ENCLOSURE 6

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

California Department of Food and Agriculture

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/cdfa.pdf

Comments	Response
Comments on "STAFF REPORT AND SUBSTITUTE ENVIRONMENTAL DOCUMENTATION FOR PROPOSED AMENDMENTS TO THE WATER QUALITY CONTROL PLAN FOR THE LAHONTAN REGION REVISING THE REGIONWIDE PESTICIDE WATER QUALITY OBJECTIVE TO A REGIONWIDE WASTE DISCHARGE PROHIBITION" and the "Draft Basin Plan Language – · Draft Waste Discharge Prohibition and Exemption Criteria" and Chapters 3, 4, and 5 Patrick Akers, PhD Sr. Environmental Scientist Calif Dept of Food and Agric Hydrilla Eradication Program Major comments are only on the "Draft Waste Discharge Prohibition and Exemption Criteria". Comments on the Substitute Environmental Documentation were only minor and will not be included. **Draft Waste Discharge Prohibition and Exemption Criteria** **Pg 3, Exemption Criteria: "The treatment event shall not exceed one week..." and Pg 4, "Within one week of the application event compliance with water quality objectives..." and similar references** The Board should be aware that the one-week criterion will preclude the use of most of the safest aquatic herbicides and force dependence on herbicides that, when used at effective legal rates, have much narrower safety margins for non-plant taxa, including fish and invertebrates. They can sometimes cause direct injury to these taxa even when used in compliance with the label. Most of the aquatic herbicides that could be used in compliance with the one-week criterion are older, faster-acting contact herbicides such as acrolein, endothal, diquat, and copper. These herbicides usually require relatively high concentrations in the range of 0.8 to 3 or 4 ppm to be effective, and often their application rates approach the LC50's for various animal taxa. However, they usually kill their targets and degrade or are inactivated within a few days, so they can stay within the criterion period. Contrasted to these herbicides are newer herbicides such as fluridone, penoxsulam, imazapyr, imazamox, and several others that are in the process of being registered. These herbicides are slow-acting systemics. They generally take 2 to 5 weeks or more to exert their effects, and they break down or are inactivated more slowly than the contact herbicides, so they remain at effective concentrations for the required time or even longer, unless diluted. This means their use could not comply with the criterion period. However, they also are generally applied at much lower rates (0.01 to 0.3 ppm) and have similar to much better toxicity profiles for non-plant taxa than the contact herbicides, so in practice they have much higher safety margins for taxa other than plants. Some of these new herbicides are among the lowest-risk pesticides ever registered by EPA. They	**CDFA R1:** Water Board staff acknowledges that the one week period assigned to the treatment event may preclude the use of some pesticides including slow-acting systemic herbicides. In recognition of the variability of the duration of a treatment event, the duration of a treatment event will not be discretely defined to one week as previously proposed. Instead the duration of the treatment event will be limited to the shortest duration possible while still achieving project success and will be defined on a project-by-project basis. The duration of the treatment event will be determined by whether the pesticide in use is a fast-acting chemical or a slow-release systemic compound and by considering site-specific conditions (flow, target species, water chemistry). assigned to the treatment event. Project proponents, however, will be required to begin water quality monitoring one week post-application event (i.e., when pesticides are first applied to surface water) to track the ambient concentration and degradation of the aquatic pesticide. For further clarification on how this amendment provides for the potential use of systemic pesticides that require a time-release mode that often extends beyond one week for effectiveness see Chapter 4 of the Basin Plan under the section titled "Purpose and Need for Exemption."

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also often have a range of effectiveness on different plant species, such that it is often possible to control a pest plant while favoring more beneficial species. The Board would do well to consider rewording this criterion so that it does not exclude effective alternative compounds that provide lower risk.	Refer to **CDFA R1** on the previous page.
Pg 5, para. 1: "...and (d) prevent damage...species." Consider adding something similar to: "(e) manage waterways for safe navigation and effective water delivery."	**CDFA R2:** The Water Board will consider projects for an exemption on a project-by-project basis. Though projects proposed for purposes of providing safe navigation and effective water delivery are not explicitly identified in the Basin Plan the Water Board may provide a prohibition exemption for these types of projects where there is a nexus to public health and safety.
Pg 5: (a) The project is an eligible circumstance. Consider adding "as described below." **Pg 5: (b):** Change "project criteria" to "exemption criteria"?	**CDFA R3:** Water Board staff concurs with the minor language revisions and have made the changes in the appropriate locations throughout Chapter 4 of the Basin Plan under the section titled "Findings Necessary for Granting an Exemption."
Pg 6, para 6: "Emergency Projects." CEQA Guidelines 15269 requires declaration by the Governor, but Resource Code 21060.3 does not specify the authority that declares the emergency. What will be the Board's stance on this question? Will declaration by a resources agency suffice?	**CDFA R4:** PRC 21060.3 and CEQA Guidelines 15359 provide a definition of an action that may be considered an emergency that may be exempt from CEQA; it does not specify what authority declares the project an emergency. CEQA section 15269 provides which types of projects are statutorily exempt from the requirements of CEQA because they fit the definition of emergency. CEQA subsection 15269(a) does specify that the Governor is the authority that declares a situation an emergency, but CEQA sections 15269 (b) and (c) do not specify which entity needs to declare the project as an emergency. If the CDFA or a resources agency is the CEQA lead on a project, it may declare an activity is an emergency project, according to the definition, and the project is statutorily exempt from CEQA. When the exemption request is filed with the Water Board, the Water Board would need to concur with the lead agency's determination or otherwise file a separate CEQA finding.
Pg 6, para 7, 2nd sentence Consider changing "not already infested by that species" to "where that species is not already established." **Pg 6, para 7, 3rd sentence:** Consider adding State and Federal noxious weeds to the list of species. **Pg 6, para 8 et seq, General Comments** The "Circumstances" and "Exemption Criteria" sections give the sense that the Board anticipates that projects will be put forward in reaction to a single current problem in a specific area with tightly limited geographic extents and in a tightly defined time frame. However, some problems, especially concerning facility or waterways maintenance, are often anticipated, but perhaps in a general way. For example, a canal company might know that some parts of its system are prone to developing weed problems, but the specific problem sites and weeds vary from year to year. The management people at Tahoe Keys know they're likely to have milfoil and curlyleaf pond weed problems in any given year, but the timing and extent might vary according to the year's weather. The Vector Control people probably have a good idea of the areas that are most likely to	

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develop mosquitoes in general, but the specific problem areas in any given year probably depend on factors at a microclimate scale and can't be accurately predicted. Water delivery companies may know that a particular reservoir has a history of cyanobacteria problems, but perhaps not always in the same location or in every year. The quagga mussel response team probably anticipates that the mussels will first be found in Tahoe at a boat ramp or marina, but not which one. Managers in such conditions likely have general plans on a response, but all the important details of where, when, extent, and probably even the precise treatment method and protocol will depend on the specific situation. However, when the situation arises, in many cases the response needs to be swift if it is to be useful. If the Board could give some direction as to whether they wish to consider projects with more generalized project descriptions, it would be appreciated. Such projects would appear to fall under the classification of "Projects that Are Neither Emergency Nor Time Sensitive", but, as noted above, when a specific circumstance arises, often time is pressing. If the Board would consider more generalized, proactive projects, some guidance as to how the Board envisions such projects fitting into the "Exemption Criteria" scheme would be helpful.	Refer to **CDFA R6** on previous page**.**
Pg 7, para 3, 2nd sentence (NPDES requirements): "Project proponents...must obtain coverage under an applicable permit..." The timing between obtaining the Prohibition Exemption and a General NPDES permit is confusing. In paragraph 11, "2. Notice of intent for coverage..." implies that the two processes occur in parallel. Please clarify.	**CDFA R7:** When a project proponent submits an exemption request, specific exemption criteria must be satisfied before the Water Board considers to grant or deny the prohibition exemption. One of the criterion that the project proponent must supply includes proof that the appropriate Notice of Intent (NOI) or Report of Waste Discharge (RoWD) has been filed. Filing the NOI or the RoWD in itself does not provide permit coverage. Instead filing these forms initiates the process of obtaining the appropriate permit. These forms are submitted to the State Board or Water Board and indicate the dischargers' intent to seek permit coverage for the discharge of aquatic pesticides. The discharge of aquatic pesticides is **not authorized** until an exemption request is granted by the Water Board and the appropriate permit has been obtained. For aquatic pesticide discharges covered under the State Board aquatic pesticide permits, authorization to discharge is not permitted until the project proponent receives a Notice of Applicability (NOA) from the State Board's Deputy Director. The NOA will specify the pesticide products or type(s) of pesticides that may be used and any Regional Water Board specific conditions and requirements not stated in the Statewide NPDES General Permit. The Discharger is authorized to discharge starting on the date of the NOA. If the aquatic pesticide discharge will be covered by a Water Board individual permit, the Water Board has 120 days to issue Waste Discharge Requirements or 180 days to issue an individual NPDES permit, and these permits would likely be issued at the same time the exemption request was considered at a Water Board hearing.
Pg 7, para 11, 1st sentence: Should "...State Board or Regional Board permit..." be "...State Board or Regional Board NPDES permit..."?	
Pg 7, para 12, CEQA Documentation: 1. In a declared emergency that is exempt from CEQA, no documentation is required? 2. Preparing CEQA documentation can be very expensive in time and money. To take on such an investment without good indication as to whether the Board is likely to grant the exemption places the applicant in a highly risky position. Will the Board be able to provide some guidance to the applicant prior to initiating the CEQA document process?	
Pg 9, para 4: "2. ... The Plan should include measures to remove..." Removal of biomass is likely not feasible for weeds treated with herbicides. The contact herbicides usually kill and break down the plants rapidly. Attempts to harvest the dying plants would only cause extensive shattering, greatly increasing the release rate of organic matter, thereby encouraging even more rapid bacterial blooms and the chance of	

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deleterious effects on dissolved oxygen. For contact herbicides that work rapidly, the more common mitigation (usually on the label) is to not treat when the DO is low (near 5 ppm) or to treat only a section (usually 1/3) of an infested water body at a time (usually with 1 to 2 weeks between treating sections), if it is infested over most of its area. Another mitigation is to use one of the slower-working systemic herbicides. In these cases, a single plant does not die all at once: parts of it are decaying while other parts are still dying. The plant stand as a whole dies gradually over a prolonged period, so bacterial growth is not as intense and the effects on DO are usually less pronounced. If the Board were to insist that only fast-acting contact herbicides were acceptable to control the spread of AIS weeds, a more logical approach to using harvesting to mitigate biomass decay in using such herbicides would be to harvest first and then immediately treat with a contact herbicide to kill the many plant fragments that harvesting generates. Plant fragments generated by harvesting or boating are a major means of spreading an invading weed within a water body.	Refer to **CDFA R11** on the previous page.
Pg 9, para 4 et seq, "4. Monitoring and reporting program..." The Board should consider requiring that the monitoring plans be structured along the lines of the statewide NPDES pesticide plans, where a representative fraction of treatments are monitored. The Board might perhaps also require that a project proponent takes care to include a treatment that represents a "worst case" scenario, if one can reasonably be anticipated. As stated earlier, the current draft gives the impression that the Board largely envisions each project as a single treatment event, discrete in both time and space. The monitoring plan laid out in Time Sensitive Projects, section 4, is extremely extensive and will be very expensive. It would perhaps be reasonable if it were a one-time expense, but maintenance-type situations will probably entail multiple treatments in time or space. If each treatment event requires such extensive monitoring, the cost will be prohibitive. It would also help to know that the data is being incorporated into a scheme that will allow the Board at some future time to understand the effects of pesticides in the watershed and make judgments as to circumstances where a particular use was or was not especially deleterious. However, it seems a waste to require recurring large costs simply for data that will not lead to better understanding.	**CDFA R12:** Many of the treatments that will require a prohibition exemption include routine, maintenance activities that are currently, or will be, appropriately regulated under the existing Statewide NPDES aquatic pesticide permits (Vector Control and Aquatic Weed Control) rather than an individual or general NPDES permit developed and adopted by the Water Board. For these projects, monitoring plans will need to satisfy NPDES permit monitoring requirements. These routine pest control projects (e.g., BLM Invasive Weed Abatement Program, CDFA's Statewide Pest Management Program, Mosquito Abatement Control District Vector Control Program) that will be covered under the Statewide NPDES permits will need to comply with the monitoring and reporting programs associated with these permits, which require monitoring of a representative fraction of the treatments covered under the permit. Proponents are encouraged to consult with Water Board staff in developing all treatment scenarios reasonably anticipated when submitting an exemption request. The commenter addresses monitoring requirements of a time sensitive project, and then continues with the assumption that multiple treatments, such as maintenance treatments, fit the Time Sensitive circumstance. Time Sensitive projects are expected to be one-time treatments in response to a time sensitive situation. **CDFA R12 continues on next page.**
Pg 10, para 2: Peer review The mechanism of peer review needs better definition, because there may be problems if the Board intends to follow the model of review for scientific journals. Anonymous peer review is the cornerstone for scientific work being submitted for publication in a scientific journal. Publications form the basis for the advance of a publishing scientist, so having one's papers peer reviewed is of paramount importance. Publishing scientists review each other's work for free, with the understanding that each	

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is providing the favor in return for similar consideration. Project monitoring plans and reports generally provide no such incentive to a publishing scientist. Some scientists may provide limited review services out of a sense of public duty or to earn the right to list the activity on a resume, but scientists with appropriate backgrounds are few, and their good offices could easily be overwhelmed. This means that project proponents will probably soon run into difficulty finding reviewers, unless the reviewers are compensated. However, if the project proponent compensates the reviewer directly, then the review is open to the criticism that it is no longer disinterested. To overcome this, the Board may have to set up a panel of reviewers that is has on retainer, and the project proponents will need to contribute to a general fund to pay for reviews. Alternatively, monitoring plans could be anonymously reviewed by other potential project proponents. Project proponents would share incentive to review in the same way that scientists share an incentive to review. The Board would have to determine whether proponents in general have the technical ability to undertake the reviews, and whether such a scheme would provide an adequate perception of disinterestedness.	Refer to **CDFA R13** on previous page. **CDFA R14:** The biological monitoring program must be based on an appropriate study design, metrics, and performance criteria to evaluate restoration of non-target biological life potentially affected by the pesticide application. In projects with the goal of removing an invasive plant community, the recovery target will be based on an appropriate reference site identified in the study design. The recovery target will be measured using appropriate indicators (e.g., macroinvertebrates, aquatic plants) that demonstrate restoration of non-target species to levels equal to or better than pre-treatment conditions (a reference site may be used to represent pre-project conditions). We acknowledge that the same species may not exist at the treatment location after treatment as before treatment, or that the species may not exist with the same abundance. Rather, the community as defined by quantifiable metrics (e.g., functional feeding groups, abundance, etc.) will be comparable. For further guidance on biological monitoring of non-target species, see additional language in Chapter 4 of the Basin Plan under the section titled “Exemption Criteria for Controlling Aquatic Invasive Species (AIS) and Other Harmful Species”, No. 7.
Pg 10 para 3: The Board focuses its interest in population recovery on macroinvertebrates. This focus probably reflects its experience with rotenone, which is an insecticide as well as a piscicide. It would be helpful if the Board could give guidance on how it perceives dealing with other pesticide groups besides rotenone. For example, many aquatic herbicides have little to no direct toxicity for most invertebrates, although the fast-acting contact herbicides can be marginally toxic at normal use rates. On the other hand, it is conceivable that herbicides that are not directly toxic could alter the habitat enough by the removal of certain plant species that it could indirectly alter the invertebrate community. Carried further, if removal of AIS weeds allows the recovery of native plants, the invertebrate community might also move to a more "native" structure. With herbicides, will the recovery target be a reference native plant community, a recovery of invertebrate populations to pre-treatment community, or a "native" invertebrate community based on a native plant community?	**CDFA R15:** Staff concurs that every project will not need monitoring as described in the proposed Waste Discharge Exemption Language in the section titled “Exemption Criteria for Controlling Aquatic Invasive Species (AIS) and Other Harmful Species”, No. 7.
Pg 10, para 4 Paragraph 4 epitomizes the impression created by the BPA language that the Board perceives control projects as single treatment events discrete in both time and space. For rotenone-based eradication projects, this is sensible. However, for maintenance situations, the conditions in Paragraph 4 might be inherently unattainable. For example, if a water company may finds it needs to treat a section of a canal for weeds every two years or so, can it still operate under the BPA? The Board would serve the water infrastructure community if the Board could state whether it envisions maintenance-type	If the project is permitted under a statewide general permit, the monitoring requirements will meet those of the permit. If the exemption request packet indicates the potential for direct impacts to non-target organisms, staff may recommend that the Water Board require additional monitoring to that required in the permit to evaluate full restoration of non-target species. If HR 872 passes, exempting pesticide projects from NPDES permits, State Board or the Regional Board may still regulate these discharges by permit under authority of the Porter-Cologne Act. **See CDFA R8.**

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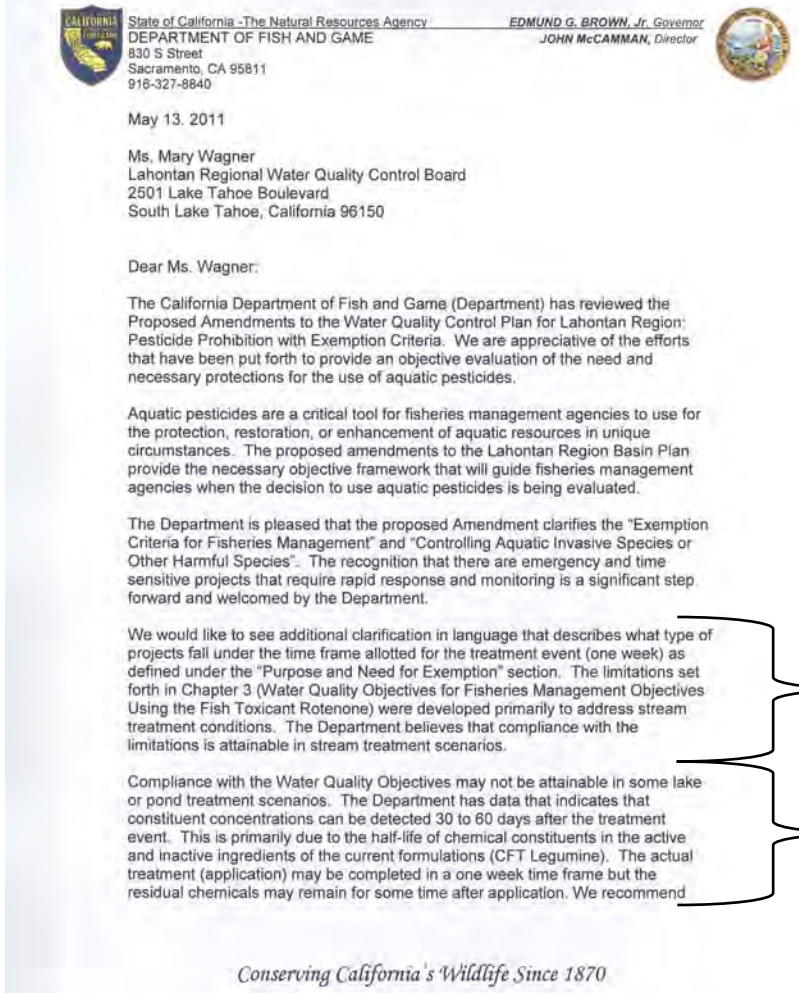
projects having any place under the proposed BPA amendment, and outline how they might fit in.	See **CDFA R15** previous page.

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

California Department of Fish and Game
http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/cdfg.pdf

Comments	Response
	**DFG-R1**: The one week maximum treatment event duration has been replaced with language in Chapter 4 of the Basin Plan under the "Purpose and Need for Exemption" section that allows flexibility in duration based on project specifics (e.g., pesticide characteristics, site conditions). **DFG-R2**: Time to compliance, as related to treatment event duration, is not specified by water body type. "Language in the Purpose and Need for Exemption" section allows the time to compliance to be based on project specific characteristics. See also **DFG-R1**. Water quality monitoring is required no more than one week after pesticides are applied and must continue at least until compliance with water quality objectives is achieved.

Comments	Response

that language be incorporated that recognizes this and that post project monitoring should be in effect until the standard of non-detection is achieved.

If you have questions regarding our comments please contact us so that we can provide additional information.

Sincerely,

Stafford Lehr, Chief

Cc: Ms. Katherine Hill
California Department of Fish and Game
North Central Region - Region 2

Ms. Kimberly Nicol
California Department of Fish and Game
Inland Desert Region - Region 6

Refer to **DFG-R2** on previous page.

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

California Department of Public Health –
Northern California Drinking Water Field Operations Branch
http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/cdphdw.pdf

Comments	Response

Mary Fiore-Wagner - RE: Lahontan Draft Pesticide Basin Plan Amendment Language

From: "Lischeske, Carl (CDPH-DDWEM)" <Carl.Lischeske@cdph.ca.gov>
To: Mary Fiore-Wagner <MFWagner@waterboards.ca.gov>
Date: 5/19/2011 3:59 PM
Subject: RE: Lahontan Draft Pesticide Basin Plan Amendment Language
CC: <jcarr@ndep.nv.gov>, "Walker, Leah (CDPH-DDWEM)" <Leah.Walker@cdph.ca.gov>

Mary,

I looked at the "Draft Waste Discharge Prohibition and Exemption Criteria Language Pesticide Basin Plan Amendment", and suggest you add two bullets on page 7 to the Exemption Criteria for Aquatic Pesticide Use section as shown below:

1. Project Information to include:

a. Project description including, but not limited to, proposed schedule, duration, name of pesticide, method and rate of application, spatial extent, water body, control/mitigation measures to be used, contact information.

b. Purpose and need for project.

c. The chemical composition of the pesticide to be used, including inert ingredients.

d. An estimate of the maximum foreseeable concentrations of pesticide components in any surface water intake used for drinking water supplies within ½ mile of the point of application.

e. Public notification and warning plan must be implemented before and during the project and include any water use restrictions or precautions during treatment if necessary. Suitable measures will be taken to identify potentially affected sources of potable surface and ground water intakes, and to provide potable drinking water where necessary.

f. Spill contingency plan to address proper transport, storage, spill prevention and cleanup.

