**Response to Written Comments**

# In Consideration of:
# Waiver of Waste Discharge Requirements
# and General Water Quality Certification
# for
# Discharges of Waste Resulting from Cannabis[1] Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region

The North Coast Regional Water Quality Control Board (Regional Water Board) circulated draft Order No. R1-2015-0023, and the associated Initial Study for public review and comment from April 23 to June 8, 2015, and held a public workshop on May 7, 2015 in Eureka, California. Staff of the Regional Water Board (Staff) received 47 comment letters/emails within the public comment period (Attachment 1), on a range of topics generally in favor of, or opposed to, efforts to regulate discharges of waste associated with cannabis cultivation or specific elements of those efforts. Staff received additional written comments following the public comment period, as well as a number of verbal comments at meetings and by phone; those comments are not included in this package and are not specifically referenced, but were generally consistent with the content of the written comments that are included and discussed here.

There were a number of recurring comments, and Staff responds to these under eleven general categories, as shown in the Table of Contents on the next page. Some comments warranted individual responses and these are also addressed below. Numerous comments contained constructive and helpful suggestions that Staff has incorporated into the proposed Order and its associated documents. Most of the changes help clarify or better organize the existing content. The largest substantive changes in response to comments include raising the size threshold requirements for Tier 1 and 2, specific criteria to approve third-party programs, and an extension of the enrollment date to February 15, 2016. The Regional Water Board appreciates stakeholders' participation and insightful comments.

[1] In response to comments received regarding the appropriate term for the subject agricultural commodity, Staff proposes to change "marijuana" to "cannabis" throughout the Order and associated documents.

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## ISSUE 1: Rationale for the Cannabis Program, and Consistency with Other Types of Nonpoint Source Discharges and Activities

Regional Water Board Jurisdiction

The State Water Board and the nine Regional Water Quality Control Boards have primary responsibility for the protection and restoration of water quality in California. The Regional Water Boards adopt and implement water quality control plans (Basin Plans), that 1) designate beneficial uses for surface and ground waters; 2) set narrative and numerical water quality objectives that must be attained or maintained to protect beneficial uses; and 3) define implementation programs that include specific prohibitions, action plans, and policies to achieve the water quality objectives.

In California, under the Porter-Cologne Water Quality Control Act (Porter-Cologne), discharges of waste that are not NPDES "discharges of pollutants" require the issuance of waste discharge requirements (WDR) unless otherwise waived. (Wat. Code, §§ 13000 *et. seq.*) Discharges of waste that are not subject to NPDES permits typically include runoff from nonpoint source (NPS) pollution such as agricultural activities and waste discharges to land or to groundwater. WDRs prescribe requirements, such as limitations on temperature, toxicity, or pollutant levels, as to the nature of any discharge (Wat. Code, § 13260, subd. (a)). WDRs may specify conditions where no discharge will be permitted (*id.*, § 13241), and may include monitoring and reporting requirements (*id.* § 13267, Cal. Code Regs., tit. 23, § 2230).

Other existing regulatory tools include general WDRs or waivers of waste discharge requirements (covering a category of discharges from same or similar operations that generate the same or similar types of waste and require similar treatments), basin plan prohibitions, and enforcement actions. Under Water Code section 13301, the Regional Water Board may issue a cease and desist order (CDO) if it finds a discharge or threatened discharge of waste in violation of waste discharge requirements or prohibitions. Under Water Code section 13304, the Regional Water Board may issue a cleanup and abatement order (CAO) to any person who has discharged or discharges waste into waters of the state, or who has caused or permitted, or threatens to cause or permit waste to be discharged or deposited where it will be discharged, or threatens to create a condition of pollution or nuisance. Civil monetary remedies may be pursued for violations of WDRs, waivers, prohibitions, CDOs, CAOs, and other orders. (See e.g., Wat. Code, §13350.)

*A number of commenters (18) suggested that the proposal to regulate cannabis separately from and/or differently from other NPS activities in the Region, such as timber harvesting, cattle grazing, and wine grape production, is unfair.*

Response: Water quality problems in the North Coast region are predominantly associated with nonpoint source pollution (NPS), which is generally defined as pollution that is not a "point source discharge" requiring an NPDES permit under the federal Clean Water Act. The majority of the streams in the region are sediment impaired and many are temperature impaired. Completed sediment and temperature Total Maximum Daily Loads (TMDLs)

identify and assign load allocations to similar categories of land uses that generate nonpoint source discharges of waste and pollution, such as timber harvest, roads, agriculture, and grazing. Implementation actions taken to achieve load allocations should be consistent with the Porter-Cologne Water Quality Control Act, as described in the Statewide Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy), which requires nonpoint sources be regulated under WDRs, waivers of WDRs, a Basin Plan prohibition, or some combination of these tools. In compliance with the NPS Policy and as a result of numerous sediment and temperature TMDLs, the Regional Water Board has made great progress to date in addressing NPS land use activities.

In 2004, the Regional Water Board adopted Resolution R1-2004-0087, the Sediment Policy, which directs Staff to use existing authorities to strengthen regulatory controls of nonpoint source discharges of sediment. The Regional Water Board has made the most progress to date in implementing comprehensive nonpoint source permit coverage for timber harvest activities (see e.g., Order R1-2004-0030: General Waste Discharge Requirements for Discharges Related to Timber Harvest Activities on Non-Federal Lands in the North Coast Region (Timber GWDRs); Order R1-2009-0038 and Order R1-2014-0011: Categorical Waiver of Waste Discharge Requirements for Discharges Related to Timber Harvest Activities On Non-Federal Lands in the North Coast Region (Non-Federal Timber Waiver). The Regional Water Board also addresses nonpoint source activities including timber harvest, roads, and grazing on U.S. Forest Service (USFS) lands, covering close to half of the region under a USFS permit (see Order R1-2010-0029: Waiver of Waste Discharge Requirements for Nonpoint Source Discharges Related to Certain Federal Land Management Activities on National Forest System Lands in the North Coast Region (USFS Waiver).

The Regional Water Board has also adopted two agricultural land waivers in the Scott and Shasta watersheds (see Orders No. R1-2012-0084 and R1-2012-0083 [requiring landowners to employ land stewardship practices and activities that minimize, control, and preferably prevent discharges of fine sediment, nutrients (including animal waste), other oxygen consuming materials, and elevated solar radiation loads (including loss of riparian vegetation)]. In 2012, the Board adopted a regulatory program for discharges associated with cow dairies. (See Orders No. R1 2012-0002 and 0003 [covering management of process water, manure, and other organic materials at dairy operations including the application of such materials to cropland].)

In May 2013, the Regional Water Board adopted Order No. R1-2013-0004, Waiver of Waste Discharge Requirements and General Water Quality Certification for County Road Management and Activities Conducted Under the Five Counties Salmonid Conservation Program in the Counties of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity (covering road maintenance and associated project activities including fish barrier removal, sediment control, and correction of stream diversions). In November 2013, the Regional Water Board adopted Order No. R1-2013-0059 for the Mendocino County RCD and NRCS' Mendocino County Permit Coordination Program (MCPCP) to (permitting restoration practices including upslope source controls, barrier removal, native plant

restoration, instream habitat improvements, large wood augmentation, streambank stabilization, and invasive species removal).
Finally, on March 13, 2014, the Regional Water Board adopted a Policy for the Implementation of Water Quality Objectives for Temperature, and Action Plans to Address Temperature Impairments in the Eel, Mattole, and Navarro River Watersheds (see Resolution No. R1-2014-0006). The Temperature Policy directs Staff to prevent, minimize, and mitigate temperature alterations associated with various factors through a combination of riparian management and other temperature controls as appropriate in nonpoint source control programs; permits and waivers, grants and loans, and enforcement actions; support of restoration projects; and coordination with other agencies with jurisdiction over controllable factors that influence water temperature.

The Regional Water Board has been in the process of developing a regulatory program/mechanism covering agricultural lands in general throughout the region but, by mid-2013, concluded that it would be most appropriate to develop regulatory programs specific to various significant agricultural commodities and distinct growing areas. In addition to the cannabis program, Staff is currently developing permits to address discharges of waste from vineyards and orchards, lily bulb production in the Smith River plains, and agricultural lands in the Tule Lake watershed.

*One commenter noted that to be fair, the cannabis Order should be expanded to cover all agricultural operations.*

Response: As discussed above, the Regional Water Board and Staff have determined that it is appropriate to regulate agricultural waste discharges in the region through commodity/crop-specific and growing area-specific regulatory orders, rather than through a single agricultural waste discharge order. However, the cannabis Order conditions and requirements could be generally applied to address NPS pollution from properties throughout the region, including those with other types of agricultural operations. Staff drafted the cannabis Order with the intent that it be used for other similar operations when and where applicable. Further, the other agricultural regulatory orders under development and to be developed will include similar measures to protect watercourses from impacts related to sediment, temperature, nutrient, chemical, and flow diversion.

*Several commenters suggested that Staff focus regulatory and enforcement efforts on the cannabis cultivators with larger grow operations rather than the smaller grow operations.*

Response: Staff expect that changes in the proposed Order to the de minimus and Tier 1 size thresholds, as discussed below, will allay some of these comments.
However, it should be noted that even a "small" operation may still represent a threat to receiving waters due to its site characteristics or the location of surface water or depth to ground water, and it may contribute to cumulative adverse impacts due to the activities occurring on the properties around it. Therefore, all operations above the de minimus level are subject to the Order conditions, with requirements more or less commensurate to the level of threat to water resources that the site presents.

Implementation of the Order will help sort out small and medium operations in compliance or on a pathway to compliance with waste discharge requirements, thus freeing limited law enforcement resources to focus on the larger and most damaging operations. Enforcement activities either by the Staff, in concert with our partners, or by our partners separately will focus on areas of concern which could include individual large operations, areas with high densities of operations, or watersheds with observed or suspected cumulative adverse impacts. Staff resources will be applied on a priority basis to achieve the greatest water quality protections.

*One commenter asked why the proposed program would apply to cultivation areas that are less than one acre, the threshold for a construction storm water permit.*

Response: Staff has strived to tailor the permit to conditions in the North Coast Region. As discussed further below, the thresholds for the regulatory tiers identified in the Order are based upon assessments of threat to water quality. Available literature and Staff observations in the field have confirmed that controllable sediment discharge sites much smaller than one acre in size can present a threat to water quality.

*Some commenters as why the proposed Order is stricter than other existing programs*

Response: The scope of this Order is consistent with existing general orders and regulatory programs addressing NPS discharges. The Order requires landowners and operators to identify, prioritize, schedule, and control waste discharges and to ensure that water is used wisely so as to protect water quality and water resources. The Regional Water Board is required to review waivers at least every five years and revise as appropriate. TMDL implementation programs are also subject to periodic review and revision. If evidence shows that the Order is not effectively controlling pollutant discharges to receiving waters and protecting the associated water resources, or if evidence shows that the Order includes requirements that are unnecessary, Staff would propose revisions to the Order to account for the best available information and approaches. There will be opportunities for public review and comment on any proposed revisions prior to the Board's consideration for adoption. The North Coast Regional Water Board and its Staff will continue to evaluate and revise all its NPS regulatory programs, if and as appropriate, and to strive for regulatory consistency and fairness amongst industries, operators, and landowners. See also discussion below regarding legacy sites and property-wide NPS control.

*Some commenters expressed concern that this program establishes new laws or regulations that apply only to cannabis growers, and asked Staff to rely on existing regulations to address the water quality concerns.*

Response: As stated above, this program is consistent with the NPS Policy and implements existing laws and regulations. This Order does not represent a new law or new regulation, but rather articulates applicable regulations under the Water Board's existing authority in a standard regulatory tool that has been tailored to be specific to a type of activity or discharge, in this case, cannabis cultivation, associated activities, and other similar operations.

*The Order is for Discharges of Waste Resulting from Marijuana Cultivation and Associated Activities or Operations with Similar Environmental Effects. Several comments (9) asked that we clarify what is meant by associated activities and operations with similar environmental effects.*

Response: Operations with similar environmental effects are those that present similar threats to water quality listed in Finding 4 on page 2 of the Order, due to similar site development and use for crop cultivation, where there is not another applicable water quality regulatory program.

The requirements of the Order apply to all non-de minimus operations where cannabis is being grown; landowners/dischargers with such operations must enroll for coverage. Landowners/dischargers with similar operations may voluntarily enroll for and obtain regulatory coverage under the Order for their facilities. In addition, the Regional Water Board may direct a landowner/discharger with similar operations, environmental effects and threats to enroll for coverage under the Order and to comply with the standard conditions and other applicable requirements.

*A few commenters expressed concern that the Order places uneven burdens on small farmers that lack political clout, as compared to other industries whose lobbies have influenced the regulation or who are otherwise unregulated.*

Response: Staff worked with cannabis industry groups to gather input prior to the release of the draft Order. Staff also engaged in significant education and outreach efforts to solicit public comments on the draft Order, recognizing that the requirements will affect a significant percentage of the landowners in the North Coast Region. Proposed changes to the draft Order may serve to address some of those concerns; however, it should be noted that this is a standard NPS waiver to address waste discharges from cannabis cultivation properties and operations, regardless of size. As discussed above, regulatory programs for other specific agricultural operations are already established, or are under development.

*One commenter noted that it cannot be determined as fair to require water storage for vegetable or medical garden when timber and cattle have exemptions allowing thousands of gallons of water diversion per day.*

Response: The Order does not require storage of water; rather, it requires that surface water diversion be reasonable and that dischargers ensure that water quality and downstream beneficial uses are not degraded due to the reduction in stream flow. The diversion abstention period included in Tier 1 criteria is a necessary component for a discharger wishing to be subject to Tier 1 requirements, but opting to not adhere to this period simply means that a site is subject to Tier 2 requirements. (See also discussion on Water Storage and Use.)

*A few comments suggested that the draft Order was so burdensome that it amounts to a regulatory taking of private property under the Fifth Amendment of the US Constitution.*

Response: The draft Order does not impose requirements that would rise to the level of a regulatory taking. It does not deprive all or even a significant portion of economically beneficial or productive use of property.

