

Appendix - G

General Waste Discharge Requirements

Order WQ 2017-0023-DWQ:
SWRCB General Waste
Discharge Requirements
Associated with Cannabis
Cultivation Activities

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**STATE WATER RESOURCES CONTROL BOARD
ORDER WQ 2017-0023-DWQ
GENERAL WASTE DISCHARGE REQUIREMENTS AND
WAIVER OF WASTE DISCHARGE REQUIREMENTS
FOR DISCHARGES OF WASTE ASSOCIATED WITH
CANNABIS CULTIVATION ACTIVITIES**



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ACRONYMS AND ABBREVIATIONS	
Antidegradation Policy	State Water Board Resolution 68-16, the Statement of Policy with Respect to Maintaining High Quality of Waters in California
ARMY Corps	United States Army Corps of Engineers
AUMA	Adult Use of Marijuana Act of 2016
Basin Plan	Water Quality Control Plan
BOF	Board of Forestry
BPTC	Best Practicable Treatment or Control
CAL FIRE	California Department of Forestry and Fire Protection
CDFA	California Department of Food and Agriculture
Cannabis Policy	Cannabis Cultivation Policy, Principles and Guidelines for Cannabis Cultivation
CDFW	California Department of Fish and Wildlife
CIWQS	California Integrated Water Quality System
CUA	Compassionate Use Act of 1996
CEQA	California Environmental Quality Act
CDFW	California Department of Fish and Wildlife
DPR	Department of Pesticides Regulation
e.g.	Latin <i>exempli gratia</i> (for example)
FPR	Forest Practice Rules
ILRP	Irrigated Lands Regulatory Program
MCRSA	Medical Cannabis Regulation and Safety Act
MMRSA	Medical Marijuana Regulation and Safety Act
NOA	Notice of Applicability
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Source Pollution Control Program
NTU	Nephelometric Turbidity Units
OWTS	Onsite Wastewater Treatment System
Regional Water Board	Regional Water Quality Control Board
Road Handbook	Handbook for Forest, Ranch, and Rural Roads
RWD	Report of Waste Discharge
State Water Board	State Water Resources Control Board
SB	Senate Bill
SIC	Standard Industrial Code
SW-CGP	Storm Water Construction General Permit
SW-IGP	Storm Water Industrial General Permit
THP	Timber Harvest Plan
TMDL	Total Maximum Daily Load
U.S. EPA	United States Environmental Protection Agency
Water Boards	State Water Board and Regional Water Boards
WDRs	Waste Discharge Requirements

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FINDINGS

The State Water Resources Control Board (State Water Board) finds that:

BACKGROUND

1. Cannabis cultivation in California has grown exponentially in recent years and is often located in sensitive environmental areas where the activities create significant impacts to water quality. Waste discharges from cultivation sites include sediment, irrigation runoff, fertilizers, pesticides/herbicides, petroleum, agricultural related chemicals, cultivation related waste, refuse, and human waste. Construction of access roads has resulted in significant erosion and sediment discharges to water bodies.
2. Water Code section 13149 required the State Water Board to adopt principles and guidelines for diversion and use of water for cannabis cultivation in areas where cannabis cultivation may have the potential to substantially affect instream flows. The principles and guidelines may include, but are not limited to, instream flow objectives, limits on diversions, and requirements for screening of diversions and elimination of barriers to fish passage. The principles and guidelines may also include requirements that apply to groundwater extractions where the board determines those requirements are reasonably necessary. The principles and guidelines were developed as part of state policy for water quality control adopted pursuant to Article 3 (commencing with Section 13140) of Chapter 3 of Division 7 and include measures to protect springs, wetlands, and aquatic habitats from negative impacts of cannabis cultivation. The principles and guidelines are included in the Cannabis Cultivation Policy – Principles and Guidelines for Cannabis Cultivation (Cannabis Policy). The Cannabis Policy describes the overarching water diversion and waste discharge requirements (WDRs) associated with cannabis cultivation activities. The State Water Board does not, in any way authorize, endorse, sanction, permit or approve the cultivation, use, sale or other activities associated with cannabis. Individuals engaging in cannabis cultivation and other activities risk prosecution under federal law.
3. Section 19332 (d) of the Business and Professions Code directs the State Water Board, in consultation with the California Department of Fish and Wildlife (CDFW) and the California Department of Food and Agriculture (CDFA), to ensure, pursuant to Section 13149 of the Water Code, that individual and cumulative effects of water diversions and discharges associated with cannabis cultivation do not affect the instream flows needed for fish spawning, migration, rearing, and the flows needed to maintain natural flow variability.
4. This General Order implements the Cannabis Policy requirements, specifically those requirements that address waste discharges associated with cannabis cultivation activities. Dischargers covered under this General Order are subject to the requirements of the Cannabis Policy in its entirety.
 - a. The Cannabis Policy describes the water quality control policy structure, requirements for cannabis cultivation activities to protect water quality and instream flows, implementation, means of compliance, and enforcement.
 - b. Attachment A of the Cannabis Policy, which is attached hereto as Attachment A of the General Order and is made part of this Order by reference, contains non-flow related requirements (Section 1 and Section 2) and flow requirements (Section 3,

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Section 4). Section 5 contains planning and reporting requirements. Section 6 contains guidance documents referenced in Attachment A.

- c. The Cannabis Policy and staff report contains rationale for the requirements contained in the Cannabis Policy.

Administrative requirements, such as how to apply for coverage, terminate coverage, applicable fees, and monitoring and reporting requirements are contained within this General Order.

- 5. Two Regional Water Quality Control Boards (Regional Water Boards) have adopted orders related to cannabis cultivation.
 - a. On August 13, 2015, the North Coast Regional Water Quality Control Board adopted a Waiver of Waste Discharge Requirements and General Water Quality Certification for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region (Order No. R1-2015-0023).
 - b. On October 2, 2015, the Central Valley Regional Water Quality Control Board adopted a General Waste Discharge Requirements Order for Discharges of Waste Associated with Medical Cannabis Cultivation Activities (Order No. R5-2015-0113).

APPLICABILITY, TIER DESIGNATION, AND THREAT TO WATER QUALITY

- 6. It is the intent of the State Water Board that Regional Water Boards enroll all eligible dischargers developing land for, or engaging in, cannabis cultivation activities under this General Order consistent with the exemptions and conditional exemptions described herein. If a Regional Water Board determines that due to site-specific conditions, coverage under this General Order will not be protective of water quality, the Regional Water Board may issue site-specific WDRs for discharges from a cannabis cultivation site.
 - a. For dredge and fill activities covered by this General Order, a Regional Water Board may issue a site-specific Clean Water Act section 401 water quality certification or enroll the Discharger in a general section 401 water quality certification if the Regional Water Board determines that the general water quality certification in this General Order is not protective of water quality due to site-specific or region-specific conditions.
 - b. The Regional Water Boards may also regulate discharges from cannabis cultivation activities using individual or general Irrigated Lands Regulatory Program (ILRP) WDRs if the Regional Water Board Executive Officer determines that the ILRP WDRs or ILRP conditional waiver of WDRs adequately describe discharges from the cannabis cultivation activity, are protective of water quality, the Discharger possesses valid water rights after consulting with State Water Board Division of Water Rights, the Discharger complies with the water diversion reporting requirements contained in Water Code sections 1840 and 1841, and the ILRP WDRs or ILRP conditional waiver of WDRs require compliance with the State Water Board's Cannabis Policy.
- 7. The Cannabis Policy provides a statewide tiered approach for permitting discharges and threatened discharges of waste from cannabis cultivation and associated activities, establishes a personal use exemption standard, and provides conditional exemption criteria for low threat to water quality activities. Tiers are defined by the amount of disturbed area. The criteria consist of:

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- a. Personal use exempt Dischargers are very small non-commercial cultivators that are exempt from this General Order. (See the Exemptions for Certain Cultivation Activities section of this General Order for more information.)
 - b. Indoor commercial cultivation activities are conditionally exempt under this General Order. (See the Exemptions for Certain Cultivation Activities section of this General Order for more information.)
 - c. Outdoor commercial cultivation activities that disturb less than 2,000 square feet may be conditionally exempt under this General Order. (See the Exemptions for Certain Cultivation Activities section of this General Order for more information.)
 - d. Tier 1 Dischargers cultivate cannabis commercially outdoors, and have a disturbed area equal to or greater than 2,000 square feet and less than 1 acre (43,560 square feet).
 - e. Tier 2 Dischargers cultivate cannabis commercially outdoors, and have a disturbed area equal to or greater than 1 acre.
8. The Cannabis Policy provides criteria to evaluate the threat to water quality based on site conditions. The threat is risk-based as described below:
 - a. Disturbed area: The disturbed area indicates the threat to water quality because level of threat is proportional to the area of disturbed soil, the amount of irrigation water used, the potential for storm water runoff, and the potential impacts to groundwater (e.g., the use of fertilizers or soil amendments, the possible number of employees on site, etc.).
 - b. Slope of disturbed area: Increased slopes may be associated with decreased soil stability, especially when associated with vegetation removal. Storm water and excess irrigation water are more likely to runoff and discharge off-site from sloped surfaces.
 - c. Proximity to a surface water body: The Cannabis Policy provides setbacks from surface water bodies to reduce water quality impacts. Disturbed areas within the setbacks are more likely to discharge waste constituents to surface water and/or result in removal of riparian vegetation.
9. Dischargers must characterize their cultivation activities as described below and implement all applicable best practicable treatment or control (BPTC) measures described in Attachment A.
 - a. Dischargers that cultivate in multiple areas within a parcel or contiguous parcels shall add all the disturbed areas together to calculate the total disturbed area. (For example, a Discharger that operates two cultivation areas that each disturbs 1,100 square feet must report a disturbance of 2,200 square feet and does not qualify for a conditional exemption under this General Order.)
 - b. Risk determination based on the site conditions shall be based on the greatest threat to water quality. (For example, if one of the 1,100 square feet cultivation areas is located on a slope greater than 30 percent, all the cultivation areas will be classified as moderate risk – see Table 1).
 - c. Dischargers that cultivate cannabis on non-contiguous parcels must evaluate each parcel for regulatory coverage separately.

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This General Order does not limit the State Water Board or Regional Water Board authority to inspect and/or evaluate the regulatory status, water quality impacts, or water right regulatory requirements of cannabis cultivation activities.

10. Personal use exempt dischargers meeting the criteria described in this General Order (see Exemptions for Certain Cultivation Activities) do not need to apply for coverage under the General Order. Dischargers that qualify for conditional exemption (either indoor or outdoor activities) will be covered under the Waiver of WDRs (Waiver) contained in this General Order. Tier 1 or Tier 2 dischargers must enroll under the General Order (see Finding 7 for tier designation). Outdoor conditionally exempt and Tier 1 and Tier 2 enrollees shall characterize the risk designation based on the slope of disturbed areas and the proximity to a water body. Characterization shall be based on the risk designation summarized in Table 1 below.

Table 1: Summary of Risk Designation

Low Risk	Moderate Risk	High Risk
<ul style="list-style-type: none"> No portion of the disturbed area is located on a slope greater than 30 percent, and All of the disturbed area complies with the setback requirements. 	<ul style="list-style-type: none"> Any portion of the disturbed area is located on a slope greater than 30 percent, and All of the disturbed area complies with the setback requirements. 	<ul style="list-style-type: none"> Any portion of the disturbed area is located within the setback requirements.

11. Site development and/or access road building and maintenance activities associated with cannabis cultivation are subject to this General Order. The *Handbook for Forest, Ranch & Rural Roads* (Road Handbook) provides a guide for planning, designing, constructing, reconstructing, upgrading, maintaining, and closing wildland roads. Development of the Road Handbook was funded in part by State Water Board, United States Environmental Protection Agency (U.S. EPA), and California Department of Forestry and Fire Protection (CAL FIRE). The Road Handbook is available at:
<http://www.pacificwatershed.com/sites/default/files/RoadsEnglishBOOKapril2015b.pdf>.
Construction of new access roads, and development of cultivation sites may be subject to the Regional Water Board's forestry program permitting requirements, statewide construction storm water program permitting requirements the Lahontan Regional Water Board's construction storm water program permitting requirements for the Lake Tahoe Hydrologic Unit, CAL FIRE permitting requirements, Clean Water Act section 404 permitting requirements issued by the US Army Corps of Engineers (Army Corps), and Clean Water Act section 401 water quality certification issued by a Regional Water Board. In some cases, the Army Corps may not issue a section 404 permit because the activity is associated with cannabis cultivation; in those situations, the Regional Water Board will not issue a section 401 water quality certification but will regulate that activity under this General Order or issue individual WDRs consistent with the Water Code.

EXEMPTIONS FOR CERTAIN CULTIVATION ACTIVITIES

12. Cultivation activities that qualify for the personal use exemption disturb less than 1,000 square feet (in aggregate) and present the lowest threat to water quality; therefore, discharges from the operations are exempt from enrolling in the General Order if they comply with the conditions specified in this order. Personal use cultivation activities are exempt from requirements to obtain a CDFA cultivation license because they are not a commercial activity.

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Activities that are consistent with Health and Safety Code sections 11362.77 (medical marijuana) or 11362.2 (non-medical marijuana) and subsequent revisions of the statutes, disturb an area (in aggregate) less than 1,000 square feet, and comply with the additional conditions below, are not required to submit any application information to obtain coverage under this General Order. The 1,000 square feet personal use exemption criteria provides sufficient area for outdoor cultivation of six mature plants for non-medical use, or 500 square feet of cannabis plant canopy as allowed for medical cultivation purposes.

The exemptions apply per parcel or contiguous parcels; no coalitions, cooperatives, or other combination of cultivation activities can claim the personal use exemption for activities on the same parcel. The personal use exemption shall not apply if the Cannabis Cultivator fails to comply with all applicable conditions, including the non-commercial activity requirement.

If the personal use exemption does not apply, the Discharger shall contact the Regional Water Board to determine if the activity qualifies for coverage as conditionally exempt, or Tier 1 or Tier 2 enrollment. To qualify for the personal use exemption, a Discharger must comply with all of the following conditions:

- a. The cultivation area shall be contiguous (all located in one area).
- b. The disturbed area complies with the setback requirements contained in this General Order (see Attachment A) and occupies less than 1,000 square feet.
- c. No part of the disturbed area is located on land with a slope greater than 20-percent.
- d. The Discharger implements all applicable BPTC measures listed in Attachment A.

The personal use exemption does not alter any other legal requirement (e.g., limitations on sales, distribution, or donations of cannabis). Noncommercial cultivation activities require a valid basis of right for the diversion and use of water and therefore may need to apply for a water right. The personal use exemption does not affect the requirement to obtain authorization for water diversion.

13. Outdoor cannabis cultivation activities that disturb an area (in aggregate) less than 2,000 square feet on any one parcel or on contiguous parcels managed as a single operation and that comply with all of the additional cultivation area criteria listed below are conditionally exempt and are required to obtain coverage under the Waiver. The 2,000 square feet conditional exemption criterion provides sufficient area for outdoor cultivation for small commercial activities. Facilities with larger disturbed areas are inherently a higher threat to water quality and are subject to additional regulatory oversight. The conditional exemption applies per parcel or contiguous parcels; no coalitions, cooperatives, or other combination of cultivation activities can claim the conditional exemption for activities on the same parcel. To be conditionally exempt, a Discharger must comply with all of the following:

- a. The cultivation area shall be contiguous (all located in one area).
- b. The disturbed area complies with the setback requirements contained in this General Order (see Attachment A) and occupies less than 2,000 square feet.
- c. No part of the disturbed area is located on land with a slope greater than 20-percent.
- d. The Discharger implements all applicable BPTC measures listed in Attachment A.

14. The Conditional exemption does not alter any other legal requirement (e.g., limitations on sales, distribution, or donations of cannabis). Refer to the Application/Termination Process and Fees section for information on application requirements. Cultivation activities that are conditionally exempt under this General Order still require a valid basis of right for the diversion and use of water and therefore may still need to apply for a water right. Indoor commercial cannabis cultivation may be performed using hydroponic growing systems, soil, or other growth media. To maintain suitable growing conditions, wastewater is discharged from hydroponic systems when the irrigation water contains excessive salinity or nutrients. Irrigation tail water is generated when excess water drains from the growth media. Irrigation tail water or hydroponic wastewater may contain nutrients (e.g., phosphate or nitrate), salinity constituents (e.g., sodium, chloride, potassium, calcium, sulfate, magnesium), and other constituents (e.g., iron, manganese, zinc, molybdenum, boron, and silver).¹ Other sanitation based wastewaters may also be generated at indoor commercial cannabis cultivation sites. These miscellaneous industrial wastewaters may contain biocides, bleach mixtures, or other chemical waste streams.
- a. Commercial cannabis cultivation activities that occur within a structure with a permanent roof, a permanent relatively impermeable floor (e.g., concrete or asphalt paved), and that discharge all industrial wastewaters generated to a community sewer system consistent with the sewer system requirements, are classified as conditionally exempt. To obtain documentation of the conditionally exempt status to obtain a CDFA cultivation license, conditionally exempt Dischargers are required to obtain coverage under the Waiver included in this General Order. Refer to the Application/Termination Process and Fees section for information on application requirements.
 - b. Discharges of irrigation tailwater, hydroponic wastewater, or other miscellaneous industrial wastewaters to an on-site wastewater treatment system (such as septic tank and leach field), to land, or to surface water must obtain separate regulatory authorization (e.g., WDRs, conditional waiver of WDRs, or other permit mechanism) to discharge the wastewater. Such Dischargers are classified as conditionally exempt. To obtain documentation of the conditionally exempt status to obtain a CDFA cultivation license, conditionally exempt Dischargers are required to obtain coverage under the Waiver included in this General Order. Refer to the Application/Termination Process and Fees section for information on application requirements.
 - c. Indoor commercial cultivation activities that are conditionally exempt under this General Order still require a valid basis of right for the diversion and use of water and therefore may still need to apply for a water right. The exemption for enrolling under the General Order does not affect the requirement to obtain authorization for water diversion.

WATER CODE CONSIDERATIONS

15. Water Code section 13260(a) requires that any person, citizen, or domiciliary discharging waste or proposing to discharge waste within any region, other than to a community sewer system, that could affect the quality of the waters of the state, file a report of waste discharge

¹City of Littleton – City of Englewood Pretreatment Pipeline. Third Quarter 2011. “Medical Marijuana – an Exploding New Industry.” <<http://www.lewwtp.org/home/showdocument?id=5674>>. Accessed 17 January 2017.

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(RWD) to obtain coverage under WDRs or a waiver of WDRs. Waste, person, citizen, and domiciliary are defined in Water Code section 13050.

16. Water Code section 13146 requires that WDRs must implement the Regional Water Board's Water Quality Control Plan (Basin Plan) for the basin in which the discharge occurs. This General Order requires Dischargers to comply with all applicable Basin Plan requirements, including prohibitions and/or water quality objectives governing the discharge. In the event of a conflict between the requirements of this General Order and the Basin Plan, the more protective requirement prevails.
17. The State Water Board's authority to regulate discharges associated with cannabis cultivation and associated activities are subject to the following regulatory measures:

- a. Water Code section 13263(i) states the State Water Board or a Regional Water Board may prescribe general WDRs for a category of discharges if the State Water Board or a Regional Water Board finds or determines that all of the following criteria apply to the discharges in that category:
 - i. The discharges are produced by the same or similar operations.
 - ii. The discharges involve the same or similar type of waste.
 - iii. The discharges require the same or similar treatment standards.
 - iv. The discharges are more appropriately regulated under general WDRs than individual WDRs.

Discharges associated with cannabis cultivation and associated activities that will be regulated under this General Order are consistent with the criteria listed above and therefore a general order is appropriate. All discharges regulated under this order will be from similar operations and/or activities related to cannabis cultivation, which pose similar types of threat to water quality. The discharges will use similar treatment methods (e.g., filtration, settling, setbacks, application to land, etc.). Individual WDRs are not necessary because the discharges are similar and discharge requirements would be similar if individual WDRs were issued.

- b. Water Code section 13269 states that the State Water Board or the Regional Water Board may conditionally waive the requirements to file an RWD under Water Code section 13260(a)(1) and/or the requirement to prescribe WDRs under Water Code section 13263(a) for a specific discharge or specific type of discharge where such a waiver is consistent with the applicable Regional Water Board Basin Plans, in the public interest, and the following conditions are met:
 - i. The waiver is conditional.
 - ii. The discharge complies with the waiver conditions.
 - iii. A public hearing is held.

Discharges that meet the criteria for conditional exemption under this General Order are considered to be a limited threat to water quality provided the Discharger complies with the conditions contained in this General Order; therefore, coverage under a conditional waiver is appropriate. A Discharger covered under the conditional waiver that no longer complies with the conditions is required to consult with the Regional Water Board to determine if a compliance schedule is appropriate, if enrollment in Tier 1 or Tier 2 is possible, or if the Discharger must cease the

discharge. Violators are guilty of misdemeanor and may be liable civilly pursuant to Water Code section 13265.

18. Pursuant to Water Code section 13263(g), no discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.
19. In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to comply with requirements established to protect municipal and domestic water supplies.

REGULATORY CONSIDERATIONS

20. The Cannabis Policy includes instream flow objectives, limits on diversions, requirements for screening of diversions and elimination of barriers to fish passage, and includes requirements that apply to groundwater extraction. Cannabis cultivation activities statewide are required to comply with the requirements of the Cannabis Policy.
21. Health and Safety Code Section 11362.2 states that local municipalities (e.g., city, county, or city and county) have land use authority related to cannabis cultivation and associated activities. Coverage under this General Order does not supersede any requirements, ordinances, or regulations of other regulatory agencies or local municipalities.
22. Those requirements, ordinances, or regulations may change over time. Authorization to discharge waste from cannabis cultivation activities under this General Order may be revoked based on those conditions.
23. The Regional Water Board Executive Officer may terminate permit coverage under the General Order for cause when such termination is needed to protect water quality.
24. Industrial hemp, as defined in Health and Safety Code section 9.1, is exempt from regulation under this General Order. Industrial hemp is regulated by the CDFA, commencing with section 81000 of the Food and Agricultural Code. Cultivation of industrial hemp shall be performed consistent with the Regional Water Board's ILRP.
25. The California Forest Practice Rules designate watercourse (stream) and lake protection zones, protective measures based on the beneficial use, and whether the watercourse is natural or manmade. Activities performed in areas subject to the Forest Practice Rules shall be implemented consistent with the permitting, licensing, and performance standards of the Forest Practice Rules, and the requirements of the Cannabis Policy and this General Order, whichever is more protective.
26. Diversion of water or any other alteration of a lake or streambed (including alterations that result from construction or modification of culverts, etc.) requires CDFW notification and permitting. CDFW manages California's fish and wildlife resources and habitats for their ecological value and enjoyment by the public. CDFW may issue Lake or Streambed Alteration Agreements (also known as "1600 Agreements") that may limit water diversions to ensure that public resources are protected or impose additional conditions.

TITLE 27 EXEMPTION

27. Discharges from cannabis cultivation activities eligible for coverage under this General Order are exempt from the requirements of Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste in California Code of Regulations, title 27, division 2, subdivision 1, section 20005, et seq. The activities are exempt from the requirements of title 27 so long as the activity meets and continues to meet all preconditions listed below. (Cal. Code Regs., tit. 27, §20090).
- a. Wastewater – Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leach fields if all of the following conditions are met:
 - i. The applicable Regional Water Board has issued WDRs, reclamation requirements, or waived such issuance.
 - ii. The discharge complies with the applicable water quality control plan.
 - iii. The wastewater does not need to be managed according to California Code of Regulations, title 22, division 4.5, chapter 11, as a hazardous waste. (Cal. Code Regs., tit.27, §20090(b).)
 - b. Soil Amendments – Use of nonhazardous decomposable waste as a soil amendment pursuant to applicable BPTC measures, provided that Regional Water Boards may issue waste discharge or reclamation requirements for such use. (Cal. Code Regs., tit.27, §20090(f).)

MONITORING AND REPORTING

28. Water Code section 13267 states, in relevant part:

(b)(1) In conducting an investigation ..., the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region . . . shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

Tier 1 and Tier 2 enrollees are required to submit technical and monitoring reports. The reports include certifying completion of winterization measures, certification of the facility tier status, and for higher risk tiers, nitrogen management status. The technical reports and monitoring reports are necessary to assure compliance with this General Order. The burden and cost of preparing the reports is reasonable and consistent with the interest of the state in maintaining water quality.

BASIN PLANS AND BENEFICIAL USES

29. Beneficial uses of groundwater are determined by each Regional Water Board and are listed in their respective Basin Plans.
- a. Beneficial uses of groundwater include municipal and domestic supply, industrial service supply, industrial process supply, fresh water replenishment, aquaculture, wildlife habitat, water contact recreation, agricultural supply, and groundwater

recharge. Some beneficial uses only apply to certain geographical areas within regions.

- b. Beneficial uses of surface waters include agricultural supply; cold freshwater habitat; estuarine habitat; flood peak attenuation or flood water storage; freshwater replenishment; groundwater recharge; inland saline water habitat; municipal and domestic supply; warm freshwater habitat; water quality enhancement; wetland habitat; wildlife habitat; aquaculture; commercial and sport fishing; industrial process supply; industrial service supply; migration of aquatic organisms; Native American culture; navigation; non-contact water recreation; rare, threatened, or endangered species; spawning, reproduction, and/or early development; subsistence fishing; and water contact recreation.

NORTH COAST REGIONAL WATER BOARD BASIN PLAN, POLICIES, AND TMDLS

- 30. The North Coast Regional Water Board adopted the Support of Restoration in the North Coast Region Resolution No. R1-2015-0001 (Restoration Policy) to support the implementation of restoration projects for the purpose of eliminating, reducing, or ameliorating a variety of conditions that can negatively impact aquatic ecosystems, including but not limited to: water pollution, eutrophication, desiccation, habitat simplification, species displacement, migration barriers, erosion from diverted streams, riparian zone disturbance, effects of climate change, or other impairments to the beneficial uses of waters of the state. In many watersheds, the impact of past land use activities or so-called “legacy” problems may require decades to recover to their historic, natural, or functioning conditions. Some aquatic ecosystems have been so significantly altered that it is no longer reasonable or feasible to achieve historic conditions; but rather, restoration efforts must focus on establishing best achievable structure, function, and biodiversity.
- 31. The North Coast Regional Water Board Basin Plan includes the policy for the Implementation of the Water Quality Objectives for Temperature (Temperature Implementation Policy), which specifies that activities resulting in water temperature increases shall be addressed on a case-by-case basis to reduce impairments and prevent further impairment. The Temperature Implementation Policy directs staff to examine and address temperature when developing permits. At a minimum, any program or permit should implement temperature shade load allocations in areas subject to existing temperature total maximum daily loads (TMDLs), including EPA-established temperature TMDLs. To attain and maintain the water quality objectives for temperature, the Regional Water Board and its staff will implement programs and collaborate with others in such a manner as to prevent, minimize, and mitigate temperature alterations associated with sediment discharges and controllable water quality factors. Controllable water quality factors affecting water temperature include any anthropogenic activity which results in the removal of riparian vegetation, sediment discharges, impoundments and other channel alterations, reduction of instream summer flows, and the reduction of cold water sources. The Temperature Policy requires program implementation through adoption of WDRs.
- 32. The North Coast Region is home to numerous threatened and endangered species that are sensitive to excessive sediment, temperature fluctuations, and reduction of suitable habitat. The migration, spawning, reproduction, and early development of cold water fish such as salmon and trout species are impacted in the North Coast Region due to water quality impairments and other conditions. The National Marine Fisheries Service has listed southern Oregon/northern California coast Coho salmon, California coastal Chinook salmon, and

northern California steelhead as threatened under the federal Endangered Species Act. The CDFW listed coho salmon as threatened in 2005.

33. Approximately 61-percent of the North Coast Region drains to sediment impaired rivers and streams (2006 Clean Water Act Section 303(d) list). Sediment TMDLs have been established by the U.S. EPA for the Albion River, Big River, Middle Fork Eel River, North Fork Eel River, South Fork Eel River, Garcia River, Gualala River, Mattole River, Navarro River, Noyo River, Redwood Creek, Ten Mile River, Trinity River, South Fork Trinity River, and Van Duzen River. The establishment of TMDLs by the U.S. EPA was conducted under the authority of the Clean Water Act and is equivalent to adoption of a TMDL as described in California Code of Regulations, title 14, section 916.9(a)(I).
34. The North Coast Regional Board adopted the TMDL Implementation Policy Statement for Sediment Impaired Receiving Waters in the North Coast Region, (Sediment TMDL Implementation Policy) on November 29, 2004. The Sediment TMDL Implementation Policy directs the Executive Officer to use all available authority in pursuing sediment related compliance.
35. This General Order is consistent with the Basin Plan for the North Coast Region, the Temperature Implementation Policy and the Sediment TMDL Implementation Policy by requiring all Dischargers that are landowners of the cultivation site in the North Coast Region to develop *Site Management Plans* identifying compliance with BPTC measures property-wide, including discharges from legacy activities (e.g., former timber harvest, road building, mining, etc.) at the site.

LAHONTAN REGIONAL WATER BOARD BASIN PLAN

36. The Lahontan Regional Water Board Basin Plan contains control measures for construction activities. To minimize the risk of erosion and storm water threatening sensitive watersheds, the Basin Plan requires the following:
 - a. Disturbed areas located at elevations above 6,000 feet must be stabilized from October 15th through May 1st of each year, and all work performed during this period must be conducted so that the site can be winterized within 48 hrs.
 - b. "Winterized" for the Lahontan region means implementing erosion and/or sediment controls that will prevent the discharge of earthen materials from the site and the controls will remain effective throughout the rainy/snow season without requiring maintenance. The winter season may be shortened in desert areas of the region.
37. The Lahontan Regional Water Board adopted the General Waste Discharge Requirements and National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit, Counties of Alpine, El Dorado, and Placer (Order No. R6T-2016-0010) which includes a specific anticipated precipitation event criteria. An anticipated precipitation event is defined as a 30 percent or greater chance producing 0.1 inch of precipitation as rainfall in the project area, or if the chance of thunderstorms becomes 30 percent or greater, or when visual observations indicate imminent precipitation.
38. The Lahontan Regional Water Board adopted Resolution No. R6T-2008-0019, *Approval of Amendments to the Water Quality Control Plan for the Lahontan Region to Incorporate a Total Maximum Daily Load (TMDL) and TMDL Implementation Plan for Sediment in the Middle Truckee River Watershed, Placer, Nevada, and Sierra Counties, and Certification of a*

Substitute Environmental Document (Middle Truckee River TMDL) on May 14, 2008. The Middle Truckee River TMDL was approved by the State Water Board on March 17, 2009; and the U.S. EPA on September 16, 2009. The implementation of the Middle Truckee River TMDL includes identification of legacy sites and restoration, or implementation of storm water best management practices to prevent erosion and sedimentation of surface waters. The BPTC measures included in this General Order includes requirements to control sediment discharges from construction and maintenance activities related to cannabis cultivation.

SAN DIEGO REGIONAL WATER BOARD TMDL

39. The San Diego Regional Water Board adopted Resolution No. R9-2005-0036, *A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Revised Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed, San Diego County* (Rainbow Creek TMDL) on February 9, 2005. The Rainbow Creek TMDL was approved by the State Water Board on November 16, 2005; the Office of Administrative Law (OAL) on February 1, 2006; and the U.S. EPA on March 22, 2006. The Rainbow Creek TMDL became effective on February 1, 2006.
- a. Nitrate and phosphorus concentrations in the Rainbow Creek Watershed exceed the water quality objective for some municipal supply beneficial uses and threaten several additional beneficial uses. Runoff from agriculture, nursery, and residential land uses contribute to increased nitrate and phosphorus in Rainbow Creek as a result of storm water runoff, irrigation return flows, and groundwater contributions to the creek.
 - b. The objectives of the Rainbow Creek TMDL Implementation Plan requires the use of effective management practices and best management practices to reduce the loading of nitrogen and phosphorus to attain numeric targets for total nitrogen (1.0 mg/L) and total phosphorus of (0.1 mg/L). The BPTC measures included in this General Order represent effective management practices limiting nitrogen and phosphorus discharges.
40. The San Diego Regional Water Board adopted Resolution No. R9-2010-0001, *A Resolution Amending the Water Quality Control Plan for the San Diego Basin (9) to incorporate Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)* (Bacteria TMDL) on February 10, 2010. The Bacteria TMDL was approved by the State Water Board on December 14, 2010; OAL on April 4, 2011; and U.S. EPA on June 22, 2011. The Bacteria TMDL became effective on April 4, 2011.
- a. Bacteria in the waters of the beaches and creeks addressed by this TMDL have exceeded numeric water quality objective for total, fecal, and/or enterococci bacteria (collectively referred to as indicator bacteria). Beaches have been posted with health advisories and/or closed threatening and impairing beneficial uses.
 - b. Watersheds with agricultural operations (Lower San Juan hydrologic sub area, San Luis Rey hydrologic unit, San Marcos hydrologic area, and San Dieguito hydrologic unit) are required to reduce their wet weather and dry weather bacteria loading. The objectives of the Bacteria TMDL Implementation Plan requires the use of effective management practices and best management practices to reduce the loading of bacteria containing discharges to achieve the load allocations and waste loads specified in the Bacteria TMDL. The BPTC measures included in this General Order represent effective management practices limiting bacteria containing discharges.

