The following changes pertain to replacing the Water Quality Objective for pesticides with a Waste Discharge Prohibition on pesticides in water coupled with exemption criteria. Additionally, specific sections of the Basin Plan pertaining to pesticides and rotenone, which are affected by the new prohibition language, will be edited and/or relocated as needed. These associated edits can be found in: Chapter 3, pp. 3-2. 3-3, 3-5, 3-10; Chapter 4, pp. 4.1-1, 4.1-2, 4.9-21, 4.9-22, 4.9-23, 4.9-24, 4.9-25, 4.9-27, 4.10-5; and Chapter 5, pp. 5.1-7, 5.1-8, 5.1-10., 5.2, 5.16-2.

Deletions to language are shown in strike-out and additions are in underline. Instructions regarding edits and page number locations are shown in 12 point Times New Roman Font in bold type.

The existing water quality objective for pesticides is listed in Chapter 3, page 3-5 and Chapter 5, pages 5.1-7 and 5.1-8.

All water quality objectives for pesticides will be struck.

~~**Pesticides**~~
~~For the purposes of this Basin Plan, pesticides are defined to include insecticides, herbicides, rodenticides, fungicides, piscicides and all other economic poisons. An economic poison is any substance intended to prevent, repel, destroy, or mitigate the damage from insects, rodents, predatory animals, bacteria, fungi or weeds capable of infesting or harming vegetation, humans, or animals (CA Agriculture Code, 12753).~~

~~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.~~

~~Waters designated as MUN shall not contain concentrations of pesticides or herbicides in excess of the limiting concentrations specified in Table 64444-A of Section 64444 (Organic Chemicals) of Title 22 of the California Code of Regulations which is incorporated by reference into this plan. This incorporation by reference is prospective including future changes to the incorporated provisions as the changes take effect.~~

The proposed amendment would insert the following language in Chapter 4.1 (p. 4.1-1) of the Basin Plan, immediately preceding "Regionwide Prohibitions":

For regionwide prohibitions, where a decision is tasked to the Regional Board, the term "Regional Board" includes the Executive Officer where the Regional Board delegates such authority.

The proposed amendment would insert the following language in Section 4.1 of Chapter 4 (p. 4.1-1) of the Basin Plan, immediately following Regionwide Prohibition No. 5, and in Section 5.2, Lake Tahoe Basin, "Waste Discharge Prohibitions, Regionwide Prohibitions" immediately after Waste Discharge Prohibition No. 4:

To be numbered as 6 in Section 4.1;
To be numbered as 5 in Section 5.2:

6. The discharge of pesticides to surface or ground waters is prohibited.[1]

The following language should be inserted directly following the newly proposed prohibition language (Regionwide Prohibition no. 6) listed in Section 4.1

Exemptions to this prohibition may be allowed subject to the criteria below detailed in the section titled "Exemption Criteria for Aquatic Pesticide Use."

For purposes of the Basin Plan, pesticides are defined in Food and Agriculture Code section 12753 to include any spray adjuvant or any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in Section 12754.5, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever.

As defined in section 12754.5 of the Food and Agriculture Code, a pest is any of the following that is, or is liable to become, dangerous or detrimental to the agricultural or nonagricultural environment of the state:
(a) Any insect, predatory animal, rodent, nematode, or weed.
(b) Any form of terrestrial, aquatic, or aerial plant or animal, virus, fungus, bacteria, or other microorganism (except viruses, fungi, bacteria, or other microorganisms on or in living man or other living animals).
(c) Anything that the director of the Department of Food and Agriculture, by regulation, declares to be a pest.

"Aquatic pesticides" are pesticides registered by the California Department of Pesticide Regulation (DPR) and formulated for use in water to control aquatic animal or plant pests. An aquatic pesticide is any substance (including biological agents) applied in, on, or over the waters of the State or in such a way as to enter those waters for the purpose of inhibiting the growth or controlling the existence of any plant or animal in those waters.