Carl Lischeske
Chief, Northern California Drinking Water Field Operations Branch
1616 Capitol Avenue, MS 7407, P.O. Box 997377
Sacramento, CA 95899-7377
(916) 449-5596 / (916) 449-5656 FAX

CDPH-Drinking Water R1: The suggested or similar language has been included to bolster protections for projects that may impact drinking water intakes. The language can found in Chapter 4 of the Basin Plan under the section titled "Exemption Criteria for Aquatic Pesticide Use."

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

California Department of Public Health –
Vector Borne Disease Section

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/cdphvector.pdf

Comments	Response

California Department of Public Health
MEMORANDUM

DATE: May 13, 2011

TO: Daniel Sussman, Environmental Scientist
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd
South Lake Tahoe, CA 96150

FROM: Vicki Kramer, Ph.D., Chief
Vector-Borne Disease Section
Division of Communicable Disease Control
1616 Capitol Ave, MS-7307
PO Box 997377
Sacramento, CA 95899-7377
(916) 552-9730

SUBJECT: Comment Letter – Proposed Amendments to the Water Quality Control Plan for the Lahontan Region: Pesticide Prohibition with Exemption Criteria

The California Department of Public Health, Vector-Borne Disease Section (VBDS) submits these comments in response to the Lahontan Regional Water Quality Control Board (Water Board) publication of proposed amendments to the Water Quality Control Plan for the Lahontan Region (Basin Plan). VBDS understands the important function of the Basin Plan to protect beneficial uses of waters in the Lahontan Region. We appreciate that in drafting these proposed Basin Plan Amendments (BPA), the Water Board recognizes that judicious application of aquatic pesticides for the purpose of protecting public health is consistent with maximum benefit to the people of the State.

We are available for consultation on implementation of this plan in a way that balances protecting the water quality of the Lahontan Region while ensuring the health and safety of the people of California. Thank you for allowing VBDS the opportunity to provide the following comments.

1) BPA Section: 6. Public Health and Safety – Vector Control (p.8)
California Health and Safety Code (HSC section 2000), provides the broad statutory authority for mosquito abatement and vector control districts to conduct effective programs for the abatement and control of mosquitoes and their vectors.

Comment: Mosquitoes are a type of vector and, therefore, the phrase "…of mosquitoes and their vectors" should be changed to simply read " …of vectors". To be consistent with the California Health and Safety Code, VBDS recommends the following change: "California Health and Safety Code (HSC section 2000), provides the broad statutory authority for mosquito abatement and vector control districts to conduct effective programs for the abatement and control of vectors and public nuisances."

CDPH-Vector R1: Suggested language has been incorporated into the Substitute Environmental Documentation under the section titled "Public Health and Safety – Vector Control."

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2) BPA Section: 9.C. i. Prohibition Exemptions and Coverage Under the Statewide General NPDES Permits for Vector and Weed Control (p.15) *Before receiving permit coverage, vector and weed control project proponents in the Lahontan Region must first be granted an exemption to the pesticide prohibition (once this Basin Plan Amendment is approved and in effect).* Comment: Once in effect, this BPA offers a mechanism for vector control districts to legally apply aquatic pesticides in the region. VBDS is concerned that the BPA will not be approved and in effect by the Oct. 31 2011 implementation deadline of the Statewide Vector Control NPDES permit. If the BPA is not in effect before Oct. 31, how will the existing Basin Plan affect the issuance of NPDES permits to vector control agencies operating in the Lahontan Region?	**CDPH-Vector R2:** The BPA will not be in effect on October 31, 2011. Water Board staff intends to bring the BPA to the Water Board for a hearing to consider adoption by the end of the year 2011. Following Water Board approval, the State Board, California Office of Administrative Law, and the USEPA must approve the amendment before it is "in effect". State Board will make a decision on its statewide permits regardless of the Amendment. Water Board staff acknowledges vector control projects occur now in our region and will continue to occur with or without this amendment. At this time Water Board staff is not recommending that the Water Board take enforcement actions on these discharges. We encourage vector control agencies to submit use reports and monitoring reports to our office.
3) References to public notification in BPA Sections: 11.B.3.c and e (p.31), 11.8.c (p.37), 12. Air Quality – Create Objectionable Odors Affecting a Substantial Number of People (4th sentence in paragraph, p.48), 12. Hazards and Hazardous Materials (3rd and 5th sentences in paragraph, p.50), and Attachment 2: Draft Waste Discharge Prohibition and Exemption Criteria p.7: *Public notification and warning plan must be implemented before and during the project and include any water use restrictions or precautions during treatment if necessary* Comment: VBDS seeks clarification on the specific notification requirements proposed by the Water Board. For agencies seeking coverage under the Statewide NPDES permit (CAG 990004), do the public notice requirements specified in Attachment C Section IV (A)(1) of the permit (p. C-7) satisfy the Water Board's reporting requirements? VBDS supports that the Water Board requires agencies seeking the vector control exemption be signatory to the Cooperative Agreement with the Department of Public Health. The Cooperative Agreement has two primary functions: 1) ensuring that signatory agencies safely, responsibly, and legally apply pesticides for the good of public health and 2) enabling these agencies to effectively control vectors. Due to the general understanding that vector control protects public health and rapid suppression is essential to achieve this protection, the California Education Code (Sec 17613), the California Food and Agriculture Code (Sec 13187) and California Code of Regulations (3CCR6620) provide notification exemptions for agencies signatory to the Cooperative Agreement. The proposed BPA notification language conflicts with these existing California statutes.	**CDPH-Vector R3:** Staff has incorporated appropriate language in Chapter 4 of the Basin Plan under the section titled, "Exemption Criteria for Aquatic Pesticide Use." Agencies that are signatory to Cooperative Agreement with Department of Public Health do not have to provide notification plans.
4) Attachment 1. Definition of Terms Comment: VBDS recommends including in the "Definition of Terms" the definition of vector from the Health and Safety Code Section 2002(k): Any animal capable of transmitting the causative agent of human disease or capable of producing human discomfort or injury, including, but not limited to, mosquitoes, flies, mites, ticks, other arthropods, and rodents and other vertebrates. 2	**CDPH-Vector R4:** The definition of vector from Health and Safety Code 2002 (k) has been added. This amendment is intended to address only those pesticide uses with the potential to discharge to water. We anticipate, in the realm of vector control, that this amendment will only apply to aquatic pesticide discharges for purposes of mosquito control. Terrestrial applications of pesticides to address terrestrial pests should not result in a discharge of pesticides to water. However, we do not anticipate aquatic use of pesticides for terrestrial uses.

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Throughout the BPA, when referring to activities of vector control agencies, "vector" is equated to "mosquito". While the BPA exemptions are primary focused on public health mosquito control activities, we would like the Water Board to recognize that vector control districts and agencies are mandated to protect California's public health from any animals capable of transmitting causative agents of human disease and injury. The Water Board may need to review public health exemption prohibitions for vectors other than mosquitoes. Inclusion of the definition would clarify that the BPA vector control exemptions are not limited to mosquito control projects.	Refer to **CDPH – Vector R4** previous page.
5) Attachment 2: Draft Waster Discharge Prohibition and Exemption Criteria, Exemption Criteria for Aquatic Pesticide Use, Purpose and Need for Exemption (1st sentence, 6th paragraph, p. 3) *The treatment event shall not exceed one week, after which time the level of pesticide should be below its minimum effective concentration and water quality objectives should be met within the treatment area* Comment: Specific for biological larvicides, VBDS requests the Water Board reconsider the restriction of treatment events to less than one week. Many of the biological larvicides used by vector control agencies and approved in the Statewide General Permit are designed to release over time, providing an effective life of more than one week. When applied at legal label rates, these products are very specific to mosquitoes. This combination of high specificity and extended mosquito control is advantageous to both the environment and public health. While specifically controlling larval mosquitoes, use of time-released biological larvicides minimizes the numbers of application events at a site which reduces further habitat disturbances, lessens the chance of a pesticide spill, and decreases other pollution concerns associated with repeated applications.	**CDPH-Vector R5:** Refer to Response to California Department of Food and Agriculture - **CDFA R1**. For further clarification on how this amendment provides for the **potential** use of slow-acting systemic pesticides that may require active levels of pesticide be present in the water column beyond one-week, refer to additional language inserted in Chapter 4, section titled "Purpose and Need for Exemption."
6) Attachment 2: Draft Waster Discharge Prohibition and Exemption Criteria, spelling of the word larvacide [sic] (multiple pages) Comment: For the sake of continuity, please substitute "larvicide" for "larvacide" in the document. Larvicide is used in the main document and larvacide is used Attachment 2.	**CDPH-Vector R6**: Changes have been made to be consistent through all documents in Substitute Environmental Documentation including the Basin Plan language.

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Nancy A. and Don C. Erman

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/erman.pdf

Comments	Response
1	

Comments submitted by e-mail. Please confirm receipt.

Date: May 10, 2011

To:
Mary Wagner mfwagner@waterboards.ca.gov and
Daniel Sussman dsussman@waterboards.ca.gov
Lahontan Regional Water Quality Control Board
South Lake Tahoe
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From:

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Re: PROPOSED AMENDMENTS TO THE WATER QUALITY CONTROL PLAN FOR THE LAHONTAN REGION: PESTICIDE PROHIBITION WITH EXEMPTION CRITERIA

We are filing these comments on the proposed amendments to the Lahontan Basin Plan as private citizens, in the public interest. We have been reviewing government documents on the use of rotenone formulations to remove unwanted fish species from the waters of California, and many other parts of the country, for the past 16 years. We have reviewed much of the published and unpublished literature on the impacts of rotenone to non-target species. We have reviewed over the last 10 years many documents in the Lahontan Regional Water Quality Control Board (LRWQCB) files and have filed comments on the proposed project to poison most of the remaining parts of the Silver King Creek basin. We have also filed comments with the

07-00192

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2 Environmental Protection Agency (EPA) on the impacts of fish poisons on the non-target aquatic animal community (Erman and Erman, 2005, 2006, 2007). Our detailed comments refer largely to the use of rotenone formulations to remove fish from aquatic systems. The more general comments apply also to other forms of government poison applications in and over water for such things as eliminating plants in water and for mosquito abatement, etc. The documentation supporting the statements we are making are found in LRWQCB and EPA files and are available from us upon request. The proposed Lahontan Basin Plan change is an attempt by the staff of the LRWQCB to relinquish their responsibility for oversight of government poisoning projects using pesticides in and over water, to lower the standards of the Clean Water Act Antidegradation Policy, and to reduce or remove the role of the public members of the LRWQC Board in assessing government poisoning projects in the Lahontan region. The changes define water poisoning by government agencies as in the public interest by definition. The draft revisions remove much of the regulatory authority and responsibility of the LRWQCB where government agencies are the parties seeking to poison water. They can remove the need for individual NPDES permits and give full authority to the Executive Officer to permit poisoning projects without going to the public Board and without holding public hearings to grant individual NPDES permits. As long as government agencies are doing the poisoning, for whatever reason, the LRWQCB staff will not make judgments about need for poisons or impacts of poisons. They will merely require that "monitoring" be conducted by the agencies before and after the completion of poisoning. The U. S. Fish and Wildlife Service has been added to the list of government agencies who can now poison water in the Lahontan Basin. Private entities will also be allowed to apply poisons into and over water for a variety of reasons. Perhaps the chief reason for the staff's proposed changes is to protect the LRWQCB and State Water Board from legal responsibility for the many failures and	**D&NE R1:** The proposed Amendment is designed to increase oversight of pesticide projects in the Lahontan Region. Currently, pesticides are applied by Mosquito Abatement Districts, Water Purveyors, and other entities with statutory responsibility to protect public health and safety. While many to all of these applicators submit NOIs to be covered under statewide general NPDES permits, Lahontan staff and the Water Board does not have interaction with the project proponents, and has had little opportunity to influence projects, management practices, and APAPs. The Amendment will bring these projects under Water Board oversight. Similarly, the role of the members of the Water Board will be increased, as all projects, save vector control and emergency projects, will be considered for exemption by the members of the Board during a public meeting on a case by case basis. The standards of the CWA Antidegradation Policy remain sound, as described in Section 10 of the Staff Report. During both the scoping and public comment period, the public has the opportunity to comment on the project and monitoring requirements to further refine project implementation. **D&NE R2:** As mentioned in **D&NE R1**, with the exception of vector control and emergency projects, all exemption requests will individually be considered by the members of the Water Board, unless the Water Board delegates such decisions to the Executive Officer. Each project proponent, regardless of whether it is a government or private entity, must make their case for exemption and demonstrate that a change in water quality is offset by the social or economic benefits provided by implementing the proposed project. Protection or enhancement of the environment (e.g. projects to restore ecological integrity) is justification that may qualify as a social benefit (1987 State Board memo, Chief Counsel Attwater). The proposed language provides for, but does not require, that projects may be permitted using statewide general NPDES permits. No general permit exists for rotenone projects, and future projects will thus need individual permits.

07-0193

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3 misrepresentations that have occurred in poisoning projects conducted by the California Department of Fish and Game in the Lahontan region over the past 25 years. We suspect the staff foresees a significant increase in aquatic poison applications in the region in the future including poisoning in more visible and popular areas like Lake Tahoe, Fallen Leaf Lake, and other high mountain lakes and streams for a variety of reasons deemed essential by various agencies. At present the LRWQCB is not enforcing the current requirements of the Basin Plan, and therefore of the Clean Water Act, where rotenone formulations are concerned, and so the easiest route for the staff is to just get rid of those requirements through redefinition. The intent of the proposed changes is to weaken the Basin Plan rather than to protect the aquatic resources and beneficial uses in the Lahontan Basin. We think they also violate the required standards of the Antidegradation Policy of the Clean Water Act. It is unclear from the proposed revisions whether or not individual NPDES permits will be required in the future or whether a blanket permit will be given for all projects. It is not clear whether or not public hearings will be held or that the citizen Board will even be involved in future projects. One possibility listed in the policy changes suggests that the Executive Officer alone could grant permission for individual projects. Rotenone projects in the Lahontan basin serve as a useful example of what to expect from future poisoning projects in the Lahontan basin when requirements are less strict than they are now, should these proposed changes be adopted. The rotenone picture has changed significantly in the last few years. Many studies over the past 10 years have shown a connection between rotenone and Parkinson's disease. Two of the principle pesticides that will be used under this proposed revision of the Basin Plan are rotenone and the herbicide paraquat—both approved for use in California. Both pesticides are documented in laboratory studies as mitochondrial Complex I inhibitors that lead to Parkinson's Disease-like symptoms. Both pesticides have been shown in a recent study to be definitively associated with	**D&NE R3:** Staff does not foresee a great increase in the use of aquatic pesticides following adoption of the proposed Basin Plan amendment over and above project frequency currently occurring in the Lahontan Region. Currently, Water Board staff actively supports and permits non-chemical projects - both implementations and experiments - to control aquatic invasive species (fish, plants, mollusks). Under the proposed language, when a project is brought forth to request exemption all criteria must be satisfied. One criteria is that alternatives to chemical use have failed, or an explanation of why they would be infeasible to meet project goals. Any foreseeable increase in proposed aquatic pesticide projects will likely be in response to aquatic invasive species infestations unresponsive to non-chemical control means. This does not include the permitting of pre-existing ongoing activities that involve the use of aquatic pesticides in the Region, such as mosquito abatement programs and treatments implemented to provide source water protection.

Comments	Response
3 misrepresentations that have occurred in poisoning projects conducted by the California Department of Fish and Game in the Lahontan region over the past 25 years. We suspect the staff foresees a significant increase in aquatic poison applications in the region in the future including poisoning in more visible and popular areas like Lake Tahoe, Fallen Leaf Lake, and other high mountain lakes and streams for a variety of reasons deemed essential by various agencies. At present the LRWQCB is not enforcing the current requirements of the Basin Plan, and therefore of the Clean Water Act, where rotenone formulations are concerned, and so the easiest route for the staff is to just get rid of those requirements through redefinition. The intent of the proposed changes is to weaken the Basin Plan rather than to protect the aquatic resources and beneficial uses in the Lahontan Basin. We think they also violate the required standards of the Antidegradation Policy of the Clean Water Act. It is unclear from the proposed revisions whether or not individual NPDES permits will be required in the future or whether a blanket permit will be given for all projects. It is not clear whether or not public hearings will be held or that the citizen Board will even be involved in future projects. One possibility listed in the policy changes suggests that the Executive Officer alone could grant permission for individual projects. Rotenone projects in the Lahontan basin serve as a useful example of what to expect from future poisoning projects in the Lahontan basin when requirements are less strict than they are now, should these proposed changes be adopted. The rotenone picture has changed significantly in the last few years. Many studies over the past 10 years have shown a connection between rotenone and Parkinson's disease. Two of the principle pesticides that will be used under this proposed revision of the Basin Plan are rotenone and the herbicide paraquat—both approved for use in California. Both pesticides are documented in laboratory studies as mitochondrial Complex I inhibitors that lead to Parkinson's Disease-like symptoms. Both pesticides have been shown in a recent study to be definitively associated with	**D&NE R4: Refer to D&NE R2.** If the Water Board chooses to adopt the proposed amendment, prohibition exemptions may be granted for aquatic pesticide uses conducted for purposes of vector control, public health and safety, preservation of ecological integrity, fisheries management, and projects implemented for these purposes in response to emergency situations. For vector control projects statutorily required for public health and projects that satisfy the CEQA definition for emergency project (CEQA Guidelines 15269(a)(b)(c)), the adoption of the Amendment grants exemption without subsequent hearing at a public Water Board hearing. All other projects need to satisfy exemption criteria prior to staff bringing the exemption request to the Water Board for approval or denial of request at a public hearing. All projects are subject to permitting. It is probable that for projects that can be permitted under a statewide general NPDES permit that will be the preferred permitting avenue. If a statewide or regionwide general NPDES permit does not exist for the circumstance, then Water Board staff will propose the appropriate permit for adoption at a Water Board public hearing. In the future, Congress may exempt aquatic pesticide applications from Clean Water Act permitting requirements (e.g. HR 872). If that is the case, State and Regional Boards will pursue other permitting options under the California Water Code, which could include Waste Discharge Requirements, Waivers, or other permitting options. Also refer to Response **CDFA R8**. **D&NE R5:** The proposed Amendment does not decrease compliance requirements of pesticide projects, nor does it decrease regulatory oversight. The Amendment increases monitoring requirements.

07-00195

Comments	Response
3 misrepresentations that have occurred in poisoning projects conducted by the California Department of Fish and Game in the Lahontan region over the past 25 years. We suspect the staff foresees a significant increase in aquatic poison applications in the region in the future including poisoning in more visible and popular areas like Lake Tahoe, Fallen Leaf Lake, and other high mountain lakes and streams for a variety of reasons deemed essential by various agencies. At present the LRWQCB is not enforcing the current requirements of the Basin Plan, and therefore of the Clean Water Act, where rotenone formulations are concerned, and so the easiest route for the staff is to just get rid of those requirements through redefinition. The intent of the proposed changes is to weaken the Basin Plan rather than to protect the aquatic resources and beneficial uses in the Lahontan Basin. We think they also violate the required standards of the Antidegradation Policy of the Clean Water Act. It is unclear from the proposed revisions whether or not individual NPDES permits will be required in the future or whether a blanket permit will be given for all projects. It is not clear whether or not public hearings will be held or that the citizen Board will even be involved in future projects. One possibility listed in the policy changes suggests that the Executive Officer alone could grant permission for individual projects. Rotenone projects in the Lahontan basin serve as a useful example of what to expect from future poisoning projects in the Lahontan basin when requirements are less strict than they are now, should these proposed changes be adopted. The rotenone picture has changed significantly in the last few years. Many studies over the past 10 years have shown a connection between rotenone and Parkinson's disease. Two of the principle pesticides that will be used under this proposed revision of the Basin Plan are rotenone and the herbicide paraquat—both approved for use in California. Both pesticides are documented in laboratory studies as mitochondrial Complex I inhibitors that lead to Parkinson's Disease-like symptoms. Both pesticides have been shown in a recent study to be definitively associated with	**D&NE R6:** Though diquat and paraquat are both dipyridyl compounds, paraquat is not an aquatic pesticide covered under the State Board's Aquatic Weed Permit. It is possible that a project proponent in the Lahontan Region may propose to use paraquat during a pesticide application. Since the State Board's permit does not cover this compound, the Water Board would have to issue an individual NPDES permit to regulate the discharge of paraquat, provided an exemption to the pesticide prohibition was first granted. The Water Board must consider all environmental impacts associated with the proposed discharge and determine if the project benefits outweigh the risks and short-term impacts. It is within the Water Board's purview to review the proposed use of rotenone and regulate the proposed discharge of rotenone provided the project proponent prepares and implements a best management plan to protect water quality, ensure worker safety and prevent potential health impacts. USEPA and DPR's decisions to (re)register a pesticide are based on whether a compound causes an unreasonable risk to the environment and human health. It is not within the Water Board's authority, nor is it the Water Board's responsibility, to determine whether the scientific data presented to the USEPA and DPR is sufficient to revoke a pesticide's registration. The Water Board does retain the right, within the proposed exemption process, to deny an exemption request based on evidence submitted in the exemption process, including public testimony, written and oral, against granting an exemption.

07-00196

Comments	Response
4 Parkinson's Disease in humans. The authors concluded "The current study helps connect the dots between basic research and human populations." (Tanner and 19 others. 2011. Rotenone, paraquat and Parkinson's Disease. Envir. Health Perspectives, available at ehponline.org). The EPA conducted a review of rotenone in 2006. Subsequently, the manufacturers of rotenone withdrew it for all terrestrial use (insect and/or invertebrate control) in the U.S., Canada, and the European Union. The Environmental Protection Agency (EPA) asked the companies that produce rotenone to submit evidence on the neurotoxic effects of rotenone on humans. The companies chose to withdraw from the market the products containing rotenone rather than supply the data. (EPA website: www.epa.gov/oppsrrd1/reregistration/rotenone Docket ID: EPA-HQ-OPP-2005-0494) In 2009, the EPA banned rotenone for use in marine and estuarine habitats. The only use of rotenone now is as a freshwater poison to kill unwanted fish. It is, as the revision has stated, a non-specific poison that also kills aquatic insects, other aquatic invertebrates, and amphibians at the same time it kills fish. As a consequence, rotenone poisoning disrupts aquatic and terrestrial food webs for many years and affects many other species. These effects have been acknowledged by the EPA (see Erman and Erman, Silver King Creek, Draft EIS/EIR Comments, 2009). These proposed amendments to the Basin Plan admit the immediate, the long-term, the many-years and the probably permanent impact of rotenone poisons on aquatic invertebrates (Chapter 4). Once poison has been applied to water, monitoring of either the poison or the animal life, no matter how thorough, cannot change the impacts of the poison, of the mistakes that were made, of information that was not known, revealed, or understood, or of species that were lost. And, yet, the LRWQCB has refused to require inventories of non-target species prior to rotenone projects. The assurances that "monitoring " will be "robust" and "rigorous" mean little based on past staff actions (e.g., see NPDES permit for Silver King Creek rotenone poisoning, 2010).	**D&NE R7:** Currently the only registered use for rotenone is as a piscicide (fish-kill) for freshwater fish. Rotenone is no longer registered for use in oceans/estuaries; however, EPA did not ban rotenone for use in marine and estuarine habitats in 2009 as reported in the comment letter. Instead, as reported by EPA's Pesticide Re-evaluation Division, in preparation for the 2007 Reregistration Eligibility Decision, all rotenone labels were reviewed. The labels stated that rotenone could be used in streams, lakes, ponds and rivers. The estuarine/marine use was never specified on a label. In preparing the ecological risk assessment only data on the freshwater use of rotenone was available. In clarifying the piscicide use with the registrants, the registrants decided to add a prohibition of the use of rotenone in estuarine/marine environments in lieu of submitting any data. Labels have been submitted and are currently updated to reflect this prohibition. (Electronic Mail Communication with Joel Wolf, Office of Pesticide Programs, USEPA, 08/02/2011 and 08/05/2011).

