



 **2016**  
**compliance****HANDBOOK**  
CANNABIS FARMER'S WORKSHOP SERIES



**GROW GREEN**  
**GROW LEGAL**

# 2016 compliance HANDBOOK

CANNABIS FARMER'S WORKSHOP SERIES

California is continuing its cannabis legalization revolution. It has been twenty years since the historic medical marijuana initiative, Proposition 215, was passed by the people, followed by the legislature's passage of SB 420. In 2016, under new state and local laws and regulations, medical cannabis farmers can now take steps to obtain licenses to sell their product.

This handbook is intended as a tool to provide the basics of how to comply with state and local laws and regulations that govern cannabis production.

A few caveats are in order: first, the regulatory landscape is changing quickly. This handbook represents our best efforts to encompass state and local regulations at the time of printing. Second, the handbook is an abridged look at some of the most important facets of the new regulations. In other words, this handbook is not exhaustive. We recommend you read the law, ask questions, and consult with professionals. Lastly, while this handbook provides an overview of the legal landscape affecting cannabis farmers, this handbook does not provide legal advice and should not be used as a substitute for obtaining legal advice from an attorney licensed to practice in your jurisdiction.

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2016 Farmer's Compliance Handbook is prepared and distributed by the Environmental Protection Information Center (EPIC) [www.WildCalifornia.org](http://www.WildCalifornia.org) and Mad River Alliance [www.MadRiverAlliance.org](http://www.MadRiverAlliance.org).

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# Breaking New Ground: Regulating Cannabis as Agriculture

In 2015 the California state legislature passed landmark legislation to regulate medical cannabis. The Medical Marijuana Regulatory and Safety Act (MMRSA) is a bi-partisan effort comprised of three bills, AB 243 (Wood), AB 266 (Bonta), and SB 643 (McGuire). The legislation was signed by Governor Brown in October and went into effect January 1, 2016.

The MMRSA establishes a multi-agency framework to regulate commercial cannabis. The basic foundation of MMRSA is that: "no person shall engage in commercial cannabis activity without possessing both a state license and a local permit, license, or other authorization."

This legislation provides for the licensure of commercial cannabis activity in California, strengthens environmental protections, and creates opportunities for small and specialty cultivators to be licensed.

The California Department of Food and Agriculture (CDFA) is the lead agency for the promulgation of rules and the issuing of licenses for cultivation. Starting in 2018 the Department of Food and Agriculture will issue at least 9 types of cultivation licenses plus one license for nurseries. "Cultivation" means any activity involving the planting, growing, harvesting, drying, curing, grading, or trimming of cannabis.

The legislation creates outdoor, indoor, and mixed light licenses for farms ranging in size from 5,000 square feet to 1 acre. Over the next two years the Department of Food and Agriculture will work with other agencies to develop specific requirements for cultivation licenses and rules to protect natural resources and watersheds.

Regulations will be developed to ensure that individual and cumulative effects of water diversion and discharge associated with cultivation do not affect the instream flows needed for fish spawning, migration and rearing, and to maintain natural flow variability. Pesticides will be regulated and organic standards will be developed.

The legislation requires agencies to develop a system for tracking products that growers will be required to participate in; yet the specific details of this program have not been established.



Cultivators who want to be licensed in 2018 must get to work immediately. Compliance with all existing regulatory programs and use of best management practices is the first step. In addition to complying with existing regulatory programs, cultivators must also receive a permit from their county or city.

There are several additional requirements for state licensing, including: fingerprints, evidence of the legal right to occupy and use the proposed location, acknowledgment and consent from the landlords to engage in commercial cannabis, a seller's permit, and a statement declaring the applicant is an "agricultural employer."

Applicants may be denied for "a felony conviction for the illegal possession for sale, sale, manufacture, transportation, or cultivation of a controlled substance." If a cultivator intends to be licensed and they have been convicted in the past they can seek a certificate of rehabilitation and should be prepared to submit details about the conviction.

The MMRSA left many questions unanswered. Throughout 2016 and 2017 CDFA and other regulatory agencies will determine the details. Getting organized and ensuring these detailed policies are built on good information regarding the needs of existing cultivators is very important.