Aquatic pesticides, for purposes of this Regionwide Prohibition, also include adulticides which are applied by spraying, either by ground or aerial application, at, over, or near water to control adult mosquitoes. During adulticide applications, a portion of the pesticide will unavoidably be deposited to surface waters in order to effectively target the adult mosquitoes.

[1] Compliance with this prohibition 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. Therefore, proper application of terrestrial pesticides directly to plants or animals located in a surface water (as defined by the Water Code) under dry conditions or directly to land adjacent to a surface water should not (1) result in a violation of the prohibition, (2) require the project proponent to submit an exemption request to the Regional Board, nor (3) require the Regional Board to consider exemptions to the prohibition.

Dry condition example: The application of terrestrial pesticides to the dry stream beds of ephemeral streams would not require a prohibition exemption since this situation involves pesticide application under a dry condition (i.e., no liquid water is present in the ephemeral stream).

Adjacent to surface water example: The application of terrestrial pesticides along a canal to kill weeds and help maintain structural stability would not require a prohibition exemption since this situation involves pesticide application to land, not liquid water.

The following language should be inserted in Section 4.1 of Chapter 4 in a new paragraph directly following the newly proposed prohibition language (Regionwide Prohibition no. 6) in the section titled "Regionwide Prohibitions" and immediately before the section titled "Exemption Criteria for Restoration Projects."

Exemption Criteria for Aquatic Pesticide Use

Purpose and Need for Exemption

The Regional Board recognizes that certain activities involving the application of pesticides (defined above) may be in the public interest because they protect public health and safety or provide ecological preservation. Under some circumstances the Regional Board may grant an exemption to the prohibition and allow a direct application of pesticides to water. This exempted action will constitute a discharge of pollutants into waters of the United States or waters of the State and require coverage under an appropriate permit.

Circumstances eligible for a prohibition exemption involve the use of aquatic pesticides for purposes of vector control, fisheries management, and control of aquatic invasive species or other harmful organisms under emergency or non-emergency situations (e.g., control of harmful cyanobacteria blooms affecting a drinking water supply, control of aquatic invasive species interfering with safe navigation).

If an exemption to the prohibition is granted, waters of exceptional quality within the treatment area[2] may be temporarily degraded due to the application of aquatic pesticides.

Pursuant to the State Board's "Statement of Policy with Respect to Maintaining High Quality of Waters in California" (Resolution No. 68-16), any degradation of high quality water is only permissible if the Regional Board finds that such a lowering of the existing water quality will be consistent with the maximum benefit to people of the State. 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. Additionally, it requires that water quality be adequate to protect existing uses fully.

The prohibition exemption criteria require that degradation of existing high water quality is limited to the shortest possible time and confined to the smallest area necessary for project success. The spatial extent of the treatment area and the duration of the treatment event will vary from project to project and will be proposed by the project proponent and accepted or modified by the Regional Board and specified in the final project plans, exemption conditions, and appropriate permit.

The project proponent shall work with Water Board staff to propose numeric limits for each aquatic pesticide project, which will be incorporated as exemption conditions in the Water Board's resolution granting the prohibition exemption and/ or requirements of the appropriate permit. Permit requirements and/or conditions of the exemption may include, but not be limited to, discharge limits for application rates, receiving water limitations for pesticide residue levels, limits on the temporal and spatial extent (areal and depth) of the treatment area, and recovery time expectations and biotic metrics to assess restoration of affected non-target species.

These project specific requirements issued by the Water Board will ensure project design and implementation will not unreasonably affect beneficial uses. The Water Board will evaluate the exemption request and determine if it satisfies exemption criteria that require project plans to incorporate best management practices to limit adverse impacts to the shortest time possible while achieving project success.

[2] The treatment area is the area being targeted to receive lethal doses of aquatic pesticides to control a specific pest. Within the treatment area, a spatial zone of impact exists in which water quality and beneficial uses are temporarily not protected.