NON-POINT SOURCE POLICY

41. In May 2004, the State Water Board adopted the Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program (NPS Policy). The purpose of the NPS Policy is to improve the state's ability to effectively manage nonpoint source pollution, conform to the requirements of the Clean Water Act, and comply with the Federal Coastal Zone Act Reauthorization Amendments of 1990. Polluted runoff from nonpoint sources accounts for more than 76 percent of the water bodies where TMDLs are required.
- a. The NPS Policy requires the Water Boards to regulate all nonpoint sources of pollution, using the administrative permitting authorities provided by the Porter-Cologne Water Quality Control Act. This General Order implements the NPS Policy by requiring BPTC measures for site development, cannabis cultivation, associated activities (e.g., site grading, road building, surface water diversion, etc.) that can contribute to nonpoint source pollution.
 - b. NPS pollution control implementation programs are a mechanism to achieve compliance with Basin Plan requirements. Pollution control implementation programs may be imposed upon a subbasin by the State or Regional Water Board, an individual Discharger, or a coalition of Dischargers. Alternatively, a pollution control implementation program may be developed by an individual Discharger, group of Dischargers, or landowners to address a water quality issue.
 - c. Implementation of the applicable BPTC measures contained in Attachment A will be protective of water quality for most cannabis cultivation activities. However, adherence to the BPTC measures does not assure compliance. The ultimate compliance evaluation is comparison of the effectiveness of BPTC measure implementation to the appropriate Basin Plan requirements. In some cases, the Discharger will have to implement multiple BPTC measures, or increase the density of BPTC measures to achieve water quality protection. In some cases, the activity cannot be performed without unacceptable water quality degradation. In those cases, the Regional Water Board may revoke the authorization under the General Order, require authorization under a site-specific order, or prohibit the activity from occurring.

APPLICATION/TERMINATION PROCESS AND FEES

42. The North Coast Regional Water Board and the Central Valley Regional Water Board have authorized discharges related to cannabis cultivation under Orders R1-2015-0023 and R5-2015-0113. The State Water Board intends that regulatory coverage under an existing Regional Water Board general order will be terminated by the applicable Regional Water Board by **July 1, 2019**. All existing Dischargers must apply for coverage under this General Order. (Some existing Dischargers may qualify for conditional exemption from the General Order; some previously exempted activities may need to obtain coverage under the Waiver or enroll under this General Order.) All cannabis cultivation activity that requires discharge authorization as described herein, shall be authorized by this General Order, an appropriate ILRP WDR, a waiver of ILRP WDRs, or by a site-specific order if deemed necessary by the Regional Water Board Executive Officer. All Dischargers enrolled under Orders R1-2015-0023 or R5-2015-0113 as of October 17, 2017 (the adoption date of this General Order) may continue to operate their facility with their existing order's setbacks (grandfathered status) unless the Regional Water Board's Executive Officer determines that the reduced setbacks applicable under those orders are not protective of water quality. Such Dischargers are not required to modify their facilities to comply with this General Order's setback limits. New

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disturbed areas or expansions to the existing facilities shall comply with the setbacks provided in this General Order.

43. Applicants must comply with the setback and slope limits. A cultivation site is classified as moderate risk if any part of the disturbed area is located on a slope greater than 30 percent. Such Dischargers shall enroll as moderate risk and submit a *Site Erosion and Sediment Control Plan*. (See the plan description in the Provisions section of this General Order.) A cultivation site is classified as high risk if any part of the disturbed area exists within the setback limits. Such Dischargers shall enroll as high risk, submit a *Disturbed Area Stabilization Plan*, and shall address the setback compliance issue as described below. (See the plan description in the Provisions section of this General Order.) Because such Dischargers pose a higher risk to water quality and will require a higher level of Regional Water Board oversight, they are subject to a higher application and annual fee. When the site is reconfigured to comply with the setbacks, the Discharger can request the Regional Water Board to reclassify the site to a lower risk level and allow a lower annual fee to be assessed.
44. Applicants seeking coverage under the Waiver or that are required to enroll are required to pay an application fee as described below. Water Code sections 13260(d)(1)(A) and 13269(a)(4)(A) requires persons subject to waste discharge requirements or a waiver of waste discharge requirements to pay an annual fee according to a fee schedule established by the State Water Board. The application and annual fee schedule is presented in California Code of Regulations, title 23, section 2200 et seq.
- a. Cannabis cultivation activities that comply with the conditions for personal use exemption described in the Exemptions for Certain Cultivation Activities section of this General Order are not required to apply for coverage from the State Water Board or Regional Water Board. Dischargers that qualify for personal use exemption under this General Order are not required to pay an application fee or a subsequent annual fee. Some personal use exempt dischargers that divert water may be subject to water rights registration requirements. Those dischargers shall use the online application and will receive a Notice of Exemption from this General Order.
 - b. Commercial indoor cannabis cultivation activities that occur within a structure with a permanent roof, a permanent relatively impermeable floor (e.g., concrete or asphalt paved), and that discharge all industrial wastewater generated to a community sewer system consistent with the sewer system requirements, are required to apply for coverage under the Waiver on-line and pay an application fee.
 - c. Indoor cannabis cultivation activities that occur within a structure with a permanent roof, a permanent relatively impermeable floor (e.g., concrete or asphalt paved), but discharge irrigation tailwater or hydroponic wastewater, to an on-site wastewater treatment system (such as septic tank and leach field or to land) must obtain regulatory authorization for the wastewater discharge (e.g., WDRs, conditional waiver of WDRs, or other permit mechanism). Indoor cannabis cultivation with an onsite treatment system are required to apply for coverage under the Waiver on-line and pay an application fee.
 - d. Outdoor cannabis cultivation activities that comply with the conditionally exempt conditions described in the Exemptions for Certain Cultivation Activities section of this General Order are required to apply for coverage under the Waiver on-line and pay an application fee. Existing Dischargers (under Orders R1-2015-0023, R5-2015-0113) are required to transition coverage (enroll) under the General Order.

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Transitioning Dischargers are required to apply on-line. They do not pay an application fee; they continue to pay their annual fee as appropriate from the general order fee schedule (the fee may change based on site conditions). Some Dischargers may qualify for, or be required to obtain coverage under an ILRP WDR, ILRP conditional waiver of WDRs, or a site-specific WDRs order, and pay fees associated with those permits. Enrollees directed to those orders shall contact the appropriate Regional Water Board for instructions on application procedures. Such Dischargers shall also comply with the applicable water rights registration process described herein as applicable.

- e. New facilities that are classified as either Tier 1 or Tier 2 are required to enroll under the General Order. New facilities are required to apply on-line and pay an application fee. The application fee serves as the first year's annual fee; Dischargers will be billed on an annual basis. Some existing Dischargers (under Orders R1-2015-0023, R5-2015-0113) may be classified as a Tier 1 or Tier 2 facility.
 - f. Tier 1 and 2 sites shall be characterized for risk based on site conditions. Risk is defined in Table 1 as low, moderate, or high. Because moderate and high risk sites will require greater level of regulatory oversight, the fees for those risk levels are higher, reflecting the additional cost to achieve water quality protection. A site can be located on a slope greater than 30 percent and not comply with the setback requirement. In that case, the Discharger shall pay the highest applicable fee.
 - i. Low Risk – Comply with the slope requirements and setbacks. Low risk sites are deemed to be a lower threat to water quality.
 - ii. Moderate Risk – Comply with the setback requirements but exist on slopes greater than 30 percent and less than 50 percent. The higher slopes will require implementation of more BPTC measures, more monitoring of their effectiveness, and more maintenance activities to ensure the BPTC measures are effective.
 - iii. High Risk – Are facilities that have any portion of their disturbed area located within the setback requirements, with the exception of activities authorized under a Clean Water Act section 404 permit, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board, are classified as high risk and will be assessed the high-risk fee until the activities comply with the setback requirements. It is the Discharger's responsibility to notify the Regional Water Board of compliance with the setback requirements to reassess the annual fee.
45. To apply for coverage under this General Order, the Discharger shall submit an application through the Internet as described in the Application Procedure section of this General Order.
- a. The application requires the Discharger to self-certify that all applicable BPTC measures are being implemented, or will be implemented by **the onset of the winter period, following the enrollment date**. Upon submittal of the application, the Discharger will obtain a notice of receipt. Applicants that cannot implement all applicable BPTC measures by the onset of the winter period, following their enrollment date, shall submit to the Regional Water Board Executive Officer a *Site Management Plan* that includes a time schedule and scope of work for use by the Regional Water Board in developing a compliance schedule as described in

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Attachment A. Refer to the definition of winter period in Attachment A for specific dates. The notice of receipt will expire within **30 days** of issuance if the Discharger fails to complete the application by submitting the application fee to the State Water Board. (Dischargers that are currently enrolled in the North Coast Regional Water Board or the Central Valley Regional Water Board orders do not pay an additional fee as described in the Application/Termination Process and Fees section of this General Order.)

- b. Technical reports shall be submitted to the appropriate Regional Water Board via e-mail as described in the notice of receipt and Attachment B monitoring and reporting program (MRP). The MRP is attached hereto and is made part of this General Order by reference. Enrollees may be directed to upload reports via the Internet in the future. See the Provisions section of this General Order for guidance on the report(s) contents.
 - c. Upon receipt of an application, fee, and required documentation (e.g., a tribal authorization letter is required for some applicants). Dischargers will receive documentation for use in obtaining a CDFA cultivation license.
 - i. Conditionally exempt Dischargers will receive a Conditional Waiver of WDRs.
 - ii. Tier 1 or Tier 2 Dischargers will obtain a notice of applicability.
 - iii. Enrollees transitioning from an existing Regional Water Board order will receive either a Conditional Waiver of WDRs or a Notice of Applicability depending upon the site characteristics
46. Dischargers that want to terminate coverage under this General Order shall submit a Notice of Termination (NOT), provided in Attachment C, which is attached hereto and is made part of this General Order by reference. The NOT shall include a *Site Closure Report* (see the plan description in the Provisions section of this General Order) and a final monitoring report. The Regional Water Board reserves the right to inspect the site before approving an NOT.

CEQA CONSIDERATIONS

47. This General Order imposes regulatory requirements on existing cannabis cultivation sites and regulates the water related impacts associated with the development of new cannabis cultivation sites.
- a. The adoption of this General Order for existing cannabis cultivation sites is categorically exempt from CEQA pursuant to California Code of Regulations, title 14, section 15301 (ongoing or existing projects).
 - b. Water Code section 13149 required the State Water Board to adopt principles and guidelines addressing water diversion and water quality issues associated with cannabis cultivation. The principles and guidelines contain substantive criteria for enrollment, water quality protection, and protective measures addressing biological and cultural resources. Water Code section 13149 (b)(1) provides that these actions of the State Water Board are deemed to be within California Code of Regulations, title 14, section 15308 (regulatory actions for environmental protection) if stream flow standards are not relaxed. The principles and guidelines described in the Cannabis Policy and as implemented in this General Order do not relax stream flow standards and are therefore exempt from further CEQA evaluation. Adoption of this General

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Order is a ministerial action under CEQA because it is a requirement of the Cannabis Policy. The General Order contains no substantive requirements that are not already required by the Policy, so there is no possibility that the General Order itself will have any significant effects on the environment.

- c. Activities performed in aquatic environments require Lake or Streambed Alteration Agreements from the CDFW. Potential impacts to aquatic biological resources are addressed by the CDFW permitting process.
- d. Activities related to site development in timberland require permits from CAL FIRE. Potential impacts to biological resources and cultural resources are addressed in the CAL FIRE permitting process.

OTHER REGULATORY CONCERNS

- 48. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a take will result from any action authorized under this General Order, the Discharger shall obtain authorization for an incidental take prior to construction or operation of the project. The Discharger shall be responsible for meeting all applicable requirements of the Endangered Species Act.
- 49. The State Water Board has notified interested agencies and persons of its intent to adopt this General Order for discharges of waste from cannabis cultivation activities within the state and has provided them with an opportunity for a public hearing and an opportunity to submit comments.
- 50. The State Water Board in a public meeting, heard and considered all comments pertaining to this General Order.

IT IS HEREBY ORDERED that, (1) this General Order shall not take effect unless and until the Cannabis Policy is approved by the Office of Administrative Law (Effective Date), (2) pursuant to Water Code section 13269, the State Water Board waives the requirement to submit a report of waste discharge and obtain waste discharge requirements for indoor commercial cannabis cultivators and outdoor cannabis cultivators that meet all requirements for conditional exemptions described in this General Order. This Waiver shall expire five years after the Effective Date of this General Order, unless terminated or renewed by the State Water Board, and (3) pursuant to Water Code sections 13263 and 13267, the Discharger, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted hereunder, shall comply with the requirements of this General Order:

A. CANNABIS POLICY REQUIREMENTS

- 1. The Discharger shall comply with, and implement, all requirements described in Attachment A of the Cannabis Policy, which is included as Attachment A of this General Order.

B. APPLICATION PROCEDURE

- 1. All Dischargers, except those that qualify for the personal use exemption and that do not need a water rights registration, shall provide the information requested on-line as described below.

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2. To obtain coverage under the Waiver or enroll under this General Order, the Discharger shall:

- a. Provide the information required in the on-line application process located at <<https://www.waterboards.ca.gov/cannabis>>.
- b. Submit the application fee within **30 days** of submitting the on-line application. Failure to submit the application fee within 30 days will result in the application being voided and authorization terminated. Payments shall be identified using the Fee Payment Application Number (found on the Notice of Receipt). All checks or money orders shall be made payable to: "State Water Resources Control Board," and shall be delivered to:

By U.S. Mail	In person or by courier delivery
Accounting Office Attn: Water Quality Fees – Cannabis General Order P.O. Box 1888 Sacramento, CA 95812-1888	Accounting Office Attn: Water Quality Fees – Cannabis General Order 1001 I Street Sacramento, CA 95814

- c. Provide the technical reports listed in Table 2 below. *Site Management Plan* is due **90 calendar days** after the application is submitted and the Notice of Receipt is issued; the *Site Closure Report* is due **90 days** prior to ending cannabis cultivation activities. When required, the *Site Erosion Sediment Control Plan*, and the *Disturbed Area Stabilization Plan* must be submitted and approved by the Regional Water Board Executive Officer before the Dischargers can initiate activities at the site. See the Provisions section of this General Order for descriptions of the technical report contents.

Table 2: Technical Report Requirements by Tier

Tier	Risk Level	Technical Reports ¹
Conditionally Exempt ²	N/A	Site Closure Report ³
Tier 1	All	Site Management Plan
Tier 1	Moderate	Site Erosion Sediment Control Plan ⁴
Tier 1	High	Disturbed Area Stabilization Plan ⁵
Tier 1	All	Site Closure Report ³
Tier 2	All	Site Management Plan
Tier 2	Moderate	Site Erosion Sediment Control Plan ⁴
Tier 2	High	Disturbed Area Stabilization Plan ⁵
Tier 2	All	Nitrogen Management Plan ⁶
Tier 2	All	Site Closure Report ³

¹ See the Provisions section of this General Order for the report content requirements.

² Some conditionally exempt facilities (including personal use exemption) may have to enroll as a Tier 1 or Tier 2 site if it no longer meets the exemption criteria. If so, the (formerly) conditionally exempt facilities shall submit the technical reports and monitoring reports associated with their tier status.

³ A Site Closure Report is required prior to ending cannabis cultivation at a site. Also see the Notice of Termination (Attachment C.)

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- ⁴ A Site Erosion Sediment Control Plan is required when any portion of the disturbed area is located on a slope greater than 30 percent.
 - ⁵ A Disturbed Area Stabilization Plan is required when any portion of the disturbed area, including areas disturbed upon initial site development, are located within the Disturbed Area Setbacks presented in Attachment A. Access roads and water crossings designed, constructed, and maintained consistent with the Road Handbook and Attachment A, are not considered disturbed areas.
 - ⁶ A Nitrogen Management Plan is required when the cultivation area, or aggregate of cultivation areas, exceeds one acre.
3. The primary authority for issuing NOAs is the Regional Water Board Executive Officer. However, NOAs may also be issued by the State Water Board Division of Water Quality Deputy Director or the State Water Board Chief Deputy Director.
4. Dischargers that want to terminate coverage under this General Order shall submit a Notice of Termination (NOT), provided in Attachment C. The NOT shall include a *Site Closure Report* (see the plan description in the Provisions section of this General Order) and a final monitoring report. The Regional Water Board may inspect the site before approving an NOT.

C. PROVISIONS

1. Technical Report Preparation Requirements. All technical reports shall be submitted to the appropriate Regional Water Board by transmitting the report in portable document format (PDF) to the e-mail address provided in the notice of receipt. Refer to the General Order attachments for guidance on the contents of the reports.
 - a. **Within 90 days** of the issuance of a notice of receipt, all Tier 1 and Tier 2 Dischargers shall submit and implement a *Site Management Plan* that describes how the Discharger is complying with the BPTC measures listed in Attachment A. The description shall describe how the BPTC measure is implemented (e.g., for petroleum fuel storage, specify the specific product or means of compliance). Dischargers that are landowners of the cultivation site in North Coast Regional Water Board jurisdiction are required to submit and implement *Site Management Plans* that describes how the BPTC measures are implemented property-wide, including BPTC measures implemented to address discharges from legacy activities. The *Site Management Plan* may include a schedule to achieve compliance, but all work must be completed by **the onset of winter period each year**. (The due date does not relieve a Discharger from implementing the interim soil stabilization BPTC measures described in Attachment A. Interim measures are those that are implemented immediately upon site development.) Attachment D, which is attached hereto and is made part of this General Order by reference, provides guidance on the contents of the *Site Management Plan*.
 - b. Tier 1 or Tier 2 Dischargers classified as moderate risk (any portion of the disturbed area is located on a slope greater than 30 percent, or conditionally exempt Dischargers that do not comply with the conditions that must enroll as Tier 1 or 2, and have any portion of the disturbed area on a slope greater than 30 percent) shall submit a *Site Erosion and Sediment Control Plan* that describes how the Discharger will implement the BPTC measures listed in Attachment A. (See Attachment A, Section 5 Planning and Reporting for a listing of professional registrations or certifications that are qualified to prepare the plan.) Because moderate risk sites are located on steeper slopes, additional BPTC measures, or a higher density of BPTC measures may be appropriate to achieve the goal of

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minimizing the discharge of sediment off-site. The report shall include an analysis of slope stability. Attachment D of the General Order provides guidance on the contents of the *Site Erosion and Sediment Control Plan*. The Report shall be approved by the Regional Water Board Executive Officer prior to implementation.

- c. Tier 1 or Tier 2 Dischargers classified as high risk (any portion of the disturbed area exists within the setbacks specified in this General Order except as authorized by a CDFW Lake or Streambed Alteration permit, shall submit a *Disturbed Area Stabilization Plan* that shall describe how compliance with the setbacks will be achieved. (See Attachment A, Section 5 Planning and Reporting for a listing of professional registrations or certifications that are qualified to prepare the Plan.) If the Discharger will not be able to achieve compliance by the onset of the next winter period (stabilization work will continue into the winter period or will continue the following year), the Discharger must include a time schedule and scope of work for approval by the Regional Water Board Executive Officer and use in preparing an enforcement order. Attachment D of the General Order provides guidance on the contents of the *Disturbed Area Stabilization Plan*. The Report shall be approved by the Regional Water Board Executive Officer prior to implementation.
- d. **Within 90 days** of the issuance of a notice of receipt, all Tier 2 Dischargers with a cannabis cultivation area, or aggregate of cultivation areas, greater than one acre shall submit a *Nitrogen Management Plan* (NMP) for the facility. The NMP shall calculate all the nitrogen applied to the cannabis cultivation area (dissolved in irrigation water, originating in soil amendments, and applied fertilizers) and describe procedures to limit excessive fertilizer application. Attachment D of the General Order provides guidance on the contents of a *Nitrogen Management Plan*.
- e. At least **90 days prior to ending cannabis cultivation** at a site, a conditionally exempt, Tier 1, or Tier 2 Discharger shall submit a *Site Closure Report* that describes how the site will be decommissioned to prevent waste constituents, sediment, and/or turbidity discharges that degrade water quality. If construction activities are proposed in the *Site Closure Report*, a project implementation schedule shall be included in the report. The *Site Closure Report* shall also include a final MRP report. Attachment D of the General Order provides guidance on the contents of the *Site Closure Report*.

2. Standard Provisions for All Dischargers

- a. The requirements prescribed herein do not authorize the commission of any act causing damage to the property of another, or protect the Discharger from liabilities under federal, state, or local laws. This General Order does not convey any property rights or exclusive privileges and does not create a vested right to continue cannabis cultivation or discharge of wastewater.
- b. This General Order does not relieve the Discharger from responsibility to obtain other necessary local, state, or federal permits, nor does the General Order prevent imposition of additional standards, requirements, or conditions by any other agency.
- c. The requirements of this General Order are severable. If any provision of this General Order is held invalid, the remainder of this General Order shall not be affected.

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- d. The Discharger shall ensure that all site operating personnel are familiar with the contents of the General Order. A copy of this General Order and technical reports required by this General Order shall be kept at the cultivation site. Maintenance of electronic copies of the documents, that can immediately be viewed, is acceptable.
- e. Consistent with the Business and Professions Code, the Forest Practice Act, and other state laws, certain technical report preparation, design calculations, and report preparation must be prepared under the supervision of a California licensed civil engineer, professional forester, or professional geologist. This General Order also contains requirements related to storm water documents. (See Planning and Reporting section of Attachment A for a listing of professional registrations or certifications that are qualified to prepare the plan.) In addition, contractors employed to implement the BPTC measures must comply with the specific requirements contained in the Forest Practice Act and the general requirements requiring licensing by the California Contractors' State License Board.
- f. The Discharger shall comply with all of the terms and conditions of this General Order. Any noncompliance with this General Order constitutes a violation of the Porter-Cologne Water Quality Control Act and/or applicable Regional Water Board's Basin Plan and may be grounds for an enforcement action.
- g. The State Water Board will review this General Order periodically and will revise requirements when necessary.
- h. The Regional Water Board Executive Officer or State Water Board Division of Water Quality Deputy Director or the State Water Board Chief Deputy Director may terminate a Discharger's coverage under this General Order for cause including, but not limited to, any of the following:
 - i. Violation of any of the terms or conditions contained in this General Order.
 - ii. Obtaining this General Order by misrepresentation, or failure to disclose fully all relevant facts.
 - iii. A change in any condition that results in either a temporary or permanent need to reduce or eliminate the authorized discharge activities.
 - iv. A material change in the activity, character, location, or volume of discharge.
 - v. Adoption of a TMDL amendment, new TMDL, or TMDL alternative.
- i. Before making a material change in the activity, character, location, or volume of discharge, the Discharger shall notify the Regional Water Board Executive Officer. A material change includes, but is not limited to, any of the following:
 - i. An increase in cultivation area (indoor or outdoor) beyond that specified in the application.
 - ii. A significant change in the operational activities that have the potential to increase or create a discharge to waters of the state (e.g., new green houses, change in wastewater disposal method, or new activity such as cannabis manufacturing).

The Regional Water Board Executive Officer may require resubmittal of application information, technical reports, or certifications. If the authorization was issued by the State Water Board Division of Water Quality Deputy Director or the State Water Board Chief Deputy Director, those individuals may also require that actions described in this standard provision.

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- j. Except for material determined to be confidential in accordance with California law, all reports prepared in accordance with terms of this General Order shall be available for public inspection at the offices of the Regional Water Board. Data on waste discharges, water quality, geology, and hydrogeology are not confidential.
- k. The Discharger shall take all reasonable steps to minimize any adverse impact to waters of the state resulting from noncompliance with this General Order. Such steps may include accelerated or additional monitoring as necessary to determine the nature and impact of the noncompliance.
- l. The Discharger shall maintain in good working order and operate as efficiently as possible any facility, control system, water storage, or monitoring device installed to achieve compliance with this General Order.
- m. The Discharger shall permit representatives of the Regional Water Board and/or the State Water Board, upon presentation of credentials, to:
 - i. Enter premises where cannabis is cultivated or processed, wastes are treated, stored, or disposed of, and facilities in which any records are kept.
 - ii. Copy any records required under terms and conditions of this General Order.
 - iii. Inspect at reasonable hours, monitoring equipment required by this General Order.
 - iv. Sample, photograph, and/or video record any cultivation activity, discharge, waste material, waste treatment system, or monitoring device.
- n. For any electrically operated equipment at the site, the failure of which would cause loss of control or containment of waste materials or violation of this General Order, the Discharger shall employ safeguards to prevent loss of control over wastes. Such safeguards may include alternate power sources, standby generators, retention capacity, operating procedures, or other means.
- o. The fact that it would have been necessary to halt or reduce the permitted discharge activity to maintain compliance with this General Order shall not be a defense for the Discharger's violations of the General Order.
- p. Any of the following changes must immediately be reported to the Regional Water Board Executive Officer:
 - i. A change in ownership of the parcel where the cultivation activities take place. The Discharger or owner must notify the succeeding owner of the existence of this General Order by letter, a copy of which shall immediately be forwarded to the Regional Water Board's Executive Officer.
 - ii. A change of the permitted facility operator. The Discharger must notify the succeeding operator of the existence of this General Order by letter, a copy of which shall immediately be forwarded to the Regional Water Board's Executive Officer.
 - iii. A change in a third party representative. The Discharger shall notify the owner of the change by letter, a copy of which shall immediately be forwarded to the Regional Water Board's Executive Officer.
- q. Dischargers that are covered by the Waiver or enrolled under this General Order shall pay an application fee and an annual fee to the State Water Board in accordance with the fee schedule for each fiscal year. (Cal. Code Regs. tit. 23, § 2200.) Fees are based on tier and risk designations and are subject to revision by the State Water

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Board. Annual invoices are issued by the State Water Board for the state fiscal year (July 1 to June 30).

3. General Reporting Requirements

- a. If the Discharger cannot comply with the General Order, or will be unable to implement an applicable BPTC measure contained in Attachment A by **the onset of winter period each year**, the Discharger shall notify the Regional Water Board staff by telephone so that a site-specific compliance schedule can be developed. Current phone numbers for Regional Water Board offices may be found on the Internet at:

<http://www.waterboards.ca.gov/about_us/contact_us/rwqcb_directory.shtml>

Notification shall occur as soon as the Discharger or its agents have knowledge of such noncompliance or potential for noncompliance. The written notification shall state the date, time, nature, cause of noncompliance, immediate response action, and a schedule for corrective actions.

- b. All reports submitted in response to this General Order, including monitoring reports, shall be signed by a person identified below:
- i. For individuals at a private residence: by the property owner of the residence.
 - ii. For a corporation: by a principal executive officer of at least the level of senior vice-president.
 - iii. For a partnership or sole proprietorship: by a general partner or the proprietor.
 - iv. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected or appointed official.
 - v. A duly authorized representative of a person described above if all of the following are completed:
 - a) The authorization is made in writing by a person described above.
 - b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of site manager, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
 - c) The written authorization is submitted to the Regional Water Board.

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

- c. The Discharger shall mail a copy of each monitoring report and any other reports required by this General Order to the appropriate Regional Water Board or provide electronic submittals of reports or data as specified by the Regional Water Board. Contact and mail address information is available at:

<http://www.waterboards.ca.gov/about_us/contact_us/rwqcb_directory.shtml>

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- d. When the Discharger becomes aware that it failed to submit any relevant facts in an application or technical report to the Regional Water Board, it shall promptly submit such facts or information.

4. Monitoring Requirements

- a. Dischargers enrolled under Tier 1 or Tier 2 classifications shall comply with the attached MRP and any future revisions as specified by the appropriate Regional Water Board Executive Officer or State Water Board's Executive Director. An Executive Officer, State Water Board Division of Water Quality Deputy Director, or the State Water Board Chief Deputy Director may modify or replace the MRP for site specific conditions when deemed necessary.
- b. Unless otherwise approved by the Regional Water Board Executive Officer, all analyses shall be conducted at a laboratory certified for the analyses by the State Water Board's Division of Drinking Water Environmental Laboratory Accreditation Program. Field tests, such as tests for color, odor, turbidity, pH, temperature, dissolved oxygen, conductivity, and disinfectant residual are not subject to this requirement and will be accepted provided an acceptable Quality Assurance/ Quality Control Program is instituted by the laboratory. A manual containing the steps followed in the program must be available in the laboratory and shall be available for inspection by Regional Water Board or State Water Board staff. The Quality Assurance/ Quality Control Program must conform to U.S. EPA guidelines or to procedures approved by the Regional Water Board or State Water Board.
- c. The results of any monitoring done more frequently than required in the MRP shall be reported in the next regularly scheduled monitoring report. Values obtained through additional monitoring shall be used in calculations as appropriate.
- d. The Discharger shall furnish within a reasonable time any information the Regional Water Board or State Water Board staff may request to determine whether cause exists for modifying, revoking, reissuing, or terminating the Discharger's coverage under this General Order. The Discharger shall also furnish copies of records required to be kept by this General Order upon request. Providing electronic copies of the documents is acceptable.
- e. The Discharger shall retain records of all monitoring information, including copies of all reports required by this General Order and records of all data used to complete the application for this General Order. Records shall be maintained for a minimum of **three years** from the date of the report or application. Records may be maintained electronically. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Water Board Executive Officer.
- f. All monitoring and analysis instruments and devices used by the Discharger to fulfill the prescribed MRP shall be properly maintained and calibrated as recommended by the manufacturer to ensure their continued accuracy.
- g. Monitoring and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

5. Notice of Termination (NOT)

- a. If a Discharger wishes to terminate coverage, the Discharger shall submit a Notice of Termination (NOT) form (Attachment C) to the appropriate Regional Water Board. A

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new landowner and/or Discharger must obtain authorization under this General Order or the activity is subject to enforcement activity.

- b. The General Order coverage is not terminated until the NOT is approved by the Regional Water Board. Until the NOT is approved, the Discharger is responsible for any permit fees associated with General Order enrollment. Regional Water Boards may elect to conduct an inspection of the facilities prior to terminating coverage.
- c. Dischargers and/or landowners remain responsible for any water quality degradation that results from cultivation related activities whether coverage under this General Order has been terminated or not.

CERTIFICATION


I, Jeanine Townsend, Clerk to the Board, do hereby certify that this General Order with all attachments is a full, true, and correct copy of a General Order adopted by the State Water Board, on October 17, 2017.

AYE: Chair Felicia Marcus
Vice Chair Steven Moore
Board Member Tam M. Doduc
Board Member Dorene D'Adamo
Board Member Joaquin Esquivel

NAY: None

ABSENT: None

ABSTAIN: None



Jeanine Townsend
Clerk to the Board

Attachments:

Attachment A. Cannabis Policy Attachment A: Requirements for Cannabis Cultivation
Attachment B. Monitoring and Reporting Program
Attachment C. Notice of Termination
Attachment D. Technical Report Guidance

ATTACHMENT A: CANNABIS POLICY ATTACHMENT A
REQUIREMENTS FOR CANNABIS CULTIVATION
ORDER WQ 2017-0023-DWQ
GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF WASTE
ASSOCIATED WITH CANNABIS CULTIVATION ACTIVITIES

The Cannabis Policy Attachment A Requirements for Cannabis Cultivation contains surface water diversion and waste discharge requirements for cannabis cultivation related activities. The Discharger shall comply with all requirements in the Cannabis Policy and applicable federal, state, and local laws, regulations, and permitting requirements. If requirements conflict, the most protective requirements shall apply. There are five main categories of cannabis cultivation requirements to protect water quality and instream flows, which are located in the following sections:

- Section 1. General Requirements and Prohibitions
- Section 2. Requirements Related to Diversion of Water and Discharge of Waste for Cannabis Cultivation
- Section 3. Numeric and Narrative Flow Requirements (including Gaging)
- Section 4. Watershed Compliance Gage Assignments
- Section 5. Planning and Reporting

As referenced in this Order, best practicable treatment or control (BPTC) measures associated with diversion of water and discharge of waste are contained within Attachment A.

State Water Resources Control Board

Cannabis Cultivation Policy

ATTACHMENT A

Definitions and Requirements for Cannabis Cultivation

October 17, 2017

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OVERVIEW

This Attachment A contains diversion and discharge Requirements for cannabis cultivation activities. The cannabis cultivator shall comply with all Requirements in this Policy, and applicable federal, state, and local laws, regulations, and permitting requirements. In the event of duplicate or conflicting requirements, the most stringent requirements shall apply. There are five main categories of cannabis cultivation Requirements to protect water quality and instream flows, which are organized into the following sections:

- Section 1. General Requirements and Prohibitions, and General Water Quality Certification for Cannabis Cultivation Activities
- Section 2. Requirements Related to Water Diversions and Waste Discharge for Cannabis Cultivation
- Section 3. Numeric and Narrative Instream Flow Requirements (including Gaging)
- Section 4. Watershed Compliance Gage Assignments
- Section 5. Planning and Reporting

Definitions

The following are definitions of terms used in the Policy, Attachment A, Staff Report, and General Order.