07-0019?

Comments	Response
4 Parkinson's Disease in humans. The authors concluded "The current study helps connect the dots between basic research and human populations." (Tanner and 19 others. 2011. Rotenone, paraquat and Parkinson's Disease. Envir. Health Perspectives, available at ehponline.org). The EPA conducted a review of rotenone in 2006. Subsequently, the manufacturers of rotenone withdrew it for all terrestrial use (insect and/or invertebrate control) in the U.S., Canada, and the European Union. The Environmental Protection Agency (EPA) asked the companies that produce rotenone to submit evidence on the neurotoxic effects of rotenone on humans. The companies chose to withdraw from the market the products containing rotenone rather than supply the data. (EPA website: www.epa.gov/oppsrrd1/reregistration/rotenone Docket ID: EPA-HQ-OPP-2005-0494) In 2009, the EPA banned rotenone for use in marine and estuarine habitats. The only use of rotenone now is as a freshwater poison to kill unwanted fish. It is, as the revision has stated, a non-specific poison that also kills aquatic insects, other aquatic invertebrates, and amphibians at the same time it kills fish. As a consequence, rotenone poisoning disrupts aquatic and terrestrial food webs for many years and affects many other species. These effects have been acknowledged by the EPA (see Erman and Erman, Silver King Creek, Draft EIS/EIR Comments, 2009). These proposed amendments to the Basin Plan admit the immediate, the long-term, the many-years and the probably permanent impact of rotenone poisons on aquatic invertebrates (Chapter 4). Once poison has been applied to water, monitoring of either the poison or the animal life, no matter how thorough, cannot change the impacts of the poison, of the mistakes that were made, of information that was not known, revealed, or understood, or of species that were lost. And, yet, the LRWQCB has refused to require inventories of non-target species prior to rotenone projects. The assurances that "monitoring " will be "robust" and "rigorous" mean little based on past staff actions (e.g., see NPDES permit for Silver King Creek rotenone poisoning, 2010).	**D&NE R8:** Staff recognizes and acknowledges in the SED that unintended, short-term changes in the chemical, physical, and biological integrity of a waterbody may occur during the use of an aquatic pesticide. The monitoring requirements, which include a pre-project inventory of the aquatic community, and control measures proposed in the Basin Plan Amendment, are intended to protect water quality and non-target species from the unintended effects of an aquatic pesticide application (see also **D&NE R10**). The exemption criteria that must be satisfied to obtain an exemption give the Water Board the ability to oversee and track pesticide projects. The monitoring and reporting requirements are an important element of the proposed language; they help evaluate project success and inform staff recommendations on whether to deny or grant exemptions for future proposals. The BPA language provides the overarching monitoring elements that must be included for all projects. The more specific details of the required monitoring and mitigation plans will be developed during project review and incorporated as enforceable permit conditions. Because each project is unique, it is premature, within this Basin Plan Amendment, to present specific monitoring details for aquatic pesticide project's including those that use rotenone in this amendment. Detailed monitoring plan and design must be developed on a project-by-project basis as pesticide applications are proposed to the Water Board. Pre-project monitoring is required for non-target species as detailed in Chapter 4 language under section titled "Exemption Criteria for Aquatic Pesticide Use".

07-00198

Comments	Response
5 Monitoring is not mitigation. The monitoring being conducted by the agencies can and has documented the losses of broad taxonomic groups of organisms that represent many species, but it cannot bring back species that are permanently lost through poisoning. Many of the stream basins in the Lahontan region are isolated and likely contain endemic invertebrate species that are present nowhere else. The following two sentences in the proposed revision have no meaning : "Biological monitoring will be designed and conducted as long as needed, to effectively demonstrate that non-target macroinvertebrate populations have been fully restored to pre-project assemblages. These data will help determine realistic timelines for species recovery after treatment with aquatic pesticides." Species and populations of species that are lost through poisoning may never return to the stream or lake and may be permanently extinguished. No amount of monitoring will change that reality. There is no mitigation for extinguishing a species. Even the above requirement is later revised in the proposed revisions to say that an agency can apply for release from the obligation to monitor after five years. The statement is misleading in another way as well: the monitoring being done by government agencies is not precise enough to identify species. Adult forms of invertebrates are not collected or identified. The "metrics" being used by the agencies are too crude to determine what species or how many are lost through poisoning. The LRWQCB staff passes off its responsibilities by leaving monitoring designs up to proponents and outside peer reviews selected by proponents. The Clean Water Act allows the lowering of water quality under specified times and circumstances, but if and only if, such lowering assures protection of beneficial uses fully. The following example from the EPA Water Quality Handbook is key (2nd Edition, updated through 2009, Appendix G, Questions and Answers: Antidegradation): The question is asked and answered: "THE WATER QUALITY STANDARDS REGULATION STATES THAT 'EXISTING USES AND THE LEVEL OF WATER QUALITY NECESSARY TO PROTECT THE	**D&NE R9:** The intent of pesticides is to kill biota. Some pesticide projects, particularly rotenone projects, will kill non-target species. The SED acknowledges the potential that recovery of the aquatic macroinvertebrate assemblage to pre-project levels is uncertain. The Water Board does not offer monitoring as a mitigation measure, and the proposed amendment includes the separate requirement to develop a mitigation plan. Monitoring, not mitigation, will help determine compliance with control measures required by the exemption criteria and help determine compliance with permit conditions. Additionally, monitoring can provide information to support or reject assertions made in subsequent exemption applications for the use of aquatic pesticides. The SED, in acknowledging potential significant environmental impacts (such as loss of endemic species) from some aquatic pesticide exemptions, includes a Statement of Overriding Considerations (SOC) for the proposed amendment. For individual aquatic pesticide exemption requests, if the potential for a significant adverse effect is identified, the Water Board will weigh the potential effect against the benefits to the people and environment of California, and decide whether to adopt a project level SOC and grant an exemption, or reject the exemption request. Monitoring is vital, not only to evaluate compliance status, but to gather information to inform the Water Board and Water Board staff on success of project goal attainment and the progress of a project site returning to pre-project conditions. The requirements of a project's monitoring and mitigation program include annual assessment of non-target macroinvertebrate communities for comparison with pre-project macroinvertebrate community assemblages. If two years post-project the communities are not demonstrably restored (as quantitatively established by standardized monitoring indices and accepted metrics) then the project proponent must implement the planned mitigation program that was accepted by the Water Board at project inception. Monitoring must continue annually.

Comments	Response
5 Monitoring is not mitigation. The monitoring being conducted by the agencies can and has documented the losses of broad taxonomic groups of organisms that represent many species, but it cannot bring back species that are permanently lost through poisoning. Many of the stream basins in the Lahontan region are isolated and likely contain endemic invertebrate species that are present nowhere else. The following two sentences in the proposed revision have no meaning : "Biological monitoring will be designed and conducted as long as needed, to effectively demonstrate that non-target macroinvertebrate populations have been fully restored to pre-project assemblages. These data will help determine realistic timelines for species recovery after treatment with aquatic pesticides." Species and populations of species that are lost through poisoning may never return to the stream or lake and may be permanently extinguished. No amount of monitoring will change that reality. There is no mitigation for extinguishing a species. Even the above requirement is later revised in the proposed revisions to say that an agency can apply for release from the obligation to monitor after five years.	**D&NE R9 (cont'd):** The proponent may petition the Water Board for release of the obligation to continue monitoring only after five years of post-project monitoring, and only if monitoring results provide evidence that the recovery of the benthic community has become asymptotic or the recovery curve has plateaued. The project proponent may use such evidence to demonstrate to the Water Board that the benthic community of the affected waterbody is unlikely to return to pre-project health and that it has likely recovered as much as can be expected. In such instances it may not be reasonable to require continued resource expenditure on monitoring. The Water Board has the opportunity to then release the project proponent of their monitoring responsibility, reject the proponent's petition to cease monitoring, or lessen the monitoring obligation, for example, by altering monitoring design (e.g., frequency, number of locations). It is precisely this type of long term quantitative monitoring data that will inform the Water Board and Water Board staff as to the impacts of similar projects and the success of their mitigation methods, so that future similar project proposals can be evaluated with greater understanding.
The statement is misleading in another way as well: the monitoring being done by government agencies is not precise enough to identify species. Adult forms of invertebrates are not collected or identified. The "metrics" being used by the agencies are too crude to determine what species or how many are lost through poisoning. The LRWQCB staff passes off its responsibilities by leaving monitoring designs up to proponents and outside peer reviews selected by proponents. The Clean Water Act allows the lowering of water quality under specified times and circumstances, but if and only if, such lowering assures protection of beneficial uses fully. The following example from the EPA Water Quality Handbook is key (2nd Edition, updated through 2009, Appendix G, Questions and Answers: Antidegradation): The question is asked and answered: "THE WATER QUALITY STANDARDS REGULATION STATES THAT 'EXISTING USES AND THE LEVEL OF WATER QUALITY NECESSARY TO PROTECT THE	**D&NE R10:** The commenters highlight the need, recognized in the proposed language, for site specific monitoring plans. Consistency with the water quality objectives and beneficial uses for the waters of the Lahontan Region, specifically the COLD designation, is not determined by the presence or absence of a particular invertebrate species. The indices used by the agencies (if accepted by the Water Board) are sufficient to compare pre and post-project invertebrate community health within a project water body. The metrics in these indices are sufficient to determine the occupation of the niches within the benthic invertebrate community. So long as the post-project community is healthy (e.g., similar to pre-project measures of richness, abundance, biomass, functional feeding groups, etc.) it is immaterial to the agency's regulations which particular species fits which particular niche.

07-00200

Comments	Response
5 Monitoring is not mitigation. The monitoring being conducted by the agencies can and has documented the losses of broad taxonomic groups of organisms that represent many species, but it cannot bring back species that are permanently lost through poisoning. Many of the stream basins in the Lahontan region are isolated and likely contain endemic invertebrate species that are present nowhere else. The following two sentences in the proposed revision have no meaning : "Biological monitoring will be designed and conducted as long as needed, to effectively demonstrate that non-target macroinvertebrate populations have been fully restored to pre-project assemblages. These data will help determine realistic timelines for species recovery after treatment with aquatic pesticides." Species and populations of species that are lost through poisoning may never return to the stream or lake and may be permanently extinguished. No amount of monitoring will change that reality. There is no mitigation for extinguishing a species. Even the above requirement is later revised in the proposed revisions to say that an agency can apply for release from the obligation to monitor after five years. The statement is misleading in another way as well: the monitoring being done by government agencies is not precise enough to identify species. Adult forms of invertebrates are not collected or identified. The "metrics" being used by the agencies are too crude to determine what species or how many are lost through poisoning. The LRWQCB staff passes off its responsibilities by leaving monitoring designs up to proponents and outside peer reviews selected by proponents. The Clean Water Act allows the lowering of water quality under specified times and circumstances, but if and only if, such lowering assures protection of beneficial uses fully. The following example from the EPA Water Quality Handbook is key (2nd Edition, updated through 2009, Appendix G, Questions and Answers: Antidegradation): The question is asked and answered: "THE WATER QUALITY STANDARDS REGULATION STATES THAT 'EXISTING USES AND THE LEVEL OF WATER QUALITY NECESSARY TO PROTECT THE	**D&NE R10:** It is the responsibility of the Water Board to ensure that the monitoring plans are rigorous, scientifically sound, and can be used to compare pre- and post-project health of a water body's benthic macroinvertebrate community and pre- and post-project water quality. Such responsibility is strengthened and overtly maintained within the proposed amendment language. **D&NE R11:** Protecting "existing uses fully" should not be confused with protecting any specific benthic invertebrates, but instead should be focused on protecting the ecological integrity of the aquatic community. As the EPA Water Quality Handbook notes in its discussion of how the antidegradation policy applies to 'Aquatic Life', "the term 'aquatic life' would more accurately reflect the protection of the aquatic community that was intended in section 101(a)(2) of the CWA." The objective of the Clean Water Act is to "restore and maintain the chemical, physical and biological integrity of our Nations waters." (33 U.S.C. 1251(a); Clean Water Act 101(a)(1); Water Quality Handbook 4.4.2.) The commenters assert that beneficial uses are not fully protected if pesticide treatments impact non-target organisms including rare endemic species not prevalent in number or abundance within an aquatic ecosystem. Aquatic pesticide treatments that may be allowed under the amendment are intended to maintain, protect, and improve the beneficial use as a whole and over the long-term. We acknowledge that aquatic pesticide applications implemented to protect aquatic communities and restore ecological integrity may temporarily eliminate non-target, possibly rare and endemic, species that may not be prevalent in number or abundance. It is unreasonable to assume a beneficial use is not fully protected because there are short-term impairments to non-target species present within the pesticide treatment area. There must be some flexibility to allow temporary impacts. Otherwise, the health and stability of an entire aquatic community would be jeopardized if judicious uses of aquatic pesticides are prohibited due to transient effects to specific species.

07-0020I

Comments	Response
6 EXISTING USES SHALL BE MAINTAINED AND PROTECTED.' HOW FULLY AND AT WHAT LEVEL OF PROTECTION IS AN EXISTING USE TO BE PROTECTED IN ORDER TO SATISFY THE ABOVE REOUIREMENT? NO activity is allowable under the antidegradation policy which would partially or completely eliminate any existing use whether or not that use is designated in a State's water quality standards. The aquatic protection use is a broad category requiring further explanation. **Species that are in the water body and which are consistent with the designated-use (i.e., not aberrational) must be protected, even if not prevalent in number or importance. Nor can activity be allowed which would render the species unfit for maintaining the use. Water quality should be such that it results in no mortality and no significant growth or reproductive impairment of resident species.** (See Question 16 for situation where an aberrant sensitive species may exist.) Any lowering of water quality below this full level of protection is not allowed. A State may develop subcategories of aquatic protection uses but cannot choose different levels of protection for like uses. The fact that sport or commercial fish are not present does not mean that the water may not be supporting an aquatic life protection function. An existing aquatic community composed entirely of invertebrates and plants, such as may be found in a pristine alpine tributary stream, should still be protected whether or not such a stream supports a fishery. Even though the shorthand expression "fishable/swimmable" is often used, the actual objective of the act is to "restore and maintain the chemical, physical, and biological integrity of our Nation's waters (Section 101(a)(l). The term "aquatic life" would more accurately reflect the protection of the aquatic community that was intended in Section 101(a)(2) of the Act." (Emphasis added in bold). The Department of Fish and Game (CDFG) has recently begun using a new rotenone formulation of rotenone called CFT Legumine. It was used for the first time in California in the 2007 poisoning of the Lake Davis and the surrounding streams and springs. It did not perform as expected. The CDFG was unable to apply the rotenone in CFT Legumine at target levels. Levels were far above the target levels (> 1000% above target levels at some stations in the first poisoning), and high concentrations were even more common in the second poisoning than in the first. These results indicate the inability of CDFG to deliver, under field conditions, the poison rotenone in CFT Legumine at designed concentrations (see Erman and Erman, 2010, Comments on Draft	**D&NE R11, continued** **D&NE R12:** This comment addresses two projects not a part of the proposed amendment. It speaks to the Lake Davis project as a proxy for the forthcoming Silver King project. Though both projects use the active ingredient rotenone, neither project is being addressed by the proposed amendment since the existing Basin Plan provides for approval of the use of rotenone. However, acknowledging the commenters' concern, Water Board staff will briefly address the comment. The Lake Davis project, regulated by the Central Valley Water Board, did demonstrate some shortcomings in DFG administering and implementing that project. The experience of the Lake Davis project was used to inform changes in project implementation by DFG. The current permit requires additional planning, monitoring and reporting to ensure application as required by the applicable plans and policies (FIFRA, Basin Plan, Aquatic Pesticide Application Plan).

07-00202

Comments	Response
7 NPDES permit, Silver King Creek; Erman and Erman, 2010, Comments on Final EIR/EIS Silver King Creek). Based on the Lake Davis watershed results, we think it highly likely that the Agencies will exceed the EPA/FIFRA label requirement for normal use of 50μg/L in Silver King Creek if this project is allowed. The proposed new language in the basin plan eliminates monitoring of pesticide application during the treatment phase of a project. In so doing, the Regional Board staff eliminates any means of verifying pesticide label restrictions for maximum allowed rates of application. Independent monitoring of rotenone projects is essential. The Department of Fish and Game (CDFG) has a poor record of compliance. In the Lahontan Region alone, 6 of 11 rotenone projects between 1988 and 1994 violated water quality standards. Rotenone, rotenolone, or naphthalene were detected downstream or persisted longer than limits established in the basin plan (LRWQCB files). CFT Legumine contains 5% rotenone and 5% other cube resins (primarily deguelin and tephrosin) as active ingredients. Cube resins have not been analyzed and it is unknown if they are neutralized by potassium permanganate (verbal testimony by Bruce Warden, LRWQCB staff, April 14, 2010, NPDES hearing). Breakdown of deguelin and tephrosin, unlike rotenone, does not produce rotenolone (Caboni et al. 2004). Therefore, monitoring of either rotenone or rotenolone will not account for other cube resins in the active ingredients. Deguelin also has been shown in laboratory tests to elicit the same Parkinson's Disease-like changes in cells as rotenone (Caboni et al. 2004). In other words, half of the active ingredients in CFT Legumine have not been analyzed or considered in any government document. We notice the same omission has appeared again in this proposed document (p. 4 pp 4.9-2125). It is assumed that the only active ingredient in rotenone formulations is rotenone. That is false. The statement is correct, however, in stating that many other chemicals are in the formulations. But the revision has omitted the information that some of these so-called "inert" chemicals are known carcinogens, or have other deleterious properties.	**D&NE R12, continued** **D&NE R13:** Satisfaction of the proposed criteria and a granting of an exemption does not end Water Board oversight of pesticide projects. Projects also need a permit to proceed. Permits or the Executive Officer may impose additional monitoring to ensure compliance. Additionally, some of the aquatic pesticide projects proposed under this amendment will be regulated under the existing Statewide Aquatic Pesticide NPDES permits which include the Vector and Aquatic Weed Control Permits. Both of these permits require background, event, and post-project monitoring. The Notice of Applicability (NOA) issued for these Statewide NPDES permits will specify any additional Regional Water Board specific conditions and requirements not already stated in the Statewide NPDES permits. To qualify for a prohibition exemption, project applicants must develop and implement monitoring programs to verify compliance with criterion that require the planned treatment protocol result in the minimum discharge of chemical substances that can reasonably be expected for an effective treatment. Additionally, all aquatic pesticide applications potentially allowed under this amendment must be applied according to label instruction. A pesticide's label prescribes the proper, safe, and legal use of that pesticide. Pesticide applicators that disregard the label instructions risk (1) suspension or revocation of their license/certificate, (2) fines, and/or (3) civil or criminal prosecution.