This two year “transition period” is meant to provide time for local governments and cannabis growers to work together to develop local permitting ordinances. A local permit is required for any cultivator who wants to be licensed. In counties and cities where permits do not exist, outreach to local government is a first step for any cultivator who seeks to be compliant. This transition period also provides time for cultivators to come into compliance with other existing regulations. In addition to environmental protections, growers will also need to comply with labor laws and accounting requirements.

We are watching the dawn of a new era. Though regulation will provide protections for watersheds, it must be acknowledged that the transition is going to be very challenging for our community. Things are going to change. One of the most painful elements of transition is realizing that not everyone in our community will be able to be regulated.

Two decades of regulatory uncertainty have led to egregious practices being competitive. Many farms —seeking to be isolated and low profile—are in remote, sensitive watershed areas. We must take shared responsibilities for the environmental impacts,

and public safety challenges, and work together by building public/private partnerships to address these impacts.

The MMRSA provides a robust framework to protect natural resources and watersheds. Successful implementation of the MMRSA will ensure that state enforcement is focused on environmental impacts. Successful implementation of MMRSA will depend on a sustained commitment for the legislature.

Community development is also a fundamental component of successful implementation of the MMRSA. All stakeholders must coordinate with each other in order to successfully implement MMRSA. For local government, this means developing ordinances to regulate cannabis instead of resorting to bans. For cultivators, this means getting into compliance and implementing best management practices. For everyone involved, this means getting to work right away.

Written by: Hezekiah Allen, Executive Director, California Growers Association.



**You can find more information at [www.calgrowersassociation.org](http://www.calgrowersassociation.org)**

“When the changes are in place, people may finally be able to smoke pot without being paranoid about what it’s been sprayed with or whether it’s wiping out furry critters and making rivers run dry.”

- Josh Harkinson, *Mother Jones News*

# A Citizen's Guide to the Humboldt County Commercial Medical Marijuana Land Use Ordinance

This handbook is intended to be a step-by-step guide of the requirements of the Commercial Medical Marijuana Land Use Ordinance (CMMLUO). Due to the length of the CMMLUO, this is an abridged version. This section is intended to cover most topics and issues, however it is nonexhaustive. Please contact Humboldt County Planning and Building Department with any questions: (707) 268-3795, or a licensed professional.

**There are three main steps to legalize your cannabis farm:**

- (1) Register your farm;**
- (2) Apply for a permit from the Humboldt County Planning & Building Department; and**
- (3) Meet all Performance Standards.**

**Many portions may require the assistance of a licensed professional, so plan accordingly.**

## 1. Register Your Farm

Humboldt County has established a registration program for cannabis cultivators. This program has two purposes. First, this program is necessary for all farmers seeking recognition of cultivation activities that occurred on or before January 1, 2016. The deadline to submit your registration to be recognition as an existing operation is August 24, 2016. Second, by registering with the County, you permit the County to establish that you are in "good standing," which may make you eligible for priority processing of your state license application.

To download a commercial cannabis activity registration form, please visit: <http://bit.ly/20TNGzZ>

## 2. Apply for a Permit from the Humboldt County Planning & Building Department

All commercial cultivation, processing, manufacture, or distribution of cannabis requires some form of certification that your operation is appropriately permitted, either in the form of a Zoning Clearance Certificate, Special Permit, or Use Permit. This requires two steps:

**(A) Determine what type of certificate or permit you will need.** There are five types of permits: cultivation, processing, manufacturing, distribution and nursery.

**(B) Meet standard application requirements.**

Applications are available at the Humboldt County Planning & Building Department website: <http://www.humboldt.gov/DocumentCenter/View/340>

*\*Please note: No application for any Zoning Clearance Certificate, Special Permit, or Use Permit will be processed or approved if it is received after December 31, 2016.*



## 2A. First, Determine What Type of Certificate or Permit You Need

Under the County Ordinance, there are three different types of permits and certificates you may need. What type of certificate or permit you need depends on a number of factors, including the size of your cultivation area, the size of your parcel, the land use zone of your parcel, and your cultivation method (indoor, mixed-light, or outdoor).