No.	DEFINITION
1.	Access Road – A road, other than a completely paved road regularly maintained by a governmental entity, that provides access to one or more cannabis cultivation areas.
2.	Agronomic Rate – The rate of application of irrigation water and nutrients to plants necessary to satisfy the plants' evapotranspiration requirements and growth needs and minimize the movement of nutrients below the plants root zone. The agronomic rate considers allowances for supplemental water (e.g., effective precipitation), irrigation distribution uniformity, nutrients present in irrigation water, leaching requirement, and plant available nitrogen.
3.	Anadromy (adj. form: anadromous) — Migration of fish, as adults or subadults, from salt water to fresh.
4.	Aquatic Base Flow — The set of chemical, physical, and biological instream flow conditions that represent limiting conditions for aquatic life in stream environments. The aquatic base flow is determined using defined scientific methodology that equates the aquatic ecosystem health with the flow in the stream, calculated by applying the New England Aquatic Base Flow Standard.
5.	Aquatic benthic macroinvertebrate — Aquatic animals without backbones that can be seen by the unaided eye and typically dwell on rocks, logs, sediment or plants. Examples include, but are not limited to, insects, mollusks, amphipods, and aquatic worms. Common aquatic insects include, but are not limited to, mayflies, stoneflies, caddisflies, true flies, water beetles, dragonflies, and damselflies.

No.	DEFINITION
6.	Aquatic non-fish vertebrate — Include, but are not limited to: aquatic mammals, such as beavers, river otters, and muskrats; amphibians, such as frogs and salamanders; and aquatic reptiles, such as snakes and turtles.
7.	Average, also called mean — The sum of measured values divided by the number of samples.
8.	California Native American tribe – As defined in section 21073 of the Public Resources Code: a Native American tribe located in California that is on the contact list maintained by the Native American Heritage Commission for the purposes of Chapter 905 of the Statutes of 2004.
9.	Cannabis Cultivation – Any activity involving or necessary for the planting, growing, pruning, harvesting, drying, curing, or trimming of cannabis. This term includes, but is not limited to: (1) water diversions for cannabis cultivation, and (2) activities that prepare or develop a cannabis cultivation site or otherwise support cannabis cultivation and which discharge or threaten to discharge waste to waters of the state.
10.	Cannabis Cultivation Area – is defined by the following: <ul style="list-style-type: none"> a. For in-ground plants, the cultivation area is defined by the perimeter of the area planted, including any immediately adjacent surrounding access pathways. b. For plants grown outdoors in containers (e.g., pots, grow bags, etc.) the cultivation area is defined by the perimeter of the area that contains the containers, including any immediately adjacent surrounding access pathways. The area is not limited to the sum of the area of each individual container. c. For plants grown indoors, that do not qualify for the conditional exemption under the Cannabis General Order, the cultivation area is defined by the entire area contained in the structure where cultivation occurs, excluding any area used solely for activities that are not cultivation activities (e.g., office space). Areas used for storage of materials, equipment, or items related to cannabis cultivation shall be included in the cultivation area calculation.
11.	Cannabis Cultivation Site – A location where cannabis is planted, grown, pruned, harvested, dried, cured, graded, or trimmed, or where any combination of these activities occurs.
12.	Cannabis Cultivator – Any person or entity engaged in cultivating cannabis who diverts water (i.e., diverter) or discharges or threatens to discharge waste (i.e., discharger). This term includes business entities; employees; contractors; landowners; cultivators; lessees; and tenants of private land where cannabis is cultivated and of lands that are modified or maintained to facilitate cannabis cultivation.
13.	Waterbody Canopy Area — The overhead branches and leaves of streamside woody vegetation.

No.	DEFINITION
14.	Cannabis Canopy Area (Canopy Area) – The anticipated canopy acreage at plant maturity.
15.	Cesspool — An excavation in the ground receiving domestic wastewater, designed to retain organic matter and solids, while allowing the liquids to seep into the soil. Cesspools do not have a septic tank providing primary treatment of wastewater prior to discharge. A cesspool is distinguished from an outhouse, pit-privy, or pit-toilet because liquid wastewater (e.g., from toilet flushing, shower, or kitchen sources) is discharged to a cesspool.
16.	Channel maintenance flows — Peak streamflows needed for maintaining stream channel geometry, gravel and woody debris movement, and the natural flow variability needed for protection of various habitat needs of anadromous salmonids.
17.	Channel thalweg — The line connecting the lowest or deepest points along a stream channel.
18.	Coarse sediment — Particle sizes of ¼ inch or larger, including particles derived from debris flows, that either contribute directly to spawning gravel, or that reduce to a smaller usable size, or influence stream channel morphology by forming a substrate framework.
19.	Construction Storm Water Program – Refers to implementation of Water Quality Order 2009-0009-DWQ and National Pollutant Discharge Elimination System No. CAS000002, as amended by Order No. 2010-0014-DWQ, Order No. 2012-0006-DWQ, and amendments thereto. Activities located in the Lake Tahoe Hydrologic Unit shall comply with the National Pollutant Discharge Elimination System No. CAG616002, Order No. R6T-2016-0010 and amendments thereto. Cannabis cultivators whose activities disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres may need to obtain coverage under the Construction Storm Water Program. Contact the appropriate Regional Water Board Storm Water Program for a determination of the need for storm water permitting.
20.	Day – is the mean solar day of 24 hours beginning at midnight (12:00 am). All references to day in this Policy and the General Order are calendar days.
21.	Deep percolation — Infiltration of water through soil when storm water or excess irrigation water is applied and percolates below the plant root zone.
22.	Discharger – any person or entity engaged in developing land for cannabis cultivation, providing access to adjacent properties for cultivation activities, or engaged in the legal cultivation of cannabis that discharges or threatens to discharge waste.
23.	Disturbed Area – see Land Disturbance
24.	Disturbed Land – see Land Disturbance
25.	Diversion — Taking water, by gravity or pumping, from a surface stream or groundwater, into a canal, pipeline, or other conduit, including impoundment of water in a reservoir.

No.	DEFINITION
26.	Diverter – Any person or entity that diverts water from waters of the state, including surface waterbodies and groundwater.
27.	Dredged material — Any material that is excavated or dredged from a waterbody. This includes but is not limited to “dredged material” as defined at title 33, section 323.2, subdivision (c) of the Code of Federal Regulations.
28.	Ecological functions and values (of riparian habitat) — Functions are onsite and offsite natural riparian habitat processes. Values are the importance of the riparian habitat to society in terms of health and safety; historical or cultural significance; ecological characteristics, education, research, or scientific significance; aesthetic significance; economic significance; or other reasons.
29.	Ephemeral watercourse — See <i>Watercourse</i> definitions.
30.	Exceedance probability — The probability that a specified streamflow magnitude will be exceeded. The exceedance probability is equal to one divided by the recurrence interval.
31.	Face value —The maximum amount of water that is authorized to be diverted under a water right permit, license, registration, or livestock stockpond certificate, and the maximum amount of water claimed under a statement of water diversion and use.
32.	Face value demand — The sum of the face values of all water rights above an identified location in a stream channel.
33.	Fill material — Material placed into a waterbody that has the effect of either replacing any portion of the water with dry land or changing the bottom elevation of the waterbody. This includes but is not limited to “fill material” as defined at title 33, section 323.2, subdivision (e) of the Code of Federal Regulations.
34.	Fish – Wild fish, mollusks, crustaceans, invertebrates, or amphibians, including any part, spawn, or ova thereof (California Fish and Code section 45). For the purposes of stream classification, fish are defined as finfish.
35.	Flow frequency analysis — A statistical technique used by hydrologists for estimating the average rate at which floods, droughts, storms, stores, rainfall events, etc., of a specified magnitude recur.
36.	Flow path — The direction water flows along its stream course from the point of diversion to the Pacific Ocean. If a project will have a <i>de minimis</i> effect on flows in a flow-regulated mainstem river, then the flow path may terminate at the flow-regulated mainstem river.
37.	Flow-regulated mainstem river — A river or stream in which scheduled releases from storage are made to meet minimum instream flow requirements established by a State Water Board Order or Decision.
38.	Forbearance Period —The calendar days or otherwise defined conditions during which no water may be diverted. See also <i>Surface Water Diversion Period</i> .

No.	DEFINITION
39.	Habitat suitability criteria — Structural and hydraulic characteristics of a stream that are indicators of habitat suitability for different fish species and life stages.
40.	Hazardous material — Any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.
41.	Heavy equipment — Large pieces of machinery or vehicles, especially those used in the building and construction industry (e.g., bulldozers, excavators, backhoes, bobcats, or tractors).
42.	Hydraulic conductivity — The capacity of a porous medium to transmit water. The rate at which fluid can move through a permeable medium depends on the properties of the fluid (viscosity and specific weight) and properties of the medium (intrinsic permeability). Hydraulic conductivity is generally measured in units of feet/day or centimeters/second.
43.	Hydrograph — A graph showing the rate of flow versus time past a specific point in a river, or other channel or conduit carrying flow; generally measured in units of cubic meters or cubic feet/second.
44.	Hyporheic — Denoting an area or ecosystem beneath the bed of a river or stream that is saturated with water and that supports invertebrate fauna which play a role in the larger ecosystem.
45.	Impervious surface — A permanent improvement affixed to the earth which does not allow water or liquid to pass through it or permeate into the earth. Impervious surface includes a house or primary structure, driveway, parking lot, walkways, sidewalks, patios, decks, green houses, accessory structure(s), and other hardscape.
46.	Instream cover — Areas of shelter in a stream channel that provide aquatic organisms protection from predators or competitors and/or a place in which to rest and conserve energy due to a reduction in the force of the current.
47.	Integrated Pest Management (IPM) — An ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.
48.	Intermittent watercourse — see <i>Watercourse</i> definitions.
49.	Invasive Species — Organisms (plants, animals, or microbes) that are not native to an environment and that, once introduced, establish, quickly reproduce and spread, and cause harm to the environment, economy, or human health. For guidance on decontamination methods and species of concern, see CDFW's invasive species webpage: https://www.wildlife.ca.gov/Conservation/Invasives .

No.	DEFINITION
50.	<p>Lake and Streambed Alteration Agreement — Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following:</p> <ul style="list-style-type: none"> • Substantially divert or obstruct the natural flow of any river, stream or lake; • Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or • Deposit debris, waste or other materials that could pass into any river, stream or lake. <p>"Any river, stream or lake" includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.</p>
51.	<p>Land Disturbance – Land areas where natural conditions have been modified in a way that may result in an increase in turbidity in water discharged from the site. Disturbed land includes areas where natural plant growth has been removed whether by physical, animal, or chemical means, or natural grade has been modified for any purpose. Land disturbance includes all activities whatsoever associated with developing or modifying land for cannabis cultivation related activities or access. Land disturbance activities include, but are not limited to, construction of roads, buildings, water storage areas; excavation, grading, and site clearing. Disturbed land includes cultivation areas, storage areas where soil or soil amendments (e.g., potting soil, compost, or biosolids) are located.</p> <p>Access roads that are designed, constructed, and maintained, or are reconstructed consistent with the Handbook for Forest, Ranch, and Rural Roads (Road Handbook), and that implement the interim and long term erosion prevention and soil stabilization measures contained in Attachment A, are not considered disturbed areas for the purpose of tier determination under the Cannabis General Order.</p>
52.	<p>Landowner – Any person or entity who owns, in whole or in part, the parcel of land on which cannabis cultivation is occurring or will occur. A landowner need not be a cannabis cultivator.</p>
53.	<p>Laterals (in the context of irrigation water lines) — Pipes between the control valve and the sprinkler heads.</p>
54.	<p>Legacy conditions – are sites of historical activity, which may not be related to cannabis cultivation activities that may discharge sediment or other waste constituents to waters of the state. Legacy conditions are caused or affected by human activity. Implementation of corrective actions can reduce or eliminate the waste discharge.</p>
55.	<p>Licensed Contractor - In California, anyone who contracts to perform work that is valued at \$500 or more in combined labor and material costs must hold a current, valid license from the California Contractors' State License Board. Licensed contractors are classified as general engineering, general building, or specialty contractors.</p> <ul style="list-style-type: none"> • General engineering ("A" contractors) principally work with fixed works that require specialized engineering knowledge and skill. A general engineering contractor may perform the work or hire specialty contractors for specific tasks.

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	<ul style="list-style-type: none"> • General building ("B" contractors) work on existing or new structures that require at least two unrelated types of work. In some cases a general building contractor can perform the work, but often must hire subcontractors with specialty licenses. • Specialty contractors ("C" contractors) are those who specialize in a particular skill or trade. Specialty or subcontractors usually are hired to perform a single task. <p>Because there is significant overlap between specialty contractor skills, more than one specialty contractor may be licensed to contract for a project.</p>
56.	Licensed Timber Operators (LTOs) — Persons who have been licensed under the Forest Practice Act law and are authorized to conduct forest tree cutting and removal operations.
57.	Local Environmental Health Department — To identify ones local environmental health department, enter your address information into the following website directory: http://cersapps.calepa.ca.gov/public/directory .
58.	Mainlines (in the context of irrigation water lines) — Pipes that run from the water source to the control valves.
59.	Maximum cumulative diversion rate — The sum of the rates of diversion of all diversions upstream of a specific location in the watershed.
60.	Mean, also called average — The sum of measured values divided by the number of samples.
61.	Minimum bypass flow — In the context of a diversion Requirement, it is the minimum instantaneous flow rate of water that must be moving past the point of diversion before water may be diverted.
62.	Natural monthly streamflows — Modeled monthly streamflows that are unaffected by land use or water management.
63.	Offset well — A well drilled at an offset distance from a river or stream that is considered pumping from the underflow of the river or stream.
64.	Perennial watercourse — See <i>Watercourse</i> definitions.
65.	Period of record — The time period for which flow measurements have been recorded. The period of record may be continuous or interrupted by intervals during which no data were collected.
66.	Permeability —The property of a porous rock or soil for transmitting a fluid. It measures the relative ease of flow under unequal pressure. See <i>hydraulic conductivity</i> .
67.	<p>Pesticide — Pesticide is defined as follows:</p> <ul style="list-style-type: none"> - Per California Code of Regulations Title 3. Division 6. Section 6000: (a) Any substance or mixture of substances that is a pesticide as defined in the Food

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	<p>and Agricultural Code and includes mixtures and dilutions of pesticides;</p> <p>(b) As the term is used in Section 12995 of the California Food and Agricultural Code, includes any substance or product that the user intends to be used for the pesticidal poison purposes specified in Sections 12753 and 12758 of the Food and Agricultural Code.</p> <p>- Per California Food and Agricultural Code section 12753(b), the term “Pesticide” includes any of the following: Any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in Section 12754.5, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever.</p> <p>- In laymen’s terms: “pesticide” includes: rodenticides, herbicides, insecticides, fungicides, and disinfectants.</p>
68.	Point of Diversion — A location at which water is withdrawn from a surface waterbody.
69.	Pool — A deeper area of water in a stream channel; usually quiet and often with no visible flow.
70.	Professional Archeologist — An Archeologist that is qualified by the Secretary of Interior, Register of Professional Archaeologists, or Society for California Archaeology.
71.	Qualified Biologist – an individual who possesses, at a minimum, a bachelor’s or advanced degree, from an accredited university, with a major in biology, zoology, wildlife biology, natural resources science, or a closely related scientific discipline, at least two years of field experience in the biology and natural history of local plant, fish, and wildlife resources present at the cannabis cultivation site, and knowledge of state and federal laws regarding the protection of sensitive and endangered species.
72.	<p>Qualified Professional – Qualified Professional means:</p> <ol style="list-style-type: none"> 1. individuals licensed in California under the Professional Engineer Act (e.g., Professional Engineer), Geologist and Geophysicist Act (e.g., Professional Geologist, Certified Engineering Geologist, or Certified Hydrogeologist), and Professional Land Surveyors’ Act (e.g., Professional Land Surveyor)¹, 2. a California Registered Professional Forester (RPF), and 3. a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD). Qualified QSDs are California licensed civil engineers; professional geologists; landscape architects; professional hydrologists; certified professionals in erosion and sediment control; certified inspectors of sediment and erosion control; and certified erosion, sediment, and storm water inspectors. <p>A Qualified Professional shall only perform work he/she is qualified to complete, consistent with applicable licensing and registration restrictions, and shall certify any work completed. Cannabis cultivation land development in timberland may be designed by a qualified</p>

¹ See Business and Professions Code sections 6700-6799, 7800-7887, and 8700-8805, respectively.

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	California RPF.
73.	Range of anadromy — Length of stream reach between the Pacific Ocean and the upper limit of anadromy (see definition of <i>Anadromy</i>), where migration, spawning and rearing of salmonids occur.
74.	Recurrence interval — The average time between occurrences of streamflows of a given or greater magnitude, sometimes referred to as the return period. The recurrence interval is equal to one divided by the exceedance probability.
75.	Redd — Spawning areas or nests made by a salmon or trout
76.	Requirements - Principles and guidelines established in accordance with Water Code section 13149 for the diversion and use of water for cannabis cultivation. Principles and guidelines include: (i) measures to protect springs, wetlands, and aquatic habitats from negative impacts of cannabis cultivation; and (ii) requirements that apply to groundwater diversions where the State Water Board determines those requirements are reasonably necessary.
77.	Residual pool depth — The difference between the depth of a pool at its deepest point and at its outlet.
78.	Restricted materials — Restricted materials are defined in California Code of Regulations, title 3, section 6400. Restricted materials include all “restricted use pesticides,” as defined in the Federal Insecticide, Fungicide, and Rodenticide Act section 3(d)(1)(C). Information on restricted materials is available at: http://www.cdpr.ca.gov/docs/enforce/compend/vol_3/chap2.pdf .
79.	Riffle — A shallow area in which water flows rapidly over a rocky or gravelly streambed.
80.	Riffle crest — The highest point along the channel thalweg at a riffle.
81.	Riparian habitat — Vegetation growing close to a stream, lake, swamp, or spring that is generally critical for wildlife cover, fish food organisms, stream nutrients and large organic debris, and for streambank stability.
82.	Riparian Setback – setbacks from a watercourse or waterbody established to protect water quality and/or aquatic life. For the purposes of this document, riparian setbacks also apply to wetlands and surface water bodies such as lakes or reservoirs. Please refer to the Minimum Riparian Setback table (Section 1, Requirement 37)
83.	Road Handbook - The Handbook for Forest, Ranch, and Rural Roads, available at: < http://www.pacificwatershed.com/PWA-publications-library >.
84.	Salmonid — Of, belonging to, or characteristic of the family Salmonidae, which includes salmon, trout, and whitefish.
85.	Sheet flow length — The length that shallow, low velocity flow travels across a site.

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86.	Site Mitigation – Efforts to mitigate the impacts of Legacy conditions or cannabis cultivation activities on the cannabis cultivation site or its surroundings.
87.	Site Remediation – Efforts to restore the cannabis cultivation site and its surroundings to its pre-legacy conditions or condition before cannabis cultivation activities began, or to restore the cannabis cultivation site and its surroundings to its natural condition.
88.	<p>Slope – shall be determined across the natural topography (preconstruction) of the land to be disturbed. Measure the highest and lowest elevations of the land to be disturbed, then measure the horizontal distance separating the highest and lowest elevations. Determine the slope using the formula below. (Multiple the ratio by 100 to find the percent value.) There may be more than one slope value if the low elevation has higher elevations in different directions. The highest slope value calculated (highest percentage numerically) is the value to be reported.</p> $\text{Slope} = \frac{\text{elevation difference}}{\text{horizontal distance}} \times 100$ <p>Slope – Value of slope expressed as a percentage.</p> <p>Elevation difference – Report in feet to an accuracy of one inch or one tenth of a foot.</p> <p>Horizontal distance – Report in feet to an accuracy of one inch or one tenth of a foot.</p>
89.	Soil Materials – Include soil, aggregate (rock, sand, or soil), potting soil, compost, manure, or biosolids.
90.	Spring — See <i>Watercourse</i> definitions.
91.	Stabilized Areas – Consist of areas previously disturbed that have been successfully reclaimed to minimize the increase in sediment or turbidity in water discharged from the site. Areas where vehicles may travel or be parked may not be considered stabilized.
92.	Substrate —The material (e.g., sand, gravel, cobbles, boulders, bedrock, and combinations thereof) that forms the bed of a stream.
93.	Surface Water Diversion Period — The calendar period during which water may be diverted. See also <i>Forbearance Period</i> .
94.	Thalweg — See <i>channel thalweg</i> .
95.	Timberland – Pursuant to Public Resources Code section 4526, means land, other than land owned by the federal government and land designated by the Board of Forestry as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species, on a district basis, are defined in California Code of Regulations, title 14, section 895.1.
96.	Tribal lands – lands recognized as “Indian country” within the meaning of title 18, United States Code, section 1151.

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97.	Turbidity – a measure of water clarity: how much the material suspended in water decreases the passage of light through the water. Suspended materials include soil particles (clay, silt, and sand), algae, plankton, and other substances. The turbidity test is reported in Nephelometric Turbidity Units (NTUs).
98.	Upper limit of anadromy — The upstream end of the range of anadromous fish that currently are or have been historically present year-round or seasonally, whichever extends the furthest upstream.
99.	Waterbody – any significant accumulation of water above the ground surface, such as: lakes, ponds, rivers, streams, creeks, springs, artesian wells, wetlands, and canals.
100.	<p>Watercourse – a natural or artificial channel through which water flows.</p> <ul style="list-style-type: none"> • Perennial watercourse (Class I*): <ol style="list-style-type: none"> 1. In the absence of diversions, water is flowing for more than nine months during a typical year, 2. Fish always or seasonally present onsite or includes habitat to sustain fish migration and spawning, and/or 3. Spring: an area where there is concentrated discharge of ground water that flows at the ground surface. A spring may flow any part of the year. For the purpose of this Policy, a spring does not have a defined bed and banks. • Intermittent watercourse (Class II*): <ol style="list-style-type: none"> 1. In the absence of diversions, water is flowing for three to nine months during a typical year, 2. Provides aquatic habitat for non-fish aquatic species, 3. Fish always or seasonally present within 1,000 feet downstream, and/or 4. Water is flowing less than three months during a typical year and the stream supports riparian vegetation. • Ephemeral watercourse (Class III*): In the absence of diversion, water is flowing less than three months during a typical year and the stream does not support riparian vegetation or aquatic life. Ephemeral watercourses typically have water flowing for a short duration after precipitation events or snowmelt and show evidence of being capable of sediment transport. • Other watercourses (Class IV*): Class IV watercourses do not support native aquatic species and are man-made, provide established domestic, agricultural, hydroelectric supply, or other beneficial use. <p>*Except where more restrictive, stream class designations are equivalent to the Forest Practice Rules Water Course and Lake Protection Zone definitions (California Code of Regulations, title 14, Chapter 4. Forest Practice Rules, Subchapters 4, 5, and 6 Forest District Rules, Article 6 Water Course and Lake Protection).</p>
101.	Watershed — The land area that drains into a stream. An area of land that contributes runoff to one specific delivery point; large watersheds may be composed of several smaller "subsheds", each of which contributes runoff to different locations that ultimately combine at a common delivery point. Often considered synonymous with a drainage basin or catchment.

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	Watershed (drainage basin) boundaries follow topographic highs. The term watershed is also defined as the divide separating one drainage basin from another.
102.	Watershed drainage area — The land area that comprises a watershed.
103.	Water hauler — Any person who hauls water in bulk by any means of transportation.
104.	Waters of the State – any surface water or groundwater, including saline waters, within the boundaries of the state (Water Code section 13050(e)). Includes all waters within the state’s boundaries, whether private or public, including waters in both natural and artificial channels. Waters of the state includes waters of the United States.
105.	Weed-free mulch — A certified weed-free protective covering (e.g. bark chips, straw, etc.) placed on the ground around plants to suppress weed growth, retain soil moisture, or prevent freezing of roots.
106.	<p>Wetland – an area is a wetland if, under normal circumstances:</p> <ol style="list-style-type: none"> 1. the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; 2. the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and 3. the area’s vegetation is dominated by hydrophytes or the area lacks vegetation.
107.	<p>Winter Period – calendar dates from November 15 to April 1, except as noted under special County Rules in California Code of Regulations, title 14, sections 925.1, 926.18, 927.1, and 965.5. A Regional Water Board Executive Officer may impose a more restrictive winter period to protect water quality based on special county rules or as specified in a Basin Plan. The following special rules or basin plan requirements apply:</p> <ol style="list-style-type: none"> i. Santa Clara County, Santa Cruz County, and Monterey County: October 15 to April 15; ii. Marin County: October 1 to April 15; and iii. Lahontan Regional Water Board: October 15 to May 1 (for elevations above 6,000 feet).

SECTION 1 – GENERAL REQUIREMENTS AND PROHIBITIONS

The following general requirements and prohibitions apply to any cannabis cultivator.

General Requirements and Prohibitions

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1.	<p>Prior to commencing any cannabis cultivation activities, including cannabis cultivation land development or alteration, the cannabis cultivator shall comply with all applicable federal, state, and local laws, regulations, and permitting requirements, as applicable, including but not limited to the following:</p> <ul style="list-style-type: none"> • The Clean Water Act (CWA) as implemented through permits, enforcement orders, and self-implementing requirements. When needed per the requirements of the CWA, the cannabis cultivator shall obtain a CWA section 404 (33 U.S.C. § 1344) permit from the United States Army Corps of Engineers (Army Corps) and a CWA section 401 (33 U.S.C. § 1341) water quality certification from the State Water Board or the Regional Water Board with jurisdiction. If the CWA permit cannot be obtained, the cannabis cultivator shall contact the appropriate Regional Water Board or State Water Board prior to commencing any cultivation activities. The Regional Water Board or State Water Board will determine if the cannabis cultivation activity and discharge is covered by the Requirements in the Policy and Cannabis General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Cannabis General Order). • The California Water Code as implemented through applicable water quality control plans (often referred to as Basin Plans), waste discharge requirements (WDRs) or waivers of WDRs, enforcement orders, and self-implementing requirements issued by the State Water Resources Control Board (State Water Board) or Regional Water Quality Control Boards (Regional Water Boards). • All applicable state, city, county, or local regulations, ordinances, or license requirements including, but not limited to those for cannabis cultivation, grading, construction, and building. • All applicable requirements of the California Department of Fish and Wildlife (CDFW). • All applicable requirements of the California Department of Forestry and Fire Protection (CAL FIRE), including the Board of Forestry. • California Environmental Quality Act and the National Environmental Policy Act.
2.	<p>If applicable, cannabis cultivators shall obtain coverage under all of the following:</p> <ol style="list-style-type: none"> a. The State Water Board's Construction Storm Water Program and any successors, amendments, or revisions thereto when applicable. b. Activities performed in areas subject to California Code of Regulations title 14,

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	Chapter 4. Forest Practices (Forest Practice Rules) shall be implemented consistent with the permitting, licensing, and performance standards of the Forest Practice Rules, and the Requirements of this Policy, whichever is more stringent.
3.	<p>The cannabis cultivator shall apply for a Lake and Streambed Alteration Agreement (LSA Agreement) or consult with CDFW to determine if a LSA Agreement is needed prior to commencing any activity that may substantially:</p> <ul style="list-style-type: none"> • divert or obstruct the natural flow of any river, stream, or lake; • change or use any material from the bed, channel, or bank of any river, stream, or lake; or • deposit debris, waste, or other materials that could pass into any river stream or lake. <p>"Any river, stream or lake," as defined by CDFW, includes those that are episodic (they are dry for periods of time) as well as those that are perennial (they flow year round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.</p>
4.	<p>Cannabis cultivators shall not take any action which results in the taking of Special-Status Plants (state listed and California Native Plant Society 1B.1 and 1B.2), Fully Protected species (Fish and Game Code sections 3511, 4700, 5050, and 5515), or a threatened, endangered, or candidate species under either the California Endangered Species Act (ESA) (Fish & Game Code §§ 2050 et seq.) or the federal ESA (16 U.S.C. § 1531 et seq.). If a "take," as defined by the California ESA (Fish and Game Code section 86) or the federal ESA (16 U.S.C. § 1532(21)), may result from any act authorized under this Policy, the cannabis cultivator must obtain authorization from CDFW, National Marine Fisheries Service, and United States Fish and Wildlife Service, as applicable, to incidentally take such species prior to land disturbance or operation associated with the cannabis cultivation activities. The cannabis cultivator is responsible for meeting all requirements under the California ESA and the federal ESA.</p>
5.	<p>A Regional Water Board may adopt site-specific WDRs or an enforcement order for a cannabis cultivation facility that does not include requirements consistent with the following if the site-specific WDRs or enforcement order contains sufficient requirements to be protective of water quality:</p> <ul style="list-style-type: none"> • The maximum slope limit of 50 percent in disturbed areas. • The minimum riparian setbacks described herein. • The prohibition against land disturbance activities during the winter period.
6.	<p>To avoid water quality degradation from erosion and sedimentation, land disturbance activities shall not occur during the winter period unless authorized by a Regional Water Board Executive Officer. Cannabis cultivators shall ensure land disturbing activities are completed and site stabilization measures are in place prior to the onset of the winter period.</p>

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	All land disturbing activities during the winter period shall be supervised by a Qualified Professional. ²
7.	A California Licensed Timber Operator (LTO) ³ shall be used if any commercial tree species are to be removed from the cannabis cultivation site. All timberland conversions shall be permitted and compliant with the Forest Practice Rules and CAL FIRE permitting requirements.
8.	Site improvements and limited repairs may be performed by the cannabis cultivator or contractors as allowed by the Business and Professions Code (Bus. & Prof. Code, section 7044 and/or section 7048). All contracts to perform work that is valued at \$500 or more in combined labor and material costs shall be performed by an appropriately qualified and licensed contractor as required by the California Contractors' State License Board.
9.	<p>During land disturbance activities the cannabis cultivator shall review and evaluate the applicable daily weather forecast and any applicable 24 hour forecast⁴ at least once per 24 hour period and maintain records of the weather forecast for each day land disturbance activities are conducted. The cannabis cultivator shall cease land disturbance activities and shall implement erosion control Requirements described in this Policy during any 24 hour period in which the applicable daily weather forecast or any 24 hour forecast reports a 50 percent or greater chance of precipitation greater than 0.5 inch per 24 hours.</p> <p>Consistent with Lahontan Regional Water Board Order No R6T-2016-0010, an anticipated precipitation event within the Lake Tahoe Hydrologic Unit (Department of Water Resources Hydrologic Unit No.634.00) is any weather pattern that is forecast to have a 30 percent or greater chance of producing 0.1 inch of precipitation as rainfall in the project area. Cannabis cultivators located in the Lake Tahoe Hydrologic Unit shall cease land disturbance activities and shall implement erosion control Requirements described in this Policy during any 24 hour period in which the applicable daily weather forecast or any 24 hour forecast reports a 30 percent or greater chance of precipitation greater than 0.1 inch per 24 hours. This requirement may be updated based on amendments to the Lahontan Regional Water Board construction storm water general order.</p>
10.	Prior to commencing any cannabis land development or site expansion activities the cannabis cultivator shall retain a qualified biologist to identify sensitive plant, wildlife species, or communities at the proposed development site. If sensitive plant, wildlife species, or communities are identified, the cannabis cultivator and Qualified Biologist shall consult with

² Although emergency mitigation measures may not require obtaining coverage under the Construction Storm Water Program, the elevated threat to water quality caused by emergency mitigation or remediation work performed during the winter period requires planning and supervision by an appropriately qualified professional to protect water quality, such as an appropriately certified or registered Storm Water Pollution Prevention Plan Developer.

³ Licensed Timber Operators or "LTOs" are persons who have been licensed under the Forest Practice Act law and are authorized to conduct forest tree cutting and removal operations.

⁴ If available, the cannabis cultivator shall refer to the weather forecast developed by the National Oceanic and Atmospheric Administration (NOAA) for the local National Weather Service Office (<http://www.weather.gov>). If the NOAA forecast is not available, a forecast by a local television news or radio broadcast shall be used.

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	CDFW and CAL FIRE to designate a no-disturbance buffer to protect identified sensitive plant, wildlife species, and communities. A copy of the report shall be submitted to the appropriate Regional Water Board.
11.	To prevent transfer of invasive species, ⁵ all equipment used at the cannabis cultivation site, including excavators, graders, etc., shall be cleaned before arriving and before leaving the site.
12.	The cannabis cultivator shall comply with all applicable requirements of the State Water Board and Regional Water Boards' (collectively Water Boards) water quality control plans and policies.
13.	The cannabis cultivator shall immediately report any significant hazardous material release or spill that causes a film or sheen on the water's surface, leaves a sludge or emulsion beneath the water's surface, or a release or threatened release of a hazardous material that may potentially discharge to waters of the state, to the California Office of Emergency Services at (800) 852-7550 and the local Unified Program Agency. ⁶ The cannabis cultivator shall also immediately notify the appropriate Regional Water Board and CDFW of the release.
14.	The cannabis cultivator shall comply with all water quality objectives/standards, policies, and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (California Water Code section 13000, et seq.) or CWA section 303 (33 U.S.C. § 1313).
15.	<p>During reasonable hours, the cannabis cultivator shall allow the Water Boards, CDFW, CAL FIRE, and any other authorized representatives of the Water Boards, CDFW, or CAL FIRE upon presentation of a badge, employee identification card, or similar credentials, to:</p> <ol style="list-style-type: none"> 1. enter premises and facilities where cannabis is cultivated; where water is diverted, stored, or used; where wastes are treated, stored, or disposed of; or in which any records are kept; 2. access and copy, any records required to be kept under the terms and conditions of this Policy; 3. inspect, photograph, and record audio and video, any cannabis cultivation sites, and associated premises, facilities, monitoring equipment or device, practices, or operations regulated or required by this Policy; and 4. sample, monitor, photograph, and record audio and video of site conditions, any discharge, waste material substances, or water quality parameters at any location for

⁵ CDFW defines invasive species as organisms (plants, animals, or microbes) that are not native to an environment, and once introduced, they establish, quickly reproduce and spread, and cause harm to the environment, economy, or human health. Cannabis cultivators may refer to CDFW Internet webpage for guidance on decontamination methods and species of concern. See CDFW's invasive species webpage at: <https://www.wildlife.ca.gov/Conservation/Invasives>.