07-00203

Comments	Response
7 NPDES permit, Silver King Creek; Erman and Erman, 2010, Comments on Final EIR/EIS Silver King Creek). Based on the Lake Davis watershed results, we think it highly likely that the Agencies will exceed the EPA/FIFRA label requirement for normal use of 50μg/L in Silver King Creek if this project is allowed. The proposed new language in the basin plan eliminates monitoring of pesticide application during the treatment phase of a project. In so doing, the Regional Board staff eliminates any means of verifying pesticide label restrictions for maximum allowed rates of application. Independent monitoring of rotenone projects is essential. The Department of Fish and Game (CDFG) has a poor record of compliance. In the Lahontan Region alone, 6 of 11 rotenone projects between 1988 and 1994 violated water quality standards. Rotenone, rotenolone, or naphthalene were detected downstream or persisted longer than limits established in the basin plan (LRWQCB files). CFT Legumine contains 5% rotenone and 5% other cube resins (primarily deguelin and tephrosin) as active ingredients. Cube resins have not been analyzed and it is unknown if they are neutralized by potassium permanganate (verbal testimony by Bruce Warden, LRWQCB staff, April 14, 2010, NPDES hearing). Breakdown of deguelin and tephrosin, unlike rotenone, does not produce rotenolone (Caboni et al. 2004). Therefore, monitoring of either rotenone or rotenolone will not account for other cube resins in the active ingredients. Deguelin also has been shown in laboratory tests to elicit the same Parkinson's Disease-like changes in cells as rotenone (Caboni et al. 2004). In other words, half of the active ingredients in CFT Legumine have not been analyzed or considered in any government document. We notice the same omission has appeared again in this proposed document (p. 4 pp 4.9-2125). It is assumed that the only active ingredient in rotenone formulations is rotenone. That is false. The statement is correct, however, in stating that many other chemicals are in the formulations. But the revision has omitted the information that some of these so-called "inert" chemicals are known carcinogens, or have other deleterious properties.	**D&NE R14:** Independent monitoring is an important tool in regulating pesticide projects. The proposed amendment language does not prevent the Water Board from conducting independent monitoring to verify discharger monitoring and reporting. Water quality violations that occurred as a result of the rotenone project implemented during the 1990s have been used to refine monitoring requirements for future rotenone projects and will inform any future permit conditions. **D&NE R15:** The pesticide product labels for both CFT Legumine (EPA Registration No.: 75338-1) and CFT Legimine - Fish Toxicant (EPA Registration Nos.: 655-899 or 75338-2) list active ingredients as rotenone (5%) and other associated resins (5%), which include the cube resins (deguelin and tephrosin) referred to by the commenters. During product registration, a registrant provides toxicity data regarding potential adverse effects to humans and the environment. The acute toxicity data that is submitted by the registrants for project registration considers acute toxic effects caused by the formulated product, which includes active and inert ingredients. The chronic toxicity data is submitted only for the active ingredients. So for CFT Legimine products, the 5% other cube resins, which are categorized as active ingredients in these registered products, have been analyzed, studied, and considered with respect to satisfying requirements during the product registration process. The Water Board is not the agency responsible for analyzing and considering the active cube resins. (continues below)

Comments	Response
7 NPDES permit, Silver King Creek; Erman and Erman, 2010, Comments on Final EIR/EIS Silver King Creek). Based on the Lake Davis watershed results, we think it highly likely that the Agencies will exceed the EPA/FIFRA label requirement for normal use of 50μg/L in Silver King Creek if this project is allowed. The proposed new language in the basin plan eliminates monitoring of pesticide application during the treatment phase of a project. In so doing, the Regional Board staff eliminates any means of verifying pesticide label restrictions for maximum allowed rates of application. Independent monitoring of rotenone projects is essential. The Department of Fish and Game (CDFG) has a poor record of compliance. In the Lahontan Region alone, 6 of 11 rotenone projects between 1988 and 1994 violated water quality standards. Rotenone, rotenolone, or naphthalene were detected downstream or persisted longer than limits established in the basin plan (LRWQCB files). CFT Legumine contains 5% rotenone and 5% other cube resins (primarily deguelin and tephrosin) as active ingredients. Cube resins have not been analyzed and it is unknown if they are neutralized by potassium permanganate (verbal testimony by Bruce Warden, LRWQCB staff, April 14, 2010, NPDES hearing). Breakdown of deguelin and tephrosin, unlike rotenone, does not produce rotenolone (Caboni et al. 2004). Therefore, monitoring of either rotenone or rotenolone will not account for other cube resins in the active ingredients. Deguelin also has been shown in laboratory tests to elicit the same Parkinson's Disease-like changes in cells as rotenone (Caboni et al. 2004). In other words, half of the active ingredients in CFT Legumine have not been analyzed or considered in any government document. We notice the same omission has appeared again in this proposed document (p. 4 pp 4.9-2125). It is assumed that the only active ingredient in rotenone formulations is rotenone. That is false. The statement is correct, however, in stating that many other chemicals are in the formulations. But the revision has omitted the information that some of these so-called "inert" chemicals are known carcinogens, or have other deleterious properties.	**D&NE R15 cont'd:** The onus is on the project proponent to disclose potential impacts associated with a specific pesticide application and verify, through implementation of control measures and monitoring, that impacts are minimized or avoided. Further, Water Board staff have retained, not omitted, the following condition, "The chemical composition of the rotenone formulation has not changed significantly (based on analytical chemical scans to be performed by the DFG or USFWS on each formulation lot to be used) in such a way that potential hazards may be present which have not been addressed." This general statement provides a safeguard against the use of rotenone formulations that have not been vetted through the environmental and human health risk assessments required by USEPA and DPR during product (re)registration and re-evaluation. It is important to monitor other active and inert ingredients in rotenone formulations such as the "other cube resins." Such responsibilities and direction are more appropriately regulated in project level permits than in the proposed Basin Plan amendment. Also refer to Response **D&NE R6** for a discussion about the Water Board's ability to consider all environmental impacts (including health impacts) in its determination to grant or deny an exemption for an aquatic pesticide discharge.

07-0205

Comments	Response
8 For example, N-methyl pyrrolidone (NMP) is 10% of the composition of CFT Legumine (i.e., twice the amount of rotenone). NMP is considered a Substance of Very High Concern by the European Union authorities and is on the candidate list for banning as of February 2011. The concern is over its toxicity to reproduction—teratogenic in children. (wiki.answers.com/Q/Will_N-methyl_pyrrolidone_be_banned_in_Europe). The California Department of Health Services issued a Health Hazard Advisory in October 2006 to workers exposed to NMP. "You should treat NMP as a potential human reproductive hazard".(www.cdph.ca.gov/programs/hesis/Documents/nmp.pdf) There often is a delay in officially recognizing harm in chemicals used in our environment. In the case of rotenone, NMP and others, the evidence is accumulating about their harm. One of the reasons we enacted a Clean Water Act was so that we do not pollute our water systems and then find out later it was a mistake. Rotenone persisted in the bottom sediments of Lake Davis for at least six months following the 2007 poisoning. Rotenone was measured in stream water 14 days after it had been applied. It had apparently persisted in bottom sediments and was being released back into the stream. These results indicate that CFT Legumine behaves in some unexplained and unknown ways. It is unknown if rotenone persisted in streams longer than this measured period. Monitoring was apparently not conducted beyond two weeks in streams (Erman and Erman, Comments on Draft NPDES permit, Silver King Creek, 2010). The persistence of rotenone in stream sediments and ground water is a significant environmental concern that has not been analyzed by the LRWQCB. Hyporheic invertebrate life will be affected by the residual rotenone in the substrate. Ground water should also be monitored. The Agencies are assuming that hyporheic invertebrates will re-populate streams that are poisoned (Silver King Creek, Final EIS/EIR p. 5.1-45; 5.1-19; Response to Comments, pp. F-50, F-80). They seem to assume that the rotenone in bottom sediments will not affect these invertebrates. (Incidentally, even assuming they would not also be poisoned, these would only be the hyporheic invertebrates in the upper part of stream bottom sediments. Invertebrates lower in the	**D&NE R16:** Sediment monitoring and reporting data from rotenone applications conducted in the Lahontan Region in Silver King Creek (Alpine Co.) in 1991, 1992, and 1993, Silver Creek (Mono Co.) in 1994, 1995 and 1996, and in Wolf Creek (and below the confluence of West Walker River) (Mono Co.) in 1991 and 1992 do not indicate the persistence of rotenone and rotenolone in the bottom sediments. Considering monitoring results indicated non-detect levels one-week post treatment, it would be speculative to assume the invertebrates present in the hyporeheic zone may be affected by residual rotenone in the bottom substrate. A literature search did not reveal evidence of any effects of a rotenone piscicide treatment on the hyporeheic zone. Commenters do not cite evidence indicating that hyporheic invertebrates would be impacted by residual rotenone in the substrate. Consequently it would be premature to speculate as to the impacts a rotenone project would have on hyporeheic invertebrates. To broaden the limited body of knowledge on the potential effects, language will be added that recommends future research to this end. (**See Chapter 4**, section titled **Recommended Future Actions for Rotenone Use**.)

07-00206

Comments	Response
9 hyporheos are restricted to that habitat.) But the LRWQCB did not consider the effects of rotenone in the stream sediments and hyporheos in the NPDES permit issued in 2010 for poisoning Silver King Creek. If the lower Silver King Creek rotenone project is carried out, rotenone concentrations in the stream water will be 2 to 4.6 times the mean concentration that was measured in the 1991–93 poisoning of the upper part of Silver King Creek. It is likely that even greater losses of invertebrate life will occur than did as a result of the 1991–93 poisoning. (Incidentally, this proposed revision gives the false impression that fish poisoning was conducted for only one year the last time on Silver King Creek. In fact, the poisoning was done twice a year for three consecutive years. The 2010 NPDES permit allows poisoning for the same duration.) We note that all of the wording on the problems the CDFG has of applying potassium permanganate (another poison that kills aquatic animal life) to neutralize rotenone has been eliminated in the revisions, thus omitting the information that fish kills from potassium permanganate have occurred far below project boundaries in past poisoning episodes in the Lahontan Region. The proposed revision to the Basin Plan ignores or incompletely or incorrectly states the provisions of the Clean Water Act Antidegradation Policy. For example, new LRWQCB staff language in Exemption Criteria for Aquatic Pesticide Use, Purpose and Need for Exemption, paragraph 4, summarizes and re-words the federal Antidegradation Policy as "…that water quality shall be preserved unless it is determined that the lowering of water quality is necessary to accommodate important economic or social development. Additionally, it requires that water quality be maintained at levels capable of supporting existing beneficial uses." This last sentence changes the wording and meaning of the Antidegradation Policy which is, "In allowing such degradation or lower water quality, the State shall **assure water quality adequate to protect existing uses fully (40 CFR 131.12(a)(2)**." (Our emphasis added).	**D&NE R16, continued** **D&NE R17:** Comments on the Silver King Creek rotenone project appear to be added out of context. The proposed amendment will not address the Silver King Creek project in question, the Silver King Creek projects of the past, or the 2010 NPDES permit. The proposed amendment, referred to in the comment as "proposed revision," does not address Silver King Creek, and so can give no impression, false or otherwise, on the duration of fish poisoning in said creek. We acknowledge the toxicity of potassium permanganate when excess remains from its use as a neutralizer of rotenone and have re-added the language in question to the amendment in Chapter 4, in the section *Rotenone Use in Fisheries Management*. Regulation of the use of this chemical is best addressed through project specific

07-0207

Comments	Response
9 hyporheos are restricted to that habitat.) But the LRWQCB did not consider the effects of rotenone in the stream sediments and hyporheos in the NPDES permit issued in 2010 for poisoning Silver King Creek. If the lower Silver King Creek rotenone project is carried out, rotenone concentrations in the stream water will be 2 to 4.6 times the mean concentration that was measured in the 1991–93 poisoning of the upper part of Silver King Creek. It is likely that even greater losses of invertebrate life will occur than did as a result of the 1991–93 poisoning. (Incidentally, this proposed revision gives the false impression that fish poisoning was conducted for only one year the last time on Silver King Creek. In fact, the poisoning was done twice a year for three consecutive years. The 2010 NPDES permit allows poisoning for the same duration.) We note that all of the wording on the problems the CDFG has of applying potassium permanganate (another poison that kills aquatic animal life) to neutralize rotenone has been eliminated in the revisions, thus omitting the information that fish kills from potassium permanganate have occurred far below project boundaries in past poisoning episodes in the Lahontan Region. The proposed revision to the Basin Plan ignores or incompletely or incorrectly states the provisions of the Clean Water Act Antidegradation Policy. For example, new LRWQCB staff language in Exemption Criteria for Aquatic Pesticide Use, Purpose and Need for Exemption, paragraph 4, summarizes and re-words the federal Antidegradation Policy as "…that water quality shall be preserved unless it is determined that the lowering of water quality is necessary to accommodate important economic or social development. Additionally, it requires that water quality be maintained at levels capable of supporting existing beneficial uses." This last sentence changes the wording and meaning of the Antidegradation Policy which is, "In allowing such degradation or lower water quality, the State shall **assure water quality adequate to protect existing uses fully (40 CFR 131.12(a)(2)**." (Our emphasis added).	**D&NE R18:** It is not staff's intent to ignore or incompletely or incorrectly state the provisions of the Clean Water Act Antidegradation Policy. Rather, staff understands that the antidegradation policies were not intended to place an absolute bar on reductions in water quality. Nor should the State's application of the Federal Antidegradation Policy prevent States from undertaking activities that are necessary to uphold the goals of the Clean Water Act to "restore and maintain the chemical, physical, and biological integrity of our Nation's waters" (33 U.S. C. 1251(a)). We understand that the antidegradation policies are not meant to prohibit States from allowing changes in water quality that will improve a waterbody's overall conditions. The language prescribed in 40 CFR 131.12(a)(2) has replaced the paraphrased language originally presented in Exemption Criteria for Aquatic Pesticide Use, Purpose and Need for Exemption, paragraph 4, so this section now reads, "Similarly, the federal Antidegradation Policy (40 CFR 131.12) dictates that water quality shall be preserved unless it is determined that the lowering of water quality is necessary to accommodate important economic or social development. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully (40 CFR 131.12(a)(2)." Further, if the Water Board adopts the proposed Pesticide Basin Plan Amendment, the amendment will have to be approved by the State Board, the Office of Administrative Law, and the U.S. EPA. The State Board could reject the amendment if they find the Water Board has incorrectly or incompletely applied the requirements of the State and Federal Antidegradation Policies. Additionally, in the final approval step, the amendment could be disapproved if the EPA finds that the Water Board has not appropriately fulfilled the federal regulatory requirements of the antidegradation policy with respect to the proposed action.

07-00208

Comments	Response
10 The LRWQCB staff is using their creative interpretation of the Policy to claim that after water has been poisoned, even if species have been lost and the biological community has been altered, the water is still **capable** of supporting species once the poison is gone and, therefore, the staff maintains the revised plan is in compliance with the Antidegradation Policy. The Antidegradation Policy says that the beneficial uses themselves must be fully protected in any project that proposes lowering of water quality "necessary to accommodate important economic or social development." This distinction between the two components: 1) lowering of water quality under certain circumstances and 2) fully protecting beneficial uses if water quality is lowered, is fundamental to the Antidegradation Policy. The latest version of the EPA Water Quality Handbook (Section 4, 2nd Edition, last updated on 11/06/2009) provides ample discussion of these two distinct components. Elsewhere, in Chapter 4, the proposed revision states that "Similarly, the federal Antidegradation Policy (40 CFR Section 131.12) dictates that water quality shall be preserved unless degradation is necessary to accommodate important economic or social development." The section quoted conveniently leaves out the next sentence (40 CFR Section 131.12(2)) of the policy, which is "In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully." The state and LRWQCB are not at liberty to rewrite the Clean Water Act or change the plain meaning of the words used to define the regulations except "States may adopt antidegradation statements more protective than the Federal requirement." (EPA Water Quality Handbook, 2nd Edition, Section 4.3) It is also not at the discretion of a regional board to decide to vacate portions of the Clean Water Act Antidegradation Policy in favor of other acts of the state or federal government unless such acts so dictate. The Endangered Species Act, for example, does not specify what methods are necessary to carry out its provisions or claim superiority	**D&NE R19:** During a scheduled aquatic pesticide treatment event, a lethal concentration of chemicals is intentionally applied to water to control pests. This application of aquatic pesticides will result in a spatially localized and short-term lowering of water quality that may temporarily, but not unreasonably, affect beneficial uses within the treatment area. During the treatment event, the lowering of water quality and the subsequent effect to beneficial uses are confined to the treatment area. Precluding the use of aquatic pesticide due to short-term and transient impacts within the treatment area would be non-sensible considering the holistic benefit to the waterbody and the important public interests that are served by such aquatic pesticide use. It is expected that there may be short-term impacts from the pesticide applications allowed under this amendment, but regulatory oversight and the implementation of best management practices will help minimize or avoid reductions of water quality. Overall, the treatment of aquatic pests will promote the long-term maintenance and restoration of beneficial uses and the waterbody as a whole. To this end, temporary reductions in water quality are acceptable, since the intent of the pesticide applications considered under this amendment is to restore and maintain the biological integrity of the waterbody, which is consistent with the spirit and goals of the CWA. Also refer to responses **D&NE R11** and **D&NE R18**.

07-00209

Comments	Response
10 The LRWQCB staff is using their creative interpretation of the Policy to claim that after water has been poisoned, even if species have been lost and the biological community has been altered, the water is still **capable** of supporting species once the poison is gone and, therefore, the staff maintains the revised plan is in compliance with the Antidegradation Policy. The Antidegradation Policy says that the beneficial uses themselves must be fully protected in any project that proposes lowering of water quality "necessary to accommodate important economic or social development." This distinction between the two components: 1) lowering of water quality under certain circumstances and 2) fully protecting beneficial uses if water quality is lowered, is fundamental to the Antidegradation Policy. The latest version of the EPA Water Quality Handbook (Section 4, 2nd Edition, last updated on 11/06/2009) provides ample discussion of these two distinct components. Elsewhere, in Chapter 4, the proposed revision states that "Similarly, the federal Antidegradation Policy (40 CFR Section 131.12) dictates that water quality shall be preserved unless degradation is necessary to accommodate important economic or social development." The section quoted conveniently leaves out the next sentence (40 CFR Section 131.12(2)) of the policy, which is "In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully." The state and LRWQCB are not at liberty to rewrite the Clean Water Act or change the plain meaning of the words used to define the regulations except "States may adopt antidegradation statements more protective than the Federal requirement." (EPA Water Quality Handbook, 2nd Edition, Section 4.3) It is also not at the discretion of a regional board to decide to vacate portions of the Clean Water Act Antidegradation Policy in favor of other acts of the state or federal government unless such acts so dictate. The Endangered Species Act, for example, does not specify what methods are necessary to carry out its provisions or claim superiority	**D&NE R20:** Projects that may be proposed under this amendment may foreseeably lower water quality, but not to the extent that it no longer is sufficient to fully protect the existing uses in that water body (See SED, Considerations of Antidegradation When Removing a Water Quality Objective). It is unreasonable to assume a beneficial use is not fully protected because there are short-term impacts to non-target species present within the pesticide treatment area. To assume otherwise prevents the Water Board's ability to consider aquatic pesticide applications proposed where necessary for the restoration of ecological integrity and the protection of public health. Also refer to **Response D&NE R18** (2nd para) indicating staff has replaced the paraphrased language originally presented in Exemption Criteria for Aquatic Pesticide Use, Purpose and Need for Exemption, paragraph 4, so this section now directly cites the Federal Antidegradation Policy 40 CFR 131.12(a)(2).

07-0021O

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11 over the Clean Water Act. The purpose of the Regional Boards (among other things) is to implement the provisions of the Clean Water Act and Porter-Cologne Act. In section 4.4.2 of the Water Quality Handbook, the meaning of protection of beneficial uses is expanded. "No activity is allowable under the antidegradation policy which would partially or completely eliminate any existing use whether or not that use is designated in a State's water quality standards. The aquatic protection use is a broad category requiring further explanation. Non-aberrational resident species must be protected, even if not prevalent in number or importance. Water quality should be such that it results in no mortality and no significant growth or reproductive impairment of resident species." The intent of allowing lowering of water quality while fully protecting existing uses was reviewed and further explained in the Preamble by the EPA during the last revisions of rules for the Clean Water Act: "In Sec. 131.12(a)(2) a phrase was added that 'In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully'. This means that the full use must continue to exist even if some change in water quality may be permitted" (Federal Register Vol 48, No. 217, Tuesday, November 8, 1983/Rules and Regulations. (51402). "In its entirety, the antidegradation policy represents a three-tiered approach to maintaining and protecting various levels of water quality and uses. At its base (Section 131.12(a)(1): all existing uses and the level of water quality necessary to protect those uses must be maintained and protected. This provision establishes the absolute floor of water quality in all waters of the United States" (Federal Register Vol 48, No. 217, Tuesday, November 8, 1983/Rules and Regulations. (51402). Further, in response to comments not discussed in the Preamble to the proposed rule, EPA discussed three options for changes in the existing antidegradation policy. "Option 3 would have allowed changes in an existing use if maintaining that use would effectively prevent any future growth in the community or if the benefits of maintaining	

Comments	Response
12 the use do not bear a reasonable relationship to the costs." EPA response was "…commenters believed that allowances should be made for carefully defined exceptions to the absolute requirement that uses attained must be maintained. EPA rejects this contention as being totally inconsistent with the spirit and intent of both the Clean Water Act and the underlying philosophy of the antidegradation policy." (Federal Register Vol 48, No. 217, Tuesday, November 8, 1983/Rules and Regulations (51409)) The proposed new language on fisheries management recognizes the violation of Antidegradation Policy (Draft Waste Discharge Prohibition and Exemption Criteria Language: Pesticide Basin Plan Amendment, p. 4): "*It is not appropriate or possible for the Regional Board to find that discharges within the zone of impact comply with federal and state antidegradation policies.*" Not only is the use of rotenone formulations at odds with the policies during the period of treatment, the Regional Board acknowledges (Chapter 4, p. 4.9-21–25 revised Plan) such use has long-term and permanent adverse effects on aquatic invertebrates and frogs – beneficial uses protected by the state. The staff's justification for approving such a project anyway, is that the purpose of the project is of value to the people of the State. What the Regional Board staff is doing by these proposed revisions is to eliminate the elements of the Antidegradation Policy that fully protect beneficial uses when government agencies, and some private entities, claim they need to lower water quality through use of aquatic pesticides. They have chosen to focus on the aspect of the Federal policy that allows, under limited circumstances, the lowering of water quality, while ignoring or redefining the simultaneous requirement of fully protecting resident aquatic life. In conclusion, these proposed revisions by the staff of the Lahontan Basin Plan seem to reduce the responsibility and liability of the LRWQCB for all poison applications in the basin by public agencies and to permit an increase in poisoning by private agencies. The public will have to decide whether it serves the purposes of protecting health, safety and the environment, as claimed	**D&NE R21:** The state and federal antidegradation policies are complex policies intended to prevent the loss of water quality and allow the maintenance and enhancement of the physical, chemical and biological aspects of water quality (CWA section 101(a)). The proposed amendment is necessary to fulfill all of these aspects of the Clean Water Act. While it may not be possible to prevent each and every instance of water quality being lowered, including temporary drops, such application of the policy would be unreasonable considering it would prevent attainment of the goals of the Clean Water Act. Staff asks the commenters to direct their attention to the revised SED language (**refer to pages 16-19**) on considerations of the state and federal antidegradation policies for a reasoned analysis of how the proposed amendment achieves consistency with the antidegradation policies. **D&NE R22:** The Water Board is not ignoring the second aspect of the federal antidegradation policy. We recognize that the policy allows relief when "the economic and social need for the activity clearly outweighs the benefit of maintaining water quality above that required for 'fishable/swimmable' water, and both cannot be achieved (EPA Water Quality Handbook, Section 4.5)." There is a demonstrated need for this amendment as discussed in Sections 4 and 5 of the SED. The specific circumstances and related water quality controls included in the proposed language ensure that subsequent actions by the Water Board that provide exemption to the proposed waste discharge prohibition also meet the standards of the federal antidegradation policy. Additionally, the protection of aquatic life "more accurately reflect[s] the protection of the aquatic community that was intended in section 101(a)(2) of the [Clean Water] Act (EPA WQ Handbook, Section 4.4.2)." In this, the proposed amendment is consistent with the restoration and maintenance of the biological integrity of the waters of the United States that is stated as a goal of the Clean Water Act in section 101(a). Also, refer to response **D&NE R11**.

07-00212

Comments	Response
13 repeatedly in this staff document, to spray or pour an increasing amount of poison over or into water for an ever-expanding variety of reasons, under the banner of "in the public interest." We urge the Regional Board to deny these suggested revisions to the Lahontan Basin Plan.	