1. For cultivation deemed to be the lowest risk to the environment, you will need a “Zoning Clearance Certificate.” A Zoning Clearance Certificate is a “ministerial” document, meaning that if you complete the application form in full, you will obtain the certificate and may cultivate under it.

2. For larger operations, you may need a “Special Permit.” A Special Permit is discretionary, meaning County staff may add additional site-specific conditions to ensure your operation has a minimal impact to the environment. Additionally, notices are sent to your neighbors explaining that you are applying for the right to cultivate. Lastly, County staff or neighbors may request a hearing on your application before the Planning Commission.

3. For operations deemed to have the largest risk to the environment, you will need a “Use Permit.” A Use Permit is required for uses that may need special conditions to ensure compatibility with surrounding land uses. Considerations include: consistency with the General Plan; compatibility with surrounding land uses; land suitability and physical constraints; project design; availability of adequate access; public services; facilities to serve the development; and potential environmental impacts and mitigation measures. Planning staff and the applicant will make presentations to the Hearing Officer, Planning Commission, or Board of Supervisors. The hearing is open to the public for comments and questions. Generally, a Use Permit requires an environmental review under the California Environmental Quality Act (CEQA). However, your project may be exempt from CEQA if it meets certain criteria. After you file the application, staff will determine if your project is exempt.



### **Performance Standards Specific for Cannabis Processing:**

Cultivators shall comply with all applicable federal, state, and local laws and regulations governing California Agricultural Employers, which may include: federal and state wage and hour laws, CAL/OSHA, OSHA, California Agricultural Labor Relations Act, and the Humboldt County Code (including the Building Code).

A Processing Plan is required for cultivators greater than 5,000 sq ft and includes the following Performance Standards:

- Summary of processing practices;
- Description of location where processing will occur;
- Estimated number of employees, if any;
- Summary of employee safety practices;
- Description of toilet and hand-washing facilities;
- Description of plumbing and/or septic system and whether or not the system is capable of handling increased use;
- Description of source of drinking water for employees;
- Description of increased road use resulting from processing and a plan to minimize impacts; and
- Description of on-site housing, if any.

### Outdoor & Mixed Light Cultivation

To help you determine what type of certificate or permit you need, choose the type of cultivation method you plan to pursue (outdoor, mixed light or indoor). Also, note that “cultivation area,” as used in the charts below and in the County ordinance is defined as “the sum of the area(s) of cannabis cultivation as measured around the perimeter of each discrete area of cannabis cultivation on a single premises.” “Each discrete area of cannabis cultivation” is defined as “the physical space where cannabis is grown and includes, but is not limited to, garden beds or plots, the exterior dimensions of hoop houses or green houses, and the total area of each of the pots, bags or garden beds containing cannabis plants on the premises.” The definition also includes “the maximum anticipated extent of all vegetative growth of cannabis plants to be grown on the premises.”

Table 1: Humboldt County Commercial Cannabis Cultivation Permit Types

	Parcel Size	Permit Tier	Cultivated Area Size Limit
<b>OUTDOOR &amp; MIXED LIGHT*</b>	RA less than 5 acres	New Commercial Cultivation Not Permitted	0 sq ft
	Existing on AE parcels less than 1 acre in size <b>Per section A**</b>	III – Use Permit	up to 2,500 sq ft
	Existing on AE, AG over 1 acre or RA, FP, DF, FR, TPZ, and U 5 acres and above <b>Per section B</b>	I - Zoning Clearance Certificate	up to 5,000 sq ft
		II - Special Permit	5,000 - 10,000 sq ft
		III - Use Permit	> 10,000 – 43,560 sq ft (outdoor) > 10,000 – 22,000 sq ft (mixed)
	New on AE, AG, FP, DF, and U parcels between 1 and 5 acres in size. <b>Per section C</b>	III - Use Permit	up to 5,000 sq ft
New on AE, AG, FP, DF, U, and RA parcels 5 acres to 320 acres. <b>Per section D</b>	I - Zoning Clearance Certificate	up to 10,000 sq ft	
New on AE, AG, FP, DF, U, and RA parcels 320 acres and above. <b>Per section E</b>	III – Use Permit for more than 10,000 sq ft, or more than one permit per parcel	See section E	

\*Outdoor cannabis is grown entirely without supplemental artificial light and Mixed-Light means cultivation with both natural and artificial light.