⁶ Visit the Unified Program Agency website at <http://cersapps.calepa.ca.gov/public/directory> for local contact information. If internet service is not available call 911 to report the hazardous material release.

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	the purposes of assuring compliance with this Policy.
16.	The State Water Board may modify this Policy to implement new or revised water quality standards, policies, or water quality control plans; total maximum daily loads (TMDLs), TMDL implementation plans, or revisions to the California Water Code or CWA.
17.	The State Water Board may modify this Policy and the terms and conditions of water right registrations if monitoring results indicate that cannabis cultivation activities could violate instream flow requirements, water quality objectives, or impair the beneficial uses of a waterbody or its tributaries.
18.	Cannabis cultivators shall not commit trespass. Nothing in this Policy or any program implementing this Policy shall be construed to authorize cannabis cultivation: (a) on land not owned by the cannabis cultivator without the express written permission of the landowner; or (b) inconsistent with a conservation easement, open space easement, or greenway easement. This includes but is not limited to land owned by the United States or any department thereof, the State of California or any department thereof, any local agency, or any other person who is not the cannabis cultivator. This includes but is not limited to any land owned by a California Native American tribe, as defined in section 21073 of the Public Resources Code, whether or not the land meets the definition of tribal lands and includes lands owned for the purposes of preserving or protecting Native American cultural resources of the kinds listed in Public Resources Code section 5097.9 and 5097.993. This includes but is not limited to conservation easements held by a qualifying California Native American tribe pursuant to Civil Code section 815.3 and greenway easements held by a qualifying California Native American tribe pursuant to Civil Code section 816.56.
19.	The cannabis cultivator shall not cultivate cannabis on tribal lands or within 600 feet of tribal lands without the express written permission of the governing body of the affected tribe or from a person deputized by the governing body of the affected tribe to authorize cannabis cultivation on tribal lands. ⁷
20.	No cannabis cultivation activities shall occur within 600 feet of an identified tribal cultural resource site. The cannabis cultivator is solely responsible for identifying any tribal cultural resource sites ⁸ within the cannabis cultivation area.
21.	Prior to land disturbance activities for new or expanded cannabis cultivation activities, the cannabis cultivator shall perform a records search of potential Native American archeological or cultural resources at a California Historical Resources Information System (CHRIS) information center. Any person who meets qualification requirements for access to the CHRIS may perform the initial CHRIS records search and document the results. The requirement to perform a CHRIS records search may be satisfied by using the results of a previous CHRIS records search completed within the previous 10 years for the specific parcel or parcels where new or expanded cannabis cultivation activities are proposed to

⁷ Tribal lands means lands recognized as “Indian country” within the meaning of title 18, United States Code, section 1151.

⁸ Identified tribal cultural resource site means a tribal cultural resource that meets the requirements of section 21074, subdivision (a)(1) of the Public Resources Code.

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	<p>occur.</p> <p>Prior to land disturbance activities for new or expanded cannabis cultivation activities, the cannabis cultivator shall also request a search of the Sacred Lands Inventory that is maintained by the Native American Heritage Commission pursuant to Public Resources Code sections 5097.94, subdivision (a), and 5097.96 (Sacred Lands Inventory). If the Sacred Lands Inventory search reveals the presence or potential presence of Native American places of special or social significance to Native Americans, Native American known graves or cemeteries, or Native American sacred places, the cannabis cultivator shall consult with the tribe or tribes that are culturally affiliated with the area in which these Native American cultural resources exist or potentially exist prior to any ground disturbing activities. The information provided by tribes through consultation with the cannabis cultivator shall be maintained as confidential by the cannabis cultivator and its agents. A new Sacred Lands Inventory search is always required prior to ground disturbing activities for new or expanded cannabis cultivation.</p> <p>The cannabis cultivator shall notify the Appropriate Person within seven days of receiving a CHRIS positive result or Sacred Lands Inventory positive result. The Appropriate Person is the Deputy Director for Water Rights (Deputy Director) if the cannabis cultivator is operating under the Cannabis Small Irrigation Use Registration (SIUR), the Executive Officer of the applicable Regional Water Board (Executive Officer) if the cannabis cultivator is operating under the Cannabis General Order or Cannabis General Water Quality Certification, or both if the cannabis cultivator is operating under both programs.</p> <p>In the event that prehistoric archeological materials or indicators are identified in a CHRIS positive result, the cannabis cultivator shall also notify the Native American Heritage Commission within seven days of receiving the CHRIS positive result and request a list of any California Native American tribes that are potentially culturally affiliated with the positive result. The cannabis cultivator shall notify any potentially culturally affiliated California Native American tribes of the CHRIS positive result within 48 hours of receiving a list from the Native American Heritage Commission.</p> <p>The cannabis cultivator shall promptly retain a professional archeologist⁹ to evaluate the CHRIS positive result and recommend appropriate conservation measures. In the event of a Sacred Lands Inventory positive result, the cannabis cultivator shall develop appropriate mitigation and conservation measures in consultation with the affected California Native American tribe, and shall promptly retain a professional archeologist to assist in this task in the event of a Sacred Lands Inventory positive result related to human remains or archeological resources. The cannabis cultivator shall submit proposed mitigation and conservation measures to the appropriate person(s) (Deputy Director for the Cannabis SIUR and Executive Officer for the Cannabis General Order or Cannabis General Water Quality Certification) for written approval. The appropriate person may require all appropriate measures necessary to conserve archeological resources and tribal cultural resources, including but not limited to Native American monitoring, preservation in place, and archeological data recovery.</p> <p>In the event that prehistoric archeological materials or indicators are identified in a CHRIS</p>

⁹ A professional archeologist is one that is qualified by the Secretary of Interior, Register of Professional Archaeologists, or Society for California Archaeology.

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	<p>positive result, or in the event of a Sacred Lands Inventory positive result, the cannabis cultivator shall also provide a copy of the final proposed mitigation and conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission. The appropriate person will carefully consider any comments or mitigation measure recommendations submitted by culturally affiliated California Native American tribes with the goal of conserving tribal cultural resources and prehistoric archeological resources with appropriate dignity.</p> <p>Ground-disturbing activities shall not commence until all approved measures have been completed to the satisfaction of the Deputy Director and/or Executive Officer, as applicable.</p>
22.	<p>If any buried archeological materials or indicators¹⁰ are uncovered or discovered during any cannabis cultivation activities, all ground-disturbing activities shall immediately cease within 100 feet of the find.</p> <p>The cannabis cultivator shall notify the Appropriate Person within 48 hours of any discovery. The Appropriate Person is the Deputy Director if the cannabis cultivator is operating under the Cannabis SIUR, the Regional Water Board Executive Officer if the cannabis cultivator is operating under the Cannabis General Order or Cannabis General Water Quality Certification, or both if the cannabis cultivator is operating under both programs.</p> <p>In the event that prehistoric archeological materials or indicators are discovered, the cannabis cultivator shall also notify the Native American Heritage Commission within 48 hours of any discovery and request a list of any California Native American tribes that are potentially culturally affiliated with the discovery. The cannabis cultivator shall notify any potentially culturally affiliated California Native American tribes of the discovery within 48 hours of receiving a list from the Native American Heritage Commission.</p> <p>The cannabis cultivator shall promptly retain a professional archeologist¹¹ to evaluate the discovery. The cannabis cultivator shall submit proposed mitigation and conservation measures to the appropriate person(s) (Deputy Director for the Cannabis SIUR and Regional Water Board Executive Officer for the Cannabis General Order or Cannabis General Water Quality Certification) for written approval. The appropriate person may require all appropriate measures necessary to conserve archeological resources and tribal cultural resources, including but not limited to Native American monitoring, preservation in place, and archeological data recovery.</p> <p>In the event of a discovery of prehistoric archeological materials or indicators are discovered, the cannabis cultivator shall also provide a copy of the final proposed mitigation and</p>

¹⁰ Prehistoric archeological indicators include, but are not limited to: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; ground stone implements (grinding slabs, mortars, and pestles) and locally darkened midden soils containing some of the previously listed items plus fragments of bone, fire affected stones, shellfish, or other dietary refuse.

Historic period site indicators generally include, but are not limited to: fragments of glass, ceramic and metal objects; milled and split lumber; and structure and feature remains such as building foundations, privy pits, wells and dumps; and old trails.

¹¹ A professional archeologist is one that is qualified by the Secretary of Interior, Register of Professional Archaeologists, or Society for California Archaeology.

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	<p>conservation measures to any culturally affiliated California Native American tribes identified by the Native American Heritage Commission. The appropriate person will carefully consider any comments or mitigation measure recommendations submitted by culturally affiliated California Native American tribes with the goal of conserving prehistoric archeological resources and tribal cultural resources with appropriate dignity.</p> <p>Ground-disturbing activities shall not resume within 100 feet of the discovery until all approved measures have been completed to the satisfaction of the Deputy Director and/or Executive Officer, as applicable.</p>
23.	<p>Upon discovery of any human remains, cannabis cultivators shall immediately comply with Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98. The following actions shall be taken immediately upon the discovery of human remains:</p> <p>All ground-disturbing activities in the vicinity of the discovery shall stop immediately. The cannabis cultivator shall immediately notify the county coroner. Ground disturbing activities shall not resume until the requirements of Health and Safety Code section 7050.5 and, if applicable, Public Resources Code section 5097.98 have been met. The cannabis cultivator shall ensure that the human remains are treated with appropriate dignity.</p> <p>Per Health and Safety Code section 7050.5, the coroner has two working days to examine human remains after being notified by the person responsible for the excavation, or by their authorized representative. If the remains are Native American, the coroner has 24 hours to notify the Native American Heritage Commission.</p> <p>Per Public Resources Code section 5097.98, the Native American Heritage Commission will immediately notify the persons it believes to be the most likely descended from the deceased Native American. The most likely descendent has 48 hours to make recommendations to the landowner or representative for the treatment or disposition, with proper appropriate dignity, of the human remains and any associated grave goods. If the Native American Heritage Commission is unable to identify a descendant; the mediation provided for pursuant to subdivision (k) of Public Resources Code section 5097.94, if invoked, fails to provide measures acceptable to the landowner; or the most likely descendent does not make recommendations within 48 hours; and the most likely descendants and the landowner have not mutually agreed to extend discussions regarding treatment and disposition pursuant to subdivision (b)(2) of Public Resources Code section 5097.98, the landowner or their authorized representative shall reinter the human remains and items associated with the Native American human remains with appropriate dignity on the property in a location not subject to further and future disturbance consistent with subdivision (e) of Public Resources Code section 5097.98.. If the landowner does not accept the descendant's recommendations, the landowner or the descendants may request mediation by the Native American Heritage Commission pursuant to Public Resources Code section 5097.94, subdivision (k).</p>
24.	<p>Pursuant to Water Code sections 100 and 275 and the common law public trust doctrine, all rights and privileges, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of</p>

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	said water.
25.	Cannabis cultivators shall not discharge waste in a manner that creates or threatens to create a condition of pollution or nuisance, as defined by Water Code section 13050.
26.	<p>Except as allowed and authorized in this Policy, cannabis cultivators shall not discharge:</p> <ul style="list-style-type: none"> • irrigation runoff, tailwater, sediment, plant waste, or chemicals to surface water or via surface runoff; • waste classified as hazardous (California Code of Regulations, title 23, section 2521(a)) or defined as a designated waste (Water Code section 13173); or • waste in violation of, or in a manner inconsistent with, the appropriate Water Quality Control Plan(s).
27.	<p>Unless authorized by separate waste discharge requirements, the Cannabis General Order, or a CWA section 404 permit, the following discharges are prohibited:</p> <ul style="list-style-type: none"> • any waste that could affect the quality of the waters of the state; or • wastewater from cannabis manufacturing activities defined in Business and Professions Code section 26100, indoor grow operations, or other industrial wastewater to an onsite wastewater treatment system (e.g., septic tank and associated disposal facilities), to surface water, or to land.
28.	Unless authorized by a Regional Water Board site-specific WDR, cannabis cultivators shall not cultivate cannabis or have cannabis cultivation related land disturbance on slopes greater than 50 percent.
29.	Cannabis cultivators shall not use a cesspool for domestic or industrial wastewater disposal. Cannabis cultivators shall not install or continue use of an outhouse, pit-privy, pit-toilet, or similar device without approval from the Regional Water Board Executive Officer of the applicable Regional Water Board.
30.	In timberland areas, cannabis cultivators shall not remove commercial tree species or other vegetation within 150 feet of fish bearing water bodies or 100 feet of aquatic habitat for non-fish aquatic species (e.g., aquatic insects) prior to obtaining all applicable permits required from CAL FIRE, CDFW (i.e., LSA Agreement), and/or the Regional Water Board Executive Officer.
31.	Tier 1 or 2 cannabis cultivators located on slopes greater than 30% and less than 50% must submit a Site Erosion and Sediment Control Plan to the Regional Water Board Executive Officer for any cannabis-related land development or alteration. The Site Erosion and Sediment Control Plan shall be approved by the applicable Regional Water Board Executive Officer prior to the cannabis cultivator initiating or expanding any land disturbance. The Regional Water Board Executive Officer may deny the request to conduct new land disturbance activities for cannabis cultivation if local conditions (e.g., soil type, site instability, proximity to a waterbody, etc.) do not allow for adequate erosion and sediment control measures to ensure discharges to waters of the state will not occur.
32.	Tier 1 or 2 cannabis cultivators with any portion of the disturbed areas existing within the setbacks shall submit a Disturbed Area Stabilization Plan to the Regional Water Board

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	Executive Officer. The Disturbed Area Stabilization Plan shall be approved by the applicable Regional Water Board Executive Officer prior to the cannabis cultivator initiating any land stabilization activities. This requirement does not apply to disturbed areas resulting from activities authorized under 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board.
33.	Cannabis cultivators under any Cannabis General Order or individual WDRs implementing this Policy shall self-certify that they have complied with or will comply with all applicable Requirements in this Policy no later than the onset of the winter period of the same year as the application date and each year thereafter. If application occurs after the onset of the winter period, cannabis cultivators shall self-certify that all applicable Requirements in this Policy will be implemented by the onset of the winter period of the next calendar year, and each year thereafter. Those cannabis cultivators that cannot implement all applicable Requirements by the onset of the winter period shall, within 90 days of application submittal, submit to the Executive Officer of the applicable Regional Water Board a time schedule and scope of work for use by the Regional Water Board in developing a compliance schedule.
34.	Cannabis cultivators shall implement interim Requirements immediately following land disturbance, to minimize discharges of waste constituents. Interim Requirements are those that are implemented immediately upon site development. Cannabis cultivators shall complete all winterization Requirements prior to the onset of the winter period to prevent waste discharges that may result in water quality degradation.
35.	Cannabis cultivators shall not cause downstream exceedance of applicable water quality objectives identified in the applicable water quality control plan(s).
36.	The landowner is ultimately responsible for any water quality degradation that occurs on or emanates from its property and for water diversions that are not in compliance with this Policy. Landowners will be named as responsible parties and will be notified if a Cannabis General Order Notice of Applicability or conditional exemption has been issued for cannabis activities on their property. The cannabis cultivator and the landowner will be held responsible for correcting non-compliance.
37.	Cannabis cultivators shall comply with the minimum riparian setbacks described below for all land disturbance, cannabis cultivation activities, and facilities (e.g., material or vehicle storage, petroleum powered pump locations, water storage areas, and chemical toilet placement). The riparian setbacks shall be measured from the waterbody's bankfull stage (high flow water levels that occur every 1.5 to 2 years) or from the top edge of the waterbody bank in incised channels, whichever is more conservative. Riparian setbacks for springheads shall be measured from the springhead in all directions (circular buffer). Riparian setbacks for wetlands shall be measured from the edge of wetland as delineated by a qualified professional with experience implementing the Corps of Engineers Wetlands Delineation Manual (with regional supplements). The Regional Water Board Executive Officer may require additional riparian setbacks or additional requirements, as needed, to meet the performance requirement of protecting surface water from discharges that threaten water quality. If the cannabis cultivation site cannot be managed to protect water quality, the Executive Officer of the applicable Regional Water Board may revoke authorization for

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	<p>cannabis cultivation activities at the cannabis cultivation site.</p> <p>Minimum Riparian Setbacks^{1,2}</p> <table><tr><th>Common Name</th><th>Watercourse Class³</th><th>Distance</th></tr><tr><td>Perennial watercourses, waterbodies (e.g. lakes, ponds), or springs⁴</td><td>I</td><td>150 ft.</td></tr><tr><td>Intermittent watercourses or wetlands</td><td>II</td><td>100 ft.</td></tr><tr><td>Ephemeral watercourses</td><td>III</td><td>50 ft.</td></tr><tr><td>Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species</td><td>IV</td><td>Established Riparian Vegetation Zone</td></tr><tr><td>All other man-made irrigation canals, water supply reservoirs, or hydroelectric canals</td><td>IV</td><td>N/A</td></tr></table> <p>¹ A Regional Water Board may adopt site-specific WDRs or an enforcement order for a cannabis cultivator with requirements that are inconsistent with the setbacks in this table if the Executive Officer determines that the site-specific WDRs or enforcement order contains sufficient requirements to be protective of water quality.</p> <p>² Cannabis cultivators enrolled in a Regional Water Board order adopting WDRs or a waiver of WDRs for cannabis cultivation activities prior to October 17, 2017, may retain reduced setbacks applicable under that Regional Water Board order unless the Regional Water Board's Executive Officer determines that the reduced setbacks applicable under that order are not protective of water quality.</p> <p>³ Except where more restrictive, the stream class designations are equivalent to the Forest Practice Rules Water Course and Lake Protection Zone definitions (California Code of Regulations, title 14, Chapter 4. Forest Practice Rules, Subchapters 4, 5, and 6 Forest District Rules, Article 6 Water Course and Lake Protection).</p> <p>⁴ Spring riparian setbacks default to the applicable watercourse riparian setback 150 feet downstream and/or upstream of the spring's confluence with the watercourse or 150 feet downstream of the point where the spring forms a watercourse with defined bed and banks.</p>	Common Name	Watercourse Class ³	Distance	Perennial watercourses, waterbodies (e.g. lakes, ponds), or springs ⁴	I	150 ft.	Intermittent watercourses or wetlands	II	100 ft.	Ephemeral watercourses	III	50 ft.	Man-made irrigation canals, water supply reservoirs, or hydroelectric canals that support native aquatic species	IV	Established Riparian Vegetation Zone	All other man-made irrigation canals, water supply reservoirs, or hydroelectric canals	IV	N/A
Common Name	Watercourse Class ³	Distance																	
Perennial watercourses, waterbodies (e.g. lakes, ponds), or springs ⁴	I	150 ft.																	
Intermittent watercourses or wetlands	II	100 ft.																	
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All other man-made irrigation canals, water supply reservoirs, or hydroelectric canals	IV	N/A																	

Cannabis General Water Quality Certification

For the purposes of section 401 of the Clean Water Act, the State Water Board certifies that cannabis cultivation activities in compliance with the conditions of the Policy and General Order will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, subject to the following additional terms and conditions:

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1.	This certification action is subject to modification or revocation upon administrative or judicial review; including review and amendment pursuant to Water Code section 13330 and California Code of Regulations, title 23, section 3867.
2.	This certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent certification application was filed pursuant to California Code of Regulations, title 23, section 3855, subdivision (b), and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3.	This certification is conditioned upon total payment of any fee required under California Code of Regulations, title 23, division 3, chapter 28.
4.	A cannabis cultivator seeking water quality certification coverage for activities in surface waters shall notify the Executive Officer of the Regional Water Board or State Water Board Executive Director at least 60 days prior to commencement of the activity and submit information regarding the construction schedule and other relevant information. Work may not commence until the cannabis cultivator is provided authorization by the appropriate Executive Officer of the Regional Water Board or Executive Director of the State Water Board. The Executive Officer of the Regional Water Board or Executive Director of the State Water Board may include specific monitoring requirements for turbidity and other constituents that may be associated with the activity to ensure applicable state water quality standards are met.
5.	The authorization of this certification for any coverage under this Cannabis General Water Quality Certification or dredge and fill activities expires five years from the date this Policy is approved by the Office of Administrative Law.
6.	Upon completion of the discharges of dredged or fill material, the cannabis cultivator shall submit a Notice of Completion certifying that all the conditions and monitoring and reporting requirements of this General Water Quality Certification, including the Policy, Cannabis General Order (if applicable), and conditions imposed by the Regional Water Board Executive Officer or State Water Board Executive Director, have been met.
7.	All Policy and Cannabis General Order Requirements, standard conditions, general terms and provisions, and prohibitions are enforceable conditions of this General Water Quality Certification.
8.	In the event of any violation or threatened violation of the conditions of this General Water Quality Certification, the violation or threatened violation shall be subject to any remedies, penalties, processes, or sanctions as provided for under state law. For purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process, or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.

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9.	This General Water Quality Certification may be modified as needed by the Executive Director of the State Water Board.

SECTION 2 – REQUIREMENTS RELATED TO WATER DIVERSIONS AND WASTE DISCHARGE FOR CANNABIS CULTIVATION

The following Requirements apply to any water diversion or waste discharge related to cannabis cultivation.

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Land Development and Maintenance, Erosion Control, and Drainage Features	
Limitations on Earthmoving	
1.	<p>Cannabis cultivators shall not conduct grading activities for cannabis cultivation land development or alteration on slopes exceeding 50 percent grade, or as restricted by local county or city permits, ordinances, or regulations for grading, agriculture, or cannabis cultivation; whichever is more stringent shall apply.</p> <p>The grading prohibition on slopes exceeding 50 percent does not apply to site mitigation or remediation if the cannabis cultivator is issued separate WDRs or an enforcement order for the activity by the Regional Water Board Executive Officer.</p>
2.	<p>Finished cut and fill slopes, including side slopes between terraces, shall not exceed slopes of 50 percent and should conform to the natural pre-grade slope whenever possible.</p>
3.	<p>Cannabis cultivators shall not drive or operate vehicles or equipment within the riparian setbacks or within waters of the state unless authorized under 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board. This requirement does not prohibit driving on established, maintained access roads that are in compliance with this Policy.</p>
4.	<p>Cannabis cultivation land development and access road construction shall be designed by qualified professionals. Cannabis cultivators shall conduct all construction or land development activities to minimize grading, soil disturbance, and disturbance to aquatic and terrestrial habitat.</p>
5.	<p>The cannabis cultivator shall control all dust related to cannabis cultivation activities to ensure dust does not produce sediment-laden runoff. The cannabis cultivator shall implement dust control measures, including, but not limited to, pre-watering of excavation or grading sites, use of water trucks, track-out prevention, washing down vehicles or equipment before leaving a site, and prohibiting land disturbance activities when instantaneous wind speeds (gusts) exceed 25 miles per hour. Cannabis cultivators shall grade access roads in dry weather while moisture is still present in soil to minimize dust and to achieve design soil compaction, or when needed use a water truck to control dust and soil moisture.</p>
Construction Equipment Use and Limitations	

6.	Cannabis cultivators shall employ spill control and containment practices to prevent the discharge of fuels, oils, solvents and other chemicals to soils and waters of the state.
7.	<p>Cannabis cultivators shall stage and store equipment, materials, fuels, lubricants, solvents, or hazardous or toxic materials in locations that minimize the potential for discharge to waters of the state. At a minimum, the following measures shall be implemented:</p> <ol style="list-style-type: none"> 1. Designate an area outside the riparian setback for equipment storage, short-term maintenance, and refueling. Cannabis cultivator shall not conduct any maintenance activity or refuel equipment in any location where the petroleum products or other pollutants may enter waters of the state as per Fish and Game Code section 5650 (a)(1). 2. Frequently inspect equipment and vehicles for leaks. 3. Immediately clean up leaks, drips, and spills. Except for emergency repairs that are necessary for safe transport of equipment or vehicles to an appropriate repair facility, equipment or vehicle repairs, maintenance, and washing onsite is prohibited. 4. If emergency repairs generate waste fluids, ensure they are contained and properly disposed or recycled off-site. 5. Properly dispose of all construction debris off-site. 6. Use dry cleanup methods (e.g., absorbent materials, cat litter, and/or rags) whenever possible. Sweep up, contain, and properly dispose of spilled dry materials.
Erosion Control	
8.	The cannabis cultivator shall use appropriate erosion control measures to minimize erosion of disturbed areas, potting soil, or bulk soil amendments to prevent discharges of waste. Fill soil shall not be placed where it may discharge into surface water. If used, weed-free straw mulch shall be applied at a rate of two tons per acre of exposed soils and, if warranted by site conditions, shall be secured to the ground.
9.	The cannabis cultivator shall not plant or seed noxious weeds. Prohibited plant species include those identified in the California Invasive Pest Plant Council's database, available at: www.cal-ipc.org/paf/ . Locally native, non-invasive, and non-persistent grass species may be used for temporary erosion control benefits to stabilize disturbed land and prevent exposure of disturbed land to rainfall. Nothing in this term may be construed as a ban on cannabis cultivation that complies with the terms of this Policy.
10.	<p>Cannabis cultivators shall incorporate erosion control and sediment detention devices and materials into the design, work schedule, and implementation of the cannabis cultivation activities. The erosion prevention and sediment capture measures shall be effective in protecting water quality.</p> <ul style="list-style-type: none"> • Interim erosion prevention and sediment capture measures shall be implemented within seven days of completion of grading and land disturbance activities, and

	<p>shall consist of erosion prevention measures and sediment capture measures including:</p> <ul style="list-style-type: none"> ○ Erosion prevention measures are required for any earthwork that uses heavy equipment (e.g., bulldozer, compactor, excavator, etc.). Erosion prevention measures may include surface contouring, slope roughening, and upslope storm water diversion. Other types of erosion prevention measures may include mulching, hydroseeding, tarp placement, revegetation, and rock slope protection. ○ Sediment capture measures include the implementation of measures such as gravel bag berms, fiber rolls, straw bale barriers, properly installed silt fences, and sediment settling basins. ● Long-term erosion prevention and sediment capture measures shall be implemented as soon as possible and prior to the onset of fall and winter precipitation. Long-term measures may include the use of heavy equipment to reconfigure access roads or improve access road drainage, installation of properly-sized culverts, gravel placement on steeper grades, and stabilization of previously disturbed land. ● Maintenance of all erosion protection and sediment capture measures is required year round. Early monitoring allows for identification of problem areas or underperforming erosion or sediment control measures. Verification of the effectiveness of all erosion prevention and sediment capture measures is required as part of winterization activities.
11.	Cannabis cultivators shall only use geotextiles, fiber rolls, and other erosion control measures made of loose-weave mesh (e.g., jute, coconut (coir) fiber, or from other products without welded weaves). To minimize the risk of ensnaring and strangling wildlife, cannabis cultivators shall not use synthetic (e.g., plastic or nylon) monofilament netting materials for erosion control for any cannabis cultivation activities. This prohibition includes photo- or bio-degradable plastic netting.
12.	Cultivation sites constructed on or near slopes with a slope greater than or equal to 30 percent shall be inspected for indications of instability. Indications of instability include the occurrence of slope failures at nearby similar sites, weak soil layers, geologic bedding parallel to slope surface, hillside creep (trees, fence posts, etc. leaning downslope), tension cracks in the slope surface, bulging soil at the base of the slope, and groundwater discharge from the slope. If indicators of instability are present, the cannabis cultivator shall consult with a qualified professional to design measures to stabilize the slope to prevent sediment discharge to surface waters.
13.	For areas outside of riparian setbacks or for upland areas, cannabis cultivators shall ensure that rock placed for slope protection is the minimum amount necessary and is part of a design that provides for native plant revegetation. If retaining walls or other structures are required to provide slope stability, they shall be designed by a qualified professional.
14.	Cannabis cultivators shall monitor erosion control measures during and after each storm event that produces at least 0.5 in/day or 1.0 inch/7 days of precipitation, and repair or replace, as needed, ineffective erosion control measures immediately.

Access Road/Land Development and Drainage	
15.	Access roads shall be constructed consistent with the requirements of California Code of Regulations Title 14, Chapter 4. The Road Handbook describes how to implement the regulations and is available at < http://www.pacificwatershed.com/PWA-publications-library >. Existing access roads shall be upgraded to comply with the Road Handbook.
16.	Cannabis cultivators shall obtain all required permits and approvals prior to the construction of any access road constructed for cannabis cultivation activities. Permits may include section 404/401 CWA permits, Regional Water Board WDRs (when applicable), CDFW LSA Agreement, and county or local agency permits.
17.	Cannabis cultivators shall ensure that all access roads are hydrologically disconnected to receiving waters to the extent possible by installing disconnecting drainage features, increasing the frequency of (inside) ditch drain relief as needed, constructing out-sloped roads, constructing energy dissipating structures, avoiding concentrating flows in unstable areas, and performing inspection and maintenance as needed to optimize the access road performance.
18.	New access road alignments should be constructed with grades (slopes) of 3- to 8-percent, or less, wherever possible. Forest access roads should generally be kept below 12-percent except for short pitches of 500 feet or less where road slopes may go up to 20-percent. These steeper access road slopes should be paved or rock surfaced and equipped with adequate drainage. Existing access roads that do not comply with these limits shall be inspected by a qualified professional to determine if improvements are needed.
19.	Cannabis cultivators shall decommission or relocate existing roads away from riparian setbacks whenever possible. Roads that are proposed for decommissioning shall be abandoned and left in a condition that provides for long-term, maintenance-free function of drainage and erosion controls. Abandoned roads shall be blocked to prevent unauthorized vehicle traffic.
20.	If site conditions prohibit drainage structures (including rolling dips and ditch-relief culverts) at adequate intervals to avoid erosion, the cannabis cultivator shall use bioengineering techniques ¹² as the preferred measure to minimize erosion (e.g., live fascines). If bioengineering cannot be used, then engineering fixes such as armoring (e.g., rock of adequate size and depth to remain in place under traffic and flow conditions) and velocity dissipaters (e.g., gravel-filled “pillows” in an inside ditch to trap sediment) may be used for problem sites. The maximum distance between water breaks shall not exceed those defined in the Road Handbook.
21.	Cannabis cultivators shall have a qualified professional design the optimal access road alignment, surfacing, drainage, maintenance requirements, and spoils handling

¹² A Primer on Stream and River Protection for the Regulator and Program Manager: Technical Reference Circular W.D. 02-#1, San Francisco Bay Region, California Regional Water Board (April 2003) http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stream_wetland/streamprotectioncircular.pdf.

	procedures.
22.	Cannabis cultivators shall ensure that access road surfacing, especially within a segment leading to a waterbody, is sufficient to minimize sediment delivery to the wetland or waterbody and maximize access road integrity. Road surfacing may include pavement, chip-seal, lignin, rock, or other material appropriate for timing and nature of use. All access roads that will be used for winter or wet weather hauling/traffic shall be surfaced. Steeper access road grades require higher quality rock (e.g., crushed angular versus river-run) to remain in place. The use of asphalt grindings is prohibited.
23.	Cannabis cultivators shall install erosion control measures on all access road approaches to surface water diversion sites to reduce the generation and transport of sediment to streams.
24.	Cannabis cultivators shall ensure that access roads are out-sloped whenever possible to promote even drainage of the access road surface, prevent the concentration of storm water flow within an inboard or inside ditch, and to minimize disruption of the natural sheet flow pattern off a hill slope to a stream.
25.	If unable to eliminate inboard or inside ditches, the cannabis cultivator shall ensure adequate ditch relief culverts to prevent down-cutting of the ditch and to reduce water runoff concentration, velocity, and erosion. Ditches shall be designed and maintained as recommended by a qualified professional. To avoid point-source discharges, inboard ditches and ditch relief culverts shall be discharged onto vegetated or armored slopes that are designed to dissipate and prevent runoff channelization. Inboard ditches and ditch relief culverts shall be designed to ensure discharges into natural stream channels or watercourses are prevented.
26.	Cannabis cultivators shall ensure that access roads are not allowed to develop or show evidence of significant surface rutting or gulying. Cannabis cultivators shall use water bars and rolling dips as designed by a qualified professional to minimize access road surface erosion and dissipate runoff.
27.	Cannabis cultivators shall only grade ditches when necessary to prevent erosion of the ditch, undermining of the banks, or exposure of the toe of the cut slope to erosion. Cannabis cultivators shall not remove more vegetation than necessary to keep water moving, as vegetation prevents scour and filters out sediment.
28.	Access road storm water drainage structures shall not discharge onto unstable slopes, earthen fills, or directly to a waterbody. Drainage structures shall discharge onto stable areas with straw bales, slash, vegetation, and/or rock riprap.
29.	Sediment control devices (e.g., check dams, sand/gravel bag barriers, etc.) shall be used when it is not practical to disperse storm water before discharge to a waterbody. Where potential discharge to a wetland or waterbody exists (e.g., within 200 feet of a waterbody) access road surface drainage shall be filtered through vegetation, slash, other appropriate material, or settled into a depression with an outlet with adequate drainage. Sediment basins shall be engineered and properly sized to allow sediment settling, spillway stability, and maintenance activities.

