend the schedule in the current Consent Decree to establish a more logical and orderly approach to addressing the issues raised by the Draft TMDL and these comments.

Thank you again for your consideration of these comments. KWUA is committed to pursuing proactive efforts to understand the existing water quality conditions in the Lower Lost River system. KWUA maintains, however, that such an understanding must come before the establishment of TMDLs or implementation plans for this complex hydrologic system.

Sincerely,



Greg Addington
Executive Director

cc: KWUA Board of Directors
Noemi Emeric, EPA Region 9
Matt St. John, North Coast Regional Water Quality Control Board
Steve Kirk, Oregon Department of Environmental Quality

Oregon Department of Agriculture
Ron Cole, United States Fish and Wildlife Service
Pablo Arroyave, United States Bureau of Reclamation

March 27, 2009

Matt St. John
North Coast Regional Water Quality Control Board
5550 Skylane Blvd., Suite A
Santa Rosa, CA 95403

**Re: Comments on Review Draft Water Quality Restoration Plan for
Klamath River Basin in California**

Dear Mr. St. John:

Thank you for the opportunity to comment on the Review Draft Water Quality Restoration Plan for the Klamath River Basin in California: Draft Scoping for Total Maximum Daily Load (TMDL) Implementation (Scoping Document). On behalf of its constituent districts and Klamath Project farmers and ranchers, the Klamath Water Users Association (KWUA) appreciates your consideration of the following comments on the Scoping Document.

Load Allocations

The Scoping Document provides an overview of preliminary load allocations for the Stateline (i.e., for discharges outside of the Regional Board's regulatory authority), the Klamath Hydroelectric Project, the Iron Gate Hatchery, the Klamath River Tributaries, and the Watershed-wide implementation. (Scoping Document, p. 8.) The Scoping Document does not clearly explain what load allocations might be assigned to nonpoint sources throughout the Klamath Basin or how the interstate consistency concerns raised in the Scoping Document will be addressed in identifying allocations. We understand that the Klamath River load allocations and the supporting calculations are currently undergoing peer review, and that the North Coast Regional Water Quality Control Board (Regional Board) is not seeking comments on the load allocations at this time. (Scoping Document, p. 8).

We intend to participate in the public review process of the Draft TMDL scheduled for summer 2009, and plan to comment on the load allocations and supporting science at that time. However, we have the following preliminary concerns based on the overview provided in the Scoping Document:

- *Sound Science.* The load allocations must be based on sound science and appropriately account for natural background conditions. (40 C.F.R. § 130.2(g).)
- *Reservoirs as Sources.* The Scoping Document suggests that the TMDL will assign load allocations to reservoirs within the Klamath Hydroelectric

Project. (Scoping Document, pp. 13-14.) We question whether or the extent to which a TMDL may identify a reservoir as a source of discharge.

- *Stateline Loads.* Oregon Department of Environmental Quality (ODEQ) has not completed a TMDL for the Klamath River or Lost River in Oregon. Moreover, ODEQ has not circulated a public draft document identifying the proposed loads for discharges above the Stateline. The Scoping Document, however, assumes that the Regional Board's Klamath River TMDL will assign certain loads to the Stateline. (Scoping Document, p. 10 ["[i]t is appropriate for the Regional Water Board to account for these anticipated upstream load reductions in Oregon when developing the TMDLs for the segments that are downstream in California".]) The Scoping Document further assumes full implementation of the loads assigned to the Stateline. (Scoping Document, p. 10 ["[f]or ease of reference, these anticipated reductions in Oregon-source loads are identified in this TMDL in California as load allocations that reflect anticipated water quality at the Oregon/California stateline once the Oregon TMDLs are fully implemented".]) The Regional Board's apparent reliance on loads that Oregon has not assigned or implemented is premature and unjustified. (Scoping Document, p. 11.)
- *Unachievable Water Quality Objectives.* The TMDL process should begin with an evaluation of whether the water quality objectives are attainable. Thus, before assigning the loads to achieve water quality objectives, the Regional Board should recognize that the Basin Plan water quality objectives for the Klamath River are not achievable due to natural or historic conditions. (Basin Plan, p. 3-6.00.) The current quality of Upper Klamath Lake makes the downstream water quality objectives simply unattainable.
- *Compliance with Porter-Cologne.* Development of any TMDL and implementation measures must be in compliance with the Porter-Cologne Water Quality Control Act. (Cal. Wat. Code, § 13000 et seq. (Porter-Cologne).) Porter-Cologne requires reasonableness in all actions of the Regional Board and the consideration of economics, water quality that can reasonably be achieved, and other public interest factors. (Cal. Wat. Code, §§ 13000, 13001, 13241.)