\*\* Sections A - E included under General Provisions beginning on page 7.

**ZONING DISTRICTS** for commercial cannabis cultivation include: Rural Residential Agriculture (RA), General Agriculture (AG), Agriculture Exclusive (AE), Flood Plain (FP), Design Floodway (DF), Forestry Recreation (FR), Unclassified (U), Timber Production Zone (TPZ), Community Commercial (C-2), Industrial Commercial (C-3), Business Park (MB), Limited Industrial (ML), Industrial General (MG), and Heavy Industrial (MH). For the Humboldt County Web GIS Portal follow this link: <http://bit.ly/1o2iv6K>

**In Zoning Districts:** Community Commercial (C-2), Industrial Commercial (C-3), Business Park (MB), Limited Industrial (ML), and Industrial General (MG) zones, outdoor and mixed-light commercial cultivation of cannabis for medical use may be conducted with a use permit.



**GENERAL PROVISIONS**

**A) On Agriculture Exclusive Zoned Parcels of Less than One Acre,** only one Use Permit may be issued for outdoor or mixed-light commercial cannabis cultivation for some or all of the cultivation area in existence prior to January 1, 2016, not to exceed 2,500 square feet. The cultivation area must be set back at least 300 feet from existing residences on adjacent parcels.

**B) For Existing Outdoor and Mixed-Light Cultivation Areas:** A zoning clearance certificate, special permit or use permit may be issued for some or all of the cultivation area, in existence prior to January 1, 2016, in zoning districts: Rural Residential Agriculture (one acre and larger RA), General Agriculture (AG), Agriculture Exclusive (AE), Flood Plain (FP), and Design Floodway (DF) only when possible to bring the land into compliance with all applicable standards set forth in the ordinance, and to eliminate existing violations.

- ❖ If the parcel is zoned Forestry Recreation (FR), Unclassified (U) or Timber Production Zone (TPZ), a copy of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (CAL-FIRE) must be submitted with the permit application. For a 3-acre conversion permit, please visit: <http://bit.ly/1Lfc7hX>. Alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland, evidence may be provided showing that the landowner has completed a civil or criminal process and/or entered into a negotiated settlement with CAL-FIRE.
- ❖ No expansion of the existing cultivation area shall be permitted. No permits will be issued for new cultivation (ground disturbance and/or clearing) in FR, U or TPZ (55.4.8.2.2)
- ❖ The total cultivation area allowed on a single parcel shall not exceed one acre (43,560 sq ft) for outdoor cultivation, or 22,000 square feet for Mixed-Light cultivation.

**C) New and Existing Outdoor and Mixed-Light Cultivation Areas on Parcels 1 acre to 5 acres in Size in Zones:** Unclassified (where the General Plan designates the area for agricultural development), Flood Plain (FP), Design Floodway (DF), Agriculture General (AG), or Agriculture Exclusive (AE) up to 5,000 square feet may be permitted with a Use Permit. The cultivation area must be set back at least 300 feet from existing residences on adjacent parcels.

**D) For New Outdoor and Mixed-Light Cultivation Areas:** on parcels 5 acres and larger, a zoning clearance certificate may be issued for new outdoor or mixed-light commercial cannabis cultivation for an area up to 10,000 square feet that was not previously in existence as of January 1, 2016, on parcels with Prime Agriculture soils, in zoning districts RA, U, FP, DF, AG, or AE, on slopes of 15% or less, and with documented current water right or other non-diversionary source of irrigation water (e.g., municipal, public utility, or permitted well). No more than 20% of the area of Prime Agricultural soils on the parcel may be permitted for commercial medical marijuana cultivation.

**E) On Parcels 320 acres or Larger in Zoning Districts:** RA, FP, DF, AG, AE, or U (where the General Plan designates the area for agricultural development), one additional cultivation area permit up to one acre for each one hundred acre increment, (e.g. 3 for 320 acre parcel, 6 for 600 acre parcel, etc.) up to a maximum of 12 permits, may be issued with a Use Permit. No more than 20% of prime agriculture soils may be used for cannabis cultivation activities.