Drainage Culverts (See also Watercourse Crossings)	
30.	Cannabis cultivators shall regularly inspect ditch-relief culverts and clear them of any debris or sediment. To reduce ditch-relief culvert plugging by debris, cannabis cultivators shall use 15- to 24-inch diameter pipes, at minimum. In forested areas with a potential for woody debris, a minimum 18-inch diameter pipe shall be used to reduce clogging. Ditch relief culverts shall be designed by a qualified professional based on site-specific conditions.
31.	Cannabis cultivators shall ensure that all permanent watercourse crossings that are constructed or reconstructed are capable of accommodating the estimated 100-year flood flow, including debris and sediment loads. Watercourse crossings shall be designed and sized by a qualified professional.
Cleanup, Restoration, and Mitigation	
32.	Cannabis cultivators shall limit disturbance to existing grades and vegetation to the actual site of the cleanup or remediation and any necessary access routes.
33.	<p>Cannabis cultivators shall avoid damage to native riparian vegetation. All exposed or disturbed land and access points within the stream and riparian setback with damaged vegetation shall be restored with regional native vegetation of similar native species. Riparian trees over four inches diameter at breast height shall be replaced by similar native species at a ratio of three to one (3:1). Restored areas must be mulched, using at least 2 to 4 inches of weed-free, clean straw or similar biodegradable mulch over the seeded area. Mulching shall be completed within 30 days after land disturbance activities in the areas cease. Revegetation planting shall occur at a seasonally appropriate time until vegetation is restored to pre-cannabis or pre-Legacy condition or better.</p> <p>Cannabis cultivators shall stabilize and restore any temporary work areas with native vegetation to pre-cannabis cultivation or pre-Legacy conditions or better. Vegetation shall be planted at an adequate density and variety to control surface erosion and re-generate a diverse composition of regional native vegetation of similar native species.</p>
34.	Cannabis cultivators shall avoid damage to oak woodlands. Cannabis cultivator shall plant three oak trees for every one oak tree damaged or removed. Trees may be planted in groves in order to maximize wildlife benefits and shall be native to the local county.
35.	<p>Cannabis cultivators shall develop a revegetation plan for:</p> <ul style="list-style-type: none"> • All exposed or disturbed riparian vegetation areas, • any oak trees that are damaged or removed, and • temporary work areas. <p>Cannabis cultivators shall develop a monitoring plan that evaluates the revegetation plan for five years. Cannabis cultivators shall maintain annual inspections for the purpose of assessing an 85 percent survival and growth of revegetated areas within a five-year period. The presence of exposed soil shall be documented for three years following revegetation work. If the revegetation results in less than an 85 percent success rate, the unsuccessful vegetation areas shall be replanted. Cannabis cultivators shall identify the location and extent of exposed soil associated with the site; pre- and post-revegetation</p>

	work photos; diagram of all areas revegetated, the planting methods, and plants used; and an assessment of the success of the revegetation program. Cannabis cultivators shall maintain a copy of the revegetation plan and monitoring results onsite and make them available, upon request, to Water Boards staff or authorized representatives. An electronic copy of monitoring results is acceptable in Portable Document Format (PDF).
36.	Cannabis cultivators shall revegetate soil exposed as a result of cannabis cultivation activities with native vegetation by live planting, seed casting, or hydroseeding within seven days of exposure.
37.	Cannabis cultivators shall prevent the spread or introduction of exotic plant species to the maximum extent possible by cleaning equipment before delivery to the cannabis cultivation Site and before removal, restoring land disturbance with appropriate native species, and post-cannabis cultivation activities monitoring and control of exotic species. Nothing in this term may be construed as a ban on cannabis cultivation that complies with the terms of this Policy.
Stream Crossing Installation and Maintenance	
Limitations on Work in Watercourses and Permanently Ponded Areas	
38.	Cannabis cultivators shall obtain all applicable permits and approvals prior to doing any work in or around waterbodies or within the riparian setbacks. Permits may include section 404/401 CWA permits, Regional Water Board WDRs (when applicable), and a CDFW LSA Agreement.
39.	Cannabis cultivators shall avoid or minimize temporary stream crossings. When necessary, temporary stream crossings shall be located in areas where erosion potential and damage to the existing habitat is low. Cannabis cultivators shall avoid areas where runoff from access roadway side slopes and natural hillsides will drain and flow into the temporary crossing. Temporary stream crossings that impede fish passage are strictly prohibited on permanent or seasonal fish-bearing streams.
40.	Cannabis cultivators shall avoid or minimize use of heavy equipment ¹³ in a watercourse. If use is unavoidable, heavy equipment may only travel or work in a waterbody with a rocky or cobbled channel. Wood, rubber, or clean native rock temporary work pads shall be used on the channel bottom prior to use of heavy equipment to protect channel bed and preserve channel morphology. Temporary work pads and other channel protection shall be removed as soon as possible once the use of heavy equipment is complete.
41.	Cannabis cultivators shall avoid or minimize work in or near a stream, creek, river, lake, pond, or other waterbody. If work in a waterbody cannot be avoided, activities and associated workspace shall be isolated from flowing water by directing the water around the work site. If water is present, then the cannabis cultivator shall develop a site-specific plan prepared by a qualified professional. The plan shall consider partial or full stream diversion and dewatering. The plan shall consider the use of coffer dams upstream and downstream of the work site and the diversion of all flow from upstream of the upstream

¹³ Heavy equipment is defined as large pieces of machinery or vehicles, especially those used in the building and construction industry (e.g., bulldozers, excavators, backhoes, bobcats, tractors, etc.).

	dam to downstream of the downstream dam, through a suitably sized pipe with intake screens that protect and prevent impacts to fish and wildlife. Cannabis cultivation activities and associated work shall be performed outside the waterbody from the top of the bank to the maximum extent possible.
Temporary Watercourse Diversion and Dewatering: All Live Watercourses	
42.	Cannabis cultivators shall ensure that coffer dams are constructed prior to commencing work and as close as practicable upstream and downstream of the work area. Cofferdam construction using offsite materials, such as clean gravel bags or inflatable dams, is preferred. Thick plastic may be used to minimize leakage, but shall be completely removed and properly disposed of upon work completion. If the coffer dams or stream diversion fail, the cannabis cultivator shall repair them immediately.
43.	When any dam or other artificial obstruction is being constructed, maintained, or placed in operation, the cannabis cultivator shall allow sufficient water at all times to pass downstream to maintain aquatic life below the dam pursuant to Fish and Game Code section 5937.
44.	If possible, gravity flow is the preferred method of water diversion. If a pump is used, the cannabis cultivator shall ensure that the pump is operated at the rate of flow that passes through the cannabis cultivation site. Pumping rates shall not dewater or impound water on the upstream side of the coffer dam. When diversion pipe is used it shall be protected from cannabis cultivation activities and maintained to prevent debris blockage.
45.	Cannabis cultivators shall only divert water such that water does not scour the channel bed or banks at the downstream end. Cannabis cultivator shall divert flow in a manner that prevents turbidity, siltation, and pollution and provides flows to downstream reaches. Cannabis cultivators shall provide flows to downstream reaches during all times that the natural flow would have supported aquatic life. Flows shall be of sufficient quality and quantity, and of appropriate temperature to support fish and other aquatic life both above and below the diversion. Block netting and intake screens shall be sized to protect and prevent impacts to fish and wildlife.
46.	Once water has been diverted around the work area, cannabis cultivators may dewater the site to provide an adequately dry work area. Any muddy or otherwise contaminated water shall be pumped to a settling tank, dewatering filter bag, or upland area, or to another location approved by CDFW or the appropriate Regional Water Board Executive Officer prior to re-entering the watercourse.
47.	Upon completion of work, cannabis cultivators shall immediately remove the flow diversion structure in a manner that allows flow to resume with a minimum of disturbance to the channel substrate and that minimizes the generation of turbidity.
Watercourse Crossings	
48.	Cannabis cultivators shall ensure that watercourse crossings are designed by a qualified professional.
49.	Cannabis cultivators shall ensure that all access road watercourse crossing structures allow for the unrestricted passage of water and shall be designed to accommodate the

	estimated 100-year flood flow and associated debris (based upon an assessment of the streams potential to generate debris during high flow events). Consult CAL FIRE 100 year Watercourse Crossings document for examples and design calculations, available at: http://calfire.ca.gov/resource_mgt/downloads/100%20yr%20revised%208-08-17%20(final-a).pdf .
50.	<p>Cannabis cultivators shall ensure that watercourse crossings allow migration of aquatic life during all life stages supported or potentially supported by that stream reach. Design measures shall be incorporated to ensure water depth and velocity does not inhibit migration of aquatic life. Any access road crossing structure on watercourses that supports fish shall be constructed for the unrestricted passage of fish at all life stages, and should use the following design guidelines:</p> <ul style="list-style-type: none"> • CDFW's <i>Culvert Criteria for Fish Passage</i>; • CDFW's <i>Salmonid Stream Habitat Restoration Manual, Volume 2, Part IX: Fish Passage Evaluation at Stream Crossings</i>; and • National Marine Fisheries Service, Southwest Region <i>Guidelines for Salmonid Passage at Stream Crossings</i>.
51.	<p>Cannabis cultivators shall conduct regular inspection and maintenance of stream crossings to ensure crossings are not blocked by debris. Refer to California Board of Forestry Technical Rule No. 5 available at: http://www.calforests.org/wp-content/uploads/2013/10/Adopted-TRA5.pdf.</p>
52.	<p>Cannabis cultivators shall only use rock fords for temporary seasonal crossings on small watercourses where aquatic life passage is not required during the time period of use. Rock fords shall be oriented perpendicular to the flow of the watercourse and designed to maintain the range of surface flows that occur in the watercourse. When constructed, rock shall be sized to withstand the range of flow events that occur at the crossing and rock shall be maintained at the rock ford to completely cover the channel bed and bank surfaces to minimize soil compaction, rutting, and erosion. Rock must extend on either side of the ford up to the break in slope. The use of rock fords as watercourse crossings for all-weather access road use is prohibited.</p>
53.	<p>Cannabis cultivators shall ensure that culverts used at watercourse crossings are designed to direct flow and debris toward the inlet (e.g., use of wing-walls, pipe beveling, rock armoring, etc.) to prevent erosion of road fill, debris blocking the culvert, and watercourses from eroding a new channel.</p>
54.	<p>Cannabis cultivators shall regularly inspect and maintain the condition of access roads, access road drainage features, and watercourse crossings. At a minimum, cannabis cultivators shall perform inspections prior to the onset of fall and winter precipitation and following storm events that produce at least 0.5 in/day or 1.0 inch/7 days of precipitation. Cannabis cultivators are required to perform all of the following maintenance:</p> <ul style="list-style-type: none"> • Remove any wood debris that may restrict flow in a culvert. • Remove sediment that impacts access road or drainage feature performance. Place any removed sediment in a location outside the riparian setbacks and stabilize the sediment. • Maintain records of access road and drainage feature maintenance and consider

	redesigning the access road to improve performance and reduce maintenance needs.
55.	Cannabis cultivators shall compact access road crossing approaches and fill slopes during installation and shall stabilize them with rock or other appropriate surface protection to minimize surface erosion. When possible, cannabis cultivators shall ensure that access roads over culverts are equipped with a critical dip to ensure that, if the culvert becomes blocked or plugged, water can flow over the access road surface without washing away the fill prism. Access road crossings where specific conditions do not allow for a critical dip or in areas with potential for significant debris accumulation, shall include additional measures such as emergency overflow culverts or oversized culverts that are designed by a qualified professional.
56.	Cannabis cultivators shall ensure that culverts used at watercourse crossings are: 1) installed parallel to the watercourse alignment to the extent possible, 2) of sufficient length to extend beyond stabilized fill/sidecast material, and 3) embedded or installed at the same level and gradient of the streambed in which they are being placed to prevent erosion.
Soil Disposal and Spoils Management	
57.	Cannabis cultivators shall store soil, construction, and waste materials outside the riparian setback except as needed for immediate construction needs. Such materials shall not be stored in locations of known slope instability or where the storage of construction or waste material could reduce slope stability.
58.	Cannabis cultivators shall separate large organic material (e.g., roots, woody debris, etc.) from soil materials. Cannabis cultivators shall either place the large organic material in long-term, upland storage sites, or properly dispose of these materials offsite.
59.	Cannabis cultivators shall store erodible soil, soil amendments, and spoil piles to prevent sediment discharges in storm water. Storage practices may include use of tarps, upslope land contouring to divert surface flow around the material, or use of sediment control devices (e.g., silt fences, straw wattles, etc.).
60.	Cannabis cultivators shall contour and stabilize stored spoils to mimic natural slope contours and drainage patterns (as appropriate) to reduce the potential for fill saturation and slope failure.
61.	For soil disposal sites cannabis cultivators shall: <ul style="list-style-type: none"> • revegetate soil disposal sites with a mix of native plant species, • cover the seeded and planted areas with mulched straw at a rate of two tons per acre, and • apply non-synthetic netting or similar erosion control fabric (e.g., jute) on slopes greater than 2:1 if the site is erodible.
62.	Cannabis cultivators shall haul away and properly dispose of excess soil and other debris as needed to prevent discharge to waters of the state.

Riparian and Wetland Protection and Management

63.	Cannabis cultivators shall not disturb aquatic or riparian habitat, such as pools, spawning sites, large wood, or shading vegetation unless authorized under a CWA section 404 permit, CWA section 401 certification, Regional Water Board WDRs (when applicable), or a CDFW LSA Agreement.
64.	Cannabis cultivators shall maintain existing, naturally occurring, riparian vegetative cover (e.g., trees, shrubs, and grasses) in aquatic habitat areas to the maximum extent possible to maintain riparian areas for streambank stabilization, erosion control, stream shading and temperature control, sediment and chemical filtration, aquatic life support, wildlife support, and to minimize waste discharge.

Water Storage and Use

Water Supply, Diversion, and Storage

65.	Cannabis cultivators shall only install, maintain, and destroy wells in compliance with county, city, and local ordinances and with California Well Standards as stipulated in California Department of Water Resources Bulletins 74-90 and 74-81. ¹⁴
66.	All water diversions for cannabis cultivation from a surface stream, subterranean stream flowing through a known and definite channel (e.g., groundwater well diversions from subsurface stream flows), or other surface waterbody are subject to the surface water Numeric and Narrative Instream Flow Requirements. This includes lakes, ponds, and springs (unless the spring is deemed exempt by the Deputy Director). See Section 3. Numeric and Narrative Instream Flow Requirements of this Attachment A for more information.
67.	Groundwater diversions may be subject to additional requirements, such as a forbearance period, if the State Water Board determines those requirements are reasonably necessary to implement the purposes of this Policy.
68.	Cannabis cultivators are encouraged to use appropriate rainwater catchment systems to collect from impermeable surfaces (e.g., roof tops, etc.) during the wet season and store storm water in tanks, bladders, or off-stream engineered reservoirs to reduce the need for surface water or groundwater diversions.
69.	Cannabis cultivators shall not divert surface water unless it is diverted in accordance with an existing water right that specifies, as appropriate, the source, location of the point of diversion, purpose of use, place of use, and quantity and season of diversion. Cannabis cultivators shall maintain documentation of the water right at the cannabis cultivation site. Documentation of the water right shall be available for review and inspection by the Water Boards, CDFW, and any other authorized representatives of the Water Boards or CDFW.

¹⁴ California Well Standards are available at:

http://www.water.ca.gov/groundwater/well_info_and_other/california_well_standards/well_standards_content.html.

70.	Cannabis cultivators shall ensure that all water diversion facilities are designed, constructed, and maintained so they do not prevent, impede, or tend to prevent the passing of fish, as defined by Fish and Game Code section 45, upstream or downstream, as required by Fish and Game Code section 5901. This includes but is not limited to the supply of water at an appropriate depth, temperature, and velocity to facilitate upstream and downstream aquatic life movement and migration. Cannabis cultivators shall allow sufficient water at all times to pass past the point of diversion to keep in good condition any fish that may be planted or exist below the point of diversion as defined by Fish and Game Code section 5937. Cannabis cultivators shall not divert water in a manner contrary to or inconsistent with these Requirements.
71.	Cannabis cultivators issued a Cannabis SIUR by the State Water Board shall not divert surface water unless in compliance with all additional Cannabis SIUR conditions required by CDFW.
72.	Water diversion facilities shall include satisfactory means for bypassing water to satisfy downstream prior rights and any requirements of policies for water quality control, water quality control plans, water quality certifications, waste discharge requirements, or other local, state or federal instream flow requirements. Cannabis cultivators shall not divert in a manner that results in injury to holders of legal downstream senior rights. Cannabis cultivators may be required to curtail diversions should diversion result in injury to holders of legal downstream senior water rights or interfere with maintenance of downstream instream flow requirements.
73.	<p>Fuel powered (e.g., gas, diesel, etc.) diversion pumps shall be located in a stable and secure location outside of the riparian setbacks unless authorized under a 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board. Use of non-fuel powered diversion pumps (solar, electric, gravity, etc.) is encouraged.</p> <p>In all cases, all pumps shall:</p> <ol style="list-style-type: none"> 1. be properly maintained, 2. have suitable containment to ensure any spills or leaks do not enter surface waterbodies or groundwater, and 3. have sufficient overhead cover to prevent exposure of equipment to precipitation.
74.	No water shall be diverted unless the cannabis cultivator is operating the water diversion facility with a CDFW-approved water-intake screen (e.g. fish screen). The water intake screen shall be designed and maintained in accordance with screening criteria approved by CDFW. The screen shall prevent wildlife from entering the diversion intake and becoming entrapped. The cannabis cultivator shall contact the regional CDFW Office, LSA Program for information on screening criteria for diversion(s). ¹⁵ The cannabis cultivator shall provide evidence that demonstrates that the water intake screen is in good condition whenever requested by the Water Boards or CDFW. Points of re-diversion from off-stream storage facilities that are open to the environment shall have a water intake screen, as required by CDFW.

¹⁵ CDFW's Lake and Streambed program information is available at:
<https://www.wildlife.ca.gov/Conservation/LSA> .

75.	Cannabis cultivators shall inspect, maintain, and clean water intake screens and bypass appurtenances as directed by CDFW to ensure proper operation for the protection of fish and wildlife.
76.	Cannabis cultivators shall not obstruct, alter, dam, or divert all or any portion of a natural watercourse prior to obtaining all applicable permits and approvals. Permits may include a valid water right, 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board.
77.	Cannabis cultivators shall plug, block, cap, disconnect, or remove the diversion intake associated with cannabis cultivation activities during the surface water forbearance period, unless the diversion intake is used for other beneficial uses, to ensure no water is diverted during that time.
78.	Cannabis cultivators shall not divert from a surface water or from a subterranean stream for cannabis cultivation at a rate more than a maximum instantaneous diversion rate of 10 gallons per minute, unless authorized under an existing appropriative water right.
82.	<p>Onstream storage reservoirs are prohibited unless either:</p> <ul style="list-style-type: none"> • The cannabis cultivator has an existing water right with irrigation as a designated use, issued prior to October 31, 2017, that authorizes the onstream storage reservoir, or • The cannabis cultivator obtains an appropriative water right permit with irrigation as a designated use prior to diverting water from an onstream storage reservoir for cannabis cultivation. Cannabis cultivators with a pending application or an unpermitted onstream storage reservoir shall not divert for cannabis cultivation until the cannabis cultivator has obtain a valid water right.
83.	Cannabis cultivators are encouraged to install separate storage systems for water diverted for cannabis irrigation and water diverted for any other beneficial uses, ¹⁶ or otherwise shall install separate measuring devices to quantify diversion to and from each storage facility, including the quantity of water diverted and the quantity, place, and purpose of use (e.g., cannabis irrigation, other crop irrigation, domestic, etc.) for the stored water.
84.	The cannabis cultivator shall install and maintain a measuring device(s) for surface water or subterranean stream diversions. The measuring device shall be, at a minimum equivalent to the requirements for direct diversions greater than 10 acre-feet per year in California Code of Regulations, Title 23, Division 3, Chapter 2.7 ¹⁷ . The measuring device(s) shall be located as close to the point of diversion as reasonable. Cannabis cultivators shall maintain daily diversion records for water diverted for cannabis cultivation.

¹⁶ Other beneficial uses of water include: domestic, irrigation, power, municipal, mining, industrial, fish and wildlife preservation and enhancement, aquaculture, recreational, stockwatering, water quality, frost protection, and heat control. (California Code of Regulations, Title 23 sections 659-672).

¹⁷ Additional information on measuring devices may be found at:
https://www.waterboards.ca.gov/waterrights/water_issues/programs/diversion_use/water_use.shtml#measurement

	<p>Cannabis cultivators shall maintain separate records that document the amount of water used for cannabis cultivation separated out from the amount of water used for other irrigation purposes and other beneficial uses of water (e.g., domestic, fire protection, etc.). Cannabis cultivators shall maintain daily diversion records at the cultivation site and shall make the records available for review or by request by the Water Boards CDFW, or any other authorized representatives of the Water Boards or CDFW. Daily diversion records shall be retained for a minimum of five years. Compliance with this term is required for any surface water diversion for cannabis cultivation, even those under 10 acre-feet per year.</p>
85.	<p>The State Water Board intends to develop and implement a basin-wide program for real-time electronic monitoring and reporting of diversions, withdrawals, releases and streamflow in a standardized format if and when resources become available. Such real-time reporting will be required upon a showing by the State Water Board that the program and the infrastructure are in place to accept real-time electronic reports. Implementation of the reporting requirements shall not necessitate amendment to this Requirement.</p>
86.	<p>Cannabis cultivators shall not use off-stream storage reservoirs and ponds to store water for cannabis cultivation unless they are sited and designed or approved by a qualified professional in compliance with Division of Safety of Dams (DSOD), county, and/or city requirements, as applicable. If the DSOD, county, and/or city do not have established requirements they shall be designed consistent with the Natural Resource Conservation Service National Engineering Manual. Reservoirs shall be designed with an adequate overflow outlet that is protected and promotes the dispersal and infiltration of flow and prevents channelization.</p> <p>All off-stream storage reservoirs and ponds shall be designed, managed, and maintained to accommodate average annual winter period precipitation and storm water inputs to reduce the potential for overflow.</p> <p>Cannabis cultivators shall plant native vegetation along the perimeter of the reservoir in locations where it does not impact the structural integrity of the reservoir berm or spillway. The cannabis cultivator shall control vegetation around the reservoir berm and spillway to allow for visual inspection of berm and spillway condition and control burrowing animals as necessary.</p>
87.	<p>Cannabis cultivators shall implement an invasive species management plan prepared by a Qualified Biologist for any existing or proposed water storage facilities that are open to the environment. The plan shall include, at a minimum, an annual survey for bullfrogs and other invasive aquatic species. If bullfrogs or other invasive aquatic species are identified, eradication measures shall be implemented under the direction of a qualified biologist, if appropriate after consultation with CDFW (pursuant to Fish and Game Code section 6400). Eradication methods can be direct or indirect. Direct methods may include hand-held dip net, hook and line, lights, spears, gigs, or fish tackle under a fishing license (pursuant to Fish and Game Code section 6855). An indirect method may involve seasonally timed complete dewatering and a drying period of the off-stream storage facility under a Permit to Destroy Harmful Species (pursuant to Fish and Game Code section 5501) issued by CDFW.</p>
88.	<p>Water storage bladders are not encouraged for long-term use. If bladders are used, the cannabis cultivator shall ensure that the bladder is designed and properly installed to store water and that the bladder is sited to minimize the potential for water to flow into a</p>

	<p>watercourse in the event of a catastrophic failure. If a storage bladder has been previously used, the cannabis cultivator shall carefully inspect the bladder to confirm its integrity and confirm the absence of any interior residual chemicals prior to resuming use. Cannabis cultivators shall periodically inspect water storage bladders and containment features to ensure integrity. Water storage bladders shall be properly disposed of or recycled and not resold when assurance of structural integrity is no longer guaranteed.</p>
89.	<p>Cannabis cultivators shall not use water storage bladders unless the bladder is safely contained within a secondary containment system with sufficient capacity to capture 110 percent of a bladder's maximum possible contents in the event of bladder failure (i.e., 110 percent of bladder's capacity). Secondary containment systems shall be of sufficient strength and stability to withstand the forces of released contents in the event of catastrophic bladder failure. In addition, secondary containment systems that are open to the environment shall be designed and maintained with sufficient capacity to accommodate precipitation and storm water inputs from a 25-year, 24-hour storm event.</p>
90.	<p>Cannabis cultivators shall not cause or allow any overflow from off-stream water storage facilities that are closed to the environment (e.g., tanks and bladders) if the off-stream facilities are served by a diversion from surface water or groundwater. Cannabis cultivators shall regularly inspect for and repair all leaks of the diversion and storage system.</p>
91.	<p>Water storage tanks, bladders, and other off-stream water storage facilities that are closed to the environment shall not be located in a riparian setback or next to equipment that generates heat. Cannabis cultivators shall place water storage tanks, bladders, and other off-stream water storage facilities that are closed to the environment in areas that allow for ease of installation, access, maintenance, and minimize road development.</p>
92.	<p>Cannabis cultivators shall install vertical and horizontal tanks according to manufacturer's specifications and shall place tanks on properly compacted soil that is free of rocks and sharp objects and capable of bearing the weight of the tank and its maximum contents with minimal settlement. Tanks shall not be located in areas of slope instability. Cannabis cultivators shall install water storage tanks capable of containing more than 8,000 gallons only on a reinforced concrete pad providing adequate support and enough space to attach a tank restraint system (anchor using the molded-in tie down lugs with moderate tension, being careful not to over-tighten) per the recommendations of a qualified professional.</p>
93.	<p>To prevent rupture or overflow and runoff, cannabis cultivators shall only use water storage tanks and bladders equipped with a float valve, or equivalent device, to shut off diversion when storage systems are full. Cannabis cultivators shall install any other measures necessary to prevent overflow of storage systems to prevent runoff and the diversion of more water than can be used and/or stored.</p>
94.	<p>Cannabis cultivators shall ensure that all vents and other openings on water storage tanks are designed to prevent the entry and/or entrapment of wildlife.</p>

95.	<p>Cannabis cultivators shall retain, for a minimum of five years, appropriate documentation for any hauled water¹⁸ used for cannabis cultivation. Documentation for hauled water shall include, for each delivery, all of the following:</p> <ol style="list-style-type: none"> 1. A receipt that shows the date of delivery and the name, address, license plate number, and license plate issuing state for the water hauler, 2. A copy of the Water Hauler's License (California Health and Safety Code section 111120), 3. A copy of proof of the Water Hauler's water right, groundwater well, or other authorization to take water, and the location of the water source, and 4. The quantity of water delivered or picked up from a water source, in gallons. <p>Documentation shall be made available, upon request, to Water Boards or CDFW staff and any other authorized representatives of the Water Boards or CDFW.</p>
Water Conservation and Use	
96.	Cannabis cultivators shall regularly inspect their entire water delivery system for leaks and immediately repair any leaky faucets, pipes, connectors, or other leaks.
97.	Cannabis cultivators shall use weed-free mulch in cultivation areas that do not have ground cover to conserve soil moisture and minimize evaporative loss.
98.	Cannabis cultivators shall implement water conserving irrigation methods (e.g., drip or trickle irrigation, micro-spray, or hydroponics).
99.	<p>Cannabis cultivators shall maintain daily records of all water used for irrigation of cannabis. Daily records may be calculated by the use of a measuring device or, if known, by calculating the irrigation system rates and duration of time watered (e.g., irrigating for one hour twice per day using 50 half-gallon drips equates to 50 gallons per day (1*2*50*0.5) of water used for irrigation). Cannabis cultivators shall retain, for a minimum of 5 years, irrigation records at the cannabis cultivation site and shall make all irrigation records available for review by the Water Boards, CDFW and any other authorized representatives of the Water Boards or CDFW.</p>
Irrigation Runoff	
100.	Cannabis cultivators shall regularly inspect for leaks in mainlines ¹⁹ , laterals ²⁰ , in irrigation connections, sprinkler heads, or at the ends of drip tape and feeder lines and immediately repair any leaks found upon detection.
101.	The irrigation system shall be designed to include redundancy (e.g., safety valves) in the event that leaks occur, so that waste of water and runoff is prevented and minimized.
102.	Cannabis cultivators shall regularly replace worn, outdated, or inefficient irrigation system components and equipment to ensure a properly functioning, leak-free irrigation system at

¹⁸ Water hauler means any person who hauls water in bulk by any means of transportation.

¹⁹ Mainlines are pipes that go from the water source to the control valves.

²⁰ Laterals are the pipes between the control valve and the sprinkler heads.

	all times.
103.	Cannabis cultivators shall minimize irrigation deep percolation ²¹ by applying irrigation water at agronomic rates.
Fertilizers, Pesticides, and Petroleum Products	
104.	Cannabis cultivators shall not mix, prepare, over apply, or dispose of agricultural chemicals/products (e.g., fertilizers, pesticides ²² , and other chemicals as defined in the applicable water quality control plan) in any location where they could enter the riparian setback or waters of the state. The use of agricultural chemicals inconsistently with product labeling, storage instructions, or DPR requirements for pesticide applications ²³ is prohibited. Disposal of unused product and containers shall be consistent with labels.
105.	Cannabis cultivators shall keep and use absorbent materials designated for spill containment and spill cleanup equipment on-site for use in an accidental spill of fertilizers, petroleum products, hazardous materials, and other substances which may degrade waters of the state. The cannabis cultivator shall immediately notify the California Office of Emergency Services at 1-800-852-7550 and immediately initiate cleanup activities for all spills that could enter a waterbody or degrade groundwater.
106.	Cannabis cultivators shall establish and use a separate storage area for pesticides, and fertilizers, and another storage area for petroleum or other liquid chemicals (including diesel, gasoline, oils, etc.). All such storage areas shall comply with the riparian setback Requirements, be in a secured location in compliance with label instructions, outside of areas of known slope instability, and be protected from accidental ignition, weather, and wildlife. All storage areas shall have appropriate secondary containment structures, as necessary, to protect water quality and prevent spillage, mixing, discharge, or seepage.

²¹ Deep percolation occurs when excess irrigation water is applied and percolates below the plant root zone.

²² Pesticide is defined as follows:

- Per California Code of Regulations Title 3. Division 6. Section 6000:

(a) Any substance or mixture of substances that is a pesticide as defined in the Food and Agricultural Code and includes mixtures and dilutions of pesticides;

(b) As the term is used in Section 12995 of the California Food and Agricultural Code, includes any substance or product that the user intends to be used for the pesticidal poison purposes specified in Sections 12753 and 12758 of the Food and Agricultural Code.

- Per California Food and Agricultural Code section 12753(b), the term "Pesticide" includes any of the following: Any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in Section 12754.5, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever.

- In laymen's terms: "pesticide" includes: rodenticides, herbicides, insecticides, fungicides, and disinfectants.