To verify compliance with water quality objectives and discharge requirements, project proponents will implement compliance monitoring. Monitoring will commence no more than one week after the application event[3]. The time frame in which a project must achieve compliance with water quality objectives with the exception of the biocriteria objectives[4], will vary by project depending on the type of pesticide proposed, site specific conditions, and temporal extent of treatment event. Reasonable compliance times will be assigned based on the duration of the treatment event and will be included in the Water Board's resolution to grant exemption. 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). For fast-acting pesticides it may be possible to achieve compliance with water quality objectives within a week of the application event. Fast-acting pesticides degrade quickly, usually within a week of application, and so are applied at high concentrations to be effective before degrading. Slower acting pesticides are effective at lower concentrations less toxic to non-target species, but degrade more slowly and require a longer treatment event before complying with water quality objectives.

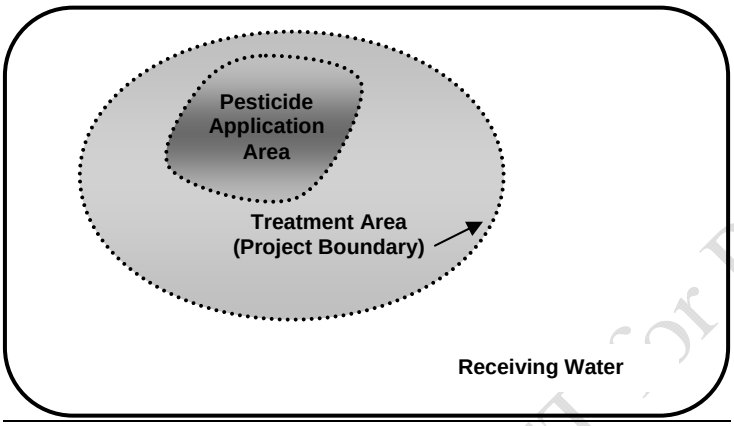

Figure 1.

The receiving water is defined as water outside of the treatment area. Outside the treatment area, compliance with water quality objectives is required within the receiving water at all times during and after the treatment event (Figure 1). During aquatic pesticide applications, an intentional lethal concentration of chemical is applied to water to control pests. The addition of the chemical results in a lowering of existing water quality. For effective treatment, a spatial and temporal zone of impact[5] corresponding to the treatment area is required, and the Regional Board acknowledges that existing uses and the level of water quality necessary to maintain those uses will not be protected within this zone during the treatment event[6].

If an aquatic pesticide project is allowed to occur, the Regional Board must find that the discharge complies with the antidegradation policies, and water quality objectives are restored within the treatment area, within the shortest time reasonably possible after the application event, and within the receiving water during and after the treatment event.

[3] The application event is the time that the pesticide is directly introduced into the treatment area, and not the length of time that the introduced pesticide releases active or inert ingredients into the environment.
[4] Biocriteria objectives include species composition, non-degradation of aquatic communities, and any future biocriteria objectives adopted by the State or Regional Board.
[5] The Zone of Impact is a spatial and temporal zone that exists during, and is targeted by, aquatic pesticide treatments in which existing uses and the level of water quality necessary to maintain those uses will not be protected. The Zone of Impact ceases to exist once the treatment event is completed.
[6] The treatment event is the period during which the aquatic application is actively killing or controlling the target pest within the treatment area. It starts upon initiation of the application event and proceeds until the concentration of the aquatic pesticide is below that which can kill the target pest. During the treatment event, a spatial and temporal zone of impact exists in which water quality and beneficial uses are temporarily not protected.

The Regional Board acknowledges that water quality degradation may occur outside of the treatment area if pesticide residues escape the treatment area. While the presence of these residues may temporarily degrade the existing high water quality, the impact is not expected, nor will it be allowed, to violate water quality objectives that are established at levels protective of beneficial uses. Any water quality degradation within the receiving water is expected to be temporary, since pesticide residues escaping the treatment area breakdown through degradation mechanisms (volitalization, photolysis, etc.) and is not expected to persist beyond hours or days. Appropriate protection measures (application methods, compliance with pesticide label instructions, implementation of best management practices (BMPs)) shall be implemented during the project to ensure that any lowering of water quality is limited to the shortest possible time.