## Indoor Cultivation

### GENERAL PROVISIONS

Indoor commercial cultivation of cannabis for medical use shall be permitted in zoning districts: RA, AG, AE, Community Commercial (C-2), Industrial Commercial (C-3), Business Park (MB), Limited Industrial (ML), Industrial General (MG), and U (where developed as industrial use) and Heavy Industrial (MH) subject to a Special Permit, Zoning Clearance Certificate or Use Permit.

Table 2: Humboldt County Indoor Cultivation Permit Types

	Parcel Size	Permit Tier	Cultivated Area Size Limit
<b>INDOOR</b>	RA parcels of 5 acres or more, or AG or AE parcels within footprint of existing non-residential structure	II – Special Permit	up to 5,000 sq ft
	C-2, C-3, MB, ML, U (industrially developed) and MH	I – Zoning Clearance Certificate	up to 5,000 sq ft
		III – Use Permit	5,000 – 10,000 sq ft

Indoor commercial cultivation of cannabis for medical use shall be permitted with a Special Permit inland of the Coastal Zone (on parcels of 5 acres or more) in zoning districts: RA, AG, and AE, for cultivation facilities of up to 5,000 square feet.

Cultivation shall be located in an existing non-residential structure. Electrical power for indoor cultivation operations including but not limited to illumination, heating, cooling, and ventilation, shall be provided by on-grid power with 100% renewable source, on-site zero net energy renewable source, or with purchase of carbon offsets of any portion of power not from renewable sources.

## 2B. Standard Application Requirements

### Application Requirements for All CMMLUO Clearances or Permits

- If cultivation involves the conversion of timberland as defined under section 4526 of the Public Resources Code, a copy of a less-than-3-acre conversion exemption or timberland conversion permit, approved by the California Department of Forestry and Fire Protection (CAL-FIRE). For a 3-acre conversion permit, please visit: <http://bit.ly/1Lfc7hX>. Alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland, evidence may be provided showing that the landowner has completed a civil or criminal process and/or entered into a negotiated settlement with CAL-FIRE.
- If the applicant is not the recorded title owner of the parcel, written consent of the owner for the application with original signature and notary acknowledgement is required.
- Site Plan Showing:**
  - The entire parcel, including easements, streams, springs, ponds and other surface water features.
  - The location and area for cultivation on the parcel with dimensions of the area for cultivation and setbacks from property lines.
  - All areas of ground disturbance or surface water disturbance associated with cultivation activities, including: access roads, water diversions, culverts, ponds, dams, graded flats, and other related features.
  - If the area for cultivation is within 1/4 mile (1,320 ft.) of a school, school bus stop, church or other place of religious worship, public park, or Tribal Cultural Resource, the site plan shall include dimensions showing that the distance from the location of such features to the nearest point of the cultivation area is at least 600 feet.
- A cultivation and operations plan** that meets or exceeds minimum legal standards for water storage, conservation and use; drainage, runoff and erosion control; watershed and habitat protection; proper storage of fertilizers, pesticides, and other regulated products to be used on the parcel, and a description of cultivation activities (outdoor, indoor, mixed light) with the approximate date(s) cannabis cultivation activities have been conducted on the parcel prior to February 2016, if applicable, and schedule of activities during each month of the growing and harvesting season.
- Copy of the statement of water diversion, or other permit, license or registration filed with the State Water Resources Control Board, Division of Water Rights, if applicable. Visit <http://bit.ly/20TZySk> for more information.
- Description of water source, storage, irrigation plan, and projected water usage.
- Copy of Notice of Intent and Monitoring Self-Certification and other documents filed with the North Coast Regional Water Quality Control Board demonstrating enrollment in Tier 1,2 or 3, North Coast Regional Water Quality Control Board Order No. 2015-0023, or any substantially equivalent rule that may be subsequently adopted by the County of Humboldt or other responsible agency.
- If any on-site or off-site component of the cultivation facility, including access roads, water supply grading or terracing impacts the bed or bank of any stream or other watercourse, a copy of the Streambed Alteration Permit needs to be obtained from the Department of Fish & Wildlife.
- If the source of water is a well, provide a copy of the County well permit.
- For indoor cultivation facilities, identify the source of electrical power and how it will meet with the energy requirements, and plan for compliance with applicable County Building Codes.