²³ More information on DPR requirements is available at:

http://www.cdpr.ca.gov/docs/legbills/laws_regulations.htm,

<http://www.cdpr.ca.gov/docs/county/cacfltrs/penfltrs/penf2017/2017atch/attach0301.pdf>, and

<http://www.cdpr.ca.gov/docs/cannabis/index.htm>

	Storage tanks and containers must be of suitable material and construction to be compatible with the substances stored and conditions of storage, such as pressure and temperature.
107.	Throughout the wet season, Cannabis Cultivators shall ensure that any temporary storage areas have a permanent cover and side-wind protection or be covered during non-working days and prior to and during rain events.
108.	Cannabis cultivators shall only use hazardous materials ²⁴ in a manner consistent with the product's label.
109.	Cannabis cultivators shall only keep hazardous materials in their original containers with labels intact, and shall store hazardous materials to prevent exposure to sunlight, excessive heat, and precipitation. Cannabis cultivators shall provide secondary containment for hazardous materials to prevent possible exposure to the environment. Disposal of unused hazardous materials and containers shall be consistent with the label.
110.	Cannabis cultivators shall only mix, prepare, apply, or load hazardous materials outside of the riparian setbacks.
111.	Cannabis cultivators shall not apply agricultural chemicals within 48 hours of a predicted rainfall event of 0.25 inches or greater with a probability greater than 50-percent. In the Lake Tahoe Hydrologic Unit, cannabis cultivators shall not apply agricultural chemicals within 48 hours of any weather pattern that is forecast to have a 30 percent or greater chance of precipitation greater than 0.1 inch per 24 hours. This requirement may be updated based on amendments to the Lahontan Regional Water Board construction storm water general order.
Fertilizers and Soils	
112.	To minimize infiltration and water quality degradation, Cannabis cultivators shall irrigate and apply fertilizer to consistent with the crop need (i.e., agronomic rate).
113.	When used, cannabis cultivators shall apply nitrogen to cannabis cultivation areas consistent with crop need (i.e., agronomic rate). Cannabis cultivators shall not apply nitrogen at a rate that may result in a discharge to surface water or groundwater that causes or contributes to exceedance of water quality objectives, and no greater than 319 pounds/acre/year unless plant tissue analysis performed by a qualified individual demonstrates the need for additional nitrogen application. The analysis shall be performed by an agricultural laboratory certified by the State Water Board's Environmental Laboratory Accreditation Program.
114.	Cannabis cultivators shall ensure that potting soil or soil amendments, when not in use, are placed and stored with covers, when needed, to protect from rainfall and erosion, to prevent discharge to waters of the state, and to minimize leaching of waste constituents into

²⁴ A hazardous material is any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.

	groundwater.
Pesticides and Herbicides	
115.	Cannabis cultivators shall not apply restricted materials, including restricted pesticides, or allow restricted materials to be stored at the cannabis cultivation site.
116.	Cannabis cultivators shall implement integrated pest management strategies where possible to reduce the need and use of pesticides and the potential for discharges to waters of the state. ²⁵
Petroleum Products and Other Chemicals	
117.	Cannabis cultivators shall only refuel vehicles or equipment outside of riparian setbacks. Cannabis cultivators shall inspect all equipment using oil, hydraulic fluid, or petroleum products for leaks prior to use and shall monitor equipment for leakage. Stationary equipment (e.g., motors, pumps, generators, etc.) and vehicles not in use shall be located outside of riparian setbacks. Spill and containment equipment (e.g., oil spill booms, sorbent pads, etc.) shall be stored onsite at all locations where equipment is used or staged.
118.	Cannabis cultivators shall store petroleum, petroleum products, and similar fluids in a manner that provides chemical compatibility, provides secondary containment, and protection from accidental ignition, the sun, wind, and rain.
119.	Use of an underground storage tank(s) for the storage of petroleum products is allowed if compliant with all applicable federal, state, and local laws; regulations; and permitting requirements.
Cultivation-Related Waste	
120.	Cannabis cultivators shall contain and regularly remove all debris and trash associated with cannabis cultivation activities from the cannabis cultivation site. Cannabis cultivators shall only dispose of debris and trash at an authorized landfill or other disposal site in compliance with state and local laws, ordinances, and regulations. Cannabis cultivators shall not allow litter, plastic, or similar debris to enter the riparian setback or waters of the state. Cannabis plant material may be disposed of onsite in compliance with any applicable CDFA license conditions.
121.	Cannabis cultivators shall only dispose or reuse spent growth medium (e.g., soil and other organic media) in a manner that prevents discharge of soil and residual nutrients and chemicals to the riparian setback or waters of the state. Spent growth medium shall be covered with plastic sheeting or stored in water tight dumpsters prior to proper disposal or reuse. Spent growth medium should be disposed of at an authorized landfill or other disposal site in compliance with state and local laws, ordinances, and regulations. Proper reuse of spent growth medium may include incorporation into garden beds or spreading on a stable surface and revegetating the surface with native plants. Cannabis cultivators shall use erosion control techniques, as needed, for any reused or stored spent growth medium

²⁵ <https://www.epa.gov/safepestcontrol/integrated-pest-management-ipm-principles>

	to prevent polluted runoff.								
Refuse and Domestic Waste									
122.	Cannabis cultivators shall ensure that debris, soil, silt, bark, slash, sawdust, rubbish, creosote-treated wood, raw cement and concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances which could be hazardous to any life stage of fish and wildlife or their habitat (includes food sources) does not contaminate soil or enter the riparian setback or waters of the state.								
123.	Cannabis cultivators shall not dispose of domestic wastewater unless it meets applicable local agency and/or Regional Water Board requirements. Cannabis cultivators shall ensure that human or animal waste is disposed of properly. Cannabis cultivators shall ensure onsite wastewater treatment systems (e.g., septic system) are permitted by the local agency or applicable Regional Water Board.								
124.	If used, chemical toilets or holding tanks shall be maintained in a manner appropriate for the frequency and conditions of usage, sited in stable locations, and comply with the riparian setback Requirements.								
Winterization									
125.	Cannabis cultivators shall implement all applicable Erosion Control and Soil Disposal and Spoils Management Requirements in addition to the Winterization Requirements below by the onset of the winter period.								
126.	Cannabis cultivators shall block or otherwise close any temporary access roads to all motorized vehicles no later than the onset of the winter period each year.								
127.	Cannabis cultivators shall not operate heavy equipment of any kind at the cannabis cultivation site during the winter period, unless authorized for emergency repairs contained in an enforcement order issued by the State Water Board, Regional Water Board, or other agency having jurisdiction.								
128.	<p>Cannabis cultivators shall apply linear sediment controls (e.g., silt fences, wattles, etc.) along the toe of the slope, face of the slope, and at the grade breaks of exposed slopes to comply with sheet flow length²⁶ at the frequency specified below.</p> <table border="1"> <thead> <tr> <th>Slope (percent)</th><th>Sheet Flow Length Not to Exceed (feet)</th></tr> </thead> <tbody> <tr> <td>0 – 25</td><td>20</td></tr> <tr> <td>25 – 50</td><td>15</td></tr> <tr> <td>>50</td><td>10</td></tr> </tbody> </table>	Slope (percent)	Sheet Flow Length Not to Exceed (feet)	0 – 25	20	25 – 50	15	>50	10
Slope (percent)	Sheet Flow Length Not to Exceed (feet)								
0 – 25	20								
25 – 50	15								
>50	10								

²⁶ Sheet flow length is the length that shallow, low velocity flow travels across a site.

129.	Cannabis cultivators shall maintain all culverts, drop inlets, trash racks and similar devices to ensure they are not blocked by debris or sediment. The outflow of culverts shall be inspected to ensure erosion is not undermining the culvert. Culverts shall be inspected prior to the onset of fall and winter precipitation and following precipitation events that produce at least 0.5 in/day or 1.0 inch/7 days of precipitation to determine if maintenance or cleaning is required.
130.	Cannabis cultivators shall stabilize all disturbed areas and construction entrances and exits to control erosion and sediment discharges from land disturbance.
131.	Cannabis cultivators shall cover and berm all loose stockpiled construction materials (e.g., soil, spoils, aggregate, etc.) that are not actively (scheduled for use within 48 hours) being used as needed to prevent erosion by storm water. The cannabis cultivator shall have adequate cover and berm materials available onsite if the weather forecast indicates a probability of precipitation.
132.	Cannabis cultivators shall apply erosion repair and control measures to the bare ground (e.g., cultivation area, access paths, etc.) to prevent discharge of sediment to waters of the state.
133.	As part of the winterization plan approval process, the Regional Water Board may require cannabis cultivators to implement additional site-specific erosion and sediment control requirements if the implementation of the Requirements in this section do not adequately protect water quality.

SECTION 3 – NUMERIC AND NARRATIVE INSTREAM FLOW REQUIREMENTS (INCLUDING GAGING)

This section outlines the numeric and narrative instream flow Requirements established in this Policy.

Narrative instream flow Requirements apply to all diversions of surface water and groundwater for cannabis cultivation throughout California. Numeric instream flow requirements are developed at compliance gages throughout California. The compliance gages are divided into 14 geographic regions (Section 4).

Narrative Instream Flow Requirements

Instream Flow Requirements for Surface Water Diversions

1. **Applicability:** Surface water instream flow Requirements apply to anyone diverting water for cannabis cultivation from a waterbody. A waterbody is defined as any significant accumulation of water, such as: lakes, ponds, rivers, streams, creeks, springs²⁷, artesian wells, wetlands, and canals. Surface water instream flow Requirements also apply to water diverted from a subterranean stream flowing through a known and definite channel.
2. **Retail Water Suppliers²⁸:** The instream flow Requirements and forbearance period listed in this section shall not apply to retail water suppliers, as defined in Section 13575 of the Water Code²⁹, whose primary beneficial use is municipal or domestic, unless any of the following circumstances are present:
 - a. the retail water supplier has 10 or fewer customers and delivers water that is used for cannabis cultivation;
 - b. the retail water supplier delivers 10 percent or more of the diverted water to one or more cannabis cultivator(s) or cannabis cultivation site(s), as established by an assessor's parcel number;
 - c. 25 percent or more of the water delivered by the retail water supplier is used for cannabis cultivation; or
 - d. a cannabis cultivator and the retail water supplier are affiliates, as defined in California Code of Regulations, title 23, section 2814.20.
3. **Exempt Springs:** Cannabis cultivators claiming, pursuant to Business and Professions Code section 26060.1(a)(2)(A)(iv) or section 26060.1(a)(2)(B)(iii), that a spring or artesian well does not flow off their property by surface or subterranean (subsurface) means in the absence of diversion, may request an exemption from the Policy's Narrative Instream Flow Requirements 4 (Surface Water Dry Season Forbearance Period) and 5 (Surface Water Wet Season Diversion Period). When requesting such an

²⁷ A spring is an area where there is concentrated discharge of groundwater that flows at the ground surface. A spring may flow any part of the year. For the purpose of this Policy, a spring does not have a defined bed and banks. Surface water instream flow Requirements apply to both natural springs and springs that are modified to improve production such as, installing piping and spring boxes/wells.

²⁸ Business and Professions Code section 26060.1(a)(1)(B).

²⁹ Under Water Code section 13575(b)(5), "Retail water supplier" means any local entity, including a public agency, city, county, or private water company that provides retail water service.

exemption, cannabis cultivators shall provide substantial evidence demonstrating that, in the absence of diversions, the spring or artesian well does not have surface or subsurface hydrologic connectivity to a surface water at any time of year during all water year types³⁰. The substantial evidence must be documented by a qualified professional. For purposes of this Requirement, qualified professionals include California-registered Professional Geologists or other classifications of professions approved by the Deputy Director for Water Rights (Deputy Director). A list of qualified professionals that may document the substantial evidence required per this Requirement will be maintained on the Water Rights section of the State Water Board's Cannabis Cultivation webpage³¹. The Deputy Director may require additional information from the cannabis cultivator to support the request. If, after reviewing the submitted evidence and analysis, the Deputy Director concurs that the cannabis cultivator has made the required showing, the cannabis cultivator may be exempted from the Policy's Narrative Instream Flow Requirements 4 and 5. Springs or artesian wells that are deemed exempt shall comply with the Policy's 50 percent visual bypass requirement (Narrative Instream Flow Requirement 6) to support aquatic and riparian habitat. In addition, springs or artesian wells that are deemed exempt shall be subject to the Requirements for Groundwater Diversions (Narrative Instream Flow Requirement 8) to address the potential cumulative impacts of groundwater diversions, to which diversions from the spring or artesian well may contribute. Notwithstanding such exemptions, all other applicable Requirements of this Policy remain in force.

4. **Surface Water Dry Season Forbearance Period:** Cannabis cultivators shall not divert surface water for cannabis cultivation activities at any time from April 1 through October 31 of each calendar year, unless the water diverted is delivered from storage in compliance with Narrative Flow Requirement 4.
 - a. The following requirements apply only to cannabis cultivators diverting under a valid water right or claim of right and without authorized storage:
 - i. The first year of the Surface Water Dry Season Forbearance Period (April 1, 2018 through October 31, 2018) is waived. Cannabis cultivators subject to Requirement 4.a. may only divert during this period in a manner consistent with their permit/license or claim of right. All other applicable requirements of the Policy shall remain in force.
 - ii. Cannabis cultivators subject to Requirement 4.a shall file for a Cannabis SIUR or submit an application for an appropriative water right permit to obtain storage sufficient to support their cannabis cultivation during the forbearance period prior to diverting water for cannabis cultivation during the 2018 forbearance period.
 - iii. As soon as possible after storage has been authorized, following the conclusion of the winter period, cannabis cultivators subject to Requirement 4.a shall begin installing and diverting to off-stream storage to prepare for a potential curtailment during the dry season of 2018 (triggered by the Aquatic Base Flow Numeric Instream Flow Requirement).

³⁰ Including during any precipitation and runoff events.

³¹ State Water Board's Cannabis Cultivation webpage: <http://www.waterboards.ca.gov/cannabis/>

- iv. Requirement 4 shall apply with full force to cannabis cultivators described in Requirement 4.a who fail to comply with Requirement 4.a.ii and/or 4.a.iii.

- 5. **Surface Water Wet Season Diversion Period:** The authorized surface water diversion period is November 1 through March 31. During this diversion period, cannabis cultivators may only divert surface water for cannabis cultivation when water is available for diversion under the cannabis cultivator's priority of right and the applicable Numeric Flow Requirement (Section 4) is met at the assigned compliance gage. This includes direct diversion and diversion to storage.

From November 1 through December 14 of each year, the surface water diversion period shall not begin until after seven consecutive days in which the surface waterbody's real-time daily average flow is greater than the Numeric Flow Requirement (applicable minimum monthly instream flow Requirement in Section 4). The first day of the seven consecutive days must occur on or after October 25. After the seventh consecutive day with average flow greater than the Numeric Flow Requirement, surface water diversions may occur on any subsequent days in which the real-time daily average flow is greater than the Numeric Instream Flow Requirement (applicable minimum monthly instream flow Requirement in Section 4)³².

Numeric instream flow Requirements are established throughout the State and are calculated for the majority of USGS National Hydrologic Database plus 2 stream reaches where the USGS flow modeling data are available. Cannabis cultivators that divert water from a waterbody with an assigned compliance gage in Section 4 of this Policy are required to ensure that the real-time daily average flow, as published on a designated compliance gage website identified by the Deputy Director for Water Rights, exceeds the minimum monthly instream flow Requirement at the cannabis cultivator's assigned compliance gage. Cannabis cultivators shall verify and document compliance with the applicable Numeric Flow Requirement on a daily basis for each day of surface water diversion.

- 6. **Surface Water Flow Bypass:** In addition to Narrative Flow Requirement 5, at all times cannabis cultivators shall bypass a minimum of 50 percent of the surface water flow past their point of diversion, as estimated based on visually observing surface water flow at least daily. The surface water flow bypass requirement applies to cannabis cultivators diverting under a riparian or a pre-1914 appropriative claim of right and without authorized storage even if they qualify for the 2018 Surface Water Dry Season Forbearance Period waiver (Requirement 4.a.)
- 7. **Numeric Instream Flow Requirements:** The State Water Board has developed Numeric Instream Flow Requirements (minimum instream flow requirements) for each

³² For example, if the daily average flows on each day from October 27 through November 2 of a given year are greater than the Numeric Instream Flow Requirement for November (applicable November monthly minimum flow Requirement), diversion may begin on November 3 if the daily average flow on November 3 is also greater than the November Numeric Instream Flow Requirement. From December 15 through March 31 of each surface water diversion period, surface water diversions may occur on any day in which the surface waterbody's real-time daily average flow is greater than the Numeric Instream Flow Requirement (applicable minimum monthly instream flow Requirement).

compliance gage in Section 4, Table 1 through Table 14, to ensure that individual and cumulative effects of water diversion and discharge associated with cannabis cultivation do not affect the instream flows needed for fish spawning, migration, and rearing, and the flows needed to maintain natural flow variability. If the individual and cumulative effects of diversions result in unanticipated impacts, however, the State Water Board may revise the narrative and/or numeric instream flow Requirements to better protect instream resources, habitat, and natural flow variability.

Requirements for Groundwater Diversions and Springs Qualifying for an Exemption under Narrative Instream Flow Requirement 3 (Exempt Springs)

8. **Aquatic Base Flow:** This Policy establishes an Aquatic Base Flow, calculated by applying the New England Aquatic Base Flow Standard, as one mechanism to help monitor whether groundwater diverters and diverters from exempt springs are having a cumulative negative impact on surface flows. The State Water Board may develop additional requirements for groundwater diversions and diversions from exempt springs for cannabis cultivation in locations where there are a significant number of groundwater diversions and/or diversions from exempt springs or locations where significant numbers of surface water diverters are switching to groundwater diversions and those diversions have the potential to have negative localized impact on surface flows.
9. **Retail Water Suppliers³³:** The instream flow Requirements listed in narrative flow Requirement 8 (Aquatic Base Flow) shall not apply to retail water suppliers, as defined in Section 13575 of the Water Code³⁴, whose primary beneficial use is municipal or domestic, unless any of the following circumstances are present:
 - a. the retail water supplier has 10 or fewer customers and delivers water that is used for cannabis cultivation;
 - b. the retail water supplier delivers 10 percent or more of the diverted water to one or more cannabis cultivator(s) or cannabis cultivation site(s), as established by an assessor's parcel number;
 - c. 25 percent or more of the water delivered by the retail water supplier is used for cannabis cultivation; or
 - d. a cannabis cultivator and the retail water supplier are affiliates, as defined in California Code of Regulations, title 23, section 2814.20.

Gage Installation, Maintenance, and Operation Requirements

The Deputy Director for Water Rights (Deputy Director) may assign a new compliance gage or require cannabis cultivators to install and operate a local telemetry gage in ungaged watersheds or localized watershed areas if the Deputy Director determines that use of the assigned compliance gage does not adequately protect instream flows or does not adequately represent the localized water demand.

Cannabis cultivators shall ensure that gages required by the Deputy Director are installed, maintained, and operated by a qualified professional. For purposes of this Requirement,

³³ Business and Professions Code section 26060.1(a)(1)(B).

³⁴ Water Code Chapter 7.5. Water Recycling Act of 1991, Section 13575(b)(5) "Retail water supplier" means any local entity, including a public agency, city, county, or private water company that provides retail water service.

qualified professionals include California-registered Professional Civil Engineers, or other classifications of professions approved by the Deputy Director. A list of qualified professionals that may document compliance with this Requirement will be maintained in the Water Rights section of the State Water Board's Cannabis Cultivation webpage³⁵. Gage equipment shall meet the applicable technical specifications for telemetered measuring devices in California Code of Regulations, title 23, section 933, that apply to diversions of over 10,000 acre-feet per year or more. Gages shall record data at a minimum of 15-minute intervals and report the recorded real-time data hourly, at a minimum, via a public website designated by the State Water Board's Division of Water Rights (Division of Water Rights).

Cannabis cultivators, or an entity acting on behalf of cannabis cultivators, shall submit a gage operation and maintenance (O&M) plan prepared by a qualified professional, as defined in the preceding paragraph, to the Deputy Director or the Deputy Director's designee for approval. At a minimum, the gage O&M plan shall include qualifications and names of entities responsible for gage installation, maintenance, and operation; gage specifications and accuracy; gage location; gage installation procedures that ensure accurate operation during the wet season and stability during high flow events; stream flow measurement procedures for development of rating curves that represent wet season flows; telemetry equipment; and an O&M schedule and procedures. The Deputy Director may require additional information from the cannabis cultivator to support the request. The Deputy Director may include additional requirements as part of any approval of a gage O&M plan.

Prior to October 31, during each water year of gage operation, an annual maintenance and operation summary report prepared by a qualified professional, as defined above in this Requirement, shall be submitted to the Division of Water Rights that includes, at a minimum: qualifications and names of entities responsible for maintenance and operation; maintenance activities or operational issues for the prior water year of operation; quality assured gage stage and flow data collected and analyzed for prior water year; rating curves for prior and upcoming water year of operation; data collected to establish rating curves for prior and upcoming water year of operation; and any anticipated maintenance plans or operational issues for the upcoming water year. The gage data shall be provided to the Division of Water Rights in a format retrievable and viewable using Microsoft Excel, Microsoft Access, or other software program authorized by the Deputy Director.

³⁵ State Water Board's cannabis cultivation webpage:
http://www.waterboards.ca.gov/water_issues/programs/cannabis/index.shtml

SECTION 4 – WATERSHED COMPLIANCE GAGE ASSIGNMENTS

Watershed Compliance Gage Assignments

The following tables show the compliance gage numeric instream flow Requirements by Region. The State Water Board is developing an online mapping tool to assist cannabis cultivators with determining which compliance gage applies to them and whether they may divert water. It is anticipated that the online mapping tool will allow cannabis cultivators to enter their address or otherwise locate their point of diversion to identify their assigned watershed compliance gage. The compliance gage assignments may change as more information becomes available. To ensure cannabis cultivators are reporting in accordance with the appropriate gage, the cannabis cultivator is required to check the website for their compliance gage assignment at least daily and prior to diverting water to ensure water is available to divert at that gage (i.e., the real-time daily average flow is greater than the Numeric Flow Requirement at the assigned compliance gage).

Table 1. Klamath Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Agency	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11516530	KLAMATH R BL IRON GATE DAM CA	USGS	828	828	828	828	1,013	1,287
11517000	SHASTA R NR MONTAGUE CA	USGS	114	114	114	176	194	107
11517500	SHASTA R NR YREKA CA	USGS	128	128	129	197	222	119
11519500	SCOTT R NR FORT JONES CA	USGS	293	327	467	454	379	161
11520500	KLAMATH R NR SEIAD VALLEY CA	USGS	1,364	1,364	1,364	1,433	2,354	1,687
11521500	INDIAN C NR HAPPY CAMP CA	USGS	181	368	372	365	319	35
11522500	SALMON R A SOMES BAR CA	USGS	758	1,035	1,306	1,265	1,243	202
11523000	KLAMATH R A ORLEANS	USGS	2,631	2,631	2,631	3,424	5,131	1,156
11523200	TRINITY R AB COFFEE C NR TRINITY CENTER CA	USGS	162	162	185	220	257	39
11525530	RUSH C NR LEWISTON CA	USGS	15	22	29	31	31	2
11525630	GRASS VALLEY C NR LEWISTON CA	USGS	23	32	48	51	47	3.7
11525670	INDIAN C NR DOUGLAS CITY CA	USGS	20	28	40	44	43	3
11525854	TRINITY R A DOUGLAS CITY CA	USGS	957	1,022	1,388	1,628	1,492	228
11526400	TRINITY R AB NF TRINITY R NR HELENA CA	USGS	1,122	1,237	1,702	1,951	1,782	273
11526500	NF TRINITY R A HELENA CA	USGS	146	175	246	269	253	32
11527000	TRINITY R NR BURNT RANCH CA	USGS	1,320	1,534	2,105	2,415	2,239	324
11528700	SF TRINITY R BL HYAMPOM CA	USGS	572	898	1,331	1,372	1,255	77
11530000	TRINITY R A HOOPA CA	USGS	2,349	3,440	4,712	5,165	4,772	423
11530500	KLAMATH R NR	USGS	9,785	10,162	14,400	13,657	16,450	4,789

Gage Number	Gage Name	Agency	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
	KLAMATH CA							
11532500	SMITH R NR CRESCENT CITY CA	USGS	1,758	3,261	3,382	2,865	2,623	288
CLE	TRINITY LAKE	US Bureau of Reclamation	749	849	1,117	1,288	1,169	188
SPU	SHASTA R AT GRENADA PUMP PLANT	CA Dept of Water Resources, NRO	47	47	47	68	77	47

Table 2. Upper Sacramento Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Agency	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11342000	SACRAMENTO R A DELTA CA	USGS	486	645	800	1,037	894	139
11345500	SF PIT R NR LIKELY CA	USGS	28	28	28	28	28	35
11348500	PIT R NR CANBY CA	USGS	125	132	116	116	116	122
11361000	BURNEY C A BURNEY FALLS NR BURNEY CA	USGS	84	84	94	123	132	58
HCB	HAT CK BLW HAT CK	CA Dept of Water Resources	85	85	85	85	99	83
HCN	HAT CK NR HAT CK	CA Dept of Water Resources	73	74	74	74	76	60
SHA	SHASTA DAM (USBR)	US Bureau of Reclamation	1,792	1,792	2,207	3,096	4,145	904

Table 3. North Eastern Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
SSD	SUSAN R NR STANDISH	CA Dept of Water Resources	65	65	65	73	81	44
SSU	SUSAN RIVER AT SUSANVILLE	CA Dept of Water Resources	54	54	54	56	71	39
WCD	WILLOW CREEK NEAR STANDISH	CA Dept of Water Resources	99	99	99	106	115	76

Table 4. North Coast Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11473900	MF EEL R NR DOS RIOS CA	USGS	621	1,138	1,592	1,450	1,279	18
11475000	EEL R A FORT SEWARD CA	USGS	1,918	3,768	5,252	4,850	3,814	73
11475560	ELDER C NR BRANSCOMB CA	USGS	11	25	31	25	22	1.3
11475610	CAHTO C NR LAYTONVILLE CA	USGS	7.9	18	23	19	15	2.4
11475800	SF EEL R A LEGGETT CA	USGS	347	783	980	851	665	25
11476500	SF EEL R NR MIRANDA CA	USGS	749	1,708	2,125	1,857	1,424	54
11476600	BULL C NR WEOTT CA	USGS	45	102	123	112	88	1.9
11477000	EEL R A SCOTIA CA	USGS	3,293	7,218	9,280	8,443	6,013	145
11478500	VAN DUZEN R NR BRIDGEVILLE CA	USGS	323	728	814	748	627	12
11480390	MAD R AB RUTH RES NR FOREST GLEN CA	USGS	100	213	257	247	203	1.1
11481000	MAD R NR ARCATA CA	USGS	641	1,406	1,555	1,453	1,245	57
11481200	LITTLE R NR TRINIDAD CA	USGS	54	127	132	111	101	6.3
11481500	REDWOOD C NR BLUE LAKE CA	USGS	96	197	221	211	203	6.7
11482500	REDWOOD C A ORICK CA	USGS	406	901	987	856	794	28

Table 5. Middle Sacramento Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11370500	SACRAMENTO R A KESWICK CA	USGS	1,786	1,786	2,275	3,155	3,802	914
11372000	CLEAR C NR IGO CA	USGS	197	296	403	503	406	35
11374000	COW C NR MILLVILLE CA	USGS	284	500	722	690	557	29
11376000	COTTONWOOD C NR COTTONWOOD CA	USGS	461	758	1,215	1,265	995	45
11376550	BATTLE C BL COLEMAN FISH HATCHERY NR COTTONWOOD CA	USGS	185	185	255	284	264	171
11377100	SACRAMENTO R AB BEND BRIDGE NR RED BLUFF CA	USGS	2,550	2,676	3,841	5,157	5,106	1,291
11379500	ELDER C NR PASKENTA CA	USGS	46	70	123	129	101	3
11381500	MILL C NR LOS MOLINOS CA	USGS	101	101	142	148	159	46
11383500	DEER C NR VINA CA	USGS	165	171	246	267	289	49
11390500	SACRAMENTO R BL WILKINS SLOUGH NR GRIMES CA	USGS	5,668	7,679	14,170	12,964	12,083	854
BIC	BIG CHICO CREEK NEAR CHICO	CA Dept of Water Resources	66	74	125	138	135	16
BLB	BLACK BUTTE	US Army Corps of Engineers	278	422	749	796	615	29
GRI	GRINDSTONE CK NR GRINDSTONE RANCHERIA	US Bureau of Reclamation	93	136	228	222	179	12
MUC	MUD CREEK NEAR CHICO	CA Dept of Water Resources	78	89	162	180	181	14
NCO	N FK COTTONWOOD CK ABV LK AT BRDG NR ONO	CA Dept of Water Resources, NRO	9.5	14	20	22	19	1.5
SCG	STONY CK NR GRIZZLY FLAT (CO RD 200A)	US Bureau of Reclamation	258	391	698	732	572	26
SUW	STONY CREEK NR SUWANNA RANCH (CO RD 410)	US Bureau of Reclamation	119	185	328	343	257	12
THO	THOMES CREEK AT PASKENTA	CA Dept of Water Resources	149	217	334	348	281	17

Table 6. Southern Sacramento Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11335000	COSUMNES R A MICHIGAN BAR CA	USGS	170	190	323	391	382	23
11336580	MORRISON C NR SACRAMENTO CA	USGS	3.4	4.1	12	13	9.2	1
11336585	LAGUNA C NR ELK GROVE CA	USGS	2.5	3.1	9.4	10	7	1.1
11401920	SPANISH C A QUINCY CA	USGS	55	58	74	86	91	17
11402000	SPANISH C AB BLACKHAWK C AT KEDDIE CA	USGS	118	118	154	182	190	34
11413000	N YUBA R BL GOODYEARS BAR CA	USGS	292	321	385	416	435	84
11421000	YUBA R NR MARYSVILLE CA	USGS	1,102	1,380	1,736	1,929	1,964	324
11425500	SACRAMENTO R A VERONA CA	USGS	10,548	14,051	25,774	24,889	22,688	1,424
11427000	NF AMERICAN R A NORTH FORK DAM CA	USGS	284	354	429	471	456	85
11447360	ARCADE C NR DEL PASO HEIGHTS CA	USGS	3.3	4.4	13	13	11	1.2
11447650	SACRAMENTO R A FREEPORT CA	USGS	7,256	7,645	12,738	16,071	14,817	2,601
11449500	KELSEY C NR KELSEYVILLE CA	USGS	29	54	78	84	58	3.3
11451000	CACHE C NR LOWER LAKE CA	USGS	277	446	814	821	610	19
11451100	NF CACHE C A HOUGH SPRING NR CLEARLAKE OAKS CA	USGS	43	77	125	123	93	1
11451300	NF CACHE C NR CLEARLAKE OAKS CA	USGS	60	93	166	176	135	5.2
11451715	BEAR C AB HOLSTEN CHIMNEY CYN NR RUMSEY CA	USGS	16	33	67	74	49	1.5
11451800	CACHE C A RUMSEY CA	USGS	437	645	1,346	1,300	979	30
11453500	PUTAH C NR GUENOC CA	USGS	82	137	234	251	172	4

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11455420	SACRAMENTO R A RIO VISTA CA	USGS	14,009	19,070	35,609	34,051	30,009	1,715
BPG	BEAR RIVER AT PLEASANT GROVE RD	CA Dept of Water Resources	133	150	252	301	270	18
CMF	COSUMNES R MID FORK NR SOMERSET	CA Dept of Water Resources	53	53	73	91	98	19
CNF	COSUMNES R N FORK NR EL DORADO	CA Dept of Water Resources	91	94	146	173	177	32
FOL	FOLSOM LAKE	US Bureau of Reclamation	1,177	1,228	1,603	1,838	1,904	413
FSB	FEATHER R ABV STAR BEND	CA Dept of Water Resources/NCRO	3,331	3,331	4,258	5,051	5,297	1,165
GRL	FEATHER RIVER NEAR GRIDLEY	CA Dept of Water Resources/O & M	2,152	2,179	2,537	3,050	3,162	704
ICR	INDIAN CREEK BELOW INDIAN FALLS	CA Dept of Water Resources	188	188	203	302	362	54
KCK	KELSEY CK BLW KELSEYVILLE	CA Dept of Water Resources	32	56	88	95	66	2.9
MCU	MIDDLE CK NR UPPER LAKE	CA Dept of Water Resources	31	52	83	85	72	1.8
MER	FEATHER RIVER AT MERRIMAC	CA Dept of Water Resources/O & M	514	514	586	771	921	167
MFP	MIDDLE FORK FEATHER RIVER NEAR PORTOLA	CA Dept of Water Resources	94	94	94	112	127	83
ORO	OROVILLE DAM	CA Dept of Water Resources/O & M	2,128	2,147	2,509	3,014	3,036	696
SFH	SOUTH HONCUT CREEK NEAR BANGOR	CA Dept of Water Resources/NCRO	22	38	61	62	50	2

Table 7. North Central Coast Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11456000	NAPA R NR ST HELENA CA	USGS	52	88	153	159	110	1.6
11458000	NAPA R NR NAPA CA	USGS	109	172	335	342	229	3.5
11458500	SONOMA C A AGUA CALIENTE CA	USGS	38	65	110	117	76	3.7
11459500	NOVATO C A NOVATO CA	USGS	7.5	13	23	24	15	1.1
11460000	CORTE MADERA C A ROSS CA	USGS	10	20	32	32	20	1
11460151	REDWOOD C A HWY 1 BRIDGE A MUIR BEACH CA	USGS	4.6	8.2	13	11	7.3	1.5
11461000	RUSSIAN R NR UKIAH CA	USGS	69	138	197	189	143	3.8
11463000	RUSSIAN R NR CLOVERDALE CA	USGS	324	606	940	935	677	8.9
11463200	BIG SULPHUR C NR CLOVERDALE CA	USGS	63	115	181	190	128	2.9
11463900	MAACAMA C NR KELLOGG CA	USGS	35	61	103	103	73	1.4
11464000	RUSSIAN R NR HEALDSBURG CA	USGS	521	972	1,522	1,539	1,082	14
11465200	DRY C NR GEYSERVILLE CA	USGS	131	253	391	379	253	6.7
11465750	LAGUNA DE SANTA ROSA C NR SEBASTOPOL CA	USGS	33	53	103	101	66	3.8
11466320	SANTA ROSA C A WILLOWSIDE RD NR SANTA ROSA CA	USGS	44	76	132	135	89	2
11466800	MARK WEST C NR MIRABEL HEIGHTS CA	USGS	134	226	407	412	273	7.2
11467000	RUSSIAN R NR GUERNEVILLE CA	USGS	878	1,645	2,585	2,592	1,829	26
11467200	AUSTIN C NR CAZADERO CA	USGS	64	139	184	179	120	1.3
11467510	SF GUALALA R NR THE SEA RANCH CA	USGS	149	323	437	424	279	4.9

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11467553	NF GUALALA R AB SF GUALALA R NR GUALALA CA	USGS	39	77	117	107	80	3.9
11468000	NAVARRO R NR NAVARRO CA	USGS	200	407	611	557	422	8.4
11468500	NOYO R NR FORT BRAGG CA	USGS	82	169	240	212	175	5.5
11468900	MATTOLE R NR ETTERSBURG CA	USGS	113	268	306	265	212	7.8
11469000	MATTOLE R NR PETROLIA CA	USGS	406	942	1,118	960	769	27

Table 8. Tahoe Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
10296000	W WALKER RV BLW L WALKER RV NR COLEVILLE, CA	USGS	89	102	102	102	102	79
10296500	W WALKER RV NR COLEVILLE, CA	USGS	103	106	106	106	106	92
10308200	E FK CARSON RV BLW MARKLEEVILLE CK NR MARKLEEVILLE	USGS	117	137	137	137	137	71
10310000	W FK CARSON RV AT WOODFORDS, CA	USGS	35	41	41	41	41	22
10336610	UPPER TRUCKEE RV AT SOUTH LAKE TAHOE, CA	USGS	27	35	35	35	35	11
10336645	GENERAL C NR MEEKS BAY CA	USGS	5	6.2	6.2	6.2	6.2	1.2
10336660	BLACKWOOD C NR TAHOE CITY CA	USGS	11	13	13	13	13	2.1
10336780	TROUT CK NR TAHOE VALLEY, CA	USGS	14	14	14	14	14	15
10343500	SAGEHEN C NR TRUCKEE CA	USGS	5.2	5.2	5.2	5.2	5.2	2.2