The Regional Board limits pesticide applications subject to the exemption to those conducted for purposes that serve the public interest (e.g., to restore natural resources or protect public health and safety or beneficial uses). State and federal regulations including the (1) Endangered Species Act, (2) Health and Safety Code, (3) Safe Drinking Water Act, and (4) Nonindigenous Aquatic Nuisance Prevention and Control Act compel state and federal agencies and public entities to (a) restore and preserve threatened and endangered species, (b) protect public health from disease-carrying vectors, (c) protect municipal drinking supplies, and (d) prevent damage to valuable aquatic habitats by controlling the spread of aquatic invasive species. Accomplishing these tasks effectively may require treating surface waters with aquatic pesticides.

Discharges of pesticide concentrations needed for effective resource management may cause waters to temporarily exceed established narrative or numeric water quality objectives (e.g., color, chemical constituents, toxicity, species composition). When an exemption to the prohibition on pesticide use in water is granted, a short-term or seasonal exemption to the prohibition on violating narrative or numeric water quality objectives may also be granted for specific water quality objectives. A longer-term exemption to the species composition objective may be granted on a project-by-project basis.

Provided aquatic pesticides are applied under the circumstances listed below, projects subject to this exemption will be considered consistent with the state antidegradation policy incorporated into this Basin Plan because such projects provide the maximum benefit to people of the State and are necessary to accommodate important economic or social development. Additionally, any degradation of water quality associated with the proposed aquatic pesticide use would only be temporary in nature and protective of beneficial uses provided the project complies with the exemption criteria specified below.

Findings Necessary to Grant Exemption

An exemption to the waste discharge prohibition for aquatic pesticide use may be granted by the Regional Board if all the following findings are made:

(a) The project is an eligible circumstance as described below.

(b) The project satisfies all the applicable exemption criteria.

Granting an exemption is at the discretion of the Regional Board. The Regional Board may deny an exemption request even though the project meets all the necessary project conditions and criteria. For example, this may occur as the Regional Board is considering the tradeoffs between use of pesticides and the actual and/or potential environmental impacts of an invasive species infestation. For instance, when considering a repeated application of an herbicide to address an infestation of aquatic invasive vegetation, the Regional Board may determine that it would be less harmful to let the infestation continue than to repeatedly apply pesticides.

Circumstances Eligible for Prohibition Exemption

Requests for exemption to this prohibition will be considered for the following circumstances:

Vector Control

Prohibition exemptions will be considered for the purposes of "Vector Control" where the proposed project is conducted to protect public health by eliminating pests with the direct application of larvicides to surface waters or aerial spraying of adulticides that have the potential to drift to surface waters.

Government agencies (e.g., local and county vector control districts) that apply aquatic pesticides for vector control to protect public health, must be a signatory to a Cooperative Agreement with the California Department of Public Health (DPH) pursuant to Section 116180 of the Health and Safety Code. (There are situations where vector control agencies contract their applications to private applicators. For these scenarios, the private applicators must be covered under the terms of the Cooperative Agreement and work under the authority and guidance of the vector control district.)

Individuals applying larvicides or adulticides must be either (1) a government agency employee (or authorized contractor) certified by DPH as a public health pesticide applicator or (2) a private applicator protecting public health on private lands who can provide documentation that he or she is licensed or certified, if required, by the County Agricultural Commissioner (CAC), or Director of DPR when there is no CAC.

Fisheries Management

Prohibition exemptions will be considered for "Fisheries Management" if the project proponent is the California Department of Fish and Game (DFG) or United States Fish and Wildlife Service (USFWS).

Aquatic pesticide applications implemented by the USFWS and the DFG for Fisheries Management may be considered for an exemption if the pesticide use is proposed to (1) restore and protect of threatened or endangered species, (2) control of fish diseases where the failure to treat could result in significant damage to fisheries resources or aquatic habitat, or (3) elimination of species (as defined in CA Fish and Game Code § 2118), where competition or predation from such species threatens native fish populations, or populations of other organisms (includes rare, unique, sensitive, or candidates for listing as endangered or threatened species).