**All commercial cultivation, processing, manufacture, or distribution of cannabis for medical use shall operate in compliance with this section, as well as all applicable state and local laws.**

### 3. Performance Standards for Cultivation and Processing Activities:

All cannabis farms must adhere to County performance standards. Failure to meet these standards may result in license revocation and substantial fines. These standards include, but may not be limited to:

- Compliance Agreements and Provisional Licensing:** Cannabis cultivation shall be conducted in compliance with all laws. If upon inspection for the initial application, violations of are discovered, an approved Compliance Agreement must be signed by the applicant, and the relevant enforcement agencies, to cure violations as soon as possible, but in no more than two years of date of issuance of a provisional permit. Applicants shall provide plans for curing such violations to the Planning & Building Department within one year of issuance of the provisional clearance or permit. Once the violations are cured, the permit will no longer be provisional. The violations subject to a compliance agreement shall be related to land conversion, on-site grading, electricity usage, water usage, agricultural discharges, and similar matters and limited to those improvements, facilities, buildings and sites that are used for commercial cannabis activity, and shall not extend to personal residences or other structures that are not used for commercial cannabis activity.
  
- Valid State License(s):** Possession of a current, valid required State Medical Marijuana license(s) issued in accordance with the MMRSA.
  
- Water Sources:** Generally, water used for the cultivation of cannabis needs to be sourced on-site from a permitted well or diversion. With water diversions or withdrawals substantially altering a waterbody's bed, bank or channel, a Streambed Alteration Permit may be required.
  - Surface Water: You Must Comply with all State Law, Including, But Not Limited to:**
    - ❖ A statement of diversion of surface water as required by Water Code Section 5101, or other applicable permit, license, or registration. For more information: <http://calsalmon.org/programs/water-rights-education>.
    - ❖ Where surface water diversion provides any part of the water supply for irrigation of cannabis cultivation, the applicant shall either: (1) consent to (a) forebear from any such diversion during the period from May 15th to October 31st of each year and (b) establish on-site water storage for retention of wet season flows sufficient to provide adequate irrigation water for the size of the area to be cultivated; or (2) submit a water management plan prepared by a qualified person such as a licensed engineer, hydrologist, or similar qualified professional, that establishes minimum water storage and forbearance period, if required, based upon local site conditions; or (3) obtain approval from the NCRWQCB through enrollment pursuant to NCRWQCB Order No. 2015-0023 and/or preparation of a Water Resources Protection Plan.
  
- Well Water:** If using water from a well, the well must be permitted by the county, for more information please see <http://bit.ly/1SGUTCr>.
  
- Bulk Water Trucking:** Is prohibited, except for emergencies. For purposes of this provision, "emergency" is defined as "a sudden, unexpected occurrence demanding immediate action."
  
- Streambed Alteration Permit:** Fish and Game Code section 1602 requires a permit prior to commencing any activity that may: 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. For more information, please see <http://bit.ly/23VJL8b>.