Natural Background

In embracing the assumption that Klamath River water at the Stateline will be dramatically improved (i.e., 84% reduction in total phosphorus and 60% reduction in total nitrogen), the Scoping Document appears to disregard the natural or historic background quality of the Klamath River as the water passes the Stateline from Oregon.

Matt St. John

Re: **Comments on Draft Water Quality Restoration Plan for Klamath River Basin**

March 27, 2009

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Upper Klamath Lake does not meet water quality standards due to natural conditions. The underlying assumptions in the Scoping Document ignore the background condition of the lake, and do not take into account existing science addressing the natural condition.

Implementation Measures

KWUA will continue to provide information throughout the Regional Board's process to establish the implementation measures, but KWUA offers the following initial comments on the proposed implementation measures:

- *Consistency.* KWUA appreciates the Regional Board's attempt to coordinate the implementation of the various pending and completed TMDLs in the Klamath Basin. KWUA believes that implementation of the Klamath River TMDL should be coordinated with the implementation of other TMDLs to ensure the requirements are consistent and feasible, and likely to lead to attainment of reasonable water quality objectives. In order to ensure consistency in implementation, however, the Regional Board must work on parallel tracks with Oregon to ensure that the load allocations are consistent and that the public has an opportunity to review the science behind both TMDLs. If Oregon and California adopt TMDLs in reliance on low quality or conflicting science, implementation of the TMDLs will not be possible.
- *Premature Assumptions.* The Scoping Document acknowledges that successful implementation of the Regional Board's Klamath River TMDL will hinge on the implementation (and, in some cases, development) of various other TMDLs within and outside¹ of California. (Scoping Document, pp. 9-13, 22-31.) Attempting to implement a TMDL that assumes upstream waters will satisfy water quality objectives is premature where there are no implementation mechanisms in place to ensure that the loads assigned in other TMDLs will be met.
- *Centralized Treatment Plant.* The Regional Board's suggested solution of a treatment plant on Upper Klamath Lake (e.g., Scoping Document, p. 44) cannot be considered without looking seriously at potential temperature effects as well as the financial feasibility of construction and operation of the plant.

¹ Notably, the Regional Board cannot attempt to "regulate" non-California discharges. For example, California does not have jurisdiction to regulate Klamath Straits Drain and, as such, should not be proposing implementation measures directed at Straits Drain. (Scoping Document, pp. 25, 27-28.) KWUA does, however, support evaluation of any and all reasonable means to improve water quality in the Klamath River, including matters that relate to Klamath Straits Drain.

- *Pollutant Trading Program.* The Scoping Document suggests that the Regional Board is considering use of a pollutant trading program whereby downstream dischargers would “implement measures for pollution control upstream to offset their contributions to water quality impairments.” (Scoping Document, p. 7.) KWUA does not fully understand how the Regional Board intends to carry out this proposed trading program, but notes that the Regional Board should not offer a trading option in lieu of adequately modeling alternative load reduction scenarios and establishing technically appropriate and equitable allocations.
- *Algae Harvesting Proposal.* The Scoping Document proposes to carry out an algae harvesting program to produce biofuels and fertilizer, despite the overwhelming scientific evidence finding no ability to produce biofuels out of the algae present in the Klamath River Basin. (Scoping Document, p. 44.) TMDL implementation measures must be supported by science. KWUA discourages any further study of algae harvesting to mitigate water quality issues because this proposal is contrary to existing science. There is also concern over the financial feasibility of construction and operation of such projects.
- *Wetland Filtration.* The Scoping Document proposes centralized treatment through wetland filtration. (Scoping Document, p. 44.) Any wetland filtration effort must carefully consider temperature effects. If a wetland filtration area were to be created, it is vital that it does not affect water allocations to the Klamath Reclamation Project, and that the cost associated with such a project be carefully considered in respect to its effectiveness in mitigating water quality concerns.
- *Stakeholder Involvement.* The Scoping Document suggests that the Regional Board will pursue a new Memorandum of Agreement with ODEQ and the United States Environmental Protection Agency Regions 9 and 10 related to the implementation of the Klamath River and Lost River TMDLs. (Scoping Document, p. 13.) Further, the Scoping Document suggests that the Regional Board may consider adoption of a waste discharge requirement or waiver of waste discharge requirement to implement loads allocated to irrigated agriculture and nonfederal grazing lands within the Klamath River Basin. (Scoping Document, pp. 37, 39.) Stakeholders must be involved in any attempt to develop a new Memorandum of Agreement as well as any Regional Board process to devise a “WDR or waiver of WDR” program for irrigated agriculture or nonfederal grazing lands.