The Regional Board may, on a project-by-project basis, grant an exemption for the use of fish toxicants in other kinds of fisheries management activities, when the DFG or the USFWS can provide the necessary justification for allowing a temporary lowering of water quality consistent with the provisions of the federal Antidegradation Policy (contained in 40 CFR § 131.12) and State Board Resolution No. 68-16.

Controlling Aquatic Invasive Species (AIS) or Other Harmful Species

Prohibition exemptions will be considered for "Controlling AIS or Other Harmful Species" if the use of aquatic pesticides is to protect public health and safety, the environment, or for other situations described below. Projects proposed for these circumstances will have different criteria depending on whether the projects are considered as emergency, time sensitive, or projects that are neither emergencies nor time sensitive.

Emergency Projects. Emergency Projects are those undertaken in response to an emergency as set forth in Public Resource Code section 21060.3; 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.

Time Sensitive Projects. For Time Sensitive Projects proposed for purposes of AIS control, the project proponent must demonstrate that the decision to apply aquatic pesticides is in compliance with an adopted Aquatic Invasive Species Management Plan. The AIS of concern must be affecting a water body where that species is not already established. The AIS must be recognized as a species of concern by the Aquatic Nuisance Species Task Force, listed as a Restricted Animal in California Administrative Code Title 14, section 671, listed as an Injurious Wildlife Species in the Lacey Act (50 CFR 16.11-16.15), addressed in the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990, listed as a Noxious Weed Species in either Title 3, Section 4500 of the California Department of Food and Agriculture, Federal Noxious Weed Act. P.L. 93-629, or is a dreissenid mussel as addressed in section 2301 of the Fish and Game code. The project proponent must be a state or federal agency with the legal authority to control aquatic invasive species as identified in the January 2008 (as amended) California Aquatic Invasive Species Management Plan, Appendices B and C.

For Time Sensitive Projects not involving AIS that are proposed to protect drinking water supplies, water distribution system, and flood control channels, the project proponent must be (1) the public agency mandated to protect such facilities, or (2) a private entity (e.g., a homeowners association, private water utility) that has control over the financing for, or the decision to perform, aquatic pesticide applications.

Projects That Are Neither Emergencies Nor Time Sensitive
For non-Emergency and non-Time Sensitive projects proposed for purposes of AIS control, the project proponent must demonstrate that the decision to apply aquatic pesticides is in compliance with an adopted Aquatic Invasive Species Management Plan. The project proponent must be a state or federal agency, with the legal authority to implement AIS control projects as identified in the California Aquatic Invasive Species Management Plan, Appendices B and C.

For non-Emergency and non-Time Sensitive projects proposed for purposes **not** involving AIS that are proposed to protect drinking water supplies, water distribution system, navigation, agricultural irrigation, and flood control channels, the project proponent must be (1) the public agency mandated to protect such facilities, or (2) a private entity (e.g., a homeowners association, private water utility) that has control over the financing for, or the decision to perform, aquatic pesticide applications.

Exemption Criteria for Aquatic Pesticide Use
Aquatic pesticide use proposed under the circumstances listed above may be considered for an exemption to the waste discharge prohibition for aquatic pesticides. Project proponents that receive a prohibition exemption must obtain coverage under an applicable permit, such as an individual or general NPDES permit or WDRs, or a waiver of WDRs issued by the State or Regional Water Board. Project proponents that receive a prohibition exemption must apply pesticides consistent with label instructions approved by the United States Environmental Protection Agency (USEPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) and any Use Permits issued by the CAC which incorporate permit conditions recommended by the Department of Pesticide Regulation and the California Department of Public Health.