**Performance Standards for Cultivation and Processing Activities:**

- Setbacks:** Depending on your property, you may need to setback your cultivation area away from schools, wetlands, parks, etc.
  - Property Line:** 30 foot setback, unless waived or reduced with the express consent of the adjacent property owner and occupant.
  - School, School Bus Stop, Church or Other Place of Religious Worship, Public Park, or Tribal Cultural Resource:** 600 foot setback.
  - Watercourses, Wetlands and “Environmentally Sensitive Habitat Areas”:** Maintain required setbacks as described in the County Streamside Management Area Ordinance. See <http://www.humboldt.gov.org/DocumentCenter/Home/View/198> for more information on the Streamside Management Ordinance. Where enhanced, reduced, or modified watercourse or wetland setbacks have been agreed to by the operator and NCRWQCB under enrollment pursuant to NCRWQB Order No. 2015-0023 and/or preparation of a Water Resources Protection Plan, these may control and supersede any setback applied pursuant to the Streamside Management Ordinance.
- Meet Regional Water Board Order:** Enroll and maintain enrollment in the North Coast Regional Water Quality Control Board Order No. 2015-0023, or for operations which no enrollment is required by the Order, such as those below 2,000 sq. ft. of cultivation area, adhere to all standard conditions applicable to Tier 1 dischargers. See page 18 of this guide for information on the Water Board Order.
- On-Site Inspection:** Consent to an annual on-site compliance inspection, with at least 24 hours prior notice, to be conducted by appropriate County officials during regular business hours (Monday - Friday, 9:00 am - 5:00 pm, excluding holidays).
- Dangerous Chemicals:** Proper storage or use of any fuels, fertilizer, pesticide, fungicide, rodenticide, or herbicide. Any uses of pesticide products shall be in compliance with State pesticide laws and regulations enforced by the County Agricultural Commissioner’s Office and the California Department of Pesticide Regulation.
- Fees:** Pay all applicable application and annual inspection fees.
- Special Conditions:** Comply with any special conditions applicable to that permit or parcel which may be imposed as a condition of any Special Permit or Use Permit.
- Generator Noise:** The noise produced by a generator used for cannabis cultivation shall not be audible by humans from neighboring residences, (no more than 60 decibels measured at the property line).
- Storage of Fuel:** Fuel shall be stored and handled in compliance with applicable state and local laws and regulations, and in such a way that no spillage occurs.
- Those cultivators using artificial lighting for mixed-light cultivation** shall shield greenhouses so that little to no light escapes. Light shall not escape at a level that is visible from neighboring properties between sunset and sunrise.

**Retirement, Remediation, and Relocation (RRR) of Cannabis Sites.** Sites eligible for RRR incentives shall be those that were in operation on or before January 1, 2016 and are located in TC, FR, TPZ, U, RA, AG, or AE zones with source of irrigation water without DWR water right, or DFW streambed alteration permit on parcels with slopes in excess of 15%. See section 55.4.14.3 of CMMLUO for more information.

**Humboldt Artisanal Branding.** The County shall develop a program for recognition of commercial cannabis cultivators meeting the following criteria: Cultivation area of 3,000 sq ft or less, operated permit holder who resides on the same parcel as the cultivation site; grown exclusively with natural light; and meets organic standards.

# Pesticides and Herbicides

Pesticides are regulated by both the federal and state government. At the present time, there are no pesticides or herbicides registered specifically for use directly on cannabis and the use of pesticides on cannabis plants has not been reviewed for safety, human health effects, or environmental health. Under California and federal law, the only pesticide products not illegal to use on cannabis are those that contain an active ingredient that is 1) exempt from residue tolerance requirements, and either 2) exempt from registration requirements or 3) registered for a use broad enough to include use on cannabis.

**Table 3:** Active ingredients NOT illegal to use on cannabis and targeted pests.

<b>azadirachtin</b>	<i>aphids, whiteflies, fungus gnats, leafminers, cutworms</i>
<b>Bacillus subtilis QST</b>	<i>root diseases, powdery mildew</i>
<b>Bacillus thuringiensis subsp. aizawai or kurstaki</b>	<i>fly larvae (e.g., fungus gnats)</i>
<b>Beauveria bassiana</b>	<i>whiteflies, aphids, thrips</i>
<b>cinnamon oil</b>	<i>whiteflies</i>
<b>Gliocladium virens</b>	<i>root disease</i>
<b>horticulture oils (petroleum oil)</b>	<i>mites, aphids, whiteflies, thrips; powdery mildew</i>
<b>insecticidal soaps (potassium salts of fatty acids)</b>	<i>aphids, whiteflies, cutworms, budworms</i>
<b>iron phosphate; sodium bicarbonate</b>	<i>powdery mildew</i>
<b>neem oil</b>	<i>mites, powdery mildew</i>
<b>potassium bicarbonate; sodium bicarbonate</b>	<i>powdery mildew</i>
<b>predatory nematodes</b>	<i>fungus gnats</i>
<b>rosemary +peppermint essential oils</b>	<i>whiteflies</i>
<b>sulfur</b>	<i>mites, hemp flea beetles</i>
<b>Trichoderma harzianum</b>	<i>root disease</i>

\* Please note: Under no circumstances should you use a number of commonly available pesticides. These pesticides have been recognized as harmful to human or environmental health. These include, but are not limited to: Eagle 20, Avid, or Rodenticides such as "d-Con."