Table 9. South Central Coast Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11141280	LOPEZ C NR ARROYO GRANDE CA	USGS	3.8	3.8	8.1	10	8.4	2.2
11143000	BIG SUR R NR BIG SUR CA	USGS	38	43	90	102	85	13
11143200	CARMEL R A ROBLES DEL RIO CA	USGS	40	67	158	210	162	3.9
11143250	CARMEL R NR CARMEL CA	USGS	40	71	175	244	181	5.5
11147500	SALINAS R A PASO ROBLES CA	USGS	20	43	117	149	114	1.9
11148500	ESTRELLA R NR ESTRELLA CA	USGS	22	28	61	96	91	1.5
11148900	NACIMIENTO R BL SAPAQUE C NR BRYSON CA	USGS	27	63	156	177	124	4.7
11149400	NACIMIENTO R BL NACIMIENTO DAM NR BRADLEY CA	USGS	16	34	108	118	80	4.7
11149900	SAN ANTONIO R NR LOCKWOOD CA	USGS	33	65	140	168	113	6.2
11150500	SALINAS R NR BRADLEY CA	USGS	75	136	350	411	399	4.4
11151300	SAN LORENZO C BL BITTERWATER C NR KING CITY CA	USGS	3.9	7.7	18	24	23	1.2
11151700	SALINAS R A SOLEDAD CA	USGS	107	167	429	519	497	11
11152000	ARROYO SECO NR SOLEDAD CA	USGS	64	99	206	280	209	9.8
11152050	ARROYO SECO BL RELIZ C NR SOLEDAD CA	USGS	57	96	208	278	189	8.4
11152500	SALINAS R NR SPRECKELS CA	USGS	125	219	539	666	618	16
11153000	PACHECO C NR DUNNEVILLE CA	USGS	4.2	9.7	27	36	24	2.3
11153650	LLAGAS C NR GILROY	USGS	11	18	59	53	37	1.3

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11156500	SAN BENITO R NR WILLOW CREEK SCHOOL CA	USGS	7	17	34	59	50	1.5
11157500	TRES PINOS C NR TRES PINOS CA	USGS	3.5	10	29	35	26	1.4
11158600	SAN BENITO R A HWY 156 NR HOLLISTER CA	USGS	15	32	79	99	80	1.8
11159000	PAJARO R A CHITTENDEN CA	USGS	50	91	288	279	210	3.5
11159200	CORRALITOS C A FREEDOM CA	USGS	10	16	29	28	22	2.3
11160000	SOQUEL C A SOQUEL CA	USGS	17	26	45	48	37	2.3
11160500	SAN LORENZO R A BIG TREES CA	USGS	52	71	129	145	110	16
11161000	SAN LORENZO R A SANTA CRUZ CA	USGS	57	83	144	159	119	17
11162500	PESCADERO C NR PESCADERO CA	USGS	12	23	43	47	36	2.5
11162570	SAN GREGORIO C A SAN GREGORIO CA	USGS	16	25	45	45	35	1.3
11162630	PILARCITOS C A HALF MOON BAY CA	USGS	9	11	21	21	17	2
11164500	SAN FRANCISQUITO C A STANFORD UNIVERSITY CA	USGS	11	17	38	40	29	1.3
11166000	MATADERO C A PALO ALTO CA	USGS	1.4	1.6	4.8	5.4	3.2	1.6
11169025	GUADALUPE R ABV HWY 101 A SAN JOSE CA	USGS	38	58	168	161	104	1.5
11169500	SARATOGA C A SARATOGA CA	USGS	3.1	5.1	9	10	8	1
11169800	COYOTE C NR GILROY CA	USGS	7.3	19	57	65	45	2.1
11172175	COYOTE C AB HWY 237 A MILPITAS CA	USGS	20	52	134	147	100	1.6
11172945	ALAMEDA C AB DIV DAM NR SUNOL CA	USGS	4.2	10	21	23	19	1.6

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11173200	ARROYO HONDO NR SAN JOSE CA	USGS	8.8	20	44	49	39	1.2
11173800	INDIAN C NR SUNOL CA	USGS	0.8	2	4.1	4.2	3.8	2.7
11174600	ALAMO CN NR PLEASANTON CA	USGS	2.9	5.1	16	15	11	1.7
11176400	ARROYO VALLE BL LANG CYN NR LIVERMORE CA	USGS	5.2	16	43	51	38	1
11176500	ARROYO VALLE NR LIVERMORE CA	USGS	6	18	48	58	41	1.3
11176900	ARROYO DE LA LAGUNA A VERONA CA	USGS	12	36	117	114	85	1.2
11180500	DRY C A UNION CITY CA	USGS	0.52	1.5	3.4	3.9	2.9	1.2
11180825	SAN LORENZO C AB DON CASTRO RES NR CASTRO V CA	USGS	1.6	3.3	7.7	8.2	6	1.5
11180900	CROW C NR HAYWARD CA	USGS	1.1	2.6	5.9	6.3	4.8	1.3
11180960	CULL C AB CULL C RES NR CASTRO VALLEY CA	USGS	0.57	1.5	3.5	3.8	3	1.9
11181040	SAN LORENZO C A SAN LORENZO CA	USGS	4	9.5	24	23	18	1.5

Table 10. San Joaquin Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11224000	MF SAN JOAQUIN R NR MAMMOTH LAKES CA	USGS	23	25	28	27	31	13
11251000	SAN JOAQUIN R BL FRIANT CA	USGS	518	711	711	711	768	307
11255575	PANOCH C A I-5 NR SILVER CREEK CA	USGS	3.8	6.3	11	22	20	1
11264500	MERCED R A HAPPY ISLES BRIDGE NR YOSEMITE CA	USGS	75	108	132	135	145	22
11266500	MERCED R A POHONO BRIDGE NR YOSEMITE CA	USGS	138	225	259	259	259	41
11274500	ORESTIMBA C NR NEWMAN CA	USGS	1.1	6.2	18	26	16	2.5
11274630	DEL PUERTO C NR PATTERSON CA	USGS	0.7	2.7	6.8	10	7.6	2.2
11274790	TUOLUMNE R A GRAND CYN OF TUOLUMNE AB HETCH HETCHY	USGS	170	197	225	211	237	66
11276500	TUOLUMNE R NR HETCH HETCHY CA	USGS	272	362	406	409	409	94
11276900	TUOLUMNE R BL EARLY INTAKE NR MATHER CA	USGS	276	377	414	414	414	98
11284400	BIG C AB WHITES GULCH NR GROVELAND CA	USGS	3.7	5.1	9.4	11	9.5	1.1
11285500	TUOLUMNE R A WARDS FERRY BR NR GROVELAND CA	USGS	601	761	761	761	816	292
11289650	TUOLUMNE R BL LAGRANGE DAM NR LAGRANGE CA	USGS	653	767	767	793	950	340
11299600	BLACK C NR COPPEROPOLIS CA	USGS	2.3	4.4	11	11	8.8	1.8
11303000	STANISLAUS R A RIPON CA	USGS	481	504	504	526	639	222

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
BAR	BEAR	US Army Corps of Engineers	6	8.5	19	22	20	1.4
BDV	BLACK RASCAL DIVERSION	US Army Corps of Engineers	1.6	1.6	3.8	4.6	3.3	1.1
BUR	BURNS CREEK DAM	US Army Corps of Engineers	4.2	4.8	12	13	12	1.3
DCM	DRY CREEK AT MODESTO AT CLAUS ROAD	CA Dept of Water Resources	12	12	29	34	28	1.8
FHL	FRESNO R ABV HENLEY LAKE	US Army Corps of Engineers	46	58	103	120	133	2.1
GDW	GOODWIN DAM	US Bureau of Reclamation	479	543	543	543	653	224
GRF	SAN JOAQUIN RIVER AT GRAVELLY FORD	US Bureau of Reclamation	518	697	697	697	759	332
LDC	LITTLE DRY CREEK (USBR)	US Bureau of Reclamation	3.3	4.1	8.9	12	11	1.2
MIL	FRIANT DAM (MILLERTON)	US Bureau of Reclamation	516	720	720	720	764	307
MSN	MERCED RIVER NEAR SNELLING	CA Dept of Water Resources	344	392	460	531	620	146
MST	MERCED RIVER NEAR STEVINSON	CA Dept of Water Resources/SCRO	348	348	436	520	597	130
NHG	NEW HOGAN LAKE	US Army Corps of Engineers	146	200	411	400	346	4.4
NML	NEW MELONES RESERVOIR	US Bureau of Reclamation	481	550	550	550	619	218
OBB	STANISLAUS R AT ORANGE BLOSSOM BRIDGE	CA Dept of Water Resources	486	533	533	533	656	219
TUM	TUOLUMNE MEADOWS	CA Dept of Water Resources	24	24	28	25	32	12

Table 11. Mono Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
10251330	AMARGOSA RV ABV CHINA RANCH WASH NR TECOPA, CA	USGS	47	47	48	75	137	17
10251335	WILLOW CK AT CHINA RANCH, CA	USGS	2.1	2.1	2.1	3.3	4.6	2.5
10260500	DEEP C NR HESPERIA CA	USGS	33	36	59	75	91	7.8
10260950	WF MOJAVE R AB MOJAVE R FORKS RES NR HESPERIA CA	USGS	11	13	28	37	35	2.2
10261500	MOJAVE R A LO NARROWS NR VICTORVILLE CA	USGS	39	42	69	99	98	4.3
10262500	MOJAVE R A BARSTOW CA	USGS	63	104	164	150	144	7.7
10263500	BIG ROCK C NR VALYERMO CA	USGS	6.5	6.5	8.3	13	13	3.9
10265150	HOT C A FLUME NR MAMMOTH LAKES CA	USGS	22	25	27	27	27	22

Table 12. Kern Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11189500	SF KERN R NR ONYX CA	USGS	61	61	61	65	61	39
11200800	DEER C NR FOUNTAIN SPRINGS CA	USGS	6.1	8.3	11	17	18	5.5
11203580	SF TULE R NR CHOLLOLO CAMPGROUND NR PORTERVILLE CA	USGS	4.9	6.3	6.3	7.5	9.8	2.7
11204100	SF TULE R NR RESERVATION BNDRY NR PORTERVILLE CA	USGS	11	14	19	25	29	3.7
11206820	MARBLE FORK KAWEAH R AB HORSE C NR LODGEPOLE CA	USGS	4.7	6.1	6.9	6.8	8.3	2.3
11224500	LOS GATOS C AB NUNEZ CYN NR COALINGA CA	USGS	1	3	6.2	10	9.3	3.2
11253310	CANTUA C NR CANTUA CREEK CA	USGS	0.53	1.3	2.5	4	4.3	1.8
ISB	ISABELLA DAM	US Army Corps of Engineers	274	274	274	274	274	310
KKV	KERN R AT KERNVILLE	US Army Corps of Engineers	255	290	290	290	290	172
KRT	KINGS R NR TRIMMER	US Army Corps of Engineers	441	695	759	759	759	277
LCV	DRY CREEK NEAR LEMONCOVE	US Army Corps of Engineers	13	19	33	40	42	1
PDR	MILL CREEK NEAR PIEDRA	US Army Corps of Engineers	16	27	50	59	64	1.2
PNF	PINE FLAT DAM	US Army Corps of Engineers	475	715	715	715	715	329
SCC	SUCCESS DAM	US Army Corps of Engineers	51	61	75	104	111	16
TRM	TERMINUS DAM	US Army Corps of Engineers	149	177	177	197	226	89
TRR	KAWEAH RIVER AT THREE RIVERS	US Army Corps of Engineers	125	186	186	186	207	62

Table 13. South Coast Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11014000	JAMUL C NR JAMUL CA	USGS	1.8	2.9	5.8	11	9.9	3.4
11015000	SWEETWATER R NR DESCANSO CA	USGS	5.1	6.3	11	16	19	2.9
11016200	SWEETWATER R A DEHESA CA	USGS	6.2	9.4	18	28	29	3.5
11023000	SAN DIEGO R A FASHION VALLEY AT SAN DIEGO CA	USGS	14	21	42	64	71	4
11023340	LOS PENASQUITOS C NR POWAY CA	USGS	1.5	1.8	5.1	6.5	6.4	1.6
11027000	GUEJITO C NR SAN PASQUAL CA	USGS	1.3	1.5	3.7	5.5	4.4	2.2
11028500	SANTA MARIA C NR RAMONA CA	USGS	3.2	3.2	7.4	11	9.6	1
11042000	SAN LUIS REY R A OCEANSIDE CA	USGS	17	30	70	96	89	1.2
11042400	TEMECULA C NR AGUANGA CA	USGS	7.4	7.7	16	24	21	1.6
11044300	SANTA MARGARITA R A FPUD SUMP NR FALLBROOK CA	USGS	24	24	55	78	71	2.8
11044350	SANDIA C NR FALLBROOK CA	USGS	0.28	0.76	2	3.4	2.2	1
11044800	DE LUZ C NR DE LUZ CA	USGS	0.52	1.3	3.1	5.8	4	1
11046000	SANTA MARGARITA R A YSIDORA CA	USGS	25	27	59	93	81	3
11046100	LAS FLORES C NR OCEANSIDE CA	USGS	0.66	1	2.6	3.9	2.9	1
11046300	SAN MATEO C NR SAN CLEMENTE CA	USGS	1.8	4.7	11	19	14	1.1
11046360	CRISTIANITOS C AB SAN MATEO C NR SAN CLEMENTE CA	USGS	0.88	1.4	3.6	6	4	1.2
11047300	ARROYO TRABUCO A SAN JUAN CAPISTRANO CA	USGS	1.4	2.9	7.8	10	9.6	3.4
11048200	AGUA CHINON WASH NR IRVINE CA	USGS	0.05	0.15	0.41	0.64	0.45	1

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11051499	SANTA ANA R NR MENTONE (RIVER ONLY) CA	USGS	39	39	41	58	69	18
11055800	CITY C NR HIGHLAND CA	USGS	3.6	4.4	8	11	11	1.3
11057500	SAN TIMOTEO C NR LOMA LINDA CA	USGS	6.5	7.3	14	24	20	1.2
11058500	E TWIN C NR ARROWHEAD SPRINGS CA	USGS	1.6	1.7	3.3	4.7	4.4	1
11062000	LYTLE C NR FONTANA CA	USGS	22	22	37	47	47	11
11063510	CAJON C BL LONE PINE C NR KEENBROOK CA	USGS	10	10	19	28	25	3.1
11063680	DEVIL CYN C NR SAN BERNARDINO CA	USGS	1.7	1.7	4.1	4.8	3.8	1.8
11069500	SAN JACINTO R NR SAN JACINTO	USGS	12	13	21	32	30	3.5
11070365	SAN JACINTO R NR SUN CITY CA	USGS	22	25	62	75	66	2.9
11073360	CHINO C A SCHAEFER AVENUE NR CHINO CA	USGS	8.9	11	23	29	27	3
11073495	CUCAMONGA C NR MIRA LOMA CA	USGS	9.5	10	26	37	25	1.5
11078000	SANTA ANA R A SANTA ANA CA	USGS	140	166	368	502	425	16
11098000	ARROYO SECO NR PASADENA CA	USGS	3.7	3.7	8.1	11	9.2	1.8
11109000	SANTA CLARA R NR PIRU CA	USGS	43	43	87	157	120	1.1
11109600	PIRU CREEK ABOVE LAKE PIRU CA	USGS	31	31	61	95	80	3.7
11109800	PIRU CREEK BELOW SANTA FELICIA DAM CA	USGS	34	34	67	113	90	2.6
11111500	SESPE CREEK NEAR WHEELER SPRINGS CA	USGS	4.9	7.6	16	28	22	1.7
11113000	SESPE C NR FILLMORE	USGS	34	40	91	150	104	1
11113500	SANTA PAULA C NR SANTA PAULA	USGS	5.1	6.1	14	23	16	1.4
11114495	MATILIJA C NR RES NR MATILIJA HOT SPRINGS CA	USGS	8.4	12	27	43	30	1.8
11118500	VENTURA R NR VENTURA	USGS	24	34	90	135	83	1.9

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
11119500	CARPINTERIA C NR CARPINTERIA CA	USGS	2.3	3.2	8.7	13	7.6	1.3
11119750	MISSION C NR MISSION ST NR SANTA BARBARA CA	USGS	1.3	1.7	4.4	6.8	4.1	1.8
11120000	ATASCADERO C NR GOLETA CA	USGS	1.9	2.9	7.7	11	7.7	1.4
11120500	SAN JOSE C NR GOLETA CA	USGS	0.86	1.2	3.2	4.4	3	1.1
11123500	SANTA YNEZ R BL LOS LAURLS CYN NR SNTA YNEZ CA	USGS	34	55	124	213	147	2.2
11124500	SANTA CRUZ C NR SANTA YNEZ CA	USGS	5.1	11	22	36	32	2.6
11128250	ALAMO PINTADO C NR SOLVANG CA	USGS	2	3.3	8.5	12	9.1	1.8
11128500	SANTA YNEZ R A SOLVANG CA	USGS	56	95	239	341	255	3
11129800	ZACA C NR BUELLTON CA	USGS	1.9	3.6	9.6	13	10	2.2
11132500	SALSIPUEDES C NR LOMPOC CA	USGS	2.4	4.7	12	18	13	2.1
11134000	SANTA YNEZ R A H ST NR LOMPOC CA	USGS	62	110	281	368	312	9.6
11135800	SAN ANTONIO C A LOS ALAMOS CA	USGS	2	3.8	9.8	15	10	1.1
11136100	SAN ANTONIO C NR CASMALIA CA	USGS	5.2	8.5	23	37	26	1.2
11136600	SANTA BARBARA CYN C NR VENTUCOPA CA	USGS	2.5	3.2	5.8	10	8.8	2
11136800	CUYAMA R BL BUCKHORN CYN NR SANTA MARIA CA	USGS	22	33	59	98	92	3
11137900	HUASNA R NR ARROYO GRANDE CA	USGS	4.1	9.2	21	31	23	3.4
11138500	SISQUOC R NR SISQUOC CA	USGS	9.4	24	41	77	77	1.3
11140000	SISQUOC R NR GAREY	USGS	17	44	96	134	143	2.6
11140585	SANTA MARIA R A SUEY CROSSING NR SANTA MARIA CA	USGS	44	81	148	266	241	7.6
11141050	ORCUTT C NR ORCUTT CA	USGS	0.84	1.2	2.8	5.1	3.2	1.4

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
CCH	CACHUMA LAKE	US Bureau of Reclamation	47	78	175	295	212	2.7
CSK	CASTAIC CANYON CK Z3-2388	CA Dept of Water Resources, Southern Field Div	2.1	2.1	3.7	7.8	6.1	2.5
ECC	ELIZABETH CANYON CK	CA Dept of Water Resources, Southern Field Div	4.1	4.9	10	18	13	2.5
FCK	FISH CANYON CK	CA Dept of Water Resources, Southern Field Div	2.6	2.8	5.5	10	7.6	1.5
PIR	PIRU CREEK BLW BUCK CR NR PYRAMID LAKE	CA Dept of Water Resources	19	23	42	70	59	3.8

Table 14. South Eastern Desert Region Compliance Gage Numeric Instream Flow Requirements

Gage Number	Gage Name	Source	November (cfs)	December (cfs)	January (cfs)	February (cfs)	March (cfs)	Aquatic Base Flow (cfs)
10254050	SALT C NR MECCA	USGS	2.6	1.2	3	4.4	2.6	2
10256500	SNOW C NR WHITE WATER CA	USGS	1.8	1.8	2.4	3	3.2	1.5
10257600	MISSION C NR DESERT HOT SPRINGS CA	USGS	1.5	1.5	2.2	3.4	3.1	1.1
10258000	TAHQUITZ C NR PALM SPRINGS CA	USGS	1.7	2.4	3.2	3.7	4.6	1.5
10258500	PALM CYN C NR PALM SPRINGS CA	USGS	1.2	1.9	4.1	6.2	5.8	1
10259000	ANDREAS C NR PALM SPRINGS CA	USGS	1.1	1.2	1.7	1.9	1.9	1
10259100	WHITEWATER R A RANCHO MIRAGE CA	USGS	40	50	69	98	86	15
10259200	DEEP C NR PALM DESERT CA	USGS	0.57	0.71	1.5	2.2	1.8	1
10259300	WHITEWATER R A INDIO CA	USGS	47	71	83	116	95	18
9423350	CARUTHERS C NR IVANPAH CA	USGS	0.25	0.29	0.39	0.48	0.86	1

SECTION 5 – PLANNING AND REPORTING

Technical Report Preparation Requirements for Cannabis General Order

Enrollees under the Cannabis General Order are required to submit technical reports to the appropriate Regional Water Board. The report(s) shall be transmitted in portable document format (PDF) to the e-mail address provided in the notice of receipt provided to the Cannabis General Order Enrollee as proof of enrollment. A description of each report and deadline for its submittal is provided below. The table below summarizes report submittal requirements, by tier and risk level, and Cannabis General Order Attachment D contains guidance regarding contents of required reports.

Summary of Technical Reports Required by Tier and Risk Level

Tier	Risk Level	Technical Reports
Conditionally Exempt	Not Applicable	Site Closure Report
Tier 1	All	Site Management Plan
Tier 1	Moderate	Site Erosion and Sediment Control Plan
Tier 1	High	Disturbed Area Stabilization Plan
Tier 1	All	Site Closure Report
Tier 2	All	Site Management Plan
Tier 2	Moderate	Site Erosion and Sediment Control Plan
Tier 2	High	Disturbed Area Stabilization Plan
Tier 2	All	Nitrogen Management Plan
Tier 2	All	Site Closure Report

Conditionally exempt cannabis cultivators that can no longer meet the requirements to qualify for conditional exemptions may have to enroll as a Tier 1 or Tier 2 site. If so, cannabis cultivators that no longer qualify for the conditionally exempt cannabis cultivation site status shall submit the technical and monitoring reports associated with their tier status and risk level.

Applicants or current cannabis cultivators that do not comply with the conditional exemptions (enrolled as Tier 1 or Tier 2) must comply with the riparian setback and slope limits and are classified as low, moderate or high risk, as described below:

- **Low Risk:** A cannabis cultivation site is classified as low risk if no part of the disturbed area is located on a slope of 30% or greater. Such cannabis cultivators shall register as low risk and submit a *Site Management Plan*.
- **Moderate Risk:** A cannabis cultivation site is classified as moderate risk if any part of the disturbed area is located on a slope greater than 30 percent and less than 50 percent. Such cannabis cultivators shall register as moderate risk and submit a *Site Erosion and Sediment Control Plan*.
- **High Risk:** A cannabis cultivation site is classified as high risk if any part of the disturbed area exists within the riparian setback limits. Such cannabis cultivators shall register as

high risk, submit a *Disturbed Area Stabilization Plan*, and shall address the compliance issue as described below. Because such cannabis cultivators pose a higher risk to water quality and will require a higher level of Regional Water Board oversight, they are subject to a higher application and annual fee. When the cannabis cultivation site is reconfigured to comply with the riparian setbacks, the cannabis cultivator can request the Regional Water Board reclassify the site to a lower risk level and allow a lower annual fee to be assessed.

Site Management Plan

Within 90 days of the issuance of a notice of receipt, Tier 1 and Tier 2 cannabis cultivators shall submit and implement a *Site Management Plan* that describes how the cannabis cultivator is complying with the Requirements listed in Attachment A. The description shall describe how the Best Practicable Treatment or Control (BPTC) measures are implemented (e.g., for petroleum fuel storage, specify the specific product or means of compliance). Cannabis cultivators that are landowners of cannabis cultivation sites in North Coast Regional Water Board jurisdiction are required to submit and implement *Site Management Plans* that describe how the Requirements are implemented property-wide, including Requirements implemented to address discharges from legacy activities. The *Site Management Plan* may include a schedule to achieve compliance, but all work must be completed by **the onset of the winter period each year**. (The winter period start date does not relieve a cannabis cultivator from implementing the interim soil stabilization Requirements described in Attachment A of this Policy. Interim measures are those that are implemented immediately upon site development.) Attachment D of the Cannabis General Order provides guidance on the contents of the *Site Management Plan*.

Site Erosion and Sediment Control Plan

Tier 1 or Tier 2 cannabis cultivators classified as moderate risk (any portion of the disturbed area is located on a slope greater than 30 percent and less than 50 percent), shall submit a *Site Erosion and Sediment Control Plan* that describes how the cannabis cultivator will implement the Requirements listed in Attachment A of this Policy. Because moderate risk sites are located on steeper slopes, additional Requirements, or a higher density of Requirements may be appropriate to achieve the goal of minimizing the discharge of sediment off-site. The report shall include an analysis of slope stability. The report shall be approved by the Regional Water Board Executive Officer prior to implementation.

Consistent with the Business and Professions Code, the Forest Practice Act, and other state laws, certain technical report preparation, design calculations, and report preparation must be prepared under the supervision of a California licensed civil engineer, professional forester, or professional geologist. When required, the *Site Erosion and Sediment Control Plan* shall be prepared by an individual qualified as described below:

- i. A California Registered Professional Civil Engineer.
- ii. A California Registered Professional Geologist.
- iii. A California Certified Engineering Geologist.
- iv. A California Registered Landscape Architect.
- v. A Professional Hydrologist registered through the American Institute of Hydrology.
- vi. A Certified Professional in Erosion and Sediment Control (CPESC)TM registered through EnviroCert International, Inc.

- vii. A Certified Professional in Storm Water Quality (CPSWQ)TM registered through EnviroCert International, Inc.
- viii. A Professional in Erosion and Sediment Control registered through the National Institute for Certification in Engineering Technologies (NICET).

Attachment D of the Cannabis General Order, provides guidance on the contents of the *Site Erosion and Sediment Control Plan*.

Disturbed Area Stabilization Plan

Tier 1 or Tier 2 cannabis cultivators classified as high risk (any portion of the disturbed area exists within the riparian setbacks Requirements specified in Section 1 of this Policy except as authorized under 404/401 CWA permits, a CDFW LSA Agreement, coverage under the Cannabis General Order water quality certification, or site-specific WDRs issued by the Regional Water Board), shall submit a *Disturbed Area Stabilization Plan* that describes how compliance with the riparian setbacks will be achieved. The report shall be approved by the Regional Water Board Executive Officer prior to implementation.

Areas disturbed upon initial site development that are located within the riparian setback specified in the Policy are considered disturbed area and will place the cannabis cultivation site under the high risk level. Access roads and watercourse crossings designed, constructed, and maintained consistent with the Road Handbook are not considered disturbed areas.

Consistent with the Business and Professions Code, the Forest Practice Act, and other state laws, certain technical report preparation, design calculations, and report preparation must be prepared under the supervision of a California licensed civil engineer, professional forester, or professional geologist.

When required, the *Disturbed Area Stabilization Plan* shall be prepared by a qualified professional as described in this attachment (Attachment A).

If the cannabis cultivator cannot achieve compliance by the next onset of the winter period (stabilization work will continue into the winter period or will continue the following year), the Cannabis Cultivator must include a time schedule and scope of work for approval by the Regional Water Board Executive Officer and use in preparing an enforcement order. Attachment D of the Cannabis General Order provides guidance on the contents of the *Disturbed Area Stabilization Plan*.

Nitrogen Management Plan

Within 90 days of the issuance of a notice of receipt, all Tier 2 cannabis cultivators with a cannabis cultivation area, or aggregate of cultivation areas, greater than one acre shall submit a *Nitrogen Management Plan* (NMP) for the cannabis cultivation site. The NMP shall calculate all the nitrogen applied to the cannabis cultivation area (dissolved in irrigation water, originating in soil amendments, and applied fertilizers) and describe procedures to limit excessive fertilizer application. Attachment D of the Cannabis General Order provides guidance on the contents of a *Nitrogen Management Plan*.

Site Closure Report

At least 90 days prior to ending cannabis cultivation at a site, a registered (conditionally exempt) or enrolled (Tier 1 or Tier 2) cannabis cultivator shall submit a *Site Closure Report* that describes how the site will be decommissioned to prevent sediment and turbidity discharges that degrade water quality. If construction activities are proposed in the *Site Closure Report*, a project implementation schedule shall be included in the report. Attachment D of the Cannabis

General Order provides guidance on the contents of the *Site Closure Report*. A Notice of Termination must be submitted (Attachment C of the Cannabis General Order) with the *Site Closure Report*.

SECTION 6 – USEFUL GUIDANCE DOCUMENTS

1. Handbook for Forest, Ranch, & Rural Roads: A Guide for Planning, Designing, Constructing, Reconstructing, Upgrading, Maintaining, and Closing Wildland Roads
<http://www.pacificwatershed.com/sites/default/files/RoadsEnglishBOOKapril2015b.pdf>
2. A Water Quality and Stream Habitat Protection Manual for County Road Maintenance in Northwestern California Watersheds
<http://www.5counties.org/roadmanual.htm>
3. Construction Site BMP Fact Sheets
<http://www.dot.ca.gov/hq/construc/stormwater/factsheets.htm>
4. United States Environmental Protection Agency Riparian/Forested Buffer
<https://nepis.epa.gov/Exe/ZyPDF.cgi/2000W45Y.PDF?Dockey=2000W45Y.PDF>
5. Creating Effective Local Riparian Buffer Ordinances
http://www.ohioenvironmentallawblog.com/uploads/file/UGA%20riparian_buffer_guidebook.pdf
6. How to Install Residential Scale Best Management Practices (BMPs) in the Lake Tahoe Basin
<http://www.tahoebmp.org/Documents/Contractors%20BMP%20Manual.pdf>
7. Spoil Pile BMPs
http://michigan.gov/documents/deq/deq-wb-nps-sp_250905_7.pdf
8. Sanctuary Forest Water Storage Guide
https://greywateraction.org/wp-content/uploads/2014/11/SanctuaryForrest_Water_Storage_Guide.pdf
9. Natural Resources Conservation Service-USDA, “Ponds – Planning, Design, Construction”, Agriculture Handbook
http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_030362.pdf
10. Division of Safety of Dams Size Requirements
<http://www.water.ca.gov/damsafety/jurischart/>
11. Water Tanks: Guidelines for Installation and Use
http://www.waterandseptictanks.com/Portals/0/files/GUIDELINES-FOR-INSTALLATION-OF-WATER-TANKS-_rev1_-03-20-08-_2_.pdf
12. Guidelines for Use and Installation of Above Ground Water Tanks
http://www.waterandseptictanks.com/Portals/0/files/GUIDELINES-FOR-INSTALLATION-OF-WATER-TANKS-_rev1_-03-20-08-_2_.pdf
13. BEST MANAGEMENT PRACTICES (BMP's) University of California Cooperative Extension
http://www.waterboards.ca.gov/sandiego/water_issues/programs/wine_country/docs/updates081910/ucce_bmps.pdf

14. California Storm Water Quality Association, Section 4: Source Control BMPs
<https://www.casqa.org/sites/default/files/BMPHandbooks/sd-12.pdf>
15. CA DOT Solid Waste Management Plan
<http://www.dot.ca.gov/hq/construc/stormwater/WM-05.pdf>
16. State Water Resources Control Board Onsite Wastewater Treatment System (OWTS) policy
http://www.waterboards.ca.gov/water_issues/programs/owts/docs/owts_policy.pdf
17. California Storm Water Quality Association
Section 4: Source Control BMPs
<https://www.casqa.org/sites/default/files/BMPHandbooks/sd-32.pdf>
18. California Riparian Habitat Restoration Handbook
http://www.conservation.ca.gov/dlrp/watershedportal/InformationResources/Documents/Restoration_Handbook_Final_Dec09.pdf
19. The Practical Streambank Bioengineering Guide
http://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/idpmcpu116.pdf
20. Watershed Best Management Practices for Cannabis Growers and other Rural Gardeners
<http://mcrd.org/resources/publications>
21. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region
http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/trel08-28.pdf
22. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region
http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/west_mt_finalsupp2.pdf

ATTACHMENT B: MONITORING AND REPORTING PROGRAM
ORDER WQ 2017-0023-DWQ
GENERAL WASTE DISCHARGE REQUIREMENTS AND
WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF WASTE
ASSOCIATED WITH CANNABIS CULTIVATION ACTIVITIES

This monitoring and reporting program (MRP) describes requirements for monitoring a cannabis cultivation site and its associated facilities. This MRP is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board (Regional Water Board) Executive Officer, State Water Board Division of Water Quality Deputy Director, or the State Water Board Chief Deputy Director.

The State Water Resources Control Board (State Water Board) and Regional Water Boards are transitioning to the paperless office system. In some regions, Dischargers will be directed to submit reports (both technical and monitoring reports) to the State Water Board's GeoTracker database over the Internet in portable document format (pdf). If so directed, analytical data shall be uploaded to the GeoTracker database under a site-specific global identification number. Information on the GeoTracker database is provided on the Internet at:

<http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml>

Water Code section 13267 states, in part:

“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

Water Code section 13268 states, in part:

“(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

ATTACHMENT B: MONITORING AND REPORTING PROGRAM
ORDER WQ 2017-0023-DWQ
GENERAL WDRs AND WAIVER OF WDRs FOR DISCHARGES OF WASTE
ASSOCIATED WITH CANNABIS CULTIVATION ACTIVITIES

The Discharger owns or engages in cannabis cultivation activities that are subject to the Notice of Applicability (NOA) of Water Quality Order 2017-0023-DWQ. The reports are necessary to ensure that the discharger complies with the NOA and General Order. Pursuant to California Water Code section 13267, the discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Regional Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a California Environmental Laboratory Program certified laboratory or:

1. The user is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
3. Instruments are serviced by the manufacturer or authorized representative at the recommended frequency; and
4. Field calibration reports are maintained and available for at least three years.