The takings clause prohibits government taking of private property for public use without just compensation. A regulatory action is deemed a *per se taking* when the regulation completely deprives the owner of "all economically beneficial use of the property." (*Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003.) Even proof that a regulation will cause a significant reduction in profits or cause a diminution in property value is insufficient to establish taking. (*Penn Central*, *supra*, 438 U.S. at p. 131 [zoning restriction on development of airspace above historic building had significant impact on the landowner's ability to further develop the property but economic impact did not amount to a constitutional taking]; *Kavanau*, *supra*, 16 Cal.4th at p. 780 [rent control restrictions limited return on landowner's investment but did not amount to a constitutional taking]; *Shaw v. County of Santa Cruz* (2008) 170 Cal.App.4th 229, 273 [denial of an electrical permit did not amount to a constitutional taking because landowners were not deprived of all economically beneficial or productive use of their property].) To constitute a taking the regulation's economic impact on the property must be so significant as to "suggest that the regulation has unfairly singled out the property owner to bear a burden that should be borne by the public as a whole." (*County of Alameda v. Superior Court* (2005) 133 Cal.App.4th 558, 566; *see also*, *Penn Central*, *supra*, 438 U.S. at p. 131.)

The Order is the Regional Water Board's attempt to establish reasonable regulation of water quality impacts from cannabis cultivation and associated activities, similar to the way it regulates other NPS land use activities. Staff developed and further refined the draft Order in response to stakeholder comments to minimize economic burdens to landowners to the extent possible. For example, the Order provides that water resource protection plans may contain time schedules for a discharger to make repairs or improvements over time, taking into consideration that substantial financial resources may be needed in some cases. The Regional Water Board has and will continue with outreach efforts to assist landowners with compliance, through third party programs and, where available, through grants and loans. The Order's requirements are designed to address the impacts created by the land use largely through the implementation of reasonable best management practices that are generally applicable for the reasonable protection of water quality.

While the Regional Water Board does not intend or expect the Order to economically impact a landowner in such a way that could be considered a regulatory taking, a specific evaluation of a regulatory taking can only occur once it is known how the regulation would specifically impact a given property. A "claim that the application of government regulations effects a taking of a property interest is not ripe until the government entity

charged with implementing the regulations has reached a final decision regarding the application of the regulations to the property at issue." (*Williamson County Regional Planning Com'n v. Hamilton Bank of Johnson City* (1985) 473 U.S. 172, 186-187; *Toigo v. Town of Ross* (1998) 70 Cal.App.4th 309, 325.)
While Staff do not know precisely the costs to each owner/operator, Staff estimate annual cost of compliance to range anywhere from less than $2,500 up to approximately $15,000, depending on size and complexity of site with cultivation operations, not taking into account any initial capital improvement costs to bring a site into compliance with standard conditions. Note that cost for Tier 3 sites, requiring cleanup and restoration, may be significantly higher. See additional discussion regarding costs under Issue 8, below.

**ISSUE 2: Privacy and Self-Incrimination Concerns; Incentives for Participation**

The Regional Water Board understands the concern from stakeholders that participation in the cannabis regulatory program not subject individuals to criminal prosecution under federal law. Challenges arise from the contradiction between state and federal law related to cannabis. In 1996, California voters approved Proposition 215, the Compassionate Use Act (CUA)[2], which allows a qualified patient and primary caregiver to possess and cultivate marijuana for the patient's personal use, and in 2003, the California Legislature enacted the Medical Marijuana Program (MMP) which further refines the CUA. Meanwhile, since 1970, the federal Controlled Substances Act (CSA) makes it a federal crime for the unauthorized manufacture, distribution, dispensing, and possession of controlled substances (21 U.S.C. § 841; 844). Medicinal use is not recognized for marijuana. (21 U.S.C. § 812.) So even though cannabis is "decriminalized" under state law, it is still illegal and subject to the prosecutorial discretion of the federal government. The U.S. Department of Justice issued a memo dated August 29, 2013 on Guidance for Marijuana Enforcement that acknowledged recent state ballot initiatives legalizing production, processing and sale of marijuana under state law, and directed federal law enforcement to focus on certain enforcement priorities such as distribution to minors and criminal enterprises. While the memo can provide some comfort to those otherwise engaged in legal state activity, we understand that the memo is not binding, and administrative priorities may change over time.

From the Regional Water Board's perspective, a water quality order simply regulates or restricts the discharges of waste resulting from cultivation, just like any other person conducting any other activity that generates waste. Waste discharge requirements generally address best management practices to mitigate water quality impacts from wastes, including but not limited to irrigation runoff, erosion, and pesticide application. The Regional Water Board can no longer postpone the application of general water quality rules because of the legal ambiguity of the land use practice. That said, the Regional Water Board recognizes the procedural challenges that could limit participation in the program.

When the Regional Water Board first began stakeholder outreach for its Agricultural Lands Discharge Program, it contemplated a region-wide permit that covered all agricultural dischargers, including cannabis cultivators. The Program has since been segmented into

[2] See the List of Acronyms on the back page for reference.

four distinct permits based on crop and area of similarly situated operations. This approach facilitates collaboration amongst the growers and helps prioritize resources based on common water quality issues; however, it eliminated the ability to provide a generic permit that did not identify cannabis cultivation specifically.

That said, the similar operations provision provides coverage to dischargers with operations that are similar to or whose potential impacts to water quality and water resources are similar to those posed by cannabis cultivation, subject to approval by the Executive Officer. This provision was included to provide a mechanism to regulate individual growers with similar activities that were not otherwise subject to the focused agricultural permits in development, including, for example, strawberry farms, other greenhouse operations, etc. The provision provides the ancillary benefit of making enrollment under the permit "crop neutral." In other words, participation in the program does not amount to any admission that can be construed as evidence of illegal activity.

As described in more detail below, the Regional Water Board has constructed the proposed Order to provide privacy and insulate enrollees from self-incrimination by neutralizing reporting forms and providing for third party programs (see Issue #9). The program is designed to limit agency retention of any records that identify individuals (for Tiers 1 and 2 enrollees in third party programs), and even if a discharger individually enrolls, the reports are not crop-specific. Further, staff can adaptively manage the program as the cannabis laws evolve.

*More than twenty comments related to topics of privacy, confidentiality, self-incrimination, and the need for incentives to participate in the program. Various commenters indicated that participation in the program will depend on the Regional Water Board's ability to maintain the confidentiality of an enrollee's personal information and on the potential for self-incrimination.*

Response:
Staff recognizes that the concern for privacy is an important one, and is engaged in various efforts to address this concern.

The proposed Order applies to all "Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities *or Operations with Similar Environmental Effects*" (emphasis added). Since the proposed Order applies to "Operations with Similar Environmental Effects," enrollees are not necessarily identifying themselves as cultivators of cannabis.

Leaving the scope of the Order broad enough to cover other types of operations was an explicit effort by the Regional Water Board and Staff to not cause self-incrimination by enrollees. All data, information, and documents collected by the Regional Water Board are public documents subject to the Public Records Act unless a specific or general exemption applies. As a result, anyone who chooses to enroll directly with the Regional Water Board will not receive the benefit of privacy/confidentiality that could be available by enrolling through approved third party programs. However, even under individual and direct enrollment, the required reports are "crop-neutral." The proposed Order encourages

prospective third party programs to work with Staff as early as possible (even prior to Order adoption) to calibrate their program. Staff is currently developing an enrollment, tracking and reporting process to further refine the California Integrated Water Quality System (CIWQS) to accommodate enrollments and reporting directly to CIWQS or via approved third parties.

Staff has been working with interested parties to develop a system that third party programs could use to maintain the privacy of their enrollees while enabling them to comply with the requirements of the Order and the Policy for Implementation and Enforcement of the NPS Pollution Control Program (NPS Policy).

The Regional or State Water Board may approve a third party NPS pollution control implementation program (third party program) that maintains the privacy/confidentiality of its members so long as it complies with the five key elements of the NPS Policy. Key element No. 2 requires that the Regional Water Board be able to determine that there is a high likelihood that Order implementation will attain water quality requirements. This likelihood increases with increasing discharger participation, which can be anticipated if provisions to address privacy are included. Key element No. 4 requires sufficient feedback mechanisms to assess program success and to gauge the need for adaptive management. To achieve this requirement, while simultaneously maintaining the privacy of enrollees, a third party program must be able to provide feedback to the Regional Water Board (i.e., report) on a scale relevant to water quality and in a consistent manner regionwide that enables effective adaptive management. As a result, Staff has included a requirement in the Order that third party programs use CIWQS with a subwatershed place identifier rather than a parcel or site-specific identifier to report on program implementation.

The proposed Order anticipated that "Regional Water Board Staff will implement comprehensive activity tracking [CATS] by mapping Tier 3 cleanup and restoration sites and individual stream crossings proposed for replacement under Tier 2 water resource protection plans." Mapping of individual locations where restoration or remediation work in streams or wetlands is proposed under this Order could conflict with efforts to maintain privacy as an incentive for participation in third party programs. Staff have retained Clean Water Act 401 water quality certification provisions in the draft Order, but dischargers may opt to seek authorization for work in streams or wetlands (including stream crossing upgrades) identified in Tier 2 water resource protection plans through other existing or available Regional Water Board permitting tools.

Specifically, Tier 2 enrollees are required to inventory, assess, prioritize, and conduct restoration or remediation work in streams or wetlands on their sites in accordance with a proposed schedule, as a part of their water resource protection plans, but when work needs to be performed, they may apply for Regional Water Board permit coverage under separate programs (i.e., WDR/ 401). This instream work will still be captured in the CATS mapping, but will not be identified as work associated with the cannabis Order. As a result, the same water quality results will be achieved, while maintaining the privacy of cannabis Order enrollees.

Tier 3 sites are subject to site-specific review, and enrollees are required to work directly with the Regional Water Board. As a result, there is no option to maintain privacy for Tier 3 sites. However, upon satisfactory completion of work identified in a Tier 3 cleanup and restoration plan, an enrollee can update its enrollment as a Tier 2 site (if still cultivating), and the records associated with the completed Tier 3 work would be subject to the Regional Water Board's document retention policies.
One commenter asked about records retention, requesting the ability for enrollees to purge records in the program retroactively. The Regional Water Board must follow its record retention schedules, which generally require the agency to maintain records for 4 years after a project is no longer active.

Many commenters indicated that these issues were their most significant concerns about the Order; addressing these issues should provide incentives to enroll under the Order. See also the discussions associated with legacy, cost of compliance, and third party programs.

Conclusion: in response to these comments, Staff has made a number of changes to Order section I.B, and the following specific change to the last paragraph of finding 35:

> Anticipating that this program will result in an increased rate of site and stream restoration across the region following Order adoption, Regional Water Board staff will implement comprehensive activity tracking by mapping Tier 3 cleanup and restoration sites and individual restoration or remediation work in streams or wetlands proposed under Tier 2 water resource protection plans, including those covered under the provisions of this Order or through other individual or general orders issued by the State and/or Regional Water board.

**ISSUE 3: Tier Criteria and Thresholds**

*The issue of the appropriate thresholds separating Tier 1 from de minimus and separating Tiers 1 and 2 received the most comments, ranging from comments advocating strongly for raising tier thresholds, as well as comments voicing opposition to any increases in tier thresholds.*

Response: A dilemma commonly faced by regulatory agency Staff attempting to set clear, quantitative thresholds to demarcate differences in size or significance amongst a population of regulated individuals. The intent in this case is to demarcate the threshold between sites representing less than significant threat to water quality from those representing a low threat to water quality from those representing a higher threat to water quality requiring additional effort and management measures to control waste discharges and minimize impacts to water resources. There is yet a higher category as well: those sites that pose a threat to water resources that cannot be mitigated or controlled; within the scope of this Order, Regional Water Board staff will have to address these sites individually. Attempting to describe the threat to water quality posed by a given site by applying a set of numeric parameters is never perfect in all cases. There will likely be some sites meeting the strict numeric thresholds, but presenting a threat to water quality different from their nominal tier, and others in a higher tier that pose few water quality

threats. However, all cannabis cultivation sites in the region are subject to site inspection, and over the life of the Order, many sites will be inspected by a third party, a Regional Water Board Staff person, or an inspector from another regulatory agency. Where sites are found to be either misclassified or to present a threat to water quality that warrants being moved to a different Tier, Staff will make appropriate recommendations.

In considering the various comments received, Staff were in general agreement that the numeric/size thresholds specified in the draft Order are likely lower than necessary to meet the objectives of the Order. Therefore, as discussed below, Staff propose to raise both Tier 1 and 2 thresholds as described below.

**Thresholds: De Minimus**

*There were many comments regarding the threshold for Order coverage of "operations or grows of no more than 12 immature or 6 mature plants." The comments have ranged in their scope, but generally commenters are concerned that the threshold for permit coverage is too small, and is unassociated with a threat to water quality.*

Response: Staff proposes that a reasonable cultivation area threshold for permit coverage is 2,000 square feet. The original threshold of 12 immature or 6 mature plants in the draft Order was taken from the Compassionate Use Act of 1996 in an effort to exclude individual, noncommercial, medicinal cultivators from the Order. It has been made clear, that this threshold is too small to adequately exclude individual or very small collective noncommercial and commercial cultivation. Additionally, the comments received from a variety of interests indicate that the threshold is too small to: 1) promote general acceptance and participation in the program, 2) properly distinguish operations with de minimum threats to water quality 3) allow the Staff to effectively prioritize the oversight of the Order with limited resources.

Staff concurs with the request of various commenters to establish a threshold for permit coverage based on an area of cultivation rather than a plant count. Size of cultivation area is a relevant indicator of threat to water quality because level of threat is proportional to the area of disturbed or exposed soil, the amount of water used, the potential for storm water runoff, and the potential for groundwater impacts. Size of cultivation area is also a field measurement that will facilitate site-specific determination of Order coverage.

The Regional Water Board does not wish to regulate every small backyard cultivation site. Staff understands that people often collaborate or form collectives to cultivate more than six mature plants for non-commercial uses. On the other hand, a larger cannabis cultivation area is cause for concern with respect to water quality; Staff has observed many instances where small scale cannabis cultivation has had large scale environmental impacts. As noted above, cannabis cultivation sites are subject to inspection by various agencies and entities, and if a site is found to be discharging pollutants to waters of the State, the landowner may be required to obtain coverage under and comply with the Order.