Project implementation, with its associated control measures and compliance monitoring, must demonstrate compliance with Basin Plan Water Quality objectives, effluent limitations, and receiving water limitations, which must be maintained (a) in the receiving water at all times during and after the treatment event, and (b) within the treatment area after completion of the aquatic pesticide treatment event. (Exemptions to the prohibition on violating narrative or numeric water quality objectives may be granted for specific water quality objectives. See Chapter 3 for project-specific water quality objectives or receiving water limitations that apply to fisheries management projects using rotenone.)

An exemption request must be submitted to the Water Board and contain the following information acceptable to the Regional Board. [7]

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. Communication and notification plan to be implemented before, during and after the project. The plan will include documented measures to notify potentially affected parties who may use the water (ground or surface) downstream for any beneficial use. The notification plan must include any associated water use restrictions or precautions. Project proponents will provide potable drinking water where necessary and shall obtain any necessary permits from CDPH and NDEP for supply of potable drinking water.

        For projects conducted in an ONRW (e.g. Lake Tahoe) that may impact surface water intakes used for drinking water located within one-half mile of the point of application, the following additional requirements apply:

        i. Proponents will provide 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.

        ii. An estimate of the maximum foreseeable concentrations of pesticide components in any surface water intake used for drinking water supplies.

        Public notification requirements may be waived where project proponent is an agency signatory to Cooperative Agreement with DPH and evidence is provided of notification exemption.

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

2. Notice of Intent for coverage under the appropriate State Board or Regional Board permit or a report of waste discharge for pesticides or pesticide use not covered under an existing State Board or Regional Board NPDES General Permit for aquatic pesticide discharges.

3. California Environmental Quality Act (CEQA) Documentation – The lead agency is required to conduct the appropriate environmental analysis and the project proponent shall submit the certified environmental document with the exemption request. If the project lead is a federal agency then it must prepare a CEQA equivalent document.

4. Information to comply with section 5.3 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California (State Implementation Plan or SIP). This information is **only** required if the proposed application of aquatic pesticides contains priority pollutants. Projects involving discharges that contain priority pollutants require a short-term or seasonal exception from meeting the priority pollutant criteria/objectives prior to treatment of surface waters with aquatic pesticides. Section 5.3 of the SIP allows the Regional Board, on a case-by-case basis, to consider and grant such short-term or seasonal exceptions.)

[7] The Regional Board will consult with the Nevada Division of Environmental Protection (NDEP) when a project affects interstate waters that exist within, or flow to, the State of Nevada. The Regional Board will consult with the California Department of Public Health (CDPH) when reviewing exemption requests that may affect surface drinking water intakes.

5. Information (evidence the project will benefit people of California, a management plan detailing control measures to avoid and mitigate adverse impacts, compliance with use restrictions, etc.) that allows the Regional Board to find that the proposed aquatic pesticide application complies with federal and state anti-degradation policies. (This request for information is waived for Vector Control projects and for projects proposed in response to an emergency as defined by Public Resources Code 21060.3. because these project types underwent antidegradation analysis for adoption of the exemption criteria into the Basin Plan.)

6. Information that the project satisfies the additional exemption criteria for the particular circumstance as specified below.

Exemption Criteria for Vector Control

The Regional Board herein grants an exemption to the prohibition on discharge of pesticides to surface or ground waters where the project proponent can verify that the project meets the following criteria, which must be submitted with an exemption request to the Regional Board. The Regional Board finds that Vector Control projects comply with state and federal anti-degradation policies, since (1) these projects are implemented in the best interest of people of California for the purposes of the protection of public health, and (2) these projects limit water quality impacts and provide reasonable protection of beneficial uses by satisfying the below-listed exemption criteria nos. 1 and 2.

1. The planned treatment will result in the minimum discharge of chemical substances that can reasonably be expected for an effective treatment.

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.

Exemption Criteria for Fisheries Management

Project proponents seeking a prohibition exemption to use aquatic pesticides for "Fisheries Management" must satisfy the criteria listed in Chapter 4, section 4.9 titled Control Measures for Rotenone Use and Other Fish Toxicants" and must submit this information with an exemption request to the Regional Board.