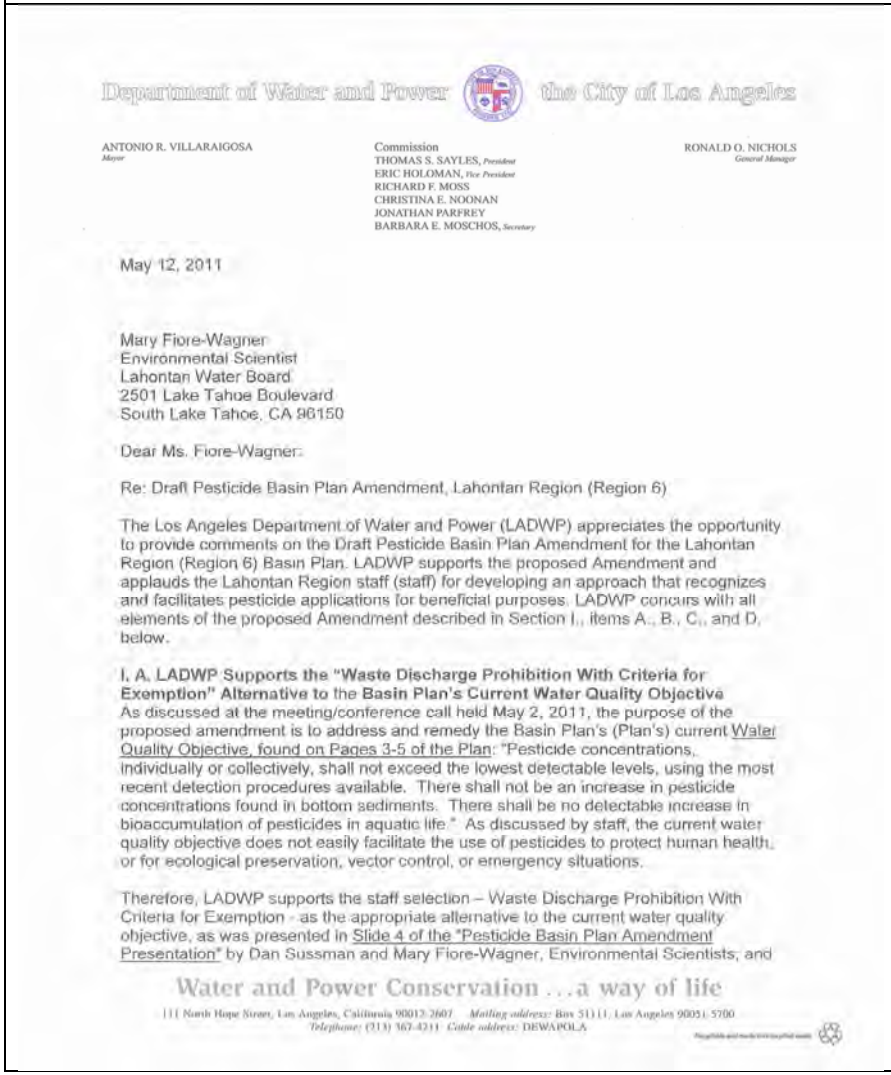
Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Los Angeles Department of Water and Power

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/ladwp.pdf

Comments	Response
	

Department of Water and Power the City of Los Angeles

May 12, 2011

Mary Fiore-Wagner
Environmental Scientist
Lahontan Water Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

Dear Ms. Fiore-Wagner:

Re: Draft Pesticide Basin Plan Amendment, Lahontan Region (Region 6)

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments on the Draft Pesticide Basin Plan Amendment for the Lahontan Region (Region 6) Basin Plan. LADWP supports the proposed Amendment and applauds the Lahontan Region staff (staff) for developing an approach that recognizes and facilitates pesticide applications for beneficial purposes. LADWP concurs with all elements of the proposed Amendment described in Section I., items A., B., C., and D. below.

I. A. LADWP Supports the "Waste Discharge Prohibition With Criteria for Exemption" Alternative to the Basin Plan's Current Water Quality Objective
As discussed at the meeting/conference call held May 2, 2011, the purpose of the proposed amendment is to address and remedy the Basin Plan's (Plan's) current Water Quality Objective, found on Pages 3-5 of the Plan: "Pesticide concentrations, individually or collectively, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall not be an increase in pesticide concentrations found in bottom sediments. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life." As discussed by staff, the current water quality objective does not easily facilitate the use of pesticides to protect human health, or for ecological preservation, vector control, or emergency situations.

Therefore, LADWP supports the staff selection – Waste Discharge Prohibition With Criteria for Exemption - as the appropriate alternative to the current water quality objective, as was presented in Slide 4 of the "Pesticide Basin Plan Amendment Presentation" by Dan Sussman and Mary Fiore-Wagner, Environmental Scientists; and

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Telephone: (213) 367-4211 Cable address: DEWAPOLA

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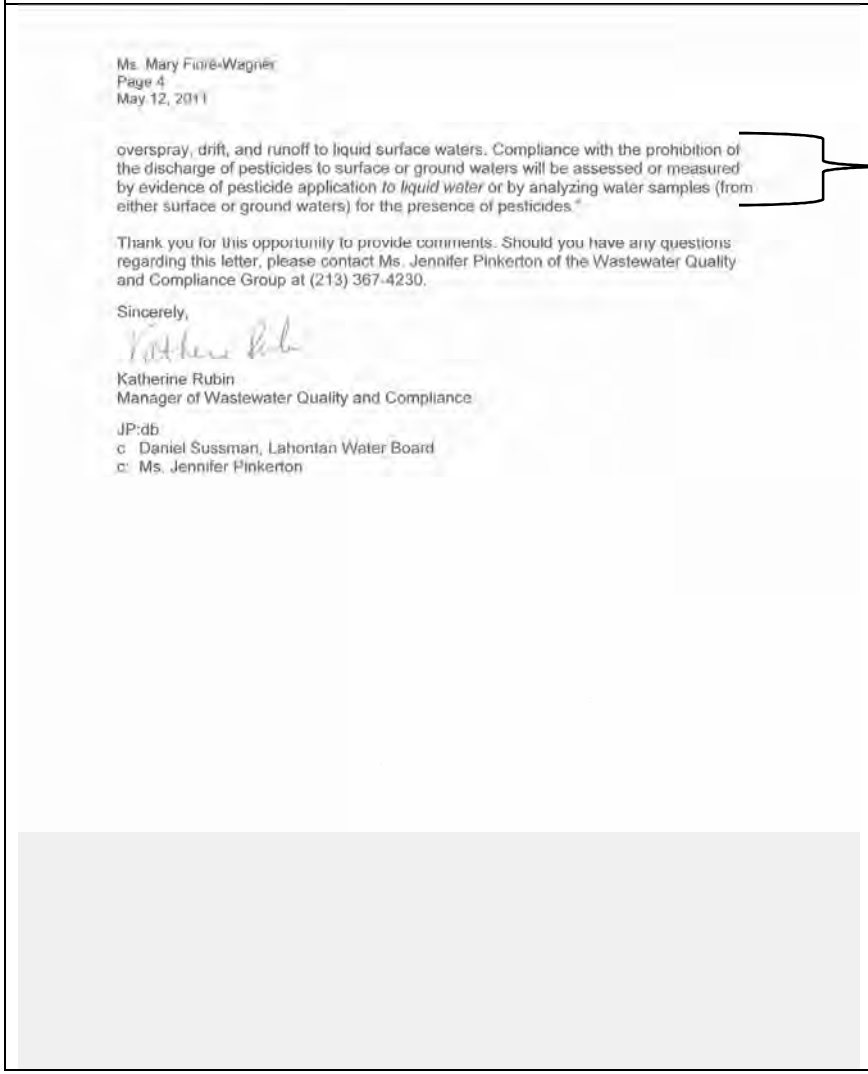
Ms. Mary Flore-Wagner Page 2 May 12, 2011 Richard Booth, Senior Engineering Geologist). LADWP concurs with the staff that the other alternatives - no action, or chemical specific numeric water quality objectives, would prove problematic. **B. LADWP Supports Eligible Circumstances Approach to Pesticide Applications** LADWP strongly supports the "eligible circumstances" for waste discharge exemptions, namely public health and safety, and ecological preservation (as per Slide 6 of the "Pesticide Basin Plan Amendment Presentation." This approach will enable entities such as LADWP to apply pesticides to 1) meet drinking water standards and therefore guard public health; 2) control algae that may not endanger public health but causes odors in drinking water; 3) control aquatic weeds that could impair critical and expensive water conveyances or distributaries ; and 4) repel invasive aquatic species that endanger habitats and native species, and/or water conveyances or distributaries. The protection measures applicable to pesticide applications, as described on Page 4, in the "Purpose and Need for Exemption" section of the Draft Pesticide Basin Plan Amendment (application methods, compliance with pesticide label instructions, implementation of best management practices), are appropriate and will ensure that any lowering of water quality is limited to the shortest time possible. **C. LADWU Supports Discharge Prohibition Exemption Process** LADWP believes that the general exemption process that would allow such applications, as described in Slide 8 of the "Pesticide Basin Plan Amendment Presentation" is stream-lined and clear. LADWP appreciates that the need for accelerated exemptions – for vector control and in response to emergency situations, such as when toxic algae develops, has been considered and included. **D. LADWP Supports Development of a Discharge Exemption Application Form** During the May 2 meeting/conference call, staff said that a discharge exemption application form has not yet been developed. LADWP supports development of this form, in order to streamline the exemption process and help ensure that applicants provide all necessary information. The following items address those issues where LADWP has concerns. **II. Pesticide Applications Under Dry Conditions** A. The Item that will be numbered as "6" in Section 4.1, now presented on Page 2 of the Amendment states: "The discharge of pesticides to surface or ground waters is prohibited.[1]" The referenced footnote (No. 1), which is found on the same page, reads: "Compliance with this prohibition will be assessed or measured by evidence of pesticide application to *liquid water* (emphasis added) or by analyzing water samples (from either surface or ground waters) for the presence of pesticides. Therefore, proper application or terrestrial pesticides directly to plants or animals located in a surface water (as defined by the Water Code) *under dry conditions* (emphasis added) should not result in	**LADWP R1:** Though the Water Board agrees that a Discharge Exemption Request Application Form should be developed, it will not be included as part of this amendment process. With limited staff resources, staff believes it is premature to develop this form at this stage. Instead it is more appropriate to develop this form after the Pesticide Basin Plan Amendment is adopted by the Water Board and while the amendment is seeking approval by the State Board, the Office of Administrative Law, and the USEPA. **LADWP R2:** Refer to response **LADWP R2** on the next page.

07-00216

Comments	Response
  a violation of the prohibition, nor require the Regional Water Board to consider exemptions to the prohibition." LADWP believes that even though this footnote is detailed, the potential for confusion about the scope of dry conditions and exemption procedures still exists. **Recommendation:** Given the significance of "dry conditions" in California, and the need for absolute clarity, LADWP recommends that the footnote referenced above be revised and expanded as follows: " "Compliance with this prohibition will be assessed or measured by evidence of pesticide application to *liquid water* (emphasis added) or by analyzing water samples (from either surface or ground waters) for the presence of pesticides. Therefore, proper application or terrestrial pesticides directly to plants or animals located in a surface water (as defined by the Water Code) *under dry conditions* should not 1) result in a violation of the prohibition, 2) should not require that the pesticide applicator submit to the Regional Board an application for a waste discharge exemption, and 3) should not require that the Regional Water Board issue an exemption to the discharge prohibition. As an example, the application of terrestrial pesticides to the dry stream beds of *ephemeral streams* would not require that a discharge exemption be obtained, because the lack of "liquid water" in the ephemeral stream bed constitutes a 'dry condition'." LADWP also recommends that the above language be presented more prominently, by means of a new Amendment Section titled "Categorical Exemptions." **III. Pesticide Applications Adjacent to Surface Waters** As discussed during the May 2 meeting, the 'proper application' of pesticides includes, at minimum, application in accordance with the pesticide label and the use of best management practices (BMPs) that are sufficient to prevent overspray, drift, and runoff to liquid surface waters." It is unclear whether the application of terrestrial pesticides *adjacent* to surface waters (such as along canals, to kill weeds and help maintain structural stability), if applied in accordance with the label, and when all protective measures, such as necessary Best Management Practices (BMPs), are in place, would or would not require the applicator to apply for a discharge exemption. **Recommendation:** LADWP therefore recommends that the Amendment address this issue more clearly with a Section titled "Pesticide Applications Adjacent to Surface Water" that reads: "Pesticide applications to land that is adjacent to surface waters is allowed, provided that the applicator, at minimum, applies the pesticides in accordance with the pesticide label and employs best management practices (BMPs) that are sufficient to prevent	**LADWP R2:** Water Board concurs with LADWP in that additional guidance is needed to clarify the applicability of the pesticide prohibition (1) to pesticide applications made under dry conditions, and (2) to terrestrial pesticide applications adjacent to surface water. Language, similar to that recommended by LADWP, has been added to the Basin Plan to clarify the footnote that discusses pesticide applications under dry conditions. Additionally, language has been added to the same footnote to clarify that a prohibition exemption is not required for the application of terrestrial pesticides to land adjacent to a surface water. To view the language that has been added to the footnote, refer to the footnote that accompanies the proposed pesticide prohibition found in Chapters 4 and 5 of the Basin Plan. The modified/additional language, however, will remain in a footnote instead of under a new section as recommended by LADWP.

Comments	Response
	**LADWP R2:** Refer to response **LADWP R2** on previous page.

overspray, drift, and runoff to liquid surface waters. Compliance with the prohibition of the discharge of pesticides to surface or ground waters will be assessed or measured by evidence of pesticide application *to liquid water* or by analyzing water samples (from either surface or ground waters) for the presence of pesticides."

Thank you for this opportunity to provide comments. Should you have any questions regarding this letter, please contact Ms. Jennifer Pinkerton of the Wastewater Quality and Compliance Group at (213) 367-4230.

Sincerely,

Katherine Rubin
Manager of Wastewater Quality and Compliance

JP:db
c: Daniel Sussman, Lahontan Water Board
c: Ms. Jennifer Pinkerton

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

League to Save Lake Tahoe

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/ltslt.pdf

Comments	Response
KEEP TAHOE BLUE. League to Save Lake Tahoe April 13, 2011 Via E-mail Mary Wagner & Daniel Sussman Lahontan Water Board 2501 Lake Tahoe Blvd., South Lake Tahoe, CA 96150 mfwagner@waterboards.ca.gov & dsussman@waterboards.ca.gov Re: Proposed Amendments to the Water Quality Control Plan for the Lahontan Region: Pesticide Prohibition with exemption Criteria Dear Ms. Wagner, Mr. Sussman, and Members of the Lahontan Water Board, These comments are submitted on behalf of the League to Save Lake Tahoe ("League"). As referenced in our comment letter dated August 31, 2009, the League continues to remain concerned with the detrimental, cumulative, and long-term impacts associated with pesticide use in water. "The current pesticide water quality objective essentially prohibits pesticide application to water by requiring the pesticide concentration to not exceed the lowest detectable levels." Lake Tahoe has special designation as an Outstanding National Resource Waters (ONRW), which affords the Lake a strict non-degradation standard. The League has been a strong advocate for protecting the Lake from the introduction of aquatic invasive species (AIS), which have the potential for irreversible impacts to the Lake's ecosystem and physical environment. For the control of AIS that have already established themselves in the Lake, such as Asian clam, Eurasian milfoil, and curly leaf pondweed, bottom barriers and similar mechanical methods need to be employed. For invasive warm water fish species like large-mouth bass and blue gill, electro-shock is a method that can be used without pesticide application. Realistically, these well-established invasive species cannot be eradicated, but only controlled at this point. With respect to the significant impacts associated with pesticide use, conflicts with the current water quality objective, Lake Tahoe's designation as an ONRW, and alternatives that exist that do not require pesticide application, the Lake Tahoe Basin needs to be excluded from this amendment, with the following exemptions: 1. In the emergency instance of the first introduction of the destructive quagga or zebra mussels within a water body in the Lake Tahoe Basin, pesticides may be considered, if eradication is probable. This needs to be limited by declaration of the California Governor.	**LTSLT R1:** The Basin Plan amendment makes it possible for a project proponent to propose chemical methods to control AIS that are already established (e.g., EWM in the Tahoe Keys, Asian clam infestations). However, at the time the request for exemption is submitted, the project proponent must provide evidence that non-chemical methods failed to address the target AIS or justification, accepted by the Regional Board, of why non-chemical measures were not employed or are not capable of achieving the treatment goals. **LTSLT R2:** At both the April and May Board meetings the Board directed staff to retain the existing language which describes circumstances that may qualify for an exemption to the prohibition on aquatic pesticides. For Lake Tahoe, the Board did not want the scope of circumstances to be narrowed to just vector control and AIS emergencies. Instead the Board prefers to keep the language flexible for all waterbodies in our region regardless of ONRW designation. The Board also indicated wanting the tool of pesticides available to combat AIS specifically because ONRW designation may warrant the need to protect unique waters. On a project-by-project basis the Water Board will use its discretion to consider, grant, or reject an exemption request. The existing amendment language will only consider a project proposed to control AIS as an emergency if the project is proposed in response to an emergency as set forth in Public Resource Code section 21060.3 (which include those declared by the Governor); or projects that meet the CEQA definition of Emergency Projects set forth in CEQA Guidelines 15269(a)(b)(c) and require immediate action to control the pest of concern.

Comments	Response
Mary Wagner & Daniel Sussman, Lahontan Water Board League to Save Lake Tahoe Comment Letter –Proposed Amendments for the Lahontan Region: Pesticide Prohibition with Exemption Criteria Page 2 of 2 April 13, 2011 2. In order to directly safeguard human health and safety, the vector control of mosquitoes should be maintained, with pesticides allowed, if necessary. Thank you for this opportunity to provide further comments on the proposed amendments to the water quality control plan for the Lahontan region: pesticide prohibition with exemption criteria. Sincerely, Carl Young Program Director League to Save Lake Tahoe 2608 Lake Tahoe Blvd South Lake Tahoe, CA 96150	**LTSLT R2**: Refer to **LTSLT R2** on previous page.

07-00221

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Mojave Desert Resource Conservation District

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/mojavercd.pdf

Comments	Response
Daniel Sussman - Pesticide Basin Plan Amendment **From:** Chuck Bell <chuckb@sisp.net> **To:** Mary Fiore-Wagner <MFWagner@waterboards.ca.gov>, <dsussman@waterboards.ca.gov> **Date:** 5/9/2011 2:43 PM **Subject:** Pesticide Basin Plan Amendment **CC:** Jackie Lindgren <Jackie.Lindgren@ca.nacdnet.net> To: Mary and Dan From: Chuck Bell, Pres. Mojave Desert Resource Conservation District - 760 964 3118 Date: 5/9/11 Re: **Lahontan's Pesticide Basin Plan Amendment.** We appreciate both the scoping session and your excellent presentation at our recent Mohave Weed Mt. Area meeting in Barstow. The Amendment is obviously more practical and fair than the current policy. It will be difficult for us to attend the Bd. hearing this Wed. evening in Victorville - but if you think critical - one of us will make it. Feel free to pass this on to your Bd. at the hearing: Per discussions at the Barstow meeting?:: "Water conservation" will be added as a criterion in support of weed management. Jackie sent you a copy of the Corp's "Regional General Permit (RGP) 41 - (removal of exotics within Waters of the U. S. in s. Calif.). We assume the Amendment does not conflict with its provisions. Compliance with a pesticide's label is a major element of the Amendment. If there is "no discharge to surface water" - there is no need for the exemption or filing - and depending on circumstances - Lahontan will respond accordingly in writing to any filing or other contact in relation to the Amendment? Removal of exotics within or on the banks of wastewater ponds - water from which does not directly flow out as - or to - surface water - might warrant special provisions under the Amendment? Grant cut-off dates might be considered under "Time Sensitive" provisions - or at least prioritized accordingly? Again, thanks for your outreach. Chuck	**MRCD R1**: By criterion, we assume the MRCD means eligible circumstance. Water conservation actions, as described by the Mojave Desert RCD, do not involve application of pesticides to water. There is no need to create a water conservation circumstance. Additionally, in correspondence, MRCD indicated that pesticide use for water conservation means often took place in the absence of surface water. For these instances, when terrestrial pesticides are being used in the absence of a threat of discharge no exemption is required. See **MRCD C4.** **MRCD R2**: RGP 41 does not conflict with the amendment provisions, but adherence to the general conditions of RGP 41 does not remove pesticide users from compliance with the proposed waste discharge prohibition or exemption. According to RGP 41 general condition 21a, project proponents need to provide the RGP 41 Notification package to the Water Board. **MRCD R3**: Compliance with a pesticide's label is an important element of the Amendment, and is a control measure. Label requirements are developed by CA Department of Pesticide Regulation, whose primary role is not to protect water quality. We hesitate to characterize compliance with FIFRA labels as a "major" element, for fear of minimizing the importance of other control criteria set forth in Chapter 4 of the Basin Plan under the section titled “Exemption Criteria for Aquatic Pesticide Use.”

Comments	Response
Daniel Sussman - Pesticide Basin Plan Amendment **From:** Chuck Bell <chuckb@sisp.net> **To:** Mary Fiore-Wagner <MFWagner@waterboards.ca.gov>, <dsussman@waterboards.ca.gov> **Date:** 5/9/2011 2:43 PM **Subject:** Pesticide Basin Plan Amendment **CC:** Jackie Lindgren <Jackie.Lindgren@ca.nacdnet.net> To: Mary and Dan From: Chuck Bell, Pres. Mojave Desert Resource Conservation District - 760 964 3118 Date: 5/9/11 Re: **Lahontan's Pesticide Basin Plan Amendment.** We appreciate both the scoping session and your excellent presentation at our recent Mohave Weed Mt. Area meeting in Barstow. The Amendment is obviously more practical and fair than the current policy. It will be difficult for us to attend the Bd. hearing this Wed. evening in Victorville - but if you think critical - one of us will make it. Feel free to pass this on to your Bd. at the hearing: Per discussions at the Barstow meeting?:: "Water conservation" will be added as a criterion in support of weed management. Jackie sent you a copy of the Corp's "Regional General Permit (RGP) 41 - (removal of exotics within Waters of the U. S. in s. Calif.). We assume the Amendment does not conflict with its provisions. Compliance with a pesticide's label is a major element of the Amendment. If there is "no discharge to surface water" - there is no need for the exemption or filing - and depending on circumstances - Lahontan will respond accordingly in writing to any filing or other contact in relation to the Amendment? Removal of exotics within or on the banks of wastewater ponds - water from which does not directly flow out as - or to - surface water - might warrant special provisions under the Amendment? Grant cut-off dates might be considered under "Time Sensitive" provisions - or at least prioritized accordingly? Again, thanks for your outreach. Chuck	**MRCD R4**: This amendment is a prohibition on the discharge of all pesticides, terrestrial, sprayed, and aquatic, to waters of the State. An exemption may be sought for aquatic pesticide use and, in the case of mosquito abatement, spray or adulticide use. Non aquatic use of pesticides should not result in discharge to surface water because proper application procedures and control measures will prevent discharge to surface waters. Exemptions need not be sought for such pesticide uses. If an entity seeks an exemption for pesticide use that does not require an exemption (it does not fit a circumstance, and will not result in a discharge to surface water), Lahontan will confirm this information. The method of response may be through phone, email, or letter. It is the responsibility of the project proponent to determine if the pesticide use requires and warrants an exemption and filing for a permit. Current filings for statewide general NPDES pesticide permits is made to the State Board. Lahontan staff can not anticipate State Board staff's response. Also, **see LADWP-R2, R3,** and footnote no. 1 that accompanies the proposed Regionwide Prohibition on Pesticides located in Chapters 4 and 5 of the Basin Plan.