## Cultivation Area: Tier 1 Criteria

*Various commenters requested that the threshold between Tiers 1 and 2 be based on square foot area of cultivation, and be significantly raised; others strongly opposed any increase in this threshold; and others suggested removal of a square foot threshold altogether. Generally, comments suggesting that the 2,000 square foot threshold between Tiers 1 and 2 be raised were based on fairness, or the lack of technical justification for selection of that value. Two comments suggesting reduction of the square foot threshold refer to resource usage and cumulative impacts.*

Response: Upon review, Staff has determined that it is appropriate to increase the square foot threshold between Tier 1 and 2 from 2,000 to 5,000 square feet (i.e., from approximately 1/22 of an acre to just less than 1/8 of an acre) of cultivated area (see below). Increasing the square footage of this threshold provides incentives to more cultivators to meet the site characteristics of Tier 1, which includes maintenance of larger buffers from surface waters, cultivation sites on shallower slopes, no diversion of surface waters during the low flow season, and expedited compliance with standard conditions, all of which would benefit water quality. Additionally, inclusion of more enrollees in Tier 1 will help Staff to allocate limited resources most efficiently on sites that pose a higher threat to water quality.

## Determining Cultivation Area:

In response to many comments requesting clarification as to what constitutes the area of cultivation to be included in the measurement, Staff proposes to add the following definition of cultivation area to the proposed Order:

> **Cultivation area**: The sum of the area(s) of cannabis cultivation and/or operations with similar environmental effects as measured around the perimeter of each discrete cultivation area on a single parcel of land.

Refer to Figure 1, below, for an example of cultivation area measurement.

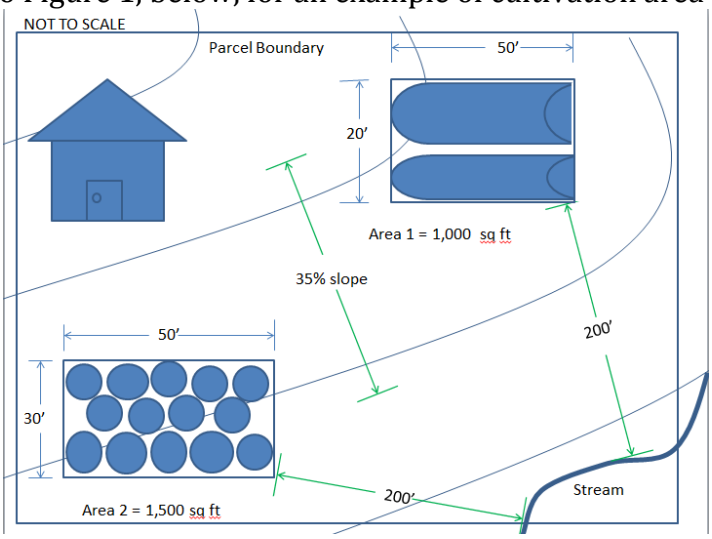


Figure 1: Plan view site example showing areas of cultivation

As stated above, size of cultivation area is a relevant indicator of threat to water quality and it allows for a simple field measurement that will facilitate site-specific tier identification. Tiers of other water quality permits and fee schedules are often based on threat and complexity, which are indicated, in part, by the size of the cultivation area. Retaining cultivation area as a factor distinguishing between tiers also provides a streamlined way to distinguish between smaller and larger cultivation sites, thus making implementation more efficient.

Staff has analyzed the square footage of cultivation sites observed in recent watershed-wide inspections, and have used this in part to help inform an appropriate square foot threshold. All but two properties with cultivation sites inspected in the Sproul Creek watershed in January 2015 had cultivation areas larger than 8,000 square feet and would be appropriately considered Tier 2 sites, at a minimum. Two other sites have cultivation areas of approximately 3,000, 3,500, and just below 5,000 square feet and, assuming all other criteria for Tier 1 are met, would be considered for Tier 1.

Additionally, since operations with similar environmental effects is included in the definition of cultivation area and to address comments regarding the scope of other operations, Staff included the following as a footnote in Finding 3 of the Order:

> Operations with similar environmental effects do not include agricultural operations otherwise subject to existing agricultural permits or those in development.

**Star Status under Tier 2**

Some commenters objected to the cultivation area distinction between Tiers 1 and 2, arguing that a larger site could present no water quality impacts, and meet all other Tier 1 site characteristics. Some Tier 2 sites could comply with all Standard Conditions and meet all other Tier 1 site characteristics including riparian buffers from surface waters and slopes. Indeed the ultimate goal is to meet Standard Conditions once a water resource protection plan is fully implemented. As such, commenters request that such sites receive the same benefits provided under Tier 1 (which are a lower fee and less reporting requirements). While Staff agrees that a Tier 2 site in compliance with Standard Conditions and Tier 2 requirements should be subject to lower fees[3] and less reporting, it would not be appropriate to initially enroll these under Tier 1, as Staff or a third party would need to verify compliance, which requires the time and effort consistent with Tier 2 procedures. To address this issue, Staff proposes to create a "star status" category within Tier 2 (Tier 2*) for sites with cultivation areas less than 10,000 square feet in size that have fully implemented a water resource protection plan and are determined by Staff or an approved third party to pose a low threat to water quality based on full compliance with standard conditions. Although fees are strictly determined by the State Water Resource Control Board, Regional Water Board Staff proposes that Tier 2* sites pay a fee equivalent to Tier 1

[3] The Fee Branch at the State Water Resource Control Board is responsible for setting fees for the various regulatory programs that the Water Boards administer.

sites. Dischargers with Tier 2* sites are required to develop a water resource protection plan based on the threshold requirements, but that plan can either indicate that no best management practices (BMPs) are necessary to mitigate potential impacts to water quality, or that all BMPs are implemented and part of a long-term maintenance schedule.

*One commenter suggested that increasing the area threshold between the tiers "would create powerful incentives to develop many sites that may not be suitable or sustainable."*

Response: Staff respectfully disagrees. The incentives to develop sites are likely to be driven more by market forces than by the relative ease of environmental compliance between one tier and another. In addition, the comment appears to reflect a misconception about this draft Order regarding an upper threshold for enrollment; there is no specific upper threshold of cultivated area for enrollment under Tier 2. The environmental impacts associated with a site could be beyond the scope of the CEQA analysis for this Order and, in that case, this Order would not apply. Since larger sites have an increasing potential for environmental impacts, some sites could be too large for the Order. However, this will be determined on a site-specific basis. Modifying the threshold that differentiates the tiers simply affects a site's designation as Tier 1 or 2, not the likelihood of site development. Furthermore, the draft Order does not apply to new site development, which is governed by other agencies (e.g., CDFW, CalFire, counties, and cities) and other Regional Water Board programs including the construction storm water permit for land disturbance and development, the timber waiver[4] for land conversion, and the water quality certification program for work within waters of the United States. Since the existing framework for land development is not being affected by the Order and since the Order applies additional restrictions and requirements on existing practices, it would not create a powerful incentive to develop unsuitable sites.

**Thresholds: Riparian Buffers**

*Most comments about the riparian buffer requirements argue that they are too stringent. A few commenters indicated that the buffer distances are appropriate, and one commenter indicated that minimum riparian buffer requirements should be increased to 100 feet for Class III streams.*

Response: Although specific riparian buffer distances are requirements to qualify for Tier 1, there is a process to obtain site-specific exceptions from the Tier 2 limitations. Therefore, the riparian buffer requirements provide a streamlined process for determining relative threats to water quality and maximizing water quality protection without being unduly restrictive. Staff has made no changes to the riparian buffer limitations in response to comments.

[4] Categorical Waiver of Waste Discharger Requirements for Discharges Related to Timber Harvest Activities on Non-Federal Lands in the North Coast Region

**Thresholds: Slopes**

*Most comments related to the proposed 35% slope threshold between Tiers 1 and 2 requested that it be reduced to less than 15 or 20 percent. One commenter claimed that the 35% slope threshold is arbitrary, and that farmers have been farming on "extreme slopes utilizing stepped terraces for millenia without engineers to 'design their plan.'"*

Response:

With respect to the argument about terraces, it fails to recognize that: 1) the development of terraced agricultural regions throughout the world is not without impacts to water quality, 2) the threat to water quality from terraced agriculture is a function of local geology, soil stability, and appropriate design, and 3) the sensitivity of north coast environmental receptors (e.g. endangered salmonid species) require a high level of protection.

Increased slopes are associated with decreased soil stability, especially when associated with native vegetation removal. The commenter is correct to note that terraces can decrease the potential for soil transport relative to unterraced agriculture, but in California the mechanical development of stable terraces on steep slopes is a practice that is the subject of numerous regulations, which generally require avoidance or oversight by licensed professional geologists and engineers to mitigate the potential for slope and fill failure and impacts to public safety and the environment. Numerous counties have grading ordinances that require a grading permit, which includes the development of a site plan, if a certain volume of soil is being graded.

The multi-agency vineyard enforcement effort, mentioned in the fairness discussion, above, led in part to development of Sonoma County's Vineyard Erosion and Sediment Control Ordinance (VESCO), which imposes strict requirements regarding vineyards on hillslopes, requiring that an erosion and sediment control plan be approved prior to planting or replanting a vineyard site in slopes ranging from 10-50%, and, with minor exceptions, not allowing any new plantings on sites with 50% average slope or more. These criteria were developed for Sonoma County conditions, while the Order is proposed for regionwide application where conditions vary. Soil erodibility varies in the north coast, and is a function of soil type, geologic formation, vegetative cover, slope, and rainfall.

With respect to the comments suggesting a reduction in the 35% slope threshold between Tiers 1 and 2, Staff notes that the other criteria for Tier 1, including a cultivated area limit of 5000 $ft^2$ and buffer of 200 feet on all watercourses, should adequately limit the amount of potential erosion and polluted runoff that may originate from the cultivation area. Sites with larger cultivation areas would not qualify for Tier 1 and would need to develop a WRPP. The riparian buffer of 200 feet on all watercourses accomplishes a number of functions, including maintaining riparian habitat and function, allowing for recruitment of large woody debris, and capturing and filtering pollutants through natural vegetation that may originate from adjacent cleared areas. Accordingly, Staff does not believe that it is necessary to reduce the allowable slope for a site to qualify as Tier 1.

**ISSUE 4: Water use and conservation**

A number of comments were related to water use and conservation, diversion and storage, as discussed below, arranged by general topic.

*The order contains provisions that address water storage and use as it relates to water quality and promote water conservation. Many commenters were supportive of this approach, while a few comments suggested that evidence was lacking to impose water use conditions.*

Response: There is ample evidence in the record that environmental damage is occurring from water diversions. As described in Bauer, et al (2015), on-the-ground data used to calibrate aerial imagery data indicate that in four subwatersheds on the North Coast, there were between approximately 115 and 670 plants per square mile of watershed. The authors of that study suggest that surface water diversions for irrigation is contributing to low flow conditions that threaten salmonid survival in those streams. Waste discharges and water diversions associated with cultivation in the North Coast region pose threats to beneficial uses. Additional support is discussed in the Initial Study under Environmental Setting.

Tier 1 Use Plans
*Two commenters requested that Tier 1 require the development and implementation of a use plan in order to record water source, water right documentation and monthly use, and to ensure that a Tier 1 producer has sufficient storage to make it through the dry period.*

Response: Tier 1 includes physical properties that would put a given operation in a lower risk tier, including no direct diversions from May 15 - October 31. The Notice of Intent (NOI) and self-certification form has been modified to require Tier 1 Dischargers to document water supply, monthly usage amount, storage capacity, and any alternate supply.

Domestic Use
*Numerous commenters objected to the "prohibition" on diverting surface water at certain times under Tier 1, also referred to as a "forbearance" requirement in many comments, stating that compliance would be unrealistic and impossible to enforce. Others objected and requested allowance for diversion of drinking waters.*

Response: As mentioned above, the Regional Water Board is not interested in regulating individual backyard gardens that do not pose a risk to water quality (either individually or cumulatively) or otherwise restricting valid domestic use of water. In response to comments, the de minimus threshold for which the Order will generally not apply has been raised to 2,000 square feet, as discussed above. Properties below this threshold are excluded from this Order (provided they do not represent a threat to water quality). This should relieve much of the burden expressed by small, medicinal growers.

In addition, not diverting surface waters during the specified period, as part of the qualifying criteria for Tier 1, is voluntary. As stated in the threshold discussion, above, the majority of dischargers will fall within Tier 2, which allows time to assess and come into compliance with standard conditions.

A grower may demonstrate its water use in compliance with standard conditions and still be diverting for domestic use in the summer time. The problem with allowing exceptions to this requirement in Tier 1 is that the condition will be difficult to enforce and will require Staff time to assess, which is an exercise more appropriate for Tier 2. As discussed above, Tier 2*status has been added to allow Tier 2 sites to be moved to reduced fee and reporting requirements once a discharger demonstrates completion of a water resource protection plan and full compliance with standard conditions.

Tier 1 qualification criterion: no surface water diversion from May 15-October 31
*A few comments requested that this Tier 1 "forbearance period" be consistent with a "60 day requirement".*

Response: Forbearance is a term sometimes used to describe a period of prohibited surface water diversions, and can be a condition in a permit. The Tier 1 qualification criterion of no surface water diversion from May 15-October 31 is voluntary and, therefore, not a forbearance period. If a riparian user changes their diversion pattern to fit into Tier 1, they should be aware that a riparian water right does not include the ability to capture and store water to use in the dry season when that water would otherwise not be available. The State Water Resources Control Board's Division of Water Rights has a program to streamline the application for the domestic storage process. Footnote 9 in the Order directs dischargers to the Division's website to access more information about this program. It appears that in addition to water rights conditions on small domestic use registrations, the Department of Fish and Wildlife (DFW) imposes additional conditions that include forbearance days and dates from 60 to 150 days. The Regional Water Board is working with DFW to harmonize conditions to the extent possible. This DFW condition is separate from the Regional Water Board's Tier 1 site characteristic of no surface water diversions from May 15-October 31. If a water user is unable to meet Tier 1 site characteristics even with a small use registration, they will enroll under Tier 2. The small domestic use/storage registration will still help meet standard conditions and should be documented in the water resource protection plan.

Note that small domestic use registration is not appropriate for irrigated agriculture that is not incidental (secondary) to the primary dwelling unit on the property. Dischargers may need to apply and register for small irrigation or file an application for a water right under the normal permitting process. Staff has amended Footnote 9 to include this additional information.