Exemption Criteria for Controlling Aquatic Invasive Species (AIS) and Other Harmful Species

Emergency Projects. The Regional Board herein grants an exemption to the prohibition on discharge of pesticides to surface or ground waters where the project proponent can verify that (1) the project meets the following criterion, which must be submitted with an exemption request, and (2) a Notice of Exemption (NOE) has been filed, as required under CEQA. Coverage under the appropriate permit must be sought by the project proponent within 30 days after the NOE is filed.

For projects implemented by state or local agencies, the agency must demonstrate that the project meets the CEQA Emergency Project definition set forth in Public Resource Code section 21060.3 (same as CEQA Guidelines section 15359); or that the project meets the CEQA definition of Emergency Projects set forth in CEQA Guidelines 15269(a)(b)(c). For these state or local agency projects the state or local agency will file the NOE. If a federal agency, such as USFWS, is the project proponent, the federal agency must provide evidence that the pesticide application meets the CEQA emergency definition. For these federal projects, the Regional Board will file the NOE.

The Regional Board retains authority to require project and post-project monitoring and reporting and retains authority to take enforcement action where appropriate to restore/recover water quality or beneficial uses.

Time Sensitive Projects. In the exemption request, the project proponent must demonstrate to the Regional Board the time sensitive nature of the project by demonstrating the existing or imminent deleterious effects of an infestation and the importance of an expedited action. The Regional Board will respond within ten days. The Regional Board may then grant the prohibition exemption where the project proponent can verify the project meets the following criteria, which must be submitted with the exemption

request. (The Regional Board may expedite granting of the exemption and require that compliance with criteria be demonstrated within ten days of the prohibition exemption being granted.)

1. Demonstration that non-chemical measures were evaluated and found inappropriate/ineffective to achieve the project goals. (Alternatives to pesticide use must be thoroughly evaluated and implemented when feasible (as defined in CEQA Guideline 15364: "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.)).

2. A plan detailing mitigation and management measures must be submitted and implemented. The Plan must incorporate control measures to limit adverse impacts to the shortest time necessary for project success. The Plan should include measures to remove and dispose of dead biomass which are adequate to protect water quality and beneficial uses. (Removal of biomass may not be necessary in situations where recovering the dead biomass creates a greater potential to impact water quality.)

3. The planned treatment protocol will result in the minimum discharge of chemical substances that can reasonably be expected for an effective treatment.

4. Monitoring and reporting program must be submitted and implemented to evaluate impacts and verify restoration of water quality in the treatment area. The program must be sufficient to determine compliance with criteria no. 3.

   The project monitoring program must include pre- and post-project sampling of water, sediment, and biota to determine if toxicity persists as a result of project implementation. At the discretion of the Regional Board, due to the urgency of Time Sensitive projects, the collection and analysis of sediment and biological samples may be waived and/or a reference site may be used to represent pre-project conditions.

   Unless waived by the Regional Board, the project proponent shall develop a biological monitoring program to evaluate (a) the magnitude and extent of potential impacts to, and (b) the post-project recovery of non-target organisms and rare/threatened or endangered species. The biological monitoring program must be based on an appropriate study design, metrics, and performance criteria to evaluate restoration of aquatic life as specified below in criterion no. 7. This requirement may be waived at the discretion of the Regional Board where the Regional Board finds that there is no significant threat to non-target aquatic organisms.

Projects That Are Neither Emergencies Nor Time Sensitive. An exemption to the prohibition on discharge of pesticides to surface or ground waters may be granted by the Regional Board for Projects That Are Neither Emergencies or Time Sensitive where the project proponent can verify that the project meets both the above-listed criteria nos. 1 through 4 and the following additional criteria, which must be submitted with the exemption request.

5. Purpose and Goals statement that (a) demonstrates that the target organism is a primary cause of the problem being addressed, and (b) provides evidence that the proposed application of pesticides will accomplish the project goals.