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Timeframes for Compliance

The Regional Board requested estimates of timeframes for compliance. (Scoping Document, p. 1.) However, the Regional Board acknowledges that successful implementation of the Klamath River TMDL for California hinges upon implementation of TMDLs assigned to the tributaries in California, as well as the adoption of a TMDL and implementation plan for the upstream waters in Oregon. (See, e.g., Scoping Document, pp. 9-13, 22-31.) Moreover, the Scoping Document does not provide the science behind the preliminary load allocations, and appears to ignore relevant science on the natural background conditions. As such, it is impossible to evaluate for compliance with the proposed load allocations. In light of the complexities and challenges involved, KWUA recommends the Regional Board pursue a phased approach to implementation.

Miscellaneous Issues

The Scoping Document identifies loading associated with Klamath Straits Drain. (Scoping Document, p. 25.) We are concerned that it does not reflect that Straits Drain water quality is itself a function of various factors, including Upper Klamath Lake water quality and sources on the refuges. In addition, it does not reflect that diversion and use of water in the Klamath Reclamation Project removes pollutants from the system. We understand that the Bureau of Reclamation is furnishing data to the Regional Board on this subject.

In addition, KWUA wishes to clarify the Regional Board's understanding of the function of D Pumping Plant. The Scoping Document states that D Plant keeps farmland on Tule Lake National Wildlife Refuge dry. (Scoping Document, p. 25.) This is incomplete. In the late 1920s, the water body now known as Tule Lake barely existed. Water had been removed from virtually all the land in the Tule Lake Basin through Clear Lake and Gerber Dams and the Lost River Diversion Channel. There were, however, increased return flows from upstream areas as well as seasonal runoff and Lost River flows that led to variable flooding, depending on the conditions. One purpose of D Plant was and is stabilizing water levels in Tule Lake Sump, which, along with diking and other system improvements, worked well. This protects private land as well as land in the Tule Lake National Wildlife Refuge. There was also an associated water quality purpose: there were concerns regarding salinization in the Tule Lake Basin that were addressed by providing the salt discharge at D Plant. Additionally, prior to the construction of D Plant, Lower Klamath National Wildlife Refuge was largely desiccated, so much so that dust storms were common and fire was a problem. D Plant provided a major source of water, which of course benefits the waterfowl and other wildlife of Lower Klamath National Wildlife Refuge. D Plant is also a critical feature in the overall efficiency of water use in the Klamath Project.

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Existing Klamath Basin Efforts to Improve Water Quality

The Regional Board has requested additional information about past or current efforts to improve water quality in the Klamath River Basin. (Scoping Document, p. 1.) KWUA constituents have been instrumental in improving water quality throughout the Klamath River Basin. For example, through the federal Environmental Quality Incentives Program (EQIP) and matching funds, KWUA constituents invested nearly 67.5 million dollars in water efficiency improvements throughout the Klamath River Basin over the last 10 years.

KWUA also urges the Regional Board to integrate its efforts, to the maximum extent possible, with the work of watershed stakeholders, including the proposed Klamath Basin Restoration Agreement (KBRA). The KBRA holds the promise of collaboration in addressing water quality issues as well as many other matters of importance to basin stakeholders. We will welcome dialogue with the Regional Board staff regarding these issues.

Thank you again for your consideration of these comments. We expect to provide additional comments upon release of the Draft TMDL. Please contact me with any questions. We would be happy to schedule a meeting with Regional Board staff to discuss these comments and activities KWUA constituents have undertaken to improve water quality in the Klamath River Basin.

Sincerely,



Belinda Stewart
Outreach and Program Coordinator

cc: KWUA Board of Directors
Greg Addington, KWUA Executive Director
Steve Kirk, ODEQ