Subwatershed Scale for Water Use
*One commenter suggested that water use restrictions be based on hydrologic watersheds rather than planning watersheds.*

Response: Staff concurs that it is generally more appropriate to assess water quality based on hydrologic watersheds than planning watersheds, given that planning watersheds were created for administrative purposes. Accordingly, Staff proposes that water use planning be based on HUC-12 level of hydrologic watersheds, which tend to have an average size of 35 square miles in the north coast region. This is also the most refined, current hydrologic dataset that is readily available for use by the Water Boards.

Staff is also currently pursuing options to create a more refined hydrologic watershed map, to allow for focusing monitoring and cumulative impact assessment more closely on individual subwatersheds.

Conclusion: Staff has amended the standard conditions section 5.a. to read:

> Size and scope of an operation shall be such that the amount of water used shall not adversely impact water quality and/or beneficial uses, including and in consideration with other water use by operations, instream flow requirements and/or needs in ~~watershed~~ the hydrologic watershed, defined at the scale of a HUC-12 watershed (see U.S. Geological Survey Watershed Boundary Dataset) or at a smaller hydrologic watershed as determined necessary by the Executive Officer.

Tier 2 Water Use Plan

*Standard Condition 5(a) requires that the size and scope of an operation be such that the amount of water used shall not adversely impact water quality, including and in consideration with other water use by operations in the watershed. Several commenters noted the difficulties associated with requiring an individual water user to minimize the cumulative impacts of all water users in a watershed, and suggest that such a measure would be impossible to implement without "determining minimum flow requirements for each stream, determining needed (or desired) water use requirements for each landowner, and then developing the maximum volumes and timing of extractions among all landowners." (PWA comment at 7.) PWA states that this would require "the Water Board, or another regulatory agency (e.g., SWRCB, CDFW, DWR, etc.), to determine and mandate water quantity and water use levels (volumes) for each and every landowner in a watershed, until and unless the landowners can develop a cooperative mechanism to accomplish the stated objectives for the protection of water quality and beneficial uses in this Draft Order." Because of the difficult nature of this task, environmental stakeholders ask that the Order make water storage mandatory in Tier 2.*

Response: Standard condition 5(a) poses a difficult challenge, with several provisions aimed at accomplishing the desired outcome (limiting water quality impacts from cumulative over-diversion). First is the incentive provided by Tier 1 for water users to restrict diversions in the dry season. But as discussed above, enrollment as a Tier 1 site is not mandatory, and some landowners may not have this option, or cannot meet other Tier 1 characteristics. Accordingly, we expect many dischargers to enroll under Tier 2, which provides for development and implementation of a resource protection plan, and a path to come into compliance with standard conditions over time. A water resource protection plan includes a water use element that will record water source, relevant water right

documentation, and amount used monthly. The plan must describe water conservation measures and document the approach to ensure that the quantity and timing of water use is not impacting water quality objectives and beneficial uses (including cumulative impacts based on other operations using water in the same watershed). Water use will be presumed to not adversely impact water quality under one of the following scenarios:

- No surface water diversions from May 15-October 31.
- Water diversion pursuant to a local plan that is protective of instream beneficial uses.
- Other options: (e.g., % of flow present in stream; riffle depth; gage at bottom of Class I stream; AB2121 equations; DFW flow recommendations; promulgated flow objective in Basin Plan)).

One option for immediate compliance is to develop storage options, and Tier 2 dischargers are to do so if possible. But this may not be the only or the best way to achieve desired results, in fact, the Order is designed to encourage landowners to collaborate and cooperate on water use issues. The Regional Water Board does not expect immediate results in this regard; however, the conditions are designed to make progress and collect data that will be necessary to solve the cumulative low flow problem. Our hope is that some third party programs may be able to assist in these efforts, particularly in subwatersheds with high enrollment.

The Regional Water Board has recently embarked on a new initiative to address the impacts of low flows on water quality and beneficial uses. The initiative involves application of the Board's planning and implementation authorities, as well as coordination with other agencies and non-governmental agencies to address low flows.

Establishing the amount of instream flow required to support beneficial uses is important for evaluating conditions relative to beneficial use needs. The Regional Water Board currently has a 319(h) grant in the South Fork Eel watershed for development of flow criteria methodology that is appropriate for north coast and can be developed faster and easier than traditional approaches.

The Regional Water Board has also begun to focus coordination efforts with the State Water Board and other resource agencies to collaborate on instream flow study methods for both specific watersheds and approaches that can be applied broadly in a regional approach. The goal of these efforts could assist voluntary agreements and/or the development of flow objectives with regulatory effect.

Staff has proposed additional text in Order section I.B that address time schedules in a water resource protection plan, and specifically acknowledge that schedules to meet standard condition 5.a may extend past the expiration and re-issuance of the Order (five years).

Tanker Trucks

*Numerous commenters expressed concern about the impacts of water tanker trucks that deliver water to cultivation sites, and requested that the Regional Water Board require growers to document tanker truck delivery and limit deliveries to only those that can demonstrate a valid water right for such use.*

Response: The primary water quality concerns regarding water truck usage are related to 1) illegal water diversions which are known to occur for supply of water to some water trucks, 2) sediment delivery to watercourses resulting from heavy trucks traversing rural, often unpaved, roads which are not engineered for such loads.

For a brief background on the regulatory environment pertaining to water hauling, Health and Safety Code, section 111120 requires water haulers operating in California to obtain a Water Hauler's License issued by the Department of Public Health, Food and Drug Branch (FDB). The Water Hauler's License is required to haul potable water in bulk by any means of transportation for drinking, culinary, or other purposes involving a likelihood of the water being ingested by humans. However, for the purposes of irrigation, hauled irrigation water is not currently held to the same regulatory standards as hauled potable water. Certain irrigation water trucking operations may have a legal source of water such as deep water well, or a municipal supply in which the water is delivered and used at a designated place of use.

The Regional Water Board is aware that illegal water hauling operations exist, in which water is diverted from a watercourse without, or in violation of, a valid water right. The Division of Water Rights holds enforcement authority over activities such as water trucking operations where illegal diversions are occurring. Typically, photographic evidence of the act of diversion is required for effective enforcement against an illegal diversion by a water hauler.

The Order does not encourage irrigation water trucking; it encourages onsite water storage. However, the shift to water storage could cause a grower to seek alternative water sources which might involve hauled water. The Initial Study has been amended to acknowledge to possibility of increased use of delivery trucks as a result of encouraging storage. In addition, staff amended the Order to require dischargers to document in their water resource protection plans alternative water supplies, including deliveries via water hauler, and documentation would occur as part of the Monitoring and Reporting Program. Tier 2 dischargers would also need to include information regarding water hauling as part of the Water Use element of the water resource protection plan. Tier 2 dischargers must list alternative water supply in a water resource protection plan, which includes truck delivery. A footnote has been added to require the name and contact of the water provider, which may also assist in proper compliance assurance and enforcement of this activity.

**ISSUE 5: Order requirements - Legacy sites, cost of compliance, incentives**

As discussed in the responses to comments regarding fairness, above, the Order provides a regulatory structure for operations of any size, where there is a potential threat to water quality, providing a pathway to compliance with water quality laws for cannabis growers on private properties. The multiple-tier structure and associated requirements recognize that there are sites posing lower versus higher levels of threat to water quality and beneficial uses. Staff expects that many of the sites in the North Coast Region will fall into Tier 2 and will likely require site work to come into compliance with Order conditions. The Order provides for flexibility in the form and format of the water resource protection plan to reflect the broad range in complexity that different sites may present, from sites with gentler slopes, fewer potential pollutant sources or surface waters within the site, to those with steeper slopes, numerous pollutant sources or numerous locations where pollutants may enter or contact receiving waters. More complex sites will require more detailed plans with involvement of one or more licensed professionals to assess and/or design pollution control or site restoration measures.
Less complex sites may only need a plan prepared by the landowner, perhaps with suggestions or input from a third party or other technical expert, or from Water Board Staff.

Where sites require improvements to existing infrastructure or work to correct chronic erosion or pollutant transport to receiving waters, or to control or prevent failure of an unstable feature that will result in pollutant discharges to receiving waters, particularly where those conditions or features are associated with past or historic site development or land management activities (legacy sources), the Order requires that landowners prioritize and develop a schedule for addressing those conditions and features. Staff expect individual improvements and corrective actions necessary for a given site may range from small, simple fixes that can be implemented by a landowner with hand tools, to large, projects requiring professional design and oversight, and use of heavy equipment. Where a given site has more areas requiring work and/or more costly improvements or corrective actions, Staff expect that the implementation schedule may extend over several years. Staff have proposed additional text in Order section I.B that address time schedules in a water resource protection plan, and specifically acknowledge that schedules to meet standard conditions that require corrective work under Order section I.B.5c may extend past the expiration and re-issuance of the Order (five years).

*Several people commented on the requirement for landowners to repair legacy pollutant sources, including those created by historic logging activities, with some expressing support, others expressing opposition or questioning the fairness of such a requirement.*

Response: Regional Water Board Resolution No. R1-2004-0087, the Total Maximum Daily Load Implementation Policy Statement for Sediment-Impaired Receiving Waters in the North Coast Region (Sediment Policy) finds that approximately fifty-nine percent of the area of the North Coast Region is "listed" as impaired due to sediment, that the implementation of existing programs used for the control of anthropogenic sediment waste

discharges has not been adequate to protect, remediate, restore, and enhance sediment-impaired water bodies and to control the cumulative impacts of sediment waste discharges, and that there is an immediate need for the prevention and control of sediment waste discharges with a greater dedication of Staff time to outreach, education, prevention, permitting, and enforcement of existing rules. Accordingly, the resolution directed Staff, in part, to rely on the use of all available authorities, including existing regulatory standards and permitting and enforcement tools, to more effectively and efficaciously pursue compliance with sediment-related standards by all dischargers of sediment waste. These existing permitting and enforcement tools include, but are not limited to watershed-wide waste discharge requirements, individual or project-specific waste discharge requirements, general waste discharge requirements, waivers of waste discharge requirements, the identification and assessment of sediment waste discharge sources under the authority of Section 13267 of the California Water Code, and the control of sediment waste discharges under the authority of Sections 13304 and 13260 of the California Water Code. The resolution also directs the Regional Water Board Executive Officer to redirect and seek additional Staff resources for public outreach, education, permitting, and enforcement of water quality standards.
In addition, the resolution states that "[t]he Regional Water Board hereby directs Staff and strongly encourages all landowners within the North Coast Region that are currently discharging or threatening to discharge sediment waste to work to control discharges."

Recent general orders adopted by the Board to address specific categories of NPS pollutant discharges require that permittees not only control waste discharges associated with their current activities, but that they inventory, prioritize, and take steps to control pollutant discharges from legacy sources. For example, Order No. R1-2013-0004, Waiver of Waste Discharge Requirements and General Water Quality Certification for County Road Management and Activities Conducted Under the Five Counties Salmonid Conservation Program In the Counties of Del Norte, Humboldt, Mendocino, Siskiyou, and Trinity states in part that the "5C Counties are responsible for discharges of waste from legacy sediment sites associated with their road networks. Legacy sediment sites are existing sites that are 1) actively discharging or have the potential to discharge sediment in violation of water quality requirements; 2) are caused or affected by human activity; and 3) may feasibly and reasonably respond to erosion control/management measures." Further, Order No. R1-2010-0029, Waiver of Waste Discharge Requirements for NPS Discharges Related to Certain Federal Land Management Activities on National Forest System Lands requires that the Forest Service inventory, prioritize, and address legacy sources on its lands throughout the North Coast Region. Regulatory mechanisms for private timber properties (e.g. Order No R1-2012-0087 for Green Diamond Resource Company, and Order Nos. R1-2011-0100 and R1-2014-0036 for Humboldt Redwood Company, LLC) and for property owners in watersheds with sediment TMDL action plans impose similar requirements for identifying and addressing controllable sediment sources, defined as those sites or locations that meet all the following conditions:

1. is discharging or has the potential to discharge sediment to waters of the state in violation of water quality requirements or other provisions of this WDR;
2. was caused or affected by human activity; and

3. may feasibly and reasonably respond to prevention and minimization management measures.

The Order is consistent with Board direction in the sediment TMDL, as well as with recent general waste discharge requirements and waivers issued for specific types of NPS facilities, dischargers, or activities. Many private property owners in the North Coast Region own rural properties in areas that are, or have previously been, timber production zone lands and have had past logging activities and, as current property owners, are responsible for the waste discharges associated with activities, features, and conditions on their property. The subset of those private property owners in the region that are cultivating cannabis are not the first to be directed through a regulatory order to control their waste discharges, over time. In addition, other property owners will likely be subject to a future order or other regulatory structure covering a different type of NPS activity, a specific watershed or subregion, or a regionwide prohibition or order relating to discharges from private roads, driveways, parking areas, and other features with controllable sediment sources.

*Several commenters suggested the need for or asked about the availability of financial assistance for property owners required to address legacy pollutant sources on their properties.*

Response: There are various technical and financial assistance opportunities available to property owners obligated to implement TMDL requirements or to comply with regulatory orders. Local Resource Conservation District Staff, members of the state-funded Eel River Recovery Project team, and Regional Water Board Staff may be available to review and/or discuss sites and provide technical assistance or advice to guide property owners in developing their own water resource protection plans. There are a number of consulting firms throughout the region with experience and expertise in NPS pollution control, site maintenance, site restoration, and mitigation. There are various grant funding programs and opportunities periodically available through state agencies to assist property owners with specific issues.[5] For example, the federally-funded and state-administered Clean Water Act section 319(h) program annually solicits project proposals for NPS pollution control projects. Regional Water Boards throughout the state identify project preferences, which may include specific types of projects, projects focusing on specific activities or programs, or projects in specific watersheds. Projects funded in the North Coast Region in the past have included projects to inventory roads, develop farm or ranch plans, and to implement best management practices. The U.S. Environmental Protection Agency has advised the Regional Water Board that 319(h) funds may be used for projects associated with implementation of the region's cannabis program. Staff will work with prospective sponsoring organizations to develop and seek funding for projects intended to: 1) assist property owners in developing and implementing water resource protection plans, and 2) to assist watershed or road associations in high priority subwatersheds to inventory, prioritize, and make improvements to sediment discharge sources on common roads within subwatersheds. As Staff identifies funding opportunities, Staff will share that

[5] For more information, see: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/

information through the Board's website, Lyris list, at outreach events, and with education and outreach partners.