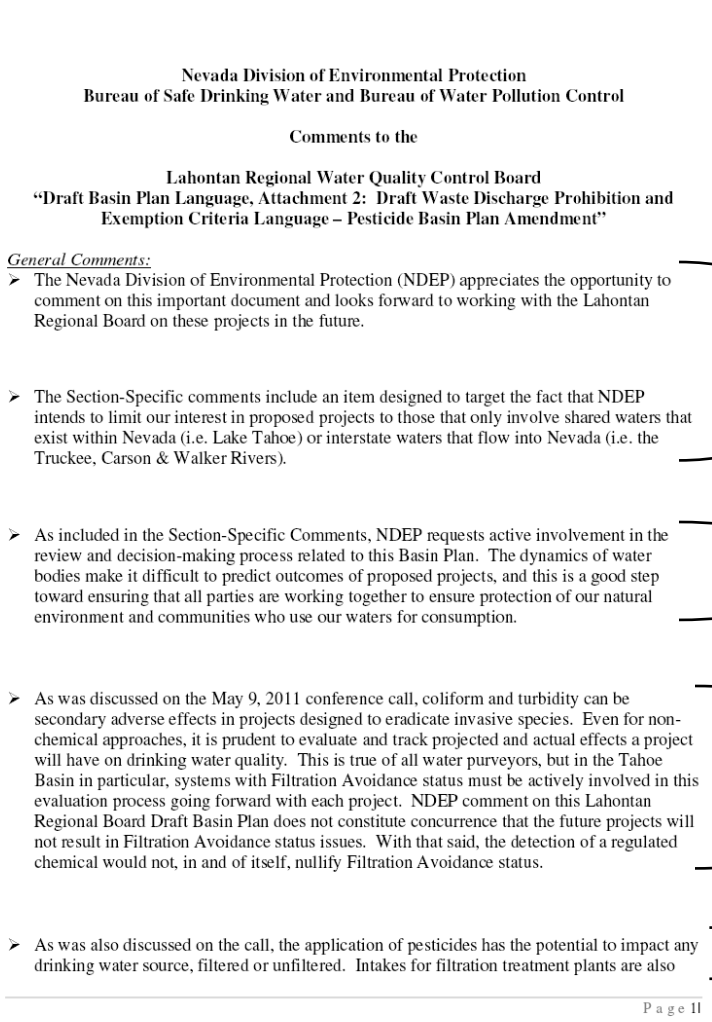
Comments	Response
Daniel Sussman - Pesticide Basin Plan Amendment **From:** Chuck Bell <chuckb@sisp.net> **To:** Mary Fiore-Wagner <MFWagner@waterboards.ca.gov>, <dsussman@waterboards.ca.gov> **Date:** 5/9/2011 2:43 PM **Subject:** Pesticide Basin Plan Amendment **CC:** Jackie Lindgren <Jackie.Lindgren@ca.nacdnet.net> To: Mary and Dan From: Chuck Bell, Pres. Mojave Desert Resource Conservation District - 760 964 3118 Date: 5/9/11 Re: **Lahontan's Pesticide Basin Plan Amendment.** We appreciate both the scoping session and your excellent presentation at our recent Mohave Weed Mt. Area meeting in Barstow. The Amendment is obviously more practical and fair than the current policy. It will be difficult for us to attend the Bd. hearing this Wed. evening in Victorville - but if you think critical - one of us will make it. Feel free to pass this on to your Bd. at the hearing: Per discussions at the Barstow meeting?:: "Water conservation" will be added as a criterion in support of weed management. Jackie sent you a copy of the Corp's "Regional General Permit (RGP) 41 - (removal of exotics within Waters of the U. S. in s. Calif.). We assume the Amendment does not conflict with its provisions. Compliance with a pesticide's label is a major element of the Amendment. If there is "no discharge to surface water" - there is no need for the exemption or filing - and depending on circumstances - Lahontan will respond accordingly in writing to any filing or other contact in relation to the Amendment? Removal of exotics within or on the banks of wastewater ponds - water from which does not directly flow out as - or to - surface water - might warrant special provisions under the Amendment? Grant cut-off dates might be considered under "Time Sensitive" provisions - or at least prioritized accordingly? Again, thanks for your outreach. Chuck	**MRCD R5**: On May 3, 2011 Water Board staff met with interested stakeholders including the MRCD. MRCD indicated that wastewater treatment ponds are typically drained before exotics within the pond are removed. In these situations where the pesticide is applied to a surface water under dry conditions an exemption to the prohibition is not required, as is the case when exotics are treated on the banks of the waterwater pond. If exotics are treated when the pond contains liquid water and application methods and implementation of BMPs prevent discharge to the surface water, then an exemption to the prohibition is not necessary. If there is any evidence that pesticides are present in water, the Water Board has the authority under Porter-Cologne to require further investigation and follow-up with enforcement if necessary. See also **LADWP R2** and **R3** and footnote no. 1 that accompanies the proposed Regionwide Prohibition on Pesticides located in Chapters 4 and 5 of the Basin Plan. **MRCD R6**: Grant cut-off dates are foreseeable dates to be factored into project planning. The Time Sensitive category of exemption circumstances is intended to apply towards an accelerated exemption process due to unforseeable circumstances, such as the new discovery of an invasive species that must be addressed for successful treatment, but which does not fit into the defined Emergency category. The Amendment language does not consider grant cut-off dates to qualify a project as Time Sensitive.

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Nevada Division of Environmental Protection -
Bureau of Safe Drinking Water and Bureau of Water Pollution Control
http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/ndep.pdf

Comments	Response
	**NDEP-Drinking Water R1**: Based on meetings with NDEP and comments submitted by NDEP, and direction from the Regional Board, the proposed Basin Plan language contains the following information regarding project applications submitted to the Regional Board: "The Regional Board will consult with NDEP when projects affect interstate waters that exist within, or flow, to the State of Nevada." **NDEP-Drinking Water R2:** The Water Board will consult with NDEP when appropriate. The Water Board is the primary agency involved in the decision making process, in that it is the regulatory body with authority to grant or deny a project proponent's request for an exemption to the pesticide prohibition. Though NDEP does not have decision making authority, NDEP's review and comment of proposed projects will be considered when determining whether a project satisfies all the exemption criteria needed to qualify for an exemption. Refer also to **NDEP-Drinking Water R1.** **NDEP-Drinking Water R3:** Water Board staff agrees that the potential and actual effects of non-chemical approaches should be evaluated and tracked. However, the exemption to the prohibition only applies to projects that propose chemical means to control pests. Water Board staff are actively involved with the Lake Tahoe Aquatic Invasive Species Working Committee, which collaborates to evaluate and track the effects of all control methods, including both non-chemical and chemical treatments. Refer to **NDEP – Drinking Water R4** on next page.

Nevada Division of Environmental Protection
Bureau of Safe Drinking Water and Bureau of Water Pollution Control

Comments to the

Lahontan Regional Water Quality Control Board
"Draft Basin Plan Language, Attachment 2: Draft Waste Discharge Prohibition and Exemption Criteria Language – Pesticide Basin Plan Amendment"

General Comments:

- The Nevada Division of Environmental Protection (NDEP) appreciates the opportunity to comment on this important document and looks forward to working with the Lahontan Regional Board on these projects in the future.
- The Section-Specific comments include an item designed to target the fact that NDEP intends to limit our interest in proposed projects to those that only involve shared waters that exist within Nevada (i.e. Lake Tahoe) or interstate waters that flow into Nevada (i.e. the Truckee, Carson & Walker Rivers).
- As included in the Section-Specific Comments, NDEP requests active involvement in the review and decision-making process related to this Basin Plan. The dynamics of water bodies make it difficult to predict outcomes of proposed projects, and this is a good step toward ensuring that all parties are working together to ensure protection of our natural environment and communities who use our waters for consumption.
- As was discussed on the May 9, 2011 conference call, coliform and turbidity can be secondary adverse effects in projects designed to eradicate invasive species. Even for non-chemical approaches, it is prudent to evaluate and track projected and actual effects a project will have on drinking water quality. This is true of all water purveyors, but in the Tahoe Basin in particular, systems with Filtration Avoidance status must be actively involved in this evaluation process going forward with each project. NDEP comment on this Lahontan Regional Board Draft Basin Plan does not constitute concurrence that the future projects will not result in Filtration Avoidance status issues. With that said, the detection of a regulated chemical would not, in and of itself, nullify Filtration Avoidance status.
- As was also discussed on the call, the application of pesticides has the potential to impact any drinking water source, filtered or unfiltered. Intakes for filtration treatment plants are also

Comments	Response
important to consider as they are designed to treat for bacteria, viruses and protozoa, not chemicals. ➢ NDEP recommends that any Basin Plan Aquatic Pesticide Use Exemptions granted by the Lahontan Regional Board be handled on a project-specific basis and that recurring annual "blanket" Exemptions not be utilized. *Section-Specific Comments:* All comments refer to the "*Draft Basin Plan Language, Attachment 2: Draft Waste Discharge Prohibition and Exemption Criteria Language – Pesticide Basin Plan Amendment" Mar 2011, Draft for Public Review* ➢ At the bottom of page 2, the NDEP suggests that the definition of a "pesticide" be expanded to include non-chemical approaches in order to be able to address secondary adverse effects from biomass decomposition & other issues. If the Lahontan Regional Board has another regulatory vehicle to address this concern, the NDEP is interested in discussion on what that mechanism is. The following language is offered: For the purposes of this Exemption, "pesticides" also includes non-chemical applications of controls for aquatic animal or plant pests that could have a temporary adverse effect on water quality. ➢ On page 7, the NDEP requests consideration of the following language insertions in the section regarding Exemption Criteria for Aquatic Pesticide Use. The text in red was suggested by CDPH on May 19, 2011; however, the NDEP suggests amending the language to be less specific about distance to a surface water intake. An exemption request must contain the following information acceptable to the Regional Board. The Regional Board will act in consultation with the California Department of Public Health (CDPH) , the Nevada Division of Environmental Protection (NDEP) and drinking water purveyors for review and acceptance of the request. The NDEP will limit involvement to interstate waters that exist within, or flow to, the State of Nevada. 1. Project Information shall be submitted with four (4) copies and is to include: a. Project description including, but not limited to, proposed schedule, duration, name of pesticide, method and rate of application, spatial extent, water body, control/mitigation measures to be used, contact information. Page 2	**NDEP-Drinking Water R4:** We acknowledge that aquatic pesticide treatments may have the potential to impact surface water drinking intakes. Additional exemption criteria, including a requirement to coordinate with affected water purveyors and notify potentially affected water users, have been added to minimize or avoid any impacts. See the section of Chapter 4 of the Basin Plan titled "Exemption Criteria for Aquatic Pesticide Use." **NDEP-Drinking Water R5:** As we developed the amendment, we realized there were a few limited circumstances where it may not be necessary for the Board to grant exemption for individual projects. If the Water Board adopts the amendment as written today, it acknowledges the importance of protecting public health and the sense of urgency for projects involving Vector Control and those declared as Emergencies by the Governor. For these limited circumstances provided all the criteria are satisfied, an exemption is granted for one-time and on-going activities, and no further action is required by the Board. Though projects will be considered on a case-by-case basis, the Water Board may allow an exemption to apply to a period of time that extends throughout a season or annually. These extended exemptions may be appropriate if the aquatic pesticide treatment is proposed for maintenance activities such as invasive weed control conducted by the Bureau of Land Management. **NDEP-Drinking Water R6:** The definition of pesticide will not be expanded to include non-chemical controls. The definition of pesticide proposed for inclusion in Chapter 4 of the Basin Plan is codified in the California Food and Agriculture Code section 12753. Water Board staff recognize that non-chemical control measures may be proposed for control of aquatic invasive species, however non-chemical treatments will be considered and permitted by the Water Board separately and outside the scope of this amendment.

Comment	Response
important to consider as they are designed to treat for bacteria, viruses and protozoa, not chemicals. ➢ NDEP recommends that any Basin Plan Aquatic Pesticide Use Exemptions granted by the Lahontan Regional Board be handled on a project-specific basis and that recurring annual "blanket" Exemptions not be utilized. *Section-Specific Comments:* All comments refer to the "*Draft Basin Plan Language, Attachment 2: Draft Waste Discharge Prohibition and Exemption Criteria Language – Pesticide Basin Plan Amendment" Mar 2011, Draft for Public Review* ➢ At the bottom of page 2, the NDEP suggests that the definition of a "pesticide" be expanded to include non-chemical approaches in order to be able to address secondary adverse effects from biomass decomposition & other issues. If the Lahontan Regional Board has another regulatory vehicle to address this concern, the NDEP is interested in discussion on what that mechanism is. The following language is offered: For the purposes of this Exemption, "pesticides" also includes non-chemical applications of controls for aquatic animal or plant pests that could have a temporary adverse effect on water quality. ➢ On page 7, the NDEP requests consideration of the following language insertions in the section regarding Exemption Criteria for Aquatic Pesticide Use. The text in red was suggested by CDPH on May 19, 2011; however, the NDEP suggests amending the language to be less specific about distance to a surface water intake. An exemption request must contain the following information acceptable to the Regional Board. The Regional Board will act in consultation with the California Department of Public Health (CDPH) , the Nevada Division of Environmental Protection (NDEP) and drinking water purveyors for review and acceptance of the request. The NDEP will limit involvement to interstate waters that exist within, or flow to, the State of Nevada. 1. Project Information shall be submitted with four (4) copies and is to include: a. Project description including, but not limited to, proposed schedule, duration, name of pesticide, method and rate of application, spatial extent, water body, control/mitigation measures to be used, contact information. Page 21	**NDEP-Drinking Water R7:** The Water Board recommends including language similar to that proposed by NDEP. The language proposed by the Water Board provides NDEP the same level of involvement as the language suggested by NDEP. Refer to **NDEP-Drinking Water R2.** See also footnote no. 7 in Chapter 4 of the Basin Plan in the section titled "Exemption Criteria for Aquatic Pesticide Use." **NDEP-Drinking Water R8:** The Water Board can require multiple copies or electronic copies as part of a project application. This requirement, which may be subject to change based on technological advances, is not appropriate to place in a Basin Plan. (Application requirements such as format, and type and number of copies can be specified on the "to be developed application form" referred to in **Response LADWP R1**.)

Comments	Response
b. Purpose and need for project. c. The chemical composition of the pesticide to be used, including inert ingredients. d. An estimate of the maximum foreseeable concentrations of pesticide components in any surface water intake used for drinking water supplies ~~within ½ mile of~~with any potential to be impacted bythe point of application. e. Public notification and warning plan must be implemented before and during the project and include any water use restrictions or precautions during treatment if necessary. f. ~~Suitable measures will be taken to identify~~Documentation that outreachwasconducted to communicate with drinking water purveyors with~~potentially affected sources of~~ potable surface and ground water intakes. Drinking Water Purveyors will respond, stating their interest in continuing involvement in the project, or if they do not believe the project has the potential to adversely affect their water supply. The project proponent will~~, and to~~ provide potable drinking water where necessary and will obtain any necessary permits from CDPH and NDEP for supply of the potable drinking water. g. Spill contingency plan to address proper transport, storage, spill prevention and cleanup. In the proposed language offered in item f, the NDEP anticipates that a list of drinking water purveyors could be developed and a project proponent would simply be required to contact everyone on the list to determine their interest in continued involvement. ➢ On page 8, the NDEP request consideration of the following language insertion in the section regarding Exemption Criteria for Vector Control. 2. Aquatic pesticide applications must minimize impacts to beneficial uses by implementing BMPs to limit the effects of the pesticide to the shortest time and within the smallest area necessary for project success. If the beneficial uses include drinking water, then the impacts must be eliminated. Jennifer L. Carr, P.E., C.E.M. Chief, Bureau of Safe Drinking Water June3, 2011 P:/BSDW/Bureau Chief/Unique Issues/	**NDEP-Drinking Water R9:** Water Board staff believes the reference to 1/2 mi distance from pesticide application was a reasonable distance to require project proponents to provide additional exemption criteria (reasonably foreseeable pesticide concentration in drinking water intake) to further protect nearby surface drinking intakes. Water Board staff maintained the 1/2 mile distance because it was suggested by California Department of Public Health – Drinking Water Branch, and it was the distance that water purveyors had recommended for inclusion in the recently adopted TRPA shorezone ordinances (currently under litigation), which instead only require a 1/4 mile setback of piers from any surface water drinking intakes. **NDEP-Drinking Water R10:** Water Board staff recommends including similar language that requires project proponents to (1) provide outreach and solicit involvement from water purveyors, and (2) obtain any necessary permits from California Department of Public Health or NDEP for supply of potable drinking water. Modified/additional language can be found within Chapter 4 of the Basin Plan under the section titled “Exemption Criteria for Aquatic Pesticide Use.” **NDEP-Drinking Water R11**: A list of water purveyors in the Lake Tahoe Basin will be provided as part of the forthcoming project application materials that will be developed, but such list should not be incorporated into our Basin Plan. **NDEP-Drinking Water R12**: The existing language is reasonable and acknowledges that even with effective management measures in place impacts to drinking water may not be eliminated. However, any impacts should be short-term and reduced to the extent possible.

07-0230

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Nevada County Board of Supervisors

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/nvcobos.pdf

Comments	Response

COUNTY OF NEVADA

STATE OF CALIFORNIA

950 Maidu Avenue, Suite 200 • Nevada City, California 95959-8617

BOARD OF SUPERVISORS

Nathan Beason, 1st District
Ed Scofield, 2nd District (Chair)
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Ted S. Owens, 5th District (Vice Chair)

Cathy R. Thompson
Clerk of the Board

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April 26, 2011

Lahontan Regional Water Quality Control Board
ATTN: Dan Sussman
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

SUBJECT: Support for Proposed Amendment Regarding Consideration of Aquatic Pesticides

Dear Mr. Sussman and Members of the Board:

After evaluating recommendations from the Nevada County Agricultural Commissioner and the County Fish and Wildlife Commission, we support the development of the plan amendment. The current policy of prohibiting aquatic pesticide use for the control and eradication of aquatic invasive species is obsolete in light of the increasing threats the Lahontan Region is experiencing from these organisms. From our perspective, these threats seem to have accelerated in the last decade. The plan amendment is unquestionably warranted.

We strongly recommend that you include the establishment of a rapid assessment and response team in order to expeditiously evaluate and treat newly-identified infestations before they develop to major crises. Such a team would ideally include appropriate experts from local government, the university system and industry as it is unreasonable with today's budgetary constraints to expect Lahontan to shoulder the full burden.

An additional safeguard would be to include a requirement to notify those who use water for agricultural purposes when aquatic pesticides are being applied.

Serious local, regional, and national economic impacts have occurred and will increase unless policy is modified in light of these changed conditions. A few examples would be Davis Lake and Pike eradication, increase in wild land fire frequency cycles, loss of agriculture productivity due to invasive weeds, threats from diseases such as West Nile Virus, Avian flu and others, and declining population trends for many native wildlife species.

The LRWQB region has witnessed unprecedented modification to aquatic and terrestrial habitats from invasive species in the last two decades. Pest management programs can be established to control existing infestations such as Eurasian Watermilfoil. The exemption to the prohibition can enable public agencies to quickly eradicate Quagga or Zebra mussel if they were introduced into the region's water bodies.

Sincerely,

Edward C. Scofield
Chairman, Board of Supervisors

NV Co. R1: The establishment of rapid assessment and response team is outside the scope of the Basin Plan amendment. However, this need is identified in both the California Aquatic Invasive Species Management Plan (CAAISMP) and the Lake Tahoe Aquatic Invasive Species Management Plan (LTAISMP). Water Board staff sit on both the Lake Tahoe AIS Coordinating Committee (LTAISCC) and the California AIS Team (CAAIST) and will use these positions to advocate for the establishment of rapid assessment and response teams. Additionally, other agencies, including US Bureau of Land Management and California Department of Food and Agriculture engage in complementary planning activities.

NV Co. R2: New language has been added to the Basin Plan, Chapter 4 under the section titled "Exemption Criteria for Aquatic Pesticide Use" that requires project proponents to prepare and implement a notification and communication plan. The plan requires project proponents to document measures to notify potentially affected parties who may use the water (ground or surface) downstream for any beneficial use. Users of the water for agricultural purposes would be captured within this broad notification language.

NV Co. R3: The proposed tiered approach allows quicker turnaround for emergencies and time-sensitive projects.

Comments	Response

RESOLUTION No. 11-178

OF THE BOARD OF SUPERVISORS OF THE COUNTY OF NEVADA

RESOLUTION IN SUPPORT OF THE DRAFT AMENDMENT TO THE WATER QUALITY CONTROL PLAN FOR THE LAHONTAN REGION (BASIC PLAN) TO ALLOW SOME LAWFUL DISCHARGE OF AQUATIC PESTICIDES

WHEREAS, the Lahontan Regional Water Quality Control Board's existing pesticide water quality objective in its Water Quality Control Plan for the Lahontan Region prohibits application of pesticides to surface waters; and

WHEREAS, the proposed amendment to the Water Quality Control Plan allows the Water Board to protect water quality from the unauthorized use and unintended effects of aquatic pesticides while still allowing some lawful discharge where that use is in the public interest; and

WHEREAS, the use of aquatic pesticides is necessary for the protection of public health and safety, the maintenance or restoration of certain beneficial uses and may be justified for certain situations where alternatives may be infeasible or inadequate to achieve effective control of pests; and

WHEREAS, the Nevada County Fish and Wildlife Commission, during its meeting on April 5, 2011, approved a recommendation that the Board of Supervisors support the proposed amendments with the addition that they include a requirement to notify those who use water for agricultural purposes when aquatic pesticides are being applied.