FACILITY STATUS

Dischargers that are classified as Tier 1 or Tier 2 facilities shall report the following:

<u>Monitoring Requirement</u>	<u>Description</u>
Winterization Measures Implemented	Report winterization procedures implemented, any outstanding measures, and the schedule for completion.
Tier Status Confirmation	Report any change in the tier status. (Stabilization of disturbed areas may change the tier status of a facility. Contact the Regional Water Board if a change in status is appropriate.)
Third Party Identification	Report any change in third party status as appropriate.
Nitrogen Application ¹	Report monthly and annual total nitrogen use for bulk, solid, and liquid forms of nitrogen. Provide the data as lbs/canopy acre/time (month or year) as described in Attachment D, Nitrogen Management Plan. If plant tissue was collected to determine limited nitrogen availability, the results shall be submitted.

¹ Nitrogen Application reporting is required when the cultivation area or aggregate of cultivation areas exceeds one acre.

SITE MAINTENANCE STATUS

Dischargers that are classified as Tier 1 or Tier 2, and are characterized as a moderate or high risk, shall perform the following additional monitoring.

<u>Observations</u>	<u>Description</u>	<u>Monitoring Frequency</u>
Surface Water Runoff	Report any conditions of surface water runoff, including location, duration, source of runoff (irrigation water, storm water, etc.)	Monthly
Soil Erosion Control	Report any indications of soil erosion (e.g., gully, gully, turbid water discharge, landslide, etc.).	Monthly
Sediment Capture	Report the status of sediment capture measures (e.g., silt fence, fiber rolls, settling basin, etc.)	Monthly
Erosion/Sediment Capture Maintenance	Report maintenance activities to maintain the effectiveness of erosion control and sediment capture measures (e.g., reinstallation of straw mulch, hydroseeding, tarp placement, removal or stabilization of sediment captured, removal of settled sediment in a basin, etc.)	Monthly
Stabilization of Disturbed Areas	Dischargers characterized as high risk (with any portion of the disturbed area within the setbacks), shall provide a status report describing activities performed to stabilize the disturbed area within the setback.	Monthly
Material(s) Storage Erosion/Spills Prevention	Report materials delivered or stored at the site that could degrade water quality if discharged off-site (e.g., potting soil, manure, chemical fertilizer, gasoline, herbicides, pesticides, etc.)	Monthly
Holding Tank, Septic Tank, or Chemical Toilet Servicing	Report the dates, activity, and name of the servicing company for servicing holding tanks or chemical toilets.	Monthly

STORM WATER RUNOFF MONITORING

Dischargers that are classified as Tier 1 or Tier 2, and are characterized as a moderate or high risk, shall perform the following monitoring.

<u>Constituent</u> ¹	<u>Frequency</u> ²	<u>Monitoring Frequency</u> ³
Turbidity	Once per calendar month when precipitation exceeds 0.25 in/day or when storm water runoff from the site is generated.	All months until winterization procedures are completed.
pH	Once per calendar month when precipitation amount is forecast to exceed 0.25 in/day.	All months until winterization procedures are completed.

¹ Constituents shall be monitored with a calibrated instrument.

² Samples shall be representative of storm water discharging from the disturbed area. Additional samples may be required to adequately characterize the discharge from all areas.

³ Monitoring shall be performed during all months in which activity is occurring at the site until winterization is complete. Monitoring is not required after winterization is complete for unoccupied sites during winter months.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, monitoring parameter and reported results are readily discernible. The data shall be summarized to clearly illustrate compliance status as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

The State Water Board or Regional Water Board may require the Discharger to electronically submit monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) program Internet web site or alternative database. Electronic submittal procedures will be provided when directed to begin electronic submittals. Until directed to electronically submit monitoring reports, the Discharger shall submit hard copy monitoring reports.

A. Annual Report

Annual Reports shall be submitted to the Regional Water Board by **March 1 following the year being monitored**. For example, the monitoring report for activities conducted in the year 2018 is due on March 1, 2019. The Annual Report shall include the following:

1. Facility Status, Site Maintenance Status, and Storm Water Runoff Monitoring.
2. The name and contact information for the person responsible for operation, maintenance, and monitoring.

A letter transmitting the annual report shall accompany each report. The letter shall summarize the numbers and severity of violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

ATTACHMENT B: MONITORING AND REPORTING PROGRAM
ORDER WQ 2017-0023-DWQ
GENERAL WDRs AND WAIVER OF WDRs FOR DISCHARGES OF WASTE
ASSOCIATED WITH CANNABIS CULTIVATION ACTIVITIES

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The Discharger shall implement the above monitoring program.

REGIONAL WATER BOARD CONTACT INFORMATION

The Discharger shall submit notices, technical reports, and annual reports to appropriate Regional Water Board where the permitted activity is taking place. The appropriate Regional Water Board office and e-mail information is provided on the application receipt (e.g., notice of exemption, notice of receipt, notice of applicability, etc.) The information is also available by entering the location address in the web tool located at :

<http://www.waterboards.ca.gov/waterboards_map.shtml#rwqcb>.

<u>Regional Water Board</u>	<u>Mailing Address</u>	<u>ECM Mailbox E-Mail Address</u>
North Coast	5550 Skylane Blvd., Ste. A Santa Rosa, CA 95403	northcoast@waterboards.ca.gov
San Francisco Bay	1515 Clay Street, Ste. 1400 Oakland, CA 94612	rb2paperless@waterboards.ca.gov
Central Coast	895 Aerovista Place, Ste. 101 San Luis Obispo, CA 93401	centralcoast@waterboards.ca.gov
Los Angeles	320 W. 4th Street, Ste. 200 Los Angeles, CA 90013	losangeles@waterboards.ca.gov
Central Valley Redding Office	364 Knollcrest Drive, Ste. 205 Redding, CA 96002	centralvalleyredding@waterboards.ca.gov
Central Valley Sacramento Office	11020 Sun Center Drive, Ste. 200 Rancho Cordova, CA 95670	centralvalleysacramento@waterboards.ca.gov
Central Valley Fresno Office	1685 E Street Fresno, CA 93706	centralvalleyfresno@waterboards.ca.gov
Lahontan South Lake Tahoe Office	2501 Lake Tahoe Blvd. South Lake Tahoe, CA 96150	lahontan@waterboards.ca.gov
Lahontan Victorville Office	15095 Amargosa Road - Bldg 2, Ste. 210 Victorville Ca 92394	lahontan@waterboards.ca.gov
Colorado River	73-720 Fred Waring Dr., Ste. 100 Palm Desert, CA 92260	rb7-wdrs_paperless@waterboards.ca.gov

ATTACHMENT B: MONITORING AND REPORTING PROGRAM
ORDER WQ 2017-0023-DWQ
GENERAL WDRs AND WAIVER OF WDRs FOR DISCHARGES OF WASTE
ASSOCIATED WITH CANNABIS CULTIVATION ACTIVITIES

<u>Regional Water Board</u>	<u>Mailing Address</u>	<u>ECM Mailbox E-Mail Address</u>
Santa Ana	3737 Main Street, Suite 500 Riverside, CA 92501	santaana@waterboards.ca.gov
San Diego	2375 Northside Drive, Ste. 100 San Diego, CA 92108	rb9paperless@waterboards.ca.gov

**ATTACHMENT C: NOTICE OF TERMINATION
ORDER WQ 2017-0023-DWQ
GENERAL WASTE DISCHARGE REQUIREMENTS AND
WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF WASTE
ASSOCIATED WITH CANNABIS CULTIVATION ACTIVITIES**

Submittal of this Notice of Termination (NOT) to the Regional Water Quality Control Board (Regional Water Board) constitutes notice that a Discharger, identified in Section I of this form, requests termination of coverage under General Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities (Order WQ 2017-0023-DWQ). Completed forms must be signed and post mailed or emailed to the Regional Water Board, attention: Cannabis Regulatory Program, 2017-0023-DWQ Notice of Termination. Refer to the monitoring and reporting program attached to the General Order for the email/mailling address or contact the Regional Water Board. The Discharger shall attach a Site Closure Report and a final monitoring and reporting program report with the NOT.

Submittal of this NOT does not relieve the Discharger and/or the property owner of responsibility to control waste discharges related to the cultivation or related activities. The Regional Water Board may inspect the condition of the site or determine that the final monitoring report is incomplete prior to terminating coverage under the General Order.

SECTION I. DISCHARGER INFORMATION

A. Role (check all applicable)		
<input type="checkbox"/> Cultivator	<input type="checkbox"/> Land/Property Owner	<input type="checkbox"/> Third Party Representative
B. Name		
Address Where Legal Notice May Be Served (cannot be a PO Box)		
City	State	Zip Code
C. Contact Person (Leave blank if the same as above)		
E-Mail	Phone	

SECTION II. CANNABIS CULTIVATION SITE INFORMATION

A. Assessor Parcel Number(s)	WDID (if applicable) ¹	
Address	County	
City	State	Zip Code
Latitude/Longitude (If address is not available)		
B. Cultivation Site Enrollment Classification (check all applicable):		
Tier Designation:		Risk Designation ² :
<input type="checkbox"/> Conditionally Exempt	<input type="checkbox"/> Tier 1 <input type="checkbox"/> Tier 2	<input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High

ATTACHMENT C: NOTICE OF TERMINATION
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C. Contact Person (Leave blank if same as Section I)	
E-Mail (Leave blank if same as Section I)	Phone (Leave blank if same as Section I)

SECTION III. CERTIFICATION

<p>I certify that: 1) I am a Discharger listed under Section I <u>or</u> a duly authorized representative of the Discharger listed in Section I of this form, 2) cultivation activities are ceased, 3) the cultivation site is stabilized, 4) there is no potential for waste discharges from the disturbed area in violation of Regional Water Board's Basin Plan or the General Order, 5) the Site Closure Report is attached to this NOT, and 6) earthen material and waste have been consolidated at the site and stabilized or disposed of properly.</p> <p>"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."</p>
Printed Name of Discharger/Duly Authorized Representative
Signature
Date

Notes:

1. Waste Discharge Identification (WDID) number is a number assigned to each Discharger enrolled under Tier 1 or Tier 2. Dischargers covered under "Conditionally Exempt" tier should leave this field blank. WDID number can also be obtained from an annual invoice mailed by the State Water Board. If a Discharger does not his/her WDID number, please contact the Regional Water Board and request the information prior to submittal of the Notice of Termination.
2. Dischargers covered under "Conditionally Exempt" tier should leave this field blank.

ATTACHMENT D: TECHNICAL REPORT GUIDANCE
ORDER WQ 2017-0023-DWQ
GENERAL WASTE DISCHARGE REQUIREMENTS AND
WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF WASTE
ASSOCIATED WITH CANNABIS CULTIVATION ACTIVITIES

This Technical Report Guidance provides guidance for preparation of the technical reports described in the Provisions section under this General Order. All technical reports shall be submitted to the appropriate Regional Water Board by transmitting the report in portable document format (PDF) to the e-mail address provided in the notice of receipt. Refer to Provisions section for technical report requirements.

SITE MANAGEMENT PLAN

Tier 1 and Tier 2 Dischargers shall submit and implement a *Site Management Plan* (Plan) that describes how the Discharger is implementing the best practical treatment or control (BPTC) measures listed in Attachment A. The Plan may include a schedule to achieve compliance, but all work must be completed by the onsets of winter period each year. (The due date does not relieve a Discharger from implementing the interim soil stabilization BPTC measures described in Attachment A.)

The Plan outline presented below is intended to provide general guidance for the Discharger and consultants. This sample format will help the Discharger include information needed to demonstrate that all applicable BPTC measures are implemented and properly maintained. In addition, Dischargers in the North Coast Regional Water Board's jurisdiction (Region 1) are required to address legacy waste discharge issues, including those that are not related to cannabis cultivation.

1. Sediment Discharge BPTC Measures

1.1. Site Characteristics

- 1.1.1. Provide a map showing access roads, vehicle parking areas, streams, stream crossings, cultivation site(s), disturbed areas, buildings, and other relevant site features.
- 1.1.2. Describe the access road conditions including estimating vehicle traffic, road surface (e.g., paved, rocky, or bare ground), and maintenance activities. Describe how storm water is drained from the access road (e.g., crowned, out slope, armored ditch, culverts, rolling dips, etc.).
- 1.1.3. Describe any vehicle stream crossing including the type of crossing (e.g., bridge, culvert, low water, etc.).
 - 1.1.3.1. For Region 1 Dischargers, identify, discuss, and locate on the site map any legacy waste discharge issues that exist on the property.

1.2. Sediment Erosion Prevention and Sediment Capture (Moderate risk Tier 1 or Tier 2 Dischargers are required to submit a Site Erosion and Sediment Control Plan. Those Dischargers may refer to that plan rather than repeat it here)

1.2.1. Erosion Prevention BPTC Measures

- 1.2.1.1. Describe the BPTC measures that have been, or will be implemented to prevent or limit erosion. Provide an implementation schedule for BPTC

measures that have not yet been implemented. Identify the erosion prevention BPTC measures on a site map.

1.2.1.1.1. The description shall address physical BPTC measures, (e.g., placement of straw mulch, plastic covers, slope stabilization, soil binders, culvert outfall armoring, etc.) and biological BPTC measures (vegetation preservation/replacement, hydro seeding, etc.).

1.2.2. Sediment Control BPTC Measures

1.2.2.1. Describe the BPTC measures that have been, or will be implemented to capture sediment that has been eroded. Provide an implementation schedule for BPTC measures that have not yet been implemented. Identify the sediment control BPTC measures on a site map.

1.2.2.1.1. The description shall address physical BPTC measures, (e.g., placement of silt fences, fiber rolls, or settling ponds/areas, etc.) and biological BPTC measures (vegetated outfalls, hydro seeding, etc.).

1.2.3. Maintenance Activities - Erosion Prevention and Sediment Control

1.2.3.1. Describe how the erosion prevention and sediment control BPTC measures will be monitored and maintained to protect water quality.

1.2.3.2. Describe how any captured sediment will be either stabilized in place, excavated and stabilized on-site, or removed from the site.

1.2.4. Erosion control BPTC measures: Describe the interim soil stabilization, if applicable and long-term BPTC measures implemented to prevent sediment transport at each identified disturbed area(s) and improperly constructed features.

2. Fertilizer, Pesticide, Herbicide, and Rodenticide BPTC Measures

2.1. Provide a summary table that identifies the products used at the site, when they are delivered to the site, how they are stored, and used at the site. If products are not consumed during the growing season, describe how they are removed from the site or stored to prevent discharge over the winter season.

2.2. Provide a site map that locates storage locations.

2.3. Describe how bulk fertilizers and chemical concentrates are stored, mixed, applied, and how empty containers are disposed.

2.4. Describe procedures for spill prevention and cleanup.

3. Petroleum Product BPTC Measures

3.1. Provide a summary table that identifies the products used at the site, when they are delivered to the site, how they are stored, and used at the site. If products are not consumed during the growing season, describe how they are removed from the site or stored to prevent discharge over the winter season.

3.2. Provide a site map that locates storage locations.

3.3. Describe how fuels, lubricants, and other petroleum products are stored, mixed, applied, and empty containers are disposed.

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- 3.4. Describe procedures for spill prevention and cleanup.
4. Trash/Refuse, and Domestic Wastewater BPTC Measures
 - 4.1. Describe the types of trash/refuse that will be generated at the site. Describe how the material is contained and properly disposed of.
 - 4.1.1. Provide a site map that locates the trash/refuse storage locations.
 - 4.2. Describe the number of employees, visitors, or residents at the site.
 - 4.2.1. Describe the types of domestic wastewater generated at the site (e.g., household generated wastewater or chemical toilet).
 - 4.2.2. Describe how the domestic wastewater is disposed.
 - 4.2.2.1. Permitted onsite wastewater treatment system (e.g., septic tank and leach lines).
 - 4.2.2.2. Chemical toilets or holding tank. If so, provide the name of the servicing company and the frequency of service.
 - 4.2.2.3. Outhouse, pit privy, or similar. Use of this alternative requires approval from the Regional Water Board Executive Officer; include the approval from the Executive Officer and any conditions imposed for use of this alternative.
 - 4.2.2.3.1. Provide a site map that locates any domestic wastewater treatment, storage, or disposal area.
5. Winterization BPTC Measures
 - 5.1. Describe activities that will be performed to winterize the site and prevent discharges of waste. The description should address all the issues listed above.
 - 5.2. Describe maintenance of all drainage or sediment capture features (e.g., drainage culverts, drainage trenches, settling ponds, etc.) to remove debris, soil blockages, and ensure adequate capacity exists.
 - 5.3. Describe any revegetation activities that will occur either at the beginning or end of the precipitation season.
 - 5.4. If any BPTC measure cannot be completed before the onset of winter period, contact the Regional Water Board to establish a compliance schedule.
 - 5.5. For Region 1 Dischargers, describe any activities that will be performed to address legacy waste discharge issues. Region 6 Dischargers should consult with Regional Water Board staff to confirm if any other activities in addition to BPTCs are necessary to address legacy waste discharge issues.

SITE EROSION AND SEDIMENT CONTROL PLAN

Tier 1 or Tier 2 Dischargers classified as moderate risk shall submit and implement a *Site Erosion and Sediment Control Plan* (Plan). The Plan shall be prepared under the supervision of a qualified professional as described in the Provisions section of the General Order. The report shall be approved by the Regional Water Board Executive Officer prior to implementation.

The Plan shall describe how best practical treatment or control (BPTC) measures listed in Attachment A will be implemented to achieve the goal of minimizing the discharge of sediment off-site. Site specific factors (e.g., percent slope, precipitation amounts, soil type, vegetation status, etc.) shall be considered in determining the appropriate level of water quality protection. The Plan shall include an analysis of slope stability and an implementation schedule; if the work cannot be completed by the onset of winter period each year, the Discharger shall contact the Regional Water Board to establish a compliance schedule. Indications of instability include the occurrence of slope failures at nearby similar sites, weak soil layers, geologic bedding parallel to slope surface, hillside creep (trees, fence posts, etc. leaning downslope), tension cracks in the slope surface, bulging soil at the base of the slope, and groundwater discharge from the slope. Interim soil stabilization BPTC measures shall be performed as soon as practicable. Interim measures are those that can be implemented immediately following site development.

At a minimum, the Plan shall address the following:

1. Site Description

- 1.1. Describe the site (e.g., topography, vegetation, elevation, historic precipitation patterns, soil types, surface waterbodies, etc.).
- 1.2. Site Disturbances – Provide a site map that shows the location of all of the applicable following items. For each mapped item, provide a description of the item.
 - 1.2.1. Historic (Existing) Disturbances (e.g., access/site roads, buildings, stream crossings, disturbed areas, graded areas, cultivation areas, vehicle parking areas, disturbed vegetation areas, etc.).
 - 1.2.2. Recent or Planned Disturbances (e.g., access/site roads, buildings, disturbed areas, graded areas, cultivation areas, vehicle parking areas, vegetation removal areas, etc.).
 - 1.2.3. Areas of Special Concern (e.g., describe any existing or planned stream or wetland crossing, any culverts, any slope that shows evidence of past failure, or evidence of instability (e.g., cracks in retaining walls, surface cracks in soil, bulging soil, groundwater discharge areas, sunken road beds, downslope leaning trees or utility poles, etc.).
 - 1.2.4. Describe and show on the site map, the storm water runoff sampling locations.

1.3. Erosion Prevention BPTC Measures

- 1.3.1. Describe the BPTC measures that have been, or will be implemented to prevent or limit erosion. Provide an implementation schedule for BPTC measures that have not yet been implemented. Identify the erosion prevention BPTC measures on a site map.
 - 1.3.1.1. The description shall address physical BPTC measures, (e.g., placement of straw mulch, plastic covers, slope stabilization, soil binders, culvert outfall

armoring, etc.) and biological BPTC measures (vegetation preservation/replacement, hydro seeding, etc.).

1.4. Sediment Control BPTC Measures

1.4.1. Describe the BPTC measures that have been, or will be implemented to capture sediment that has been eroded. Provide an implementation schedule for BPTC measures that have not yet been implemented. Identify the sediment control BPTC measures on a site map.

1.4.1.1. The description shall address physical BPTC measures, (e.g., placement of silt fences, fiber rolls, or settling ponds/areas, etc.) and biological BPTC measures (vegetated outfalls, hydro seeding, etc.).

1.5. Maintenance Activities - Erosion Prevention and Sediment Control

1.5.1. Describe how the erosion prevention and sediment control BPTC measures will be monitored and maintained to protect water quality.

1.5.2. Describe how any captured sediment will be either stabilized in place, excavated and stabilized on-site, or removed from the site.

2. Winterization

2.1. Prevention

2.1.1. Describe the BPTC measures that will be implemented before winter precipitation occurs to prevent erosion of disturbed areas, including the cultivation area.

2.1.2. Describe maintenance of all drainage or sediment capture features (e.g., drainage culverts, drainage trenches, settling ponds, etc.) to remove debris, soil blockages, and ensure adequate capacity exists.

2.1.3. Describe any revegetation activities that will occur either at the beginning or end of the precipitation season.

NITROGEN MANAGEMENT PLAN

Tier 2 Dischargers that cultivate one acre or more of cannabis are required to submit a Nitrogen Management Plan (NMP). The NMP shall describe how nitrogen is stored, used, and applied to crops in a way that is protective of water quality. At a minimum, an NMP shall address the following:

1. Facility Description
 - 1.1. Location and Configuration
 - 1.1.1. Provide a description of the site, the method of growing cannabis (e.g., in ground, raised beds, grow bags, etc.).
 - 1.1.2. Describe the canopy area acreage (at plant maturity).
 - 1.1.3. Site Location Map (Provide a US Geological Survey topographic map or similar map that shows the location, nearby water bodies, public and access roads, etc.).
 - 1.1.4. Facility Plan (Provide a scaled drawing that shows the facility, disturbed areas, cultivation areas, buildings, access roads, greenhouses, material storage areas, source of irrigation water, water storage, etc.).
2. Sources of Nitrogen
 - 2.1. Bulk Materials (Materials either used as growing medium or as amendments to the growing medium (e.g., potting soil, manure, biosolids, etc.).
 - 2.2. Dry Fertilizers (Materials added to a growing medium or mixed with irrigation water that provide nitrogen to the crop (e.g., bone meal, feather meal, pelletized manure or biosolids, pelletized chemical fertilizer, etc.).
 - 2.3. Liquid Fertilizers (Materials added to irrigation water, or that are applied directly to the crop (e.g., fish emulsion, chemical fertilizers, etc.).
3. Nitrogen Storage, Use, and Disposal Practices
 - 3.1. Describe when nitrogen containing materials will be delivered to the site (e.g., as needed or at the beginning of growing season).
 - 3.2. Describe how bulk, dry, and liquid fertilizers will be stored.
 - 3.3. Describe any mixing or processing area(s) of nitrogen containing materials.
 - 3.4. If applicable, describe how “spent” growing medium is either removed from the site or incorporated into site soils.
 - 3.5. If “spent” growing medium is not removed from the site, describe how amendments are added to the existing medium to improve the nitrogen content. Describe when that process occurs.
4. Nitrogen Application Rate
 - 4.1. Monthly Applied Nitrogen – Provide a nitrogen management worksheet that calculates the nitrogen applied per canopy acre (see attached). Note that monthly nitrogen uptake rates generally are consistent with the evapotranspiration rate.
 - 4.2. Limited Nitrogen Availability – Due to natural processes, some crops may be nitrogen limited despite applying 1.4 times the crop uptake rate. (See the *Fertilizers, Pesticides, Petroleum Products and Other Chemicals* section of the Cannabis Policy Staff Report.)

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Additional nitrogen may be applied if the need is demonstrated based on a plant tissue sample analysis as described in the General Order. Provide the name of the analytical or agricultural laboratory that will provide plant tissue analysis.

EXAMPLE NITROGEN REPORTING WORKSHEET

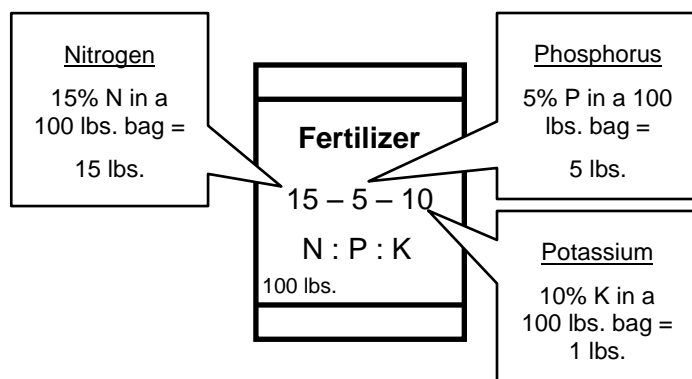
The General Order monitoring and reporting program (MRP) requires annual submittal of nitrogen data when a Discharger is required to submit an NMP. The application rate shall be reported as pounds of nitrogen applied per canopy acre. (Typically the cultivation area acreage will be larger than the canopy acreage. Use the anticipated canopy acreage at plant maturity for calculation purposes.) Methods to calculate the pounds of nitrogen applied from bulk, dry, or liquid fertilizer are presented below.

Note that the nitrogen applied shall only be calculated for the month in which it is applied and all the nitrogen applied shall be calculated. For example, use of slow release fertilizers or materials in chemical forms that are not immediately available for plant uptake shall be included in the calculation for the month applied rather than spreading the value over two or more months. Use of potting soil is likely to show an over application of nitrogen compared to crop uptake in early months, the application rate will approximate the crop uptake over the growing season.

Fertilizer Labeling

Fertilizer labels always list three nutrients, nitrogen (N), phosphorus (P), and potassium (K). The three numbers represent the percentage of each nutrient in the fertilizer source. For bulk materials such as potting soil, the seller can provide a list of the nutrient content. To calculate the nitrogen contained in liquid fertilizers, the density is needed. Liquid fertilizers list the volume and weight of the product, which can be used to calculate the density of the liquid fertilizer (if density is not listed on the product information label).

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Bulk Materials

$$\text{Nitrogen (lbs.)} = \frac{\%N}{100} \times \text{fertilizer weight applied (lbs.)}$$

Dry Fertilizers

$$\text{Nitrogen (lbs.)} = \frac{\%N}{100} \times \text{fertilizer weight applied (lbs.)}$$

Liquid Fertilizers

$$\text{Nitrogen (lbs.)} = \frac{\%N}{100} \times \text{density} \left(\frac{\text{lbs.}}{\text{gal.}} \right) \times \text{gallons of product}$$

$$\text{Nitrogen (lbs.)} = \frac{\%N}{100} \times \text{density} \left(\frac{\text{lbs.}}{\text{oz.}} \right) \times \text{ounces of product}$$

$$\text{Density} = \frac{\text{weight of product (lbs.)}}{\text{volume of product (gal. or oz.)}}$$

Report monthly bulk, dry, liquid fertilizers individually

$$\text{Rate Applied} = \frac{\text{Nitrogen Applied (lbs.)}}{\text{canopy acre}}$$

EXAMPLE NITROGEN REPORTING FORM

The nitrogen reporting form below shows the monthly and annual nitrogen application rates in pounds of nitrogen per canopy acre.

In April two bags of bulk fertilizer weight 100 lbs. each were used at a 0.50 acre cultivation site. The quantity of nitrogen from the bulk soil applied in April is 30 lbs.

$$\frac{15\%}{100} \times 200 \text{ lbs.} = 30 \text{ lbs. of Nitrogen}$$

The amount of nitrogen applied per canopy acre is then calculated as:

$$(30 \text{ lbs. N}) / (0.50 \text{ canopy acre}) = (60 \text{ lbs. N}) / (\text{canopy acre})$$

	Bulk	Dry	Liquid	Rate Applied
Month	Nitrogen reported as $\left(\frac{\text{lbs.}}{\text{canopy acre}} \right)$			
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	60	20	8	88
May	0	0	24	24
June	0	0	24	24
July	0	8	24	32
August	0	10	30	40
September	0	20	40	60
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Subtotal	60	58	150	
Total Annual Nitrogen Applied (lbs. per canopy acre) =				268

DISTURBED AREA STABILIZATION PLAN

Tier 1 or Tier 2 Dischargers classified as high risk shall submit and implement a Disturbed Area *Stabilization Plan* (Plan). (Note that high risk site classification is a temporary condition that exists until the Discharger stabilizes the disturbed area located within the setbacks. Once the area is stabilized and the Regional Water Board approves the work, the Discharger can petition the Regional Water Board to reclassify the site as either low or moderate risk, depending upon the site conditions.) The Plan shall be prepared under the supervision of a qualified professional as described in the Provisions section of the General Order. The report shall be approved by the Regional Water Board Executive Officer prior to implementation.

The Plan shall describe how best practical treatment and control (BPTC) measures listed in Attachment A will be implemented to achieve the goal of stabilizing the disturbed area to minimize the discharge of sediment off-site and complying with the setback requirements. Site specific factors (e.g., percent slope, precipitation amounts, soil type, vegetation status, etc.) shall be considered in determining the appropriate level of water quality protection. The Plan shall include an implementation schedule; if the work cannot be completed by the onset of winter period (see Attachment A for definition of “winter period”), the Discharger shall contact the Regional Water Board to establish a compliance schedule. Interim soil stabilization BPTC measures shall be performed as soon as practicable. Interim measures are those that can be implemented immediately following site development.

Certain activities within the setbacks that are authorized by a California Department of Fish and Wildlife Lake or Streambed Alteration Agreement, an Army Corps section 404 permit, a Regional Water Board section 401 water quality certification, or waste discharge requirements issued by a Regional Water Board or the State Water Board may be performed within the setbacks contained in the General Order and do not trigger a high risk Discharger classification.

At a minimum, the Plan shall address the following:

1. Site Description
 - 1.1. Describe the site (e.g., topography, vegetation, elevation, historic precipitation patterns, soil types, surface waterbodies, etc.).
 - 1.2. Provide a site map that shows the location of all water bodies, the applicable setback(s), all disturbed areas within the setback(s), and the storm water runoff sampling locations.
 - 1.3. Describe how the area was disturbed (e.g., previously existing condition, timber harvest, grading activities, etc.) and the level of disturbance.
 - 1.4. Describe the native vegetation that typically exists in the disturbed area.
2. Erosion Prevention BPTC Measures
 - 2.1. Describe the BPTC measures that have been, or will be implemented to prevent or limit erosion. Provide an implementation schedule for BPTC measures that have not yet been implemented. Identify the erosion prevention BPTC measures on a site map.
 - 2.1.1. The description shall address physical BPTC measures, (e.g., placement of straw mulch, plastic covers, slope stabilization, soil binders, culvert outfall armoring, etc.) and biological BPTC measures (vegetation preservation/replacement, hydro seeding, etc.).

3. Sediment Control BPTC Measures

3.1. Describe the BPTC measures that have been, or will be implemented to capture sediment that has been eroded. Provide an implementation schedule for BPTC measures that have not yet been implemented. Identify the sediment control BPTC measures on a site map.

3.1.1. The description shall address physical BPTC measures, (e.g., placement of silt fences, fiber rolls, or settling ponds/areas, etc.) and biological BPTC measures (vegetated outfalls, hydro seeding, etc.).

4. Maintenance Activities - Erosion Prevention and Sediment Control

4.1. Describe how the erosion prevention and sediment control BPTC measures will be monitored and maintained to protect water quality.

4.2. Describe how any captured sediment will be either stabilized in place, excavated and stabilized on-site, or removed from the site.

5. Long Term Stabilization Measures

5.1. Describe any revegetation activities designed to provide long term stabilization, that will occur either at the beginning or end of the precipitation season

6. Compliance with General Order Schedule Limits

6.1. If the Discharger will not be able to achieve compliance by the onset of the next winter period (e.g., stabilization work will continue into the winter period or will continue the following year), the Discharger shall include a compliance schedule and scope of work for approval by the Regional Water Quality Control Board Executive Officer and for use in preparing an enforcement order

SITE CLOSURE REPORT

A Site Closure Report (SCR) is required when cultivation activities at the site cease. The SCR shall be submitted in accordance with Provision C.1.e and is required for Dischargers that are covered by the Waiver (conditionally exempt) or enrolled as Tier 1 or Tier 2 Dischargers. The SCR shall be submitted with a completed Notice of Termination form (Attachment C) and shall, at a minimum, include the following components:

1. The date cultivation activities at the site will cease.
2. A description of measures that will be implemented at the cannabis cultivation site, including all areas associated with cannabis cultivation activities, to prevent sediment discharges to surface water bodies that will result in water quality degradation.
3. If construction activities are proposed as part of the closure activities, the SCR shall include a project implementation schedule.
 - 3.1. Construction and grading activities shall comply with Attachment A: Best Practices and Treatment Control Manual of the General Order.
4. For Dischargers that are classified as Tier 1 or Tier 2, a final Monitoring and Reporting Program report that includes monitoring conducted year-to-date.
5. Certification of the following items: (1) the cultivation activities will cease by the date noted in the SCR; (2) disturbed areas have or will be stabilized and the potential for waste discharges from the disturbed areas are minimized and (2) earthen material and waste have been consolidated at the site and stabilized or disposed of properly.