*Several commenters suggested or asked about incentives for Order enrollment and compliance.*

Response: In developing the Order, Staff has attempted to build in incentives for landowners to participate in the program and to make voluntary efforts to minimize water quality and resource impacts associated with their operations. See privacy discussion, above.

Incentives to minimize water resource impacts for Tier 1 include:

1. potential lower fee for participation in approved third party program
2. no requirement to prepare a water resource protection plan
3. no annual reporting

Incentives for Tier 2 include:

1. potential lower fee for participation in approved third party program
2. Lower Tier 2* fee where the conditions are met

Incentives to work together with neighbors, including other cannabis growers in the watershed include:

1. increased potential to reduce cumulative impacts to water quality and water resources; lesser impacts reduce the potential that a given site or watershed will have lower priority of enforcement inspections
2. increased potential to qualify for grant funding. Unified efforts to identify and prioritize watershed-wide problems can help to make a prospective project more competitive.

*Many commenters encourage Staff to focus early program implementation and/or enforcement efforts on larger rather than smaller sites.*

Response: As stated above, the Order generally applies to all cannabis cultivation operations on private lands. Those with larger or more complex sites will likely have more extensive and/or expensive water resource protection issues. In general, those working under the Order will have technical assistance resources available to them, and Staff will work to identify potential funding sources to assist with pollution control efforts.

In parallel with development and implementation of the cannabis regulatory program, Staff has been and will continue to work with agency partners to inspect sites in high priority watersheds, or where significant impacts are suspected, and to take appropriate enforcement actions to direct site cleanups or restoration. Enforcement follow-up may include assessment of penalties in some cases. Large and very large sites are likely to be of higher priority of these inspections. Also high priority are watersheds where there are

high densities of sites developed for cannabis cultivation, even where individual sites may be smaller, as the cumulative impacts to the water resources are likely to be significant. Those cultivating cannabis on private properties in the region are encouraged to consider both the individual impacts of their operations on their watershed, as well as the general density and distribution of cannabis cultivation occurring on properties around them. As noted in the incentives discussion above, an effort to work together with your neighbors in the watershed may allow you to work cooperatively to reduce cumulative impacts to water quality and water resources and, potentially, to reduce the likelihood that your site or your watershed will become the target of enforcement inspections.

**ISSUE 6: Order requirements - Clean Water Act section 401 Water Quality Certification**

*Staff received one late comment (on June 10, 2015), from the National Marine Fisheries Service requesting clarification on the scope of the General Water Quality Certification and asking why it does not apply to a "watercourse containing fish and/or that supplies water for a domestic water source."*

Response: Although the Staff do not have the obligation to respond to late comments, addressing this specific comment will make the Order more accurately articulate the regulations implemented through the Order. Staff had included that exclusion with the understanding that it was part of California Code of Regulations, Title 23, section 3861, subsection (d). After reviewing the regulations in response to this comment, Staff discovered that the regulations do not include that exclusion. Staff has removed the respective language from Finding No. 30 of the proposed Order.

*Staff received a comment requesting clarification on the scope of watercourse crossing work that requires Regional Water Board review and permitting, and whether that requirement includes maintenance activities "such as installing an inlet debris barrier, a flared inlet, a downspout or energy dissipation device at a culvert outlet, adding gravel to the surface of the stream crossing, or armoring the inlet or outlet fillslope."*

Response: Any work in streams or wetlands require coverage under general or individual waste discharge requirements pursuant to the Porter-Cologne Act and/or Clean Water Act section 401 certification if the U.S. Army Corps of Engineers (ACE) requires a Clean Water Act section 404 dredge or fill permit for the activity.[6] This Order provides coverage under those applicable laws and regulations for individuals performing stream-related activities to bring their site into compliance with standard conditions through a Tier 2 water

[6] Tier 2 restoration or remediation work in streams or wetlands can be considered enforcement required actions similar to Tier 3 cleanup work required pursuant to Water Code section 13304. In some enforcement cases, the ACE may consider alternatives to requiring an after-the-fact dredge and fill permit pursuant to the Clean Water Act section 404, such as voluntary restoration at the site or an order requiring completion of initial corrective measures to alleviate any imminent adverse impacts to aquatic resources. In the event that the ACE does assert its Clean Water Act 404 jurisdiction, water quality certification is required, along with applicable fees.

resource protection plan or to conduct restoration, mitigation, or cleanup work through a Tier 3 plan. However, as discussed in the privacy section above, dischargers covered under the requirements of this Order may opt to obtain permit coverage for their Tier 2 restoration or remediation work in streams or wetlands through a separate individual permit or coverage under a separate general permit (e.g., 5C Waiver).

**ISSUE 7: Enforcement of Order requirements; General Program Enforcement**

*A number of commenters stressed the importance of a strong enforcement effort and/or expressed concern about the likelihood that many individuals cultivating cannabis would choose not to comply with the program nor to correct water quality problems in the absence of a robust, well-staffed enforcement effort.*

Response: The Regional Water Board cannabis regulatory program consists of multiple parallel efforts (multi-pronged approach), including regulatory program development and implementation, education and outreach, coordination with state and local agencies, and enforcement. Significant Staff effort is presently directed towards Order development and implementation after its adoption and education and outreach; however, Staff is also participating in DFW/Water Board inspections in subwatersheds identified as priorities due to confirmed or suspected cumulative adverse impacts and a corresponding high concentration or density of development associated with cannabis cultivation on private properties. In addition, Regional Water Board Staff is continuing to participate in various environmental crimes task forces throughout the region, and to participate in task force inspections. Subwatershed inspections and task force inspections can lead to enforcement actions where violations are confirmed. Once adopted, the Order will also be enforceable, and while implementation efforts will largely consist of compliance assistance with those dischargers who are seeking to comply with the Order, Staff may recommend or pursue progressive enforcement actions when warranted by site-specific conditions or other factors.

Staff agrees that this particular Order will present unique challenges for implementation because of the evolving legal status of the cannabis plant and its uses and the potential associated criminal element not generally encountered in other programs the Board implements. Somewhat unique to this Order versus other orders adopted and implemented by the Board, legislative direction and support for development and implementation of the cannabis regulatory program came with resources to provide for Staff positions in the two pilot regional water boards, the State Water Board, and the Department of Fish and Wildlife. The pilot regional water boards may realize increases in staffing levels as the program scales up statewide, as well. All currently funded dedicated positions have been filled over the past fiscal year, allowing for a progressively scaled up implementation of elements of the cannabis regulatory program and integration with efforts already underway. In the North Coast Region, dedicated enforcement Staff have been involved for the past several years in joint agency efforts, inspections, and enforcement of water quality regulations where violations are confirmed on sites developed for cannabis cultivation. The additional dedicated cannabis team Staff help to expand those efforts, and close coordination with Staff in the Central Valley Region and at

the State Water Board include sharing Staff for specific inspection efforts in each region. While the aggregate number of inspections conducted by our Staff, or by other task force members will represent visits to only a tiny percentage of cultivation sites over the region in a given year, the focus for Water Board Staff will be on sites deemed to be a high priority for water resource protection, and any such site is a potential candidate for inspection and enforcement actions as appropriate.

Accordingly, as mentioned in the discussion regarding program incentives, above, all those persons or parties cultivating cannabis on private properties in the region are encouraged to consider both the individual impacts of their operations on their watershed, as well as the general density and distribution of cannabis cultivation occurring on properties around them, and to consider working cooperatively to reduce cumulative impacts to water quality and water resources and, potentially, to reduce the likelihood that their site(s) or their watershed(s) will become the target of enforcement inspections.

Concurrent with on the ground inspection efforts, Water Board Staff are developing the CIPs (cannabis identification and prioritization system), intended, as its name suggests, to assist Staff in identifying and prioritizing cannabis cultivation sites with respect to potential threat to water quality. A comparison of cannabis sites identified through this system, as well as those identified by other means to verify enrollments for coverage under the Order, once adopted, will help Staff to identify watersheds or areas with disproportionate percentages of parcels developed for cannabis cultivation but not enrolled under the Order. As Order implementation progresses, unenrolled sites and/or parcels in areas where there is a more widespread lack of enrollment will become candidates for progressive enforcement efforts including notices of violation and/or formal enforcement orders, as well as priority sites for subwatershed inspection efforts.

*One commenter wondered how Staff would check to confirm whether a Tier 1 enrollment was accurate.*

Response: Database for enrollment will allow for some assessment of the types of sites enrolled in a given watershed. Cannabis cultivation site identification efforts through CIPs and other means, as discussed above, will allow for comparison to enrollment information on a coarse scale, and may reveal discrepancies that warrant further investigation, either through written correspondence or by field inspection. Sites confirmed to be improperly classified either during spot checks, subwatershed inspections, or by observations reported by other inspecting agencies or parties may be subject to progressive enforcement, and will be required, at a minimum, to enroll for Order coverage under the appropriate tier.

**ISSUE 8: Program fees, Funding, Enrollment and Implementation Timelines**

*There were a number of comments about program fees and funding, and regulatory timelines. A number of commenters emphasized the importance of ensuring that the program is adequately funded by fees, while others stated that proposed fees per the State Water Board's annual fee schedule (see below) are too high.*

Response: The legislature has authorized funding for the Water Boards cannabis regulatory program for fiscal years 2015-16 and 2016-17. From 2017-18 onward, the program must be self-funded, i.e., regulatory program fees paid by enrollees must be adequate to cover program costs. The Fee Branch at the State Water Resource Control Board is responsible for setting fees for the various regulatory programs that the Water Boards administer. The Fee Branch Staff allows Regional Water Boards to provide input with respect to the fee structures for their various regulatory programs, provided the fee structures adequately cover program costs.

The existing fee structure provides:

"(4) The annual fee for discharges associated with marijuana cultivation shall be as follows:
**Total Area Cultivated Annual Fee**
Less than 0.25 acres $500
0.25 to 5 acres $2,500
Greater than 5 acres $10,000"

Staff intends to propose suggestions to the Fee Branch that may include, but not be limited to, adjusting fee amounts, and providing for separate reduced annual fees for dischargers working with approved third party programs. Over the current and upcoming fiscal year, following Order adoption, Regional Water Board Staff and Fee Branch Staff will evaluate whether the existing and/or any revised fee structure(s) are sufficient to fund the program, and propose changes as appropriate. It should be noted that Regional Water Board Staff will propose and support alternative reduced fees to create incentives for coordination with approved third party programs and for making timely efforts to comply with conditions, but that Fee Branch may, ultimately not support such incentives if overall enrollments and associated fees over the current and upcoming fiscal year indicate that the fee structure and/or discount options are not adequate to fund the program.

*A number of commenters asked for more time for enrollments.*

Response: Staff proposes to change the enrollment deadline from November 15, 2015 to February 15, 2016. In addition, Staff proposes to hold enrollment clinics throughout the region to assist prospective enrollees in completing the NOI paperwork and to answer questions about the program requirements and expectations. Finally, Staff propose to extend the amount of time provided for preparation water resource protection plans from 90 days to 180 days from enrollment in the program.

*One commenter requested an economic analysis for cost of compliance.*

Response: Staff has generally assessed a range of the costs associated with Order implementation.

The Regional Water Board expects the cost of compliance with the Order to vary considerably among dischargers throughout the region. In general, the cost of compliance is expected to correspond to the level of threat a given site poses to water quality. Among

the factors expected to affect the cost of compliance with the Order are site-specific factors, including existing onsite conditions such as quantity and quality of roads and stream crossings, slope gradients and soil erodibility, controllable sediment discharge sites or other water resource impacts associated with past site development or land management activities (legacy features), and onsite cannabis cultivation features/practices such as cultivated area, cultivation techniques, and water use/storage needs.
Based on available local knowledge and existing economic analyses for recently adopted relevant regulatory programs,[7] Staff can provide rough estimates on the range of expected costs of compliance.

The low end of the cost of compliance spectrum can be represented by a Tier 1 or 2 discharger who meets all of the criteria and standard conditions, is able to conduct their own tier category assessment and site monitoring, and opts to enroll for coverage under the Order directly with the Regional Water Board rather than through a third party. The cost of compliance for this described discharger would include the cost of enrolling in the program, payment of annual fees to the State Water Board, and monitoring and reporting, which according to the current fee schedule would likely be $2,500 or less annually. If a discharger needs to invest in water system or storage improvements, or make other onsite improvements to fulfill monitoring and reporting requirements or achieve standard conditions prior to enrollment, there would be additional capital costs but limited annual costs thereafter. Additional costs may be imposed by third parties separately.

The median of the cost of compliance spectrum can be represented by a Tier 2 discharger who elects to operate through a third party and needs to implement several BMPs on his or her site. The items incurring a compliance cost for this discharger may include payment to a third party program for items such as a tier category assessment, enrollment under the Order, and creation of a site-specific water resource protection plan. The discharger would also be required to implement BMPs per his or her site-specific water resource protection plan, which may involve adding water storage tank(s) to the property, installing water meters and upgrades to the irrigation system, installing storage sheds for soil amendments and other chemicals, installing erosion control materials and/or vegetative ground cover on hundreds to thousands of square feet of existing exposed slopes, and reshaping portions of the existing roads. The discharger may elect to work with an approved third party, or to retain a consultant and/or a contractor for installing some or all of the mentioned BMPs, as

[7] North Coast RWQCB, 2010, Staff Report for the Klamath River TMDLs, the Klamath River Site Specific Dissolved Oxygen Objective, and the Klamath and Lost River Implementation Plans, Chapter 10 Economic Analysis, dated March, available online at:
http://www.waterboards.ca.gov/northcoast/water_issues/programs/tmdls/klamath_river/100927/staff_report/11_Ch.10_EconomicAnalysis.pdf

North Coast Regional Water Quality Control Board, 2014, Staff Report Supporting the Policy for the Implementation of the Water Quality Objectives for Temperature and Action Plan to Address Temperature Impairment in the Mattole River Watershed, Action Plan to Address Temperature Impairment in the Navarro River Watershed, and Action Plan to Address Temperature Impairment in the Eel River Watershed, Section 10 Economic Analysis, Pages 170-190, dated March 13, available online at
http://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/140516_temp/140327_Temp_Policy_Staff_Report_ADOPTED.pdf

well as for periodic monitoring of the BMPs and annual reporting as required for Tier 2 dischargers. Assuming such a discharger would retain a consultant and/or a contractor to perform a majority of the scope of work, the costs of BMP installation and other initial costs are expected to range from approximately $30,000 to $70,000, not including any capital costs associated with water system or storage improvements.