NOW, THEREFORE, BE IT RESOLVED by the Board of Supervisors of the County of Nevada hereby supports the draft amendment to the Water Quality Control Plan for the Lahontan Region (Basin Plan) to allow some lawful discharge of aquatic pesticides. In addition to the draft amendment, the Water Board should require notification of those who use water for agricultural purposes when aquatic pesticides are applied.

Comments	Response

PASSED AND ADOPTED by the Board of Supervisors of the County of Nevada at a regular meeting of said Board, held on the 26th day of April, 2011, by the following vote of said Board:

Ayes: Supervisors Nate Beason, Ed Scofield, Terry Lamphier, Hank Weston & Ted S. Owens.
Noes: None.
Absent: None.
Abstain: None.

ATTEST:

CATHY R. THOMPSON
Clerk of the Board of Supervisors
By: Cathy R. Thompson

Edward C. Scofield, Chair

DATE	COPIES SENT TO
4/27/11	LRWQCB
	Agric. Comm.

07-00234

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Tahoe Area Sierra Club

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/tasc.pdf

Comments	Response
April 12, 2011 Tahoe Area Sierra Club S. Lake Tahoe, Ca Contact: Co-Chairs:Laurel Ames 530-541-5752 Ron Grassi, 530-386-3862 TASC BRIEF COMMENTS ON THE BASIN PLAN AMENDMENTS TO ACCOMMODATE PREVIOUS PESTICIDE USE PRACTICES AND INCREASE THE OPPORTUNITY FOR MORE USE OF MORE POISON IN THE LAKE TAHOE BASIN, THE EASTSIDE OF THE SIERRA AND THE EASTSIDE OF THE CALIFORNIA DESERTS. The TASC opposes unlimited poisoning experiments that last an unlimited amount of time, and produce unknown results. The accumulation of hundreds of these experiments is fraught with potential short and long-term impacts and it is entirely unknown whether the experiments will actually benefit the public in the long-term. All comments below apply equally to the entire Lahontan Basin and references to Lake Tahoe do not exclude the entire Lahontan Basin. Comments Lahontan RWQCB is proposing a basin plan amendment that accommodates and facilitates use of pesticides, herbicides and piscicides in the waters of the Lake Tahoe Basin and its tributaries. While mosquito abatement is expected to continue with or without the basin plan amendment, the application of these poisons directly to the waters of the basin is intended to kill plants, fish, bugs and macroinvertebrates in the waters and the bottom sediments. The piscicide rotenone is prohibited for use on land and in marine bays, lagoons and estuaries. It is only allowed to be used in fresh water. It is banned in the EU for all applications. This poison kills everything in the water that uses oxygen. The amendments to the Basin Plan constitute a dangerous action that permits long-term impacts that are unknown to be undertaken over an unlimited amount of time until results are actually known, and that time is not known. The fact that the permit allows three unknowns (amount of time to test the poison and its killing ability in the lake and tributaries, a date when the results will be known, and the long-term impacts) all in the name of the public benefit is precarious at best. The long-term impacts are unknown and the public benefit is unknown. This is an experiment with no limits. Projects can receive a permit, take three years to complete, and two years later the monitoring of results begins, and	**TASC R1**: The number of projects is limited by the number of completed project applications submitted that meet the proposed Basin Plan Amendment exemption criteria and, where required, the Water Board acts to grant an exemption. It is inaccurate to define the projects as experiments, as future projects considered by the Water Board may include both experiments and projects that have occurred in the past in the Lahontan Region or elsewhere in the state. The project durations are not to be unlimited but will vary in length of time depending on a variety of project characteristics (e.g., mode of action of the aquatic pesticide being used, physical and chemical properties of the waterbody being treated). Since project monitoring is required, results will be submitted to the Water Board. This comment, originally aired during a meeting between TASC and Water Board staff on April 11, was presented to the Water Board at the April and May 2011 Board meetings. At these meetings the Board acknowledged the concern and directed staff to proceed as proposed without limiting projects numbers. **TASC R2:** The intent of a pesticide is to kill organisms, so there will be impacts. These impacts are expected to be short-term. Long-term impacts may occur as well, as acknowledged in the Substitute Environmental Documentation. Each project must undergo its own environmental analysis. If the analysis shows that significant impacts can not be avoided or mitigated to less than significant, then the project must be judged to be in the benefit of the public to receive an exemption to the prohibition. Projects implemented for public health and safety, and projects implemented for the protection of beneficial uses, are examples of projects that may be for the public benefit. **TASC R3:** Refer to **TASC R2.** **TASC R4:** The example given in the comment is a hypothetical situation describing a three year project that in total is a five to ten year project. Though the comment is conjecture, it does make a valid point about the duration of time between pesticide application and commencement of monitoring. The proposed language has been amended to reflect that monitoring will occur no less than annually after use of pesticides.

Comments	Response
sometime after that, results will be released, giving the public a five year project plus at least five to ten years for long-term results to be known The process of permit to results described above is not limited to the number of experiments that can be conducted at any time. The only alleged limit is the requirement of an environmental document by the applicant. That kind of limit is about as fungible as possible – the agency can change the environmental document requirement to accommodate the poisoner. The agency can reduce the scope of the environmental document to accommodate the poisoner. The agency can waive the environmental document to accommodate the poisoner.	**TASC R5:** Refer to **TASC-R1**. **TASC-R6:** The size and scope of a project, the purpose or intent of the project, as well as the potential for the project to impact the environment define the environmental documentation requirements. After learning the extent of environmental documentation required for a project, the proponent may choose to reduce the scope of a project. This reduction may reduce the environmental document requirements, but will also reduce the environmental impacts and may reduce the ability of the proponent to meet project goals.
There is no limit on the number of projects that can be undertaken anywhere in the Tahoe Basin or in the entire eastside of the state in the Lahontan Region. In the next 20 years, hundreds of large poisoning projects can be undertaken even though most of the results of these poisonings won't be known for years. WHERE IS THE PUBLIC BENEFIT? The Proposed Basin Plan amendment claims a rigorous monitoring program. There is no contingency for a poisonier failing to monitor because of taxpayer funds being cut. There is no contingency for a poisoner failing to monitor because a contract was flawed. There is no contingency for a poisoner failing to monitor because climate change thwarted the monitoring regime. In short, there is no backup plan for the failure to perform the monitoring that is allegedly so rigorous. The Lahontan RWQ basin is faced with using an old technique (poisoning) because it is both accommodating and facilitating for short-term solutions. The action is unconscionable. TASC requests that the Regional Board at the very least reduce the number of poisoning experiments to two and await complete results of long-term trends until authorizing any more such projects.	**TASC R7:** There is no specified limit on project number in the Lahontan Region. It is speculative that hundreds of projects would be proposed in such a time frame. Each project proponent must meet the exemption criteria and where required, the Water Board must consider granting the exemption. If projects are exempted from the proposed waste discharge prohibition for pesticides, monitoring (and in some cases mitigation) will be conducted. Such monitoring will inform future Board decisions and staff analysis of later exemption requests. **TASC R8:** These issues are not the purview of the amendment, but will be addressed through the permitting, compliance, and enforcement programs of the Regional Board. Refer criterion no. 7 in Chapter 4 of the Basin Plan under the section titled "Exemption Criteria for Controlling Aquatic Invasive Species (AIS) and Other Harmful Species," for requirement to identify a budget. **TASC R9:** Request to limit the number of projects is a reasonable request. This request was presented to the Board at the April and May 2011 meetings. At each meeting the Board expressed opinion that the control measures in the proposed language, and the discretion given the Board, satisfied the Board sufficiently and staff should proceed without limiting the number of projects.

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Tahoe Keys Property Owners Association – Letter 1

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/tk1.pdf

Comments	Response

Tahoe Keys
PROPERTY OWNERS ASSOCIATION

356 Ala Wai Blvd.
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May 4, 2011

Mary Wagner
Dan Sussman
Lahontan Water Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Regarding: The Proposed Amendments to the Water Quality Control Plan for the Lahontan Region, Pesticides Prohibition with exemption criteria.

Dear Lahontan Staff and members of the Lahontan Water Board:

The Tahoe Keys Property Owners Association (TKPOA) is a complex homeowners association of 1,500 homes, 5,000 citizens, and 11 miles of waterways in South Lake Tahoe. We commend the Lahontan Water Control Board and Lahontan Staff for their vision and perseverance in the ongoing challenge of controlling and irradiating invasive aquatic weed species in Lake Tahoe. We support the Lahontan Staff for their well-researched recommendation to the Lahontan Water Control Board allowing exemptions to the prohibition of aquatic herbicides in Lake Tahoe.

As board members, we treasure Lake Tahoe, and see ourselves as the current stewards of this national resource. While we may not agree on many local, regional, and national issues within our own ranks, we are united in our conviction that the use of limited and selective herbicides to control invasive aquatic weeds is not only prudent, but vital and essential at this important point in history. **If the spread of these species is to be controlled and reversed, it must be done now, while it is still possible.**

Current methods of controlling invasive aquatic weed species are successful only in maintaining open channels for navigation, but do not destroy the invasive weed infestations. As harvesters of aquatic weeds at a commitment level unmatched anywhere in Lake Tahoe, Tahoe Keys can attest to the limitations of this and other non-chemical methods. ***The problem is getting worse. It can still be controlled. It can still be eradicated.*** **But we must be granted the tools to do so now.**

TKPOA 1 R1: The proposed amendment will give the Tahoe Keys Property Owners Association (TKPOA) the opportunity to attest to the limitations of non-chemical methods in achieving their goals, describe why and how chemical methods will achieve project goals, and provide an opportunity to apply for exemption to a pesticide prohibition.

Comments	Response
the Keys) will demonstrate that the controlled application of herbicides in the Keys will not adversely impact surface water intakes in other areas of Lake Tahoe. The remoteness of the Keys to the intakes areas and the rapid dispersal of low herbicide concentrations used will assure compliance to the highest standards. Our own Water Quality Committee here at Tahoe Keys, as well as our Board of Directors and upper staff, are actively involved with the Lake Tahoe Aquatic Invasive Species Work Group (LTAISWG) as they seek to explore all viable methods of controlling invasive aquatic weeds and other species in Lake Tahoe and in the Keys. For the next two seasons we will be partnering with this multi-agency body, of which Lahontan Water Control Board is a part, on a planned project in the keys this summer and next to test the effectiveness and feasibility of non-chemical management techniques. This comprehensive research will also include application of a surrogate, non-toxic dye to evaluate the dispersal and efficacy of focused herbicide application. It will also provide a basis for development of a long-term, integrated, aquatic weed management program for the Keys and will provide pertinent information for potential application to use herbicides, once the basin plan amendment is approved. **We urge the Water Board to allow us the tools to contain and, we are confident, eventually eradicate invasive aquatic weeds in Lake Tahoe.** We have heard from concerned and caring citizens that the eradication of invasive weeds is not possible, and that, because it is not possible, the careful use of chemical methods should not be allowed. **We strongly disagree with this contention of surrender and abandonment. Eradication is possible!** But. more importantly, even if absolute eradication was not possible, this should not prohibit the use of this vital and proven tool against the problem. Whether herbicides would or would not completely eradicate the problem, they have been proven time and time again to be the best method for the control of invasive aquatic weeds. The TKPOA has invested vast resources towards controlling weeds in the Keys by the use of weed harvesters. A full summer crew is employed to operate 4 large mechanical weed harvesters which run 8 hours a day and 6 days a week. We can only remove weeds to a depth of 5-feet. After harvesting, the majority of weeds remain to adversely impact beneficial uses, degrade water quality by increasing water temperature and recycling nutrients, providing habitat for non-native warm water fish, and impacting the safety of water contact recreation. Because of these known adverse impacts, it is in the best interest of Lahontan to preserve and improve water quality by allowing the careful, controlled use of all proven methods to control aquatic weeds. **We must be allowed to manage invasive aquatic weeds using all available tools, and we must begin doing so as soon as possible.** Please allow us to employ every reasonable and proven tool available to control the spread of invasive species in Lake Tahoe, and do so while the eradication of these species is still a viable goal.	**TKPOA 1 R2**: It is speculative to state the conclusion of ongoing studies' as forgone. The studies conclusions may show that herbicide treatments can effectively meet both project goals and compliance with control measures. Or, they may prove otherwise. The referenced studies should provide the type of information to inform a project level environmental analysis required when requesting an exemption request under the proposed amendment language. As a note, not all herbicides will, by design, disperse rapidly. Some require extended contact with the plants for effectiveness. **TKPOA 1 R3:** The proposed amendment provides exemption criteria allowing the Water Board discretion to authorize use of aquatic pesticides in certain circumstances. **TKPOA 1 R4:** The TKPOA must meet the proposed Basin Plan Amendment exemption criteria specified in Chapter 4 for continued pesticide applications in a weed abatement program. **TKPOA 1 R5:** The maintenance and protection of all beneficial uses is a goal and mandate of the Water Board. The structure and language of the proposed amendment is designed to protect and maintain all beneficial uses so long as not unreasonable to do so. The information on the inefficiencies and ineffectiveness of current abatement methods referenced in this comment is the type of information the TKPOA would include in a request for exemption when making the case that existing methods are not feasible to meet project goals.

Comments	Response
We thank the Lahontan Board and the Lahontan Staff for their effort and courage in drafting this proposal. We particularly thank Dan Sussman and Mary Wagner for their unprecedented accessibility to our Water Quality Committee, Board, and manager in these past months. Sincerely, J. J. Wolff Joey Wolff, President TKPOA Board of Directors Greg Feet Greg Feet, General Manager Tahoe Keys Property Owners Association	

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Tahoe Keys Property Owners Association – Letter 2

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/tk2.pdf

Comments	Response

Tahoe Keys
PROPERTY OWNERS ASSOCIATION

RECEIVED
MAY 19 2011
By

356 Ala Wai Blvd.
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FAX (530) 541-2521
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Lahontan Basin Plan Amendment – Aquatic Invasive Species

Comments from the Tahoe Keys Property Owners Association

May 2011

The Tahoe Keys Property Owners Association (Association) is comprised of 1529 owner/members. The Tahoe Keys is a master planned community located at the western edge of the City of South Lake Tahoe, about 1 mile north of the junction of state highways 50 and 89. The association or its members privately own all lots and canals.

The Association membership is very involved in, and concerned about the issue of Aquatic Invasive Species (AIS) at Lake Tahoe. About 30 years ago the first non-native weeds were spotted in Lake Tahoe. No one knows for sure where they came from, but it's safe to say that more than one introduction of these weed species has been made to Lake Tahoe, and probably in numerous locations. At least two invasive weed species (Eurasian Milfoil and Curly leaf pondweed) and two invasive fish species (Black Bass & Bluegill) now thrive in many of the harbors and marinas around the lake.

The Association has an annual weed control program that involves cutting and disposing of the weeds that encroach upon the navigation corridors. These techniques do not kill or eliminate these invasive weeds. The history of Milfoil and Curly leaf in North America shows a steady spread from the east to west coasts. The weeds spread from one fresh water body to another in numerous ways. Thousands of lakes and streams are affected.

Aquatic invasive weeds are spreading from the harbors and marinas to near-shore areas throughout Lake Tahoe. It is important that all agencies and organizations combine efforts to control, and where possible, eradicate AIS. Everyone must be vigilant to prevent re-introduction of AIS after infestations are destroyed, including guarding against introduction of AIS like Quagga and Zebra mussels.

The Association endeavors to be a good neighbor and is a partner-member of the Lake Tahoe Aquatic Invasive Species Working Group (WG). The WG is made up of representatives from many agencies, including researchers from UC Davis, University of Nevada-Reno, the Tahoe Regional Planning Agency, the Lahontan Region Water Quality Control Board, US Fish & Wildlife Service, US Forest Service, the Tahoe Resource Conservation District and many other state and local agencies.

The Association and the WG are cooperating in a multi-year study of AIS in the Tahoe Keys waterways. This includes a temperature/turbidity study, removal of non-native fish, and a dye study to track patterns of water movement throughout the canals. Other cooperative work being considered includes a 2-year test of non-chemical weed control techniques such as jute mats and permeable bottom barriers.

The Association commends the efforts by the Lahontan Board to amend the Basin Management Plan to include permitted exemptions that allow carefully planned and monitored used of aquatic herbicides. This is vital to the overall strategy of locating and destroying infestations of invasive weeds.

TKPOA 2 R1: While not requiring a response, we are responding to this to affirm that the data gathered in these projects is the type of information needed to inform an environmental document analyzing alternatives for control of aquatic invasive species in the Tahoe Keys.

Comments	Response
The Association rejects the notion spread by some organizations that established infestations of AIS cannot be controlled or eliminated. We are not ready to abandon this effort to destroy invasive weeds. Every reasonable alternative and solution must been tried and the best alternatives implemented. The Association Board believes that the ultimate strategy to control and eradicate infestations of AIS must provide a wide variety of tools, and include use of aquatic herbicides that have been proven to be effective and safe throughout the United States. The Association supports inclusion of control techniques that are both safe AND economically feasible. Those who say that aquatic herbicides cannot ever be used at Lake Tahoe under any circumstances would doom this natural gem to the impacts AIS have on native fish and plants. If the techniques are limited to non-chemical methods that may be highly expensive, few if any private or public organizations will be able to afford to employ their use. Banning any use of aquatic herbicides also prevents adopting future advances in herbicide design and technology. Aquatic herbicides must be one of the tools that are authorized. Special safe-guard techniques can be employed now and in the future that assure that aquatic herbicides do not have impacts upon open-lake environments here at Lake Tahoe. The Lahontan Basin plan amendment will require strict standards be met by any project proponents, assuring that the herbicides used will not adversely affect the Lake Tahoe environment. Approval of use of herbicides requires that these substances dissipate to an inert undetectable state within specific timeframes. Domestic water supplies will not be affected. The Tahoe Keys, due to its geographic location, physical characteristics and isolation make it possible to use herbicides, in a carefully designed and controlled manner, without affecting the open-lake areas of Lake Tahoe. J. J. Wolff JOEY WOLFF President, Tahoe Keys Property Owners Association	**TKPOA 2 R2:** If pesticides should be implemented, the proposed language in Chapter 4 of the Basin Plan under the section titled “Exemption Criteria for Aquatic Pesticide Use” requires that proponents have adequately researched if there are methods other than pesticides that may be effective, and if using pesticides would be worse than continued existence of the infestation. **TKPOA 2 R3:** Any description of economic feasibility or infeasibility should be included in answering criterion no.1 in Chapter 4, in the section titled “Exemption Criteria for Controlling Aquatic Invasive Species (AIS) and Other Harmful Species.” To satisfy said criterion no. 1, the project proponent must justify why non-chemical methods are not feasible. Please see the change in criterion no. 1 in Chapter 4 of the Basin Plan under the section titled “Exemption Criteria for Controlling Aquatic Invasive Species (AIS) and Other Harmful Species,” which now references the CEQA code section 15364, the definition of "feasible." Note that an herbicide project will require a (possibly extensive) environmental document, the cost of which should be factored into the cost comparison of control methods, as should the costs of conducting a monitoring and mitigation plan. The Water Board, at the May Board meeting directed that the Amendment not preclude the use of aquatic pesticides in Lake Tahoe, rather that discretion to approve such projects remain with the Board. Advances in herbicide design and technology, originated outside of Lake Tahoe, will not be prevented by the Amendment.

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Tom Spencer

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/tspencer.pdf

Comments	Response
Notes for Lahontan Meeting – 4/13/2011 I'm a resident of the City of SLT I've been following the AIS issues for several years. I'm very concerned about what the long-term affects of AIS might be on LT, specifically non-native weeds, mussels and clams. Few cost effective techniques exist for controlling the spread of non-native weed species like milfoil and curly leaf pondweed. We worry that if the control methods are too expensive, the problems of AIS won't be dealt with quickly, if at all. As agency budgets continue to shrink, partnerships will be one way we might be able to fund this work…but only if the partners can afford to be partners. We encourage Lahontan to get a permitting process for use of aquatic herbicides approved as-soon-as-possible so that these weed infestations in the harbors and marinas can be treated effectively…before it's too late. I thank the board for pursuing this effort. Tom Spencer 951-205-8862 POB 13140, SLT, 96151 rangertom@earthlink.net	**TS R1:** The cost effectiveness of some measures has yet to be confirmed. That said, project proponents are required to demonstrate why non-chemical means are ineffective. This may include logistical, technical, or fiscal reasons.

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

Tahoe Water Suppliers Association

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/twsa.pdf

Comments	Response

Tahoe Water Suppliers Association
Protect the Source

TWSA Members:
Cave Rock Water System
Edgewood Water Company
Glenbrook Water Company
Incline Village GID
Kingsbury GID
Lakeside Park Association
North Tahoe PUD
Round Hill GID
Skyland Water Company
South Tahoe PUD
Tahoe City PUD
Zephyr Water Utility

April 27, 2011

Ms. Mary Wagner, Environmental Scientist
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150

Dear Ms. Wagner,

Thank you for all your hard work to choreograph a working group to further research the Tahoe Water Suppliers Association's (TWSA) drinking water concerns into the development of the LRWQCB Basin Plan Amendment, regarding pesticide/herbicide chemical use.

We look forward to working with US EPA, NDEP, CDPH and LRWQCB on determining, if possible, how the proposal of chemical use will affect the filtration exempt status of the 6 TWSA members with that status.

I am assuming the spoken and submitted public comment from the LRWQCB meeting in South Lake Tahoe on April 13, 2011 will be incorporated into the record.

On behalf of the TWSA, we wish to have the following comments included:

The Tahoe Water Suppliers Association (TWSA) consists of public water suppliers in the Lake Tahoe Basin whose source of drinking water is Lake Tahoe. The majority of TWSA members pull water directly from Lake Tahoe to service their customers. The purpose of the TWSA is to protect the quality of the purveyors' drinking water from waterborne contaminants that are potentially harmful to human health. Source water protection is an effective tool in a multi-barrier approach to protecting drinking water.