6. A description of the failure of non-chemical measures to effectively address the target organisms. The description will include either (1) evidence that non-chemical efforts failed to address target organisms or (2) justification, accepted by Regional Board, of why non-chemical measures were not employed or are not feasible (CEQA Guideline 15364) to achieve the treatment goals.

7. A monitoring and reporting program accepted by the Regional Board, will be followed to assess the effects of treatment on surface and ground waters, and on bottom sediments if specified by the Regional Board. The monitoring and reporting program must include, but not be limited to, monitoring sites, analytes, methods, frequencies, schedule, quality assurance, and measurable objectives to

determine if the project goals were achieved (e.g., acreage treated, reduction in biomass of target species, improved water quality). The monitoring plan must identify a dedicated budget and specify the entity/person(s) responsible for the monitoring.

The pre-project biological monitoring program and the monitoring, reporting, and mitigation program[8] for non-target communities shall be peer-reviewed[9] by independent experts. The peer reviewers shall be proposed by project proponent(s) and shall be mutually agreeable to both the project proponent(s) and the Regional Board.

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. Monitoring of biota should include appropriate indicators (e.g., macroinvertebrates, aquatic plants). The indices used in the assessment must be commonly accepted by the scientific community and accepted by the Regional Board.

For projects with the goal of removing an invasive species community, project proponent shall consider using a reference site to gauge restoration of the non-target species to desired conditions or establish project goals and objectives. 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).

When applicable, biological monitoring shall be designed, and conducted as long as needed, no less than annually, to effectively demonstrate that non-target macroinvertebrate populations have been fully restored. Fully restored means that the structure and function of non-target macroinvertebrate communities have returned to conditions that reflect pre-project conditions. Function will be judged by metrics and indices related to trophic levels (e.g., functional feeding groups) and productivity (e.g., abundance, biomass). Structure will be judged based on metrics and indices related to richness and diversity (e.g., taxa richness, multivariate O/E (observed/expected) model predictions, multivariate ordinations) and presence of sensitive and rare taxa. This definition of "fully restored" shall be provided to the peer reviewers prior to peer review of the monitoring and reporting program, with instructions to determine whether the monitoring design is capable of determining whether full restoration has been achieved.

Within two years of the last treatment for a specific project, a qualified biologist(s) representing the project proponent must assess the restoration of non-target aquatic life and benthic communities within the treated waters, and if, based on the monitoring data, the evidence demonstrates, certify in writing that all affected non-target biological communities have been fully restored. The certification shall be accompanied by a report detailing the pre-project and post-project monitoring, including detailed explanation of the assessment methods used and the rationale for the certification. Macroinvertebrates shall be identified and classified, and data provided in electronic formats using conventions acceptable to the Regional Board.

If non-target biological communities are not fully restored after two years, the project proponent must conduct continued annual monitoring and implement the proposed mitigation measures until the Regional Board accepts the certification.

The Regional Board acknowledges that projects may occur where the non-target communities do not fully recover to pre-project levels. After five years of annual post-project monitoring, the project

[8] The mitigation program must examine potential measures to facilitate the restoration of non-target species to pre-project abundance and diversity. The mitigation program must include a discussion of mitigation measures included and those that were considered but rejected. The project proponent must justify why these measures were rejected as feasible mitigation measures. The requirement to implement mitigation measures may be waived during post-project recovery at the discretion of the Regional Board.

[9] The Regional Board can exempt project proponents from the requirement of preparing an externally peer reviewed monitoring and reporting, and mitigation program (e.g., project applicant proposes the use of standardized peer reviewed monitoring protocols).

proponent may petition the Regional Board to release it from annual monitoring and reporting and mitigation obligations. Such petitions must include: (1) results of mitigation efforts, (2) monitoring trends demonstrating maturity of an asymptotic recovery, and (3) evidence that the ability to attain full recovery has been significantly affected by natural environmental factors (e.g., fires, floods, drought) or catastrophic events (e.g., chemical spills) during the years of monitoring. Annual monitoring shall continue unless and until the Regional Board rescinds the monitoring requirements.