The Order allows flexibility in the timeframe for implementation of BMP elements, so these initial costs may be spread over several years. Additionally, the recurring annual cost of enrollment for Tier 2 sites is expected to range from less than $2,500 up to approximately $15,000.

Star status Tier 2* dischargers are subject to the Tier 1 annual fee. Accordingly, the recurring annual cost of compliance for the Tier 2* discharger will likely be $2,500 or less.

The high end of the cost of compliance spectrum can be represented by a Tier 3 discharger who elects to continue cultivation activities, which would require cleanup and restoration work in addition to the scope of work discussed above for a Tier 2 discharger. The items incurring a cost of compliance for this discharger beyond the costs for Tier 2 operations are expected to include the retention of a California licensed professional to develop a cleanup and restoration plan, implementation of the cleanup and restoration plan, and payment of a higher annual fee to the State Water Board than that required under Tier 2. Cleanup and restoration activities for a given site may include removal of fill material from a watercourse, replacement of multiple onsite stream crossings, and removal of unstable fill from slopes. In addition to the costs associated with either Tier 1 or Tier 2 compliance, as applicable, staff expects the initial cleanup work costs for a Tier 3 site to range from approximately $50,000 to $200,000 over a two-year period. In total, the initial cost of compliance for such a Tier 3 site is expected to range from approximately $80,000 to $270,000 and the recurring annual cost of compliance once the site moves into Tier 1 or Tier 2 status is expected to range from less than $2,500 up to approximately $15,000.

Water system and storage options and estimated costs:

Although water storage is not strictly required by the Order, it is a factor qualifying sites for Tier 1 and must be addressed in the water use component of the Water Resource Protection Plan for Tier 2. Therefore, costs for water storage are estimated assuming aneed of 30,000 -100,000 gallons, depending on use. The cost of storage varies, depending on storage type and site conditions. Water tank storage can roughly be estimated as $1 per gallon for 5,000 gallon tanks and over. Following capital costs associated with water storage system installation, there are no significant costs anticipated.

- Some portion of storage needs may be fulfilled by capturing rainfall from rooftop collection systems (1” of rain on 1,000 square-feet yields approximately 600 gallons). The construction of a 1,000 square-foot rooftop would cost approximately $2,000 for a basic galvanized metal shed roof without walls. Greenhouse structures can also serve as catchment surfaces. For a rainfall catchment system on an existing 1,000 square-foot rooftop, with 30 inches of rain in the winter, 18,000 gallons of storage can be filled. For 30,000 and 100,000 gallon capacity rainfall catchment

systems the capital cost is anticipated to be approximately $33,000 to $111,000, respectively, with no significant costs thereafter. Engineering and local permits may be required for site preparation or building. No state permits are required for the storage of rainwater.

- For a surface water diversion to storage, an appropriative water right must be obtained from the Division of Water Rights as well as a Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW). Obtaining an appropriative water right can be accomplished relatively simply for riparian users cultivating solely for the purpose of a primary dwelling unit via a Registration of Small Domestic Use. The fee is $250 for a five year registration and no additional fees are required from CDFW. A "small irrigation" registration process is also available in certain locations for water diversions not associated with the primary dwelling (i.e. commercial crop) with a filing fee of $250. For other users that do not qualify for these permits, a full appropriative water right permit will be necessary to legally store appropriated surface waters. The fee for an appropriative water right is currently $1,000 + $15 per each acre-foot over 10 acre-feet, plus the associated CDFW fees (currently $850) plus the costs of compliance with the CEQA. Costs associated with this procedure can be quite high depending on whether compliance with the CEQA is required and location-specific factors such as water availability and degree of community organization. These costs can be greatly reduced if community resources are pooled to do the necessary studies to comply with the CEQA and in areas not receiving protests from other nearby users. Overall, costs of an appropriative water right permit can range from approximately $2,800 to over $30,000. The cost of storage is a capital cost with relatively insignificant costs thereafter, including an annual water rights fee of $150 plus $0.058 per each acre-foot over 10 acre-feet, according to the current fee schedule.
- Off-channel pond installation for storage is appropriate for suitable sites. Costs are associated with site suitability analyses ($500-$5000) and engineering costs ($1,000-$50,000) and are commensurate with site risks. Local permits for are likely required. For a suitable site, the costs of excavation, lining, and stabilization can be less than those associated with tank storage. Water loss to evaporation can be significant unless the pond is deep, which is only appropriate and cost effective for suitable sites.
- Some landowners may install wells. The cost of well installation could range from $10,000-$20,000 depending on depth (up to 200 foot depth). This investment may be lost if water is not encountered.

*One commenter encouraged Staff to ensure that the annual enrollment fees generate sufficient funds to cover cleanup of abandoned sites.*

Response: The permit fees are intended to cover program staffing and implementation. There may be legislative efforts underway to generate funds to cover abandoned site cleanups. In addition, administrative civil liabilities (penalties) generated through enforcement efforts may be directed in part towards cleanup projects. Monies paid into the

cleanup and abatement account may be tapped through future funding request for specific projects in the region, as well.

*One commenter sought more specificity with respect to timelines for implementation of Tier 2 corrections to meet conditions.*

Response: See response to Issue 5, above. Site complexity and the amount and cost of work necessary to bring a property into compliance with standard conditions will play a part in the timeframe needed/allowed to bring a site into compliance.

*One commenter suggested that the Regional Water Board limit new sites in cumulatively impacted watersheds and/or shut down big sites.*

Response: The subject Order is not the tool to do this. Staff may encounter sites with significant water quality impacts that have been developed in such a way that full site restoration is necessary to protect water quality; in such cases, cultivation operations would by necessity be shut down. Cumulative impacts will be addressed in part through subwatershed inspections and enforcement efforts, and/or through the efforts of other agencies including the counties (e.g., by setting plant count limits or otherwise making zoning or general plan changes) and/or by law enforcement.

*Some commenters stated that the fees are onerous, especially considering other costs of program compliance (including costs for monitoring and reporting).*

Response: This is only the latest in many industries, land use types, or operations subject to a waste discharge regulatory program through the Water Boards, and any person discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state is subject to applicable requirements of the Porter-Cologne Act and Clean Water Act. See response to Issue 1, above. Addressing discharges of waste and water resource protection associated with cannabis cultivation is a high priority for a focused water quality regulatory program at this time due to the proliferation of cannabis cultivation sites throughout the region that are resulting in or causing adverse impacts to water resources due to waste discharges and/or unauthorized diversion, storage, and use of surface waters. The requirements imposed are specific to the typical waste discharges and water resource impacts associated with cannabis cultivation, and the costs incurred in complying with this program are commensurate with those imposed on dischargers covered by other regulatory program.

*Some commenters suggested that people may grow more plants in order to comply with the Order requirements.*

Response: Comment noted. The Regional Water Board is not proposing to regulate sites based on the number of plants being cultivated, but is only concerned with the individual and cumulative water quality and water resource impacts associated with subject sites and operations. It should be noted that all dischargers, whether or not enrolled for coverage

under the Order, are subject to and not immune from the laws, rules, regulations, and requirements of all other applicable agencies.

Conclusion: Apart from the proposed change to the enrollment deadline and amount of time following enrollment under the Order to completing development of the water resource protection plan, as discussed above, Staff does not propose any changes to the Order based on these comments.

**ISSUE 9: Third Party Programs**

*Many commenters were generally supportive of the third party component of the draft Order, but several requested additional detail on the roles and responsibilities of third party programs as a part of the Order, including substantive and procedural mechanisms. Two commenters expressed concern as to whether all information on cultivation sites would be made available to the public.*

Response: Staff provides the following discussion and response on various aspects of third party programs.

Finding 21 of the draft Order provides:

> Third Party Programs-Tiers 1 and 2 Dischargers have the option to participate and comply with this Order through an approved, third party program. Third party programs can increase the program effectiveness and administrative efficiency of the Order, provided that the third party program meets certain elements (including sufficient feedback mechanisms to Regional Water Board). Third party programs can help meet some or all of the following:
>
> • Tracking names of participating (and non-participating) dischargers.
> • Collecting and submitting required fees.
> • Managing communication and notifications between participating dischargers and the Regional Water Board, including informing growers of the Order and status of implementation.
> • Assisting dischargers with identifying the proper tier for a specific site.
> • Assisting self-certification requirements for dischargers meeting Tier 1 characteristics.
> • For Tier 2 Dischargers, developing sample water resource protection plans, helping individual dischargers develop individual plans, and/or developing a more comprehensive community plan which individual dischargers agree to abide by.
> • Assisting dischargers in implementing water resource protection plans.
> • Monitoring and reporting to Regional Water Board, including confirmation of compliance with the Order, and effectiveness of management measures.
>
> A third party program seeking approval from the Executive Officer to fulfill some or all of the elements listed must submit a proposal to the Regional Water Board. The proposal must demonstrate the substantive and procedural mechanisms to serve

the function it is applying for. Third parties are encouraged to work with Staff as early as possible (even prior to Order adoption) to calibrate their programs.

The State Water Board's 2004 NPS Policy discusses the need for regional boards to be as creative and efficient as possible in devising approaches to prevent or control NPS pollution. (NPS Policy at 9.) It identifies the development of third party programs as a good approach to reach multiple numbers of dischargers who individually may be unknown to the Regional Board.

Regional Water Board Staff considers the third party program component essential for the efficient administration of general permits that cover numerous dischargers, and particularly in consideration of the privacy concerns of individual dischargers under this Order. The reliance on third party programs does not mean that the Regional Water Board abrogate its legal authority and responsibilities. Meaningful feedback from the third party to the Regional Water Board and the accountability of the enrolled dischargers must be in place.

The NPS Policy provides guidelines for development of third party NPS control programs following the "Five Key Elements" for all NPS Programs. "For implementation programs developed by non-regulatory parties, factors such as availability of funding, a demonstrated track record or commitment to NPS control implementation, and a level of organization and group cohesion that facilitates NPS control implementation are among the critical factors that must be taken into account." (NPS Policy at 11.)

**Third Party Program Proposal and Approval Process**

Any third party program must receive approval by the Regional Water Board's Executive Officer in order to serve individual dischargers under the Order. The Executive Officer and the Regional Water Board have the authority to deny a third party application based on lack of experience/qualifications, incomplete applications, insufficient detail/scope of proposed work, or at their discretion. To ensure that a third party program is qualified to assist with implementation of this Order for Tier 1 and/or Tier 2 enrollees, third parties must submit a proposal to the Regional Water Board.

A third party may elect to cover the entire region or a portion therein, and may apply to serve any one or more of the functions listed above. If a third party proposal is accepted, the Executive Officer will send an approval letter that will identify the third party's geographic boundaries and/or applicable responsibilities for coverage of selected Tier(s). All approved third parties will be listed on the North Coast Regional Water Board website. The approval is conditional and subject to a probationary period in which the third party must work with Regional Water Board Staff, while fulfilling its duties as a third party, to assure its ability to fulfill its responsibilities to the Water Board. The probationary period will extend from 6 months to one year, depending on the type of third party functions proposed in the application, as well as determination by the Regional Water Board of the need for continued calibration.

The proposed Order has been modified as described below:

Third party proposals should include the following, as applicable:

A. Program Purpose: Include a statement of the functions and roles listed in Order finding 21 which the third party proposes to fulfill, including procedures to implement the proposed functions/roles.

Functions and roles include:

- Tracking names of participating (and non-participating) dischargers.[8] This includes data entry in the California Integrated Water Quality System (CIWQS), using a unique and secure identifier.
- Collecting and submitting required fees.[9]
- Managing communication and notifications between participating dischargers and the Regional Water Board, including informing growers of the Order and status of implementation.
- Assisting dischargers with identifying the proper tier for a specific site.
- Assisting self-certification requirements for dischargers meeting Tier 1 characteristics.
- For Tier 2 Dischargers, developing sample water resource protection plans (WRPPs), helping individual dischargers to develop individual plans, and/or developing a more comprehensive community plan which individual dischargers agree to abide by. Plans must include a timeline for implementation when necessary.
- Assisting dischargers in implementing water resource protection plans. This must include site inspections and documentation of timely implementation or installation of management measures per schedule in the WRPP, and evaluation of their effectiveness in meeting intended objectives.
- When working with a landowner or operator on efforts to comply with the requirements of the Order, the third party must have a written, signed agreement with the operator and/or owner, which serves as a mechanism to clearly identify the roles and responsibilities of the third party, and to inform the landowner and operator that they are ultimately responsible for complying with the terms and conditions of this Order.
- Monitoring and reporting to Regional Water Board, including compliance with the Order, and effectiveness of management measures.

[8] Tracking individual enrollments is a basic function that third parties must perform to facilitate implementation of the conditions of this Order and to provide the basic spatial information for watershed-scale program effectiveness reporting.

[9] A third party must collect fees from enrollees, in accordance with the State Water Board fee schedule contained in title 23 of the California Code of Regulations, and submit them to the State Water Board. The fees invoiced by the State Water Board will be based on each enrollee's tier status.

B. Demonstration of organizational capacity and funding mechanisms to administer the third party program.
    a. Documentation of organizational structure.
    b. Fee collection and submission protocols.
    c. Demonstration of the integrity and technical capacity for functions and roles to be fulfilled. This demonstration includes qualifications for ensuring that Order requirements are fulfilled.

C. Sample water resource protection plan.

D. Framework for annual compliance reporting to CIWQS and to enrollees in the third party program that includes the following:

    i. Total number of sites enrolled through the third party, by HUC-12 subwatershed, or smaller hydrologic watershed, as determined necessary by the Executive Officer.
    ii. Total number of sites in each subwatershed enrolled in each specific tier category.
    iii. Number of sites in compliance with standard conditions in each specific watershed in the covered region.
    iv. Number of sites with active water resource protection plans meeting milestones.
    v. Summary of education and outreach activities or efforts. Proposal should include metrics to be used to assess effectiveness of education and outreach efforts. This may include, but is not limited to details, where applicable, about type(s) and number(s) of activities or efforts; number of people attending events, if applicable; number of people worked with one on one or provided informational materials; number of sites where education/outreach information is being applied; and anticipated future efforts.
    vi. Monitoring data from each applicable site in the coverage area.
    vii. Annual summaries of expenditures of fees and revenue used to comply with this Order.