The Lake Tahoe watershed has benefited from a long history of source water protection, allowing local water purveyors to supply exceptionally high quality drinking water to their customers, with minimal treatment. Several water providers maintain a rarely granted status for a drinking water provider within a watershed open to multiple uses; holding filtration exemption status with the US EPA regarding water treatment requirements.

Comments	Response
2 There are 160,000 public water systems in the United States. There are only 60 filtration exempt water systems in the entire nation. 6 of those 60 - are Tahoe Water Supplier Association members, here at Lake Tahoe. It is exceptionally rare for EPA to grant filtration exemption status to a drinking water provider located in a watershed open to multiple uses, such as Tahoe. Loss of the filtration exemption status would be decimating to area water suppliers. Upgrading their existing facilities to filtration plants would require land expansion not available in the Basin, and at least $10 million dollars per agency in capital expenses. Due to the implications to drinking water supplies posed by chemical use; the TWSA is opposed to adoption of the proposed Basin Plan Amendment. However, the TWSA realizes that the proposed amendment changes are related to the need for revised statutes to address vector control, aquatic invasive species and other water quality concerns within the entire Lahontan region; and that the existing regulations do not allow the LRWQCB to address these needs. Therefore we wish to voice our most pressing concerns: 1) Lake Tahoe is a Tier 3, Outstanding National Resource Water (ONRW). The Tahoe Water Suppliers Association supports the continued prohibition on the use of any chemical agents in Lake Tahoe. If the LRWQCB does not want to grant an ongoing prohibition for Lake Tahoe, at a minimum provide a prohibition for 5 to 10 years at Lake Tahoe. This would allow for Lahontan's project review process to be developed. Through this process, the scientific documentation of selected chemical use affects on drinking water could be vetted in the lower tier water bodies within the Lahontan Board's purview. Regarding the Tier 2 lands in the Tahoe watershed, allow selected chemical use and related waste discharge - only for projects related to public health, vector control and protection of drinking water supply. These projects must be subject to rigorous project review, including water purveyor review, before approval. In the event of an emergency within Lake Tahoe, include language granting the LRWQCB a special exemption category. This category would allow LRWQCB to permit possible chemical use and waste discharge only after strict project review (inclusive of review by a potentially affected water provider) in the case of an emergency situation related only, to: public health, vector control and protection of drinking water supply. 2) Within this proposed Basin Plan Amendment, there is no reference to Lake Tahoe's status as a bi-state regulated water body. It is of great concern to the TWSA members	**TWSA R1:** At its April and May Water Board Meetings, staff specifically asked the Water Board to provide direction on (1) whether Lake Tahoe, as a designated ONRW, should be explicitly excluded from exemption eligibility, (2) if exemption eligibility for projects within the Lake Tahoe Basin should be delayed until after staff and the Board have had time to examine the efficacy of our proposed regulatory approach and the control measures once they are in practice elsewhere in the Lahontan Region, and (3) if exemption eligibility for projects in Lake Tahoe should be limited to emergency situations only. The Water Board indicated that staff should retain the language as written, since it provides the Water Board discretion to consider projects for all waterbodies in our region for circumstances including those proposed for the protection of public health and safety and ecological integrity. On a project-by-project basis the Water Board will use its discretion to consider, grant, or reject an exemption request. See also **LTSLT R2.** Water Board staff agree that water purveyors should be involved when aquatic pesticide discharges have the potential to impact water supplies. To meet the needs of the water purveyors and to provide more protection for all surface water drinking intakes, we have added new and/or modified language to Chapter 4 of the Basin Plan under the section titled "Exemption Criteria for Aquatic Pesticide Use. These language edits are based on (1) comments from NDEP, CDPH, and TWSA during our May 9, 2011 meeting, (2) written comments submitted by NDEP, CDPH, and TWSA, and (3) direction provided by the Water Board. For projects proposed in the Lake Tahoe Basin, the newly added language requires a project proponent to consult with potentially affected water purveyors prior to submitting the exemption request to the Water Board. The project proponent must supply the Water Board with a written response from the water purveyor(s) indicating (1) request for project modification (e.g., project design, monitoring, and or mitigation measures), or (2) consent with the project with no continued involvement. See also **NDEP-Drinking Water R2** and **NDEP-Drinking Water R7**.

Comments	Response

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There are only 60 filtration exempt water systems in the entire nation.
6 of those 60 - are Tahoe Water Supplier Association members, here at Lake Tahoe.
It is exceptionally rare for EPA to grant filtration exemption status to a drinking water provider located in a watershed open to multiple uses, such as Tahoe.

Loss of the filtration exemption status would be decimating to area water suppliers. Upgrading their existing facilities to filtration plants would require land expansion not available in the Basin, and at least $10 million dollars per agency in capital expenses.

Due to the implications to drinking water supplies posed by chemical use; the TWSA is opposed to adoption of the proposed Basin Plan Amendment.

However, the TWSA realizes that the proposed amendment changes are related to the need for revised statutes to address vector control, aquatic invasive species and other water quality concerns within the entire Lahontan region; and that the existing regulations do not allow the LRWQCB to address these needs.

Therefore we wish to voice our most pressing concerns:

1) Lake Tahoe is a Tier 3, Outstanding National Resource Water (ONRW). The Tahoe Water Suppliers Association supports the continued prohibition on the use of any chemical agents in Lake Tahoe. If the LRWQCB does not want to grant an ongoing prohibition for Lake Tahoe, at a minimum provide a prohibition for 5 to 10 years at Lake Tahoe. This would allow for Lahontan's project review process to be developed. Through this process, the scientific documentation of selected chemical use affects on drinking water could be vetted in the lower tier water bodies within the Lahontan Board's purview.

   Regarding the Tier 2 lands in the Tahoe watershed, allow selected chemical use and related waste discharge - only for projects related to public health, vector control and protection of drinking water supply. These projects must be subject to rigorous project review, including water purveyor review, before approval.

   In the event of an emergency within Lake Tahoe, include language granting the LRWQCB a special exemption category. This category would allow LRWQCB to permit possible chemical use and waste discharge only after strict project review (inclusive of review by a potentially affected water provider) in the case of an emergency situation related only, to: public health, vector control and protection of drinking water supply.

2) Within this proposed Basin Plan Amendment, there is no reference to Lake Tahoe's status as a bi-state regulated water body. It is of great concern to the TWSA members

TWSA R2: On April 8, 2011 Water Board staff met with TWSA regarding the proposed Basin Plan Amendment. At that meeting, TWSA recommended we engage staff from the Nevada Division of Environmental Protection (NDEP) – Bureau of Safe Drinking Water. Water Board staff began discussions regarding the Basin Plan Amendment with staff from NDEP's Bureau of Safe Drinking Water and Bureau of Water Pollution Control in April 2011 during the public review period for the Basin Plan Amendment. To actively involve NDEP, additional language has been added to the proposed Basin Plan Amendment which provides NDEP the ability to review proposals when projects affect interstate waters that exist within, or flow, to the State of Nevada. See also **NDEP - Drinking Water R1.**

Comments	Response
 that the Nevada Department of Environmental Protection has not been formally involved or is even referenced in the development of this document. 3) All consideration of potential water quality impacts has been limited to the residents of the State of California. The Nevada Lake Tahoe area, the Truckee River Corridor and the final outlet at Pyramid Lake all have the potential to be affected by proposed projects at Lake Tahoe within California. *(Page 15) This degradation* of water quality may be allowed only if the Water Board finds that some degradation is in the best interest to people of the State, and that the lowering of water quality will not unreasonably affect the designated beneficial uses. Similarly, the federal Antidegradation Policy (40 CFR 131.12) requires that water quality be preserved unless degradation is necessary to accommodate important economic or social development.* 4) The EPA definition of 'long term' is not defined. Any proposed project which has the potential to impact drinking water quality for even a short period of time may have the potential to affect the filtration exemption status and consumer confidence of an affected water purveyor. (Page 21) *EPA guidance has not defined temporary and short-term specifically, but views these terms as limiting water quality degradation for weeks or months, not years.* 5) Mitigation Measures and Water Supplier Purview need clarification. The TWSA has developed in cooperation with the US Army Corp of Engineers, a Risk Assessment Model which can be used to evaluate potential impacts to the drinking water supply of purveyors in certain areas of Lake Tahoe. This model may be used to evaluate potential impacts from a proposed project. Due to storage limitations, any project having impacts longer than 1 day could create major service issues for surface water providers, and undermine consumer confidence in the quality of the municipal water supply. How much water would be provided per customer and for how long? The volume of water needed for this mitigation measure need to be realistically evaluated. Many providers service thousands of customers. Using an alternative source of water during a project as a sufficient mitigation for the systems at Lake Tahoe, may not be realistic. How will the permitting process delineate the geographic area of an "affected water purveyor?" How will the purview of the water provider be upheld? What happens if a water provider does not agree to proposed mitigation measures? *(Page 52) In these pesticide projects, the proposed amendment's exemption criteria require that project proponents coordinate with potentially affected water purveyors and provide potable drinking water where necessary. That coordination should reduce the potential impact to water supplies, but the*	Refer to **TSWA R2** on previous page. **TWSA R3:** Refer to **NDEP - Drinking Water R2, NDEP - Drinking Water R4,** and **NDEP-Drinking Water R10** which require consideration of impacts to residents of the State of Nevada if so affected by the aquatic pesticide discharge. Additional requirements also require notification to downstream agricultural users, which may include Nevada entities. **TWSA R4:** The Basin Plan Amendment does not provide the EPA definition of long-term because the Water Quality Handbook does not give an exact definition of long-term as it relates to an acceptable period of time in which water quality may be degraded. EPA recognizes the difficulty in distinguishing the time period assigned to short-term and long-term degradation given the variety of activities that might be proposed by a discharger (e.g., construction of a facility, increased discharge from a waste water treatment plant, vector control, etc.) Some activities, such as aquatic pesticide treatments, especially those that use slow-release chemicals, may require a longer period of temporary degradation to achieve the long-term benefit of the project.

Comments	Response
3 that the Nevada Department of Environmental Protection has not been formally involved or is even referenced in the development of this document. 3) All consideration of potential water quality impacts has been limited to the residents of the State of California. The Nevada Lake Tahoe area, the Truckee River Corridor and the final outlet at Pyramid Lake all have the potential to be affected by proposed projects at Lake Tahoe within California. *(Page 15) This degradation* of water quality may be allowed only if the Water Board finds that some degradation is in the best interest to people of the State, and that the lowering of water quality will not unreasonably affect the designated beneficial uses. Similarly, the federal Antidegradation Policy (40 CFR 131.12) requires that water quality be preserved unless degradation is necessary to accommodate important economic or social development.* 4) The EPA definition of 'long term' is not defined. Any proposed project which has the potential to impact drinking water quality for even a short period of time may have the potential to affect the filtration exemption status and consumer confidence of an affected water purveyor. (Page 21) *EPA guidance has not defined temporary and short-term specifically, but views these terms as limiting water quality degradation for weeks or months, not years.* 5) Mitigation Measures and Water Supplier Purview need clarification. The TWSA has developed in cooperation with the US Army Corp of Engineers, a Risk Assessment Model which can be used to evaluate potential impacts to the drinking water supply of purveyors in certain areas of Lake Tahoe. This model may be used to evaluate potential impacts from a proposed project. Due to storage limitations, any project having impacts longer than 1 day could create major service issues for surface water providers, and undermine consumer confidence in the quality of the municipal water supply. How much water would be provided per customer and for how long? The volume of water needed for this mitigation measure need to be realistically evaluated. Many providers service thousands of customers. Using an alternative source of water during a project as a sufficient mitigation for the systems at Lake Tahoe, may not be realistic. How will the permitting process delineate the geographic area of an "affected water purveyor?" How will the purview of the water provider be upheld? What happens if a water provider does not agree to proposed mitigation measures? *(Page 52) In these pesticide projects, the proposed amendment's exemption criteria require that project proponents coordinate with potentially affected water purveyors and provide potable drinking water where necessary. That coordination should reduce the potential impact to water supplies, but the*	**TWSA R5:** Water Board staff acknowledges that aquatic pesticide discharges may impact surface water drinking intakes. To minimize any impacts the Basin Plan Amendment has incorporated language that requires the project proponent to engage any affected water purveyors so they may provide an initial review of the proposed discharge and consent to the project as proposed or request continued involvement in project development for purposes of reducing impacts to the drinking water supply. See also **NDEP-Drinking Water R9** for guidance on delineating the geographic area of an affected water provider. This language has been incorporated in Chapter 4 of the Basin Plan in the section titled "Exemption Criteria for Aquatic Pesticide Use."

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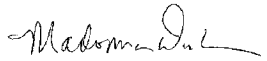
agreement reached by the coordinating parties is the purview of the water suppliers [CCR Section 15091(a)(2)].

(Page 21) If a pesticide application project is proposed in an ONRW, like Lake Tahoe, the project must satisfy all applicable project criteria, which include compliance with water quality objectives specific to the affected waterbody and receiving water limitations. Permits that are issued to regulate the aquatic pesticide discharges will incorporate numeric receiving water limitations where State or US EPA-based water quality objectives or criteria are available. Additionally, the exemption criteria require implementation of control measures to limit the spatial extent and the temporal impact of the discharge. Compliance with these limitations assures that water quality is sufficient to support beneficial uses.

Respectfully submitted on behalf of the TWSA Board,



Madonna Dunbar, *Executive Director*, Tahoe Water Suppliers Association

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Comments	Response

Reference: excerpted sections of concern:

Page 15: "Receiving waters" are defined in the permits as anywhere outside the treatment area at anytime and anywhere inside the treatment area after project completion. The Statewide Aquatic Pesticide permits do not require the duration of the treatment event to be discretely outlined in the permits, but the temporal extent of the pesticide application is intended to be short-term. The Statewide General Aquatic Pesticide Permits require post-treatment sampling of water to begin not more than a week from the time of aquatic pesticide application (or after project completion as determined by the Discharger, and accepted by the Water Board, for larvicides). The goal of the post treatment monitoring is to determine compliance with the receiving water limitations which indicates whether water quality is sufficient to maintain beneficial uses. (Any individual or general NPDES permits or WDR issued by the Water Board will contain monitoring requirements that specify the discharger begin post-treatment sampling no more than a week after the aquatic pesticide application or after project completion as determined by the Discharger, and accepted by the Water Board, for larvicides).

Lake Tahoe is recognized as an Outstanding National Water Body, the designation of which places it in Tier 3 protection category within the proposed Basin Plan Amendment. This tier placement resulted in the following language on page 21:
(Page 21) Tier Three - New or increased discharges to waters designated as Outstanding National Resource Waters (ONRWs) that would result in lower water quality in the ONRW are prohibited. The only exception to this prohibition, as discussed in the preamble to the Water Quality Standards Regulation, is for activities that result in short-term and temporary changes in the water quality of the ONRW. EPA guidance has not defined temporary and short-term specifically, but views these terms as limiting water quality degradation for weeks or months, not years. The intent is to limit degradation to the shortest possible time.

Discussion. Under the federal antidegradation policy [40 CFR 131.12 (a)(3)], ONRWs are provided the highest level of protection. The regulation requires that water quality be maintained and protected, though States are given flexibility to permit limited activities that temporarily lower the ONRW's existing high quality water. Such activities must not permanently degrade water quality or result in water quality lower than that necessary to protect the existing uses in the ONRW. Additionally, all practical means of minimizing water quality degradation shall be implemented so any lowering of water quality is limited to the shortest time feasible. In the Lahontan region, Lake Tahoe and Mono Lake are designated as ONRWs. As noted in the Tier One discussion, the use of aquatic pesticides for resource protection and pest management will be allowed only if the conditions of the exemption criteria are met. These conditions spell out the requirements and steps needed to ensure that lowering of water quality is limited to the shortest time feasible. If a pesticide application project is proposed in an ONRW, like Lake Tahoe, the project must satisfy all applicable project criteria, which include compliance with water quality objectives specific to the affected waterbody and receiving water limitations. Permits that are issued to regulate the aquatic pesticide discharges will incorporate numeric receiving water limitations where State or USEPA-based water quality objectives or criteria are available. Additionally, the exemption criteria require implementation of control measures to limit the spatial extent and the temporal impact of the discharge. Compliance with these limitations assures that water quality is sufficient to support beneficial uses. We believe the antidegradation discussions provided above justify any lowering of water quality consistent with Tiers One, Two, and Three of the test.

Page 38:
a) Application of aquatic pesticides by definition involves a discharge of chemicals into surface waters, including pesticide active ingredients and non-active "inert" ingredients such as emulsifiers and dispersants that may be present in the pesticide formulation. The use of aquatic pesticides may result in the temporary violation of water quality standards, including toxicity, and may temporarily impact beneficial uses, such as Cold Freshwater Habitat (COLD), Water Contact Recreation (REC-1), and Municipal and Domestic Supply (MUN). If not removed following herbicide treatments, dead plant

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material can affect water quality by lowering dissolved oxygen levels. Different pesticide products vary in their respective persistence, toxicity, and environmental fate. The Basin Plan amendment may allow temporary exceedence of narrative and numeric water quality objectives for projects given an exemption to the prohibition on aquatic pesticides.

Individual aquatic pesticide projects will be subject to environmental documentation and review requirements, and evaluation under the proposed Basin Plan amendments, on an individual project (or programmatic) basis. For water quality impacts, this review and evaluation must take into account persistence in waters and sediments, toxicity to humans and other organisms, and environmental fate including the potential for bioaccumulation. The criteria for evaluating projects under the proposed Basin Plan amendments stipulate aquatic pesticide applications cause no long-term impairment of beneficial uses. The criteria require that alternatives to pesticide use must be thoroughly evaluated and implemented when feasible. The criteria also require that the lowest possible effective pesticide concentration be used, that the smallest practicable area be treated, that a monitoring plan accepted by the Water Board be followed, and that BMPs be identified and implemented as appropriate to minimize water quality impacts. Even with these requirements, the temporary violation of water quality objectives cannot necessarily be avoided in each and every project.

Page 45:
c) The proposed action has the potential to result in environmental effects that may adversely affect human beings, either directly or indirectly. Pesticide projects allowed under this amendment may cause a temporary water supply loss when source waters are affected by pesticide application. Project proponents are required to coordinate with potentially affected water purveyors and provide potable drinking water where necessary.

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7 *Page 52:* *MANDATORY FINDINGS OF SIGNIFICANCE – ENVIRONMENTAL EFFECTS THAT WILL CAUSE SUBSTANTIAL ADVERSE EFFECTS ON HUMAN BEINGS, EITHER DIRECTLY OR INDIRECTLY The Water Board finds that the proposed action may indirectly result in substantial adverse effects on humans. The potential impacts to humans are indirect. Pesticide projects allowed under this amendment may cause a temporary water supply loss when source waters are treated, either to control an infestation of invasive species, harmful algal blooms, biofouling of a water intake system, or another circumstance. Without the pesticide treatment, the effects of the target species may prove worse than the temporary effects of pesticide use. In these pesticide projects, the proposed amendment's exemption criteria require that project proponents coordinate with potentially affected water purveyors and provide potable drinking water where necessary. That coordination should reduce the potential impact to water supplies, but the agreement reached by the coordinating parties is the purview of the water suppliers [CCR Section 15091(a)(2)].*	

Response to Comments – September 30, 2011

Basin Plan Amendment - Pesticide Prohibition & Exemption Criteria

(Comment deadline 5 p.m., May 13, 2011)

United States Fish and Wildlife Service

http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/comments051311/usfws.pdf

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MAY 16 2011

United States Department of the Interior
Pacific Southwest Region
FISH AND WILDLIFE SERVICE
Nevada Fish and Wildlife Office
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Reno, Nevada 89502
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May 12, 2011
File No. 84320-2011-CPA-0085

Ms. Mary Wagner
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, California 96150

Dear Ms. Wagner:

Subject: Comments on Proposed Amendments to the Water Quality Control Plan for the Lahontan Region: Pesticide Prohibition with Exemption Criteria

This letter transmits comments on the proposed amendments to the Water Quality Control Plan for the Lahontan Region (Plan) from the U.S. Fish and Wildlife Service's (Service) Nevada Fish and Wildlife Office. Our comments are based on information provided in a scoping letter dated March 21, 2011, and on the Lahontan Region's Water Quality Control Board's (Control Board) internet home page (http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/index.shtml). It is our understanding that the Staff Report completed by the Control Board functions as Substitute Environmental Documentation and fulfills the Control Board's obligations under the California Environmental Quality Act.

The Service supports the proposed amendments, including, but not limited to: the minor revisions to chapters in the Plan, removing the existing species composition objectives for rotenone projects, altering the project proponent monitoring and mitigation requirements, and deleting language regarding future actions for hatcheries. The Service agrees that these changes are likely to result in increased compliance by pesticide applicators with the Plan. In addition, these proposed amendment changes will assist collaborative efforts to implement the Aquatic Invasive Species Management Plan for Lake Tahoe and to minimize the deleterious effects of nuisance and aquatic invasive species (AIS) in the Lake Tahoe region. Changes to the Lake Tahoe region's economy, pristine water quality, aesthetic value, and recreational pursuits are occurring partly due to the harmful impacts invasive plants, fish, and invertebrates have had on

TAKE PRIDE IN AMERICA

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Mary Wagner File No. 84320-2011-CPA-0085 environmental quality. Lake Tahoe is threatened by new AIS introductions and the expansion of existing AIS populations and may be a source of AIS to other adjacent water bodies. The proposed amendment changes will facilitate a rapid response to an emergency AIS situation in Lake Tahoe and elsewhere in the Lahontan Region. In an amendment approach such as the one proposed, it is critical that the potential spatial and temporal effects be adequately addressed since such effects may not be apparent in the subsequent environmental assessment of individual projects. The importance of these considerations is mentioned in the Staff Report (p. 7); however, only in regards to the "maximum benefit of the people of the State", meaning the people of California. Coordination with the Control Board's counterpart(s) in Nevada (e.g., Nevada Division of Environmental Protection) is also necessary since large portions of the watersheds overseen by the Control Board cross the state line. If you have any questions or require any additional information, please contact me or Kerensa King (Environmental Contaminant Specialist) at (775) 861-6300. Sincerely, for Jenny A. Ericson Acting State Supervisor cc: Field Supervisor, Sacramento Fish and Wildlife Office, Sacramento, California 2	**USFWS-R1:** This assertion is incorrect. Each project that comes for an exemption request must address the temporal and spatial effects of that project as part of the exemption criteria to limit these effects. **USFWS-R2**: Refer to **NDEP- Drinking Water R1.**