E. Sample liability waiver that demonstrates that the responsibility falls to the landowner/operator of the site to meet the stated terms and conditions of this Order.

F. Framework for addressing non-compliance by individual third party enrollees.

**Monitoring and Reporting Provisions and Record Keeping Requirements**

Both Tier 1 and Tier 2 dischargers are required to complete and submit an NOI form (Order Appendix A) or alternative communication through an approved third party program. The NOI consists of three sections. Sections 1 and 2 must be completed and submitted to a third

party or directly to the Regional Water Board. Section 1 seeks information regarding the discharger. Section 2 seeks information regarding the individual site.
General characteristics about the site must be submitted in order to gather baseline information that will be aggregated on a watershed-wide scale. Section 3 of the NOI must also be filled out by all dischargers, and kept on site, to be made available to Regional Water Board Staff on request during site inspections. In section 3, Tier 1 dischargers must certify that their sites meet Tier 1 characteristics and standard conditions. Tier 2 Dischargers must develop water resource protection plans, and implement the measures noted in that plans, in accordance with the conditions of the Order and the implementation schedule proposed in the plans.

To avoid housing sensitive site-specific information at the agency (e.g. names, addresses, and APNs), this information can managed by an approved third party. The third party summarizes relevant site-specific information provided in the individual NOIs, along with all other sites managed by the third party within the approved sub-watershed area (the sub-watershed area will be based on 6$^{th}$ field watersheds, HUC-12 watersheds, or smaller hydrologic watershed as determined necessary by the Executive Officer). Summaries within watersheds facilitate the assessment of cumulative impacts, comprehensive activity tracking, and determination of program effectiveness. Watershed scale program effectiveness shall be reported in a consistent/compatible manner (i.e., consistent with how other approved third party programs assisting with implementation of this Order are reporting) that enables region-wide comparison of subwatershed reports. The summary information is comprised of the following information:

1. Number of enrollees in each tier category, by subwatershed;
2. Total fees charged;
3. Compliance status (for example, how many Tier 2 dischargers are either in the process of developing plans, how many have developed and are implementing plans, how many are in compliance with standard conditions, how effective are BMPs, what changes or improvements are proposed to improve third party program effectiveness or compliance rate); and
4. Monitoring information for each of the parameters listed in the NOI.

Providing summary information at a subwatershed scale will provide information relevant to water use planning and TMDL implementation, and will provide a basis for assessment of the Order effectiveness. Also, these verification measures are necessary for the Regional Water Board to determine whether the Order is meeting its stated purpose.

The third party must discuss general anticipated timelines for efforts to bring participating properties into compliance with conditions, per individual WRPPs. Third party programs must provide updated information about enrollments and fees annually, and should discuss any change in status of previously enrolled properties. This level of information is sufficient for the Regional Water Board to determine level of participation and effectiveness over time, in conjunction with individual Regional Water Board inspections to spot check individual compliance and to calibrate third party programs. When Regional Water Board Staff inspects sites, it can verify tier identification, self-certifications, and availability and

adequacy of water resource protection plans. Where Staff finds that a third party enrollee site is incorrectly classified or that the level of compliance with the Order at a given third party enrollee site is different from that reported by a third party, it may warrant review of third party performance. Where multiple or egregious discrepancies or violations are found, it may be appropriate to terminate third party approval.

A third party program must have a mechanism to track its enrollee compliance, and must indicate how it will accomplish this. At a minimum, the third party must keep NOIs and make those available to the Regional Water Board upon request. (See also response to Issue 2, above)

**Notice of Termination**

If the third party wishes to terminate its role, the third party must notify the Regional Water Board and all of its participants. Enrollees must be notified at least 30 days in advance to allow the opportunity to find coverage under another third party. Termination of the third party approval will occur immediately upon effective termination date proposed by third party, or upon receipt of notification by the Regional Water Board where an effective termination date is not specified. The Regional Water Board reserves the right to terminate a third party's approval if it determines that the third party is not carrying out its responsibilities properly.

**Third-Party Roles in Tier 3**

*One commenter requested that the third parties be able to register and work with Tier 3 enrollees.*

Response: Tier 3 sites are sites with existing water quality violations, and the requirements imposed on those sites through the Order comprise enforcement directives to be individually formalized through approval of site-specific cleanup and restoration plans. Staff does not propose to recommend delegating enforcement oversight or enforcement-related responsibilities to a third party.

Conclusion: Specific details have been added to finding 33 and section II of the draft Order. In addition, changes have been made to the NOI, Attachment A.

**ISSUE 9: Technical comments, BMPs, Standard Conditions, etc.**

Various commenters provided specific technical or editorial suggestions, discussed here by category.

**Pesticides and Herbicides**

*There were several comments regarding pesticides and herbicides. One comment encouraged requiring disclosure of toxics during the application process for commercial operations.*

Response: Water resource protection plans must include a list of chemicals stored onsite, and information about use (e.g., quantities used and frequency applied). Water resource

protection plans are required for all Tier 2 sites and Tier 3 sites where cannabis is being cultivated. Tier 2 site dischargers must keep their water resource protection plan onsite and make them available for review upon request by Staff.

Staff believes that these requirements should be sufficient to address concerns regarding disclosure of pesticides, herbicides, and other toxics.

*One commenter stated that the Order should not allow the permitted timber industry practice of hack and squirt with herbicide. There is concern that these methods can create fire hazards and threats to water quality and beneficial uses, and it was suggested that they should be rectified with the proposed regulation for small farmers with respect to maintaining natural shade for protection of temperature.*

Response: The Order focuses on the impacts associated with Cannabis cultivation and related activities; it does not regulate forestry activities. Staff is concerned with the potential for general pesticides to pollute surface and ground waters. However, with regard to revision of regulations for pesticide usage, the Order does not supersede California law or California Code of Regulations sections relevant to pesticide usage; the Department of Pesticide Regulation regulates the use of pesticides. The Order specifically requires pesticide usage to be consistent with product labelling. The Order also includes provisions to manage irrigation runoff in order to minimize the potential for the transport of residual pesticide chemicals to surface and ground waters.

**Culverted Stream Crossings**

*Two commenters suggested that either the Order provide additional information for compliance with specific standard conditions, such as culvert sizing guidelines for stream crossings, or that individual landowners not be held responsible for technical aspects of compliance such as stream crossing culvert sizing.*

Response: Properly designed and installed road crossings, including properly sized and installed culverts, are essential for the protection of water quality from discharges of sediment. Staff has included directives to applicable land management publications in the footnotes and in Appendix B References, Section IV. These publications and references provide technical help in determining how best to comply with the various aspects of the Order. The Regional Water Board is working to provide education and outreach regarding general land use practices including stream crossing practices and other work in streams or wetlands, but it is ultimately the responsibility of the individual landowners to ensure adequacy of management measures to protect water quality from controllable sediment discharges on their privately owned land.

**Cultivation and Associated Facilities**

*There were several comments seeking clarification as to was meant by "cultivation areas and associated facilities," and how this definition relates to the riparian buffer requirements.*

Response: "Associated facilities" are defined in Footnote # 7 of the Order, which states that facilities subject to the buffer requirement include those constructed or placed features

that facilitate plant cultivation (including but not limited to storage buildings, material storage areas, and irrigation systems.)

The intent of the wording "cultivation areas and associated facilities" for the riparian buffer requirement is to exclude roads within the buffer. This intent deviates from the wording of "cultivation areas and associated facilities," as written in the draft version of the Order, which included access roads in the definition. Given the geography of the North Coast Region with geologically young mountains and a high density of watercourses, the majority of properties used for cannabis cultivation realistically require access roads with stream crossings. The Regional Board recognizes that roads and stream crossings often have the potential to discharge sediment to watercourses. For this reason there are provisions in the standard conditions section to address work in stream or wetlands, road maintenance, road erosion, and road drainage.

It is possible that existing site improvements which do not facilitate plant cultivation will be located within the 200 foot buffer zone required for Tier 1 categorization. By the Order's current wording, such site improvements would not necessarily disqualify a property owner from the Tier 1 category. The Order does not authorize discharges of waste associated with any new sites for cannabis cultivation or related activities. New roads or stream crossings, for example, are considered part of new development, and the Order does not apply to new development. Rather, the Order applies conditions to existing facilities, including existing stream crossings and other existing development or disturbance requiring work in streams or wetlands.

**Specific Standard Conditions and Best Management Practices**

*Several commenters proposed specific edits to standard conditions, water resource protection plan requirements, cleanup and restoration plan requirements, and Best Management Practices appendix.*

Response: Staff incorporated a number of those suggested edits into the Order; those are shown in the tracked changes in the proposed Order in the August Board meeting package. Discussion below summarizes those suggested edits that Staff deemed not appropriate to include.

- *One comment related to a BMP for scheduling revegetation of exposed soil areas. Specifically, the commenter suggested that planting should occur after November 1 so there is sufficient soil moisture to sustain the plants, without the need for supplemental irrigation*.

  Response: Staff believe that seeding or replanting should occur prior to the onset of the rainy season, in order to allow time for seeds to germinate and for root structures to become established, protecting the soil from being eroded during a rain event. Proper planning prior to commencing work that will require post-construction revegetation should take into account timing for planting so as to

allow revegetation to be established slightly before (not during) the start of the rainy season, so that a minimal volume of irrigation water is required.

- *One comment regarding the Appendix B BMP Section II.A recommendation for replanting trees at a 3:1 ratio expressed concern that large-scale replanting of particular water-consumptive trees at such a ratio may have the unintended side-effect of reducing stream flows.*

  Response: Staff has revised the replanting BMP in response to the above recommendation by clarifying that this ratio strictly applies to riparian trees with the consideration that replanting, in principle, does provide overall land management benefits such as slope stabilization and shading for streams.

- *One commenter recommended that the standard condition for siting, designing, constructing, and maintaining water storage features to prevent release into waters of the state in the event of a containment failure be amended or removed, under the assumption that a containment failure would not adversely impact the stream.*

  Response: Staff believe that containment failures (such as dam failures or bladder ruptures), which result in discharge to a water of the state generally do have a high likelihood of also delivering sediment to watercourses. Many ponds are constructed with earthen materials which can be washed downstream during a containment failure. Soils in the release path of any containment device or vessel are subject to the scouring forces of the released water, which can result in erosion and sediment delivery to streams. Even assuming that the contents of the containment feature or vessel is identical to that of the receiving water, and that it passes over a non-erodible path to a water of the state, an abrupt containment failure is likely to deliver a high volume of water to that receiving water in a very short amount of time, leading to bank and channel erosion and scouring in the receiving water downstream of the discharge point.

*Several commenters asked for clarifications regarding the Order's standard conditions, Water Resource Protection Plan requirements, and Best Management Practices appendix.*

Response: Staff provides the following clarifications:

- Section III.J of the Order states that "operations shall not occur within 250 feet of 1) public, preschool, and K-12 facilities; 2) federal or state parks; and 3) military bases." Staff included this finding in response to a request from the Board chair to recognize federal mandates related to cannabis cultivation.

- With respect to the suggestion by one commenter that either 1) the Order reference existing relevant BMP manuals or 2) Staff selectively extract BMPs from existing manuals and include them in the Order:
    - Per Page 7, Finding #20, all BMPs in Appendix B are considered enforceable conditions under the Order as applicable to a given site. For Tier 2 dischargers, the water resource protection plan (WRPP) is intended to identify and direct implementation of BMPs which would result in conformance with applicable standard conditions.

      Similar to the process used by a permittee under the statewide general storm water permits in implementing a storm water pollution prevention plan (SWPPP) , Tier 2 enrollees under this Order shall implement the BMPs specified in their WRPP to meet performance-based objectives as listed in Section I.A Standard Conditions. If a given BMP is found to be inadequate in ensuring that the performance-based objective is met, the discharger will need to modify the BMP or modify the overall approach to meet the objective (i.e., adaptive management process).
    - Section I.V. of Appendix B includes references to various BMP literature which can be easily accessed by the regulated community. Staff will revise the introduction to Appendix B to more clearly recommend consulting references listed in Section I.V. Additionally, Staff will modify Appendix B as necessary to make the BMPs more enforceable.

- In response to the comment on standard condition I.A.9.b suggesting that the requirement for secondary containment for all aboveground storage tanks and containers is unreasonable, Staff note that the Order was written with the assumption that tanks and containers of all sizes have the potential to leak. Accordingly, the Order condition pertains to tanks and containers of any size. Secondary containment does not necessarily imply an expensive or complicated solution, especially for small tanks and containers.

  In response to the general comment regarding usage of the words “will” and “shall” throughout Appendix B, Staff have reviewed Appendix B and revised language where appropriate, using “shall” for enforceable regulatory expectations, and made changes to various other auxiliary verbs where appropriate.

- In response to the comment suggesting that bladders over a certain size should be contained within a berm, and that military surplus bladders should not be used without prior integrity testing, Staff notes that Appendix B Section II.E. states that “[s]torage bladders are not encouraged. Where they are used, ensure that they are designed to store water, and that they are located in a method and manner that minimizes potential for water to flow into a watercourse in the event of a catastrophic failure. Inspect bladder and containment features periodically to ensure integrity.” If a given vessel to be used for water storage was not specifically designed for water storage, its usage would be considered to be a violation of the BMP. Storage bladders of any size should be located and/or contained in a fashion

> which minimizes potential for water to flow into a watercourse in the event of a catastrophic failure.

**ISSUE 10: California Environmental Quality Act (CEQA)**

Several commenters suggest that because of the large scope of the current problem and its potential for significant adverse impacts, a mitigated negative declaration is not an appropriate CEQA document, but rather an Environmental Impact Report (EIR) should be prepared. For example:

> "Even if, arguendo, we assume that the Board's waiver would accomplish the impossible, by securing full, immediate, and heartfelt compliance from every party to whom a notice letter is directed, an EIR would still be required, because the draft waiver does not show that *existing, and rapidly growing, cumulative effects* will be effectively addressed by the proposed mitigations. (See FOER comment at X [emphasis added].)"

These comments appear to misstate the significant effects for which the Regional Water Board must be accountable for under CEQA. The normal baseline under CEQA is the current environmental setting, as provided in section 15125 of title 14, California Code of Regulations. Courts have approved the use of this baseline in cases where the project already has been constructed and is operating illegally. (*Riverwatch v. County of San Diego (Riverwatch)* (1999) 76 Cal .App.4th 1428, 1453 ["environmental impacts should be examined in light of the environment as it exists when a project is approved"]; *Fat v. County of Sacramento (Fat)* (2002) 97 Cal .App.4th 1270, 1275 [upholding negative declaration with 1997 baseline even though scientific evidence showed airport's illegal expansion over time had caused impacts to some legally rare species and their habitat].)

A water quality order does not purport to authorize cannabis cultivation activity; rather, it would impose requirements on waste discharges caused by the activity. (See also Draft Order, finding 9.) The Regional Water Board does not have authority over land use and zoning, and is not the agency that determines whether a person may cultivate cannabis, and if so, how much, in what places, etc. The Regional Water Board's purview is the regulation of waste discharges and other associated controllable water quality factors on private land under the Porter-Cologne Water Quality Control Act, and this authority exists regardless of the activity/crop generating the discharge. (See Legal Memo [finding Porter-Cologne would not meet the conflict or obstacle tests for federal preemption by the federal Controlled Substances Act (CSA), and would not conflict with the Compassionate Use Act and Medical Marijuana Program if applied evenly for all marijuana cultivation, not just medical marijuana].)

This point addresses a comment from the Fresno Cannabis Association:

> *"The proposed order "does not authorize discharges of waste associated with any new development of sites for marijuana cultivation or related activities." The*

*meaning of this statement is unclear, and could be construed as a moratorium of sorts for new cannabis cultivation sites within the North Coast region.*

*Because no baseline study has been provided, there is no inventory of existing cultivation sites that can be used to determine whether "new development" is occurring, nor is any statutory authority cited that would allow the water board to bar such development."*

The Order cannot be construed as barring new developments, nor is there any evidence to suggest a grower would refrain from this activity because of the existence or non-existence of the Order. In fact, ample evidence shows that people conduct cannabis activities regardless of the numerous arrays of laws that could potentially apply. The point is that water quality laws apply to persons discharging waste to an area that could affect waters of the state. To the extent that a person is engaged in such an activity, they must comply with regulations over the waste discharges. The Order does not grant or deny permission for a person to cultivate cannabis.

In this regard, it is important to distinguish general police power laws with any comprehensive regulatory scheme over a given land use, which one might expect from county or city government. For example, in *Pack v. Superior Court* (2011) 199 Cal.App.4th 1070 [opinion superseded by 268 P.3d 1063, Cal. (Jan. 18, 2012)], the City of Long Beach passed an ordinance regulated the operation of medical marijuana collectives by means of a permit system. The regulation included a fee and application, and a lottery for a limited amount of permits. Under the permit, a collective must demonstrate compliance with certain requirements, including sound insulation, fire and burglar alarms, and have samples analyzed by an independent lab to ensure that the product is free of pesticide and contaminants. That type of regulation is much different from a general waste discharge requirements or general waivers addressing water quality associated with a land use activity.

"Significant Effect on the Environment" means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. (Cal. Code Regs., tit. 14, §15382.) To identify any significant impacts from the project, CEQA requires a comparison of the existing environment, with the environment after the project has been implemented.

The commenter incorrectly asserts that there is no evidence that marijuana cultivation poses a water quality problem in the North Coast region. The existing environment is described in sufficient detail in the Initial Study. Overwhelming evidence exists that natural resources are being impacted by the cultivation of cannabis in the North Coast region. The vast majority of public comment further corroborates these facts. (See e.g. Larry Bruckenstein comment ["It is the cumulative impact of these activities whether they are the use/abuse of poisons and fertilizers, sewage disposal, soil disturbance, vegetation removal,

domestic animals, water use etc. that has us in the predicament we are in"]; FOER comment ["significant impacts associated with the commercial cannabis industry today"]).

We need not document with precision the rate in which these impacts are increasing to understand the baseline as it relates to any impacts associated with implementation of the Order.

The project provides a water quality regulatory structure to protect the beneficial uses of the surface water and ground water by preventing, minimizing and mitigating adverse impacts to water resources associated with marijuana cultivation on private land. The Order requires control of erosion and drainage features, proper soil disposal, proper stream crossings, water conservation, proper storage and handling of fertilizers and soil amendments, refuse and human waste, and petroleum products and other chemicals, and riparian management and protection. Compliance with the Order will serve to prevent or minimize a given site's contribution to watershed impairments as well as result in an overall net reduction in the environmental impacts associated with marijuana cultivation sites within the North Coast region. Potential impacts from the project were identified and are primarily associated with construction work from cleanup and restoration activities, and alternative water supplies. And these potential impacts are minor in relationship to activities that occur with or without the Regional Water Board's permit implementation.

CEQA requires us to identify impacts that result from implementation of the Order, not the underlying activity that is occurring now without any oversight or regulation of any kind. Implementation of the Order will probably not be able to resolve all the environmental resource issues generated by the ongoing and existing cannabis cultivation; however, we can expect to see much improvement over time as the Order is implemented to bring growers into compliance with waste discharge requirements, and further segregate irresponsible and unacceptable grows for efficient law enforcement actions.

Regional Water Board Staff carefully reviewed possible impacts that may result from Order implementation and identified mitigation where any possibility of an impact exists. After a thorough review, the comments did not provide any substantial evidence to make a fair argument that the project, as mitigated, will cause a significant effect to the environment. Substantial evidence means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion. Substantial evidence does not include argument, speculation, unsubstantiated opinion or narrative. (Cal. Code Regs., tit. 14, §15384.) The Regional Water Board determined that the project, as mitigated, will have a less than significant impact to the environment and is designed to significantly improve water quality over a shortened period of time.

*The Fresno Cannabis Association letter included comments identifying CEQA impacts that allegedly were either not identified or otherwise not supported by substantial evidence, and requested that the Regional Water Board prepare a full environmental impact report.*

Response: The Association's comments are premised on several assumptions with which the Regional Water Board Staff either disagrees, or finds too speculative and not supported by evidence.

First, the Association assumes that the Waiver will establish a statewide precedent and therefore argues that we must analyze impacts statewide. But then the Association asks that instead of the regional permit, we initiate a statewide process similar to the Grazing Program. While the regional permit may provide a framework that other regions may find useful, those regions, or the state for that matter, must develop its own permit or program with its own appropriate CEQA document.

The draft Waiver is appropriate for the North Coast region. The unique geographic and climate conditions include dense forested areas receiving substantial precipitation and this, along with the sparse population, have provided conditions that are particularly favorable to cannabis cultivation. The counter culture of the 1960s led to the back-to-the-land movement of the 1970s and a wave of new settlers in rural areas of the north coast. As such, the region has a well-established cannabis cultivation community and economy that has been in existence for decades. Many in this community already conduct cannabis cultivation in an environmentally responsible manner, or desire to do so.

Second, the Association assumes that the Waiver will have the effect of forcing growers indoors, onto public lands, or to regions other than the North Coast (thereby creating environmental impacts). This comment fundamentally misunderstands the purpose of the Waiver, which is to provide that structure under which cannabis cultivation complies with water quality laws. Currently no such structure exists, and outdoor cultivators risk fines and other penalties for violations. The permit provides a vehicle for compliance, and if anything, perhaps it would provide indoor growers with more comfort moving their operations outdoors. Similarly, the notion that the permit will force cultivators to grow on public land is misplaced. The permit is meant to cull various operations to streamline permitting and enforcement activities. With a system in place for private landowners to come into compliance with water quality rules, there would be is no reason for a cultivator on private land to feel compelled to move indoors or to public land. Instead, the permit prioritizes various operations and that allows law enforcement to focus resources on fully illegal grow on public land. As discussed above, the cultivation community is well-established in the North Coast region, and there is no evidence that the Waiver would compel growers to move to other regions.

*Impacts from Indoor Grows*

Fresno Cannabis Association (FCA) suggests that regulation of outdoor cannabis cultivation will result in an increase in indoor cultivation. While we don't believe that the Order will have this effect, if it does occur, we don't believe it will be significant in light of the existing baseline that includes existing impacts from indoor grows. FCA states in its comments that indoor grows and public land grows already exist. Therefore, associated impacts, including energy use, are part of the existing baseline. In addition, the combination of a pathway to compliance for outdoor cultivation, ongoing coordinated law enforcement efforts, and

indoor cultivation ordinances and the costs of structures and fuels are likely deterrents against an increase in indoor cultivation.

The Initial Study has been amended to acknowledge the possibility of grows moving indoors; however, Staff disagrees with the FCA's assumption that the Order will result in a "wide-scale shift" to indoor growing. We find no evidence to support the conclusion that this is a direct and foreseeable result of the project. In contrast, we have evidence that the cultivation community desires to be in compliance with water quality regulations and they will presumably stay put and work hard to meet the conditions of the Order. (See e.g. PWA and NMFS letters)

Any discharge of waste that could potentially affect waters of the state is subject to the requirements of Water Code section 13260 et seq. If a discharger is cultivating cannabis indoors, and the waste is handled by a septic system, the discharger must ensure that the septic system is designed to treat the flow and the load of those discharges, in order to ensure that the waste discharge does not adversely impact the quality of groundwater. If the discharger is not using a septic system to treat the discharge, then waste discharges must adhere to the standard conditions of this Order. The indoor cultivation area would count towards the overall cultivation area that is considered in determining appropriate tier for Order coverage.

The exception to this is if the discharger is cultivating within the jurisdiction of a municipality and/or a Waste Water Treatment Facility (WWTF). If the discharger's waste is discharged to the sewer system, that waste will be treated by the WWTF. The Water Board's authority lies in its ability to regulate waste discharges from the WWTFs themselves. The jurisdiction to regulate the waste entering a WWTF lies with the WWTF itself, and the WWTF will decide if it is to make requirements for an individual discharger or industry in general, in order to connect to the WWTF system.

*Impacts from Law Enforcement Activities*

While the draft Order acknowledges that the implementation will dovetail with certain other law enforcement practices, the Order and necessary CEQA documentation only addresses enforcement of the Order itself. It is structured to rely on third party programs for Tiers 1 and 2 implementation, with random site inspections in order to verify progress and calibrate third party programs. Therefore, impacts alleged by FCA from law enforcement activities such as helicopters and aircraft, vehicle miles from sheriff's deputies and county-code enforcement, etc. are outside the scope of our analysis. Staff did add a discussion of air impacts from Water Board and third-party inspections in the Initial Study.

*Hazards and Hazardous Materials, Land Use and Planning, and Utilities and Service Systems*

FCA objects that the Initial Study does not mention or address hazardous materials that might be present at indoor cultivation sites. As previously discussed, implementation of the Order is not expected to result in any significant increase in indoor cultivation. The Regional Water Board is concerned about impacts to water quality from indoor cultivation activities. However, those discharges are considered part of the existing baseline for the

purposes of our CEQA analysis. While the Order cannot be expected to solve all problems associated with cannabis cultivation at one time, Regional Water Board Staff does intend to address discharges from indoor grows to the extent that it can as described above (discharges other than to an onsite septic system or WWTF).

FCA objects that the Initial Study "does not survey or analyze local zoning ordinances pertaining to cannabis cultivation, even though the proposed regs would apply across 19,000-plus square miles." The Regional Water Board is aware of several efforts by local agencies in the region to address cannabis. These ordinances will vary and are generally more comprehensive land use and zoning that would not conflict with the Order.

To the extent that cities and counties attempt to provide environmental protection provisions in ordinances, the Regional Water Board has and will continue to consult to ensure that these provisions are consistent with the Order to the extent possible. In other NPS programs, the Regional Water Board relies on county laws, such as grading ordinances, if they are found to be sufficiently protective of water quality. That said, the Order is designed to protect water quality and exists independently of land use laws and zoning code. To the extent that cannabis cultivation activity already conflicts with local land use and planning laws, that impact is already part of the existing baseline condition. The Order clearly states that it does not preclude the need for other permits and approvals that may be required from other governmental agencies.

Similarly, FCA's concern about existing onsite wastewater treatment facilities that are in need of maintenance is again part of the existing baseline. That does not mean that the Regional Water Board is not concerned that onsite treatment systems are adequate to accommodate waste. Implementation of the Order could lead to improvements in this area as landowners are advised of current requirements. Finally, FCA's concern about increased waste plant materials because "marijuana cultivation is increasing by leaps and bounds" again disregards the point that the increase in cultivation is not the result of water quality regulation.

**Additional Issues**

*Composting*

One commenter encouraged Staff to allow composting toilets.

Response: The Onsite Wastewater Treatment System (OWTS) policy allows for local agencies to develop Local Area Management Plans (LAMPs) that would address composting toilets. In addition, since the use of a composting toilet does not necessarily indicate a discharge to land (disposal depends on waste management methods), this issue pertains more directly to public health than to water quality.

Various commenters encouraged Staff to allow for composting of spent plant materials and other appropriate cultivation-related wastes.

Response: Staff have added a footnote to standard condition 10., as shown here:

> Cultivation-related wastes
>
> Cultivation-related wastes including, but not limited to, empty soil/soil amendment/ fertilizer/pesticide bags and containers, empty plant pots or containers, dead or harvested plant waste, and spent growth medium shall, for as long as they remain on the site, be stored[10] at locations where they will not enter or be blown into surface waters, and in a manner that ensures that residues and pollutants within those materials do not migrate or leach into surface water or groundwaters.

*Irrigation Runoff*

Various commenters suggested there might be a contradiction in conditions directing irrigation at agronomic rates so as to conserve water while also including conditions related to irrigation runoff.

Response: While the intent of the conditions is to direct dischargers to optimize their water use to the extent possible, this effort may require adaptive management and may be prone to human error (e.g. over watering associated with hand watering, errors in setting automatic irrigation controllers, etc.) or equipment failure. In the event that runoff occurs from an irrigated area, practices and measures should be in place to minimize the amount of pollutants transported to receiving waters. These may include, but are not limited to measures and controls applied within the cultivation area (such as applying chemicals at agronomic rates), mulch or ground cover on the cultivation area to minimize erosion and to promote infiltration rather than runoff controls or measures downgradient of the cultivation area (such as buffer strips or catchment basins).

[10] Plant waste may also be composted, subject to the same restrictions cited above for cultivation-related waste storage