California Department of Pesticide Regulation: <http://bit.ly/1Lhs8nJ>

Legal Pest Management Practices for Marijuana Growers in California: <http://bit.ly/1QW4q4R>

Oregon Guidelist for Pesticides and Cannabis: <http://1.usa.gov/20LRLJO>

## California Department of Fish and Wildlife: Regulatory Compliance

### Stream Diversion, Water Source (Streams, Springs and Rain), Rates of Diversion, Bypass Flows and Forbearance



Diversion or removal of water from jurisdictional springs and streams under riparian rights is managed by the California Department of Fish and Wildlife (CDFW) under a number of sections of the Fish and Game Code (FGC 1602, 5901, and 5937). A project which could substantially alter the stream channel or flow requires a permit from CDFW that will include conditions to mitigate impacts. Permits from CDFW are called Lake and Streambed Alteration Agreements (LSAA) or 1600 Agreements ([www.wildlife.ca.gov/Conservation/LSA](http://www.wildlife.ca.gov/Conservation/LSA)). Permit requirements typically include bypass flow requirements (taking only a percentage of the total flow), or during low flow conditions, forbearance, especially for irrigation use. Forbearance is defined as a postponement or suspension of

diversion, meaning no diversion occurs during this period. Allowances for a small amount of diverted water for solely domestic use may be authorized under certain conditions.

The rate that water is diverted from the water source (spring or stream) is important to evaluate the relative impacts of water diversions. High rates of diversion, as a percentage of flow, are likely to have negative impacts on the aquatic system and species that depend on it by causing changes to water levels. For example, high rates of diversion from streams may dewater riffle habitat, reduce the production of invertebrates, and impair aquatic food webs. Diverting a small portion of the total flow (<10%) for water diversion is best to mitigate impacts to the environment by minimizing the change in water depth in a stream or spring, and providing a stable habitat for aquatic amphibians, invertebrates, and fish.

A large fluctuation in available habitat, resulting from the lowering of water levels, reduces aquatic production and impairs the aquatic ecosystem. In most locations, forbearance from water diversion and accompanying water storage is necessary to mitigate significant impacts to the environment. This is especially important in small tributary streams where salmon and trout rear in the summer low-flow season. Some of the aquatic species most impacted by excessive water diversion include coho salmon, steelhead trout, southern torrent salamander, red-legged frog, and Tailed Frogs. These species have the most limited habitat and the greatest reliance on cold water habitat.

### Water Storage and Ponds: Location, Construction, Sizing and Permitting

**Location On-stream:** Pond construction should take place outside of the watercourse and its buffer (> 50-100 feet depending on stream Class) to avoid extensive permit requirements. Construction of on-stream ponds will require permits from the County, Army Corps of Engineers, and Regional Water Quality Control Board in addition to the CDFW permit. Ponds may be permitted on a case by case basis in headwater channels, but must be engineered, stable, erosion free, and unlined. Ponds constructed on-stream without a permit may need to be removed or mitigated.

**Location Off-stream:** Ponds should not be constructed on springs, seeps, obvious wet areas or wetlands. Pond construction outside protected locations (streams, wetlands, and springs) should be sited in a stable location and be fitted with a spillway to direct overflow. Ponds built on slopes that require fill to impound water may require additional geologic evaluation (Professional Geologist). Water used to fill the pond may be diverted from streams and springs (LSAA required), collected from rainfall or overland flow, or may be filled with water pumped from a well (CDFW permit may be required if within 100 feet of a stream and hydrologically connected). Pond overflows should be designed by an engineer and may be directed into a watercourse, but requires erosion control and a permit (LSAA). Other overflow options include infiltration into bio-swales or overflow to other areas with designed erosion control.



Photo by: Thomas Dunklin

Constructed ponds are artificial habitats that often encourage establishment of non-native species such as bullfrogs. Bullfrogs are non-native (invasive) predators that prey on almost all aquatic life including native frogs, turtles, and fish. Bullfrog management and eradication is critical to mitigating negative impacts to fish and wildlife resources. Ponds should be sized appropriately to be drawn down (emptied) at the end of each season to mitigate the proliferation of bullfrogs by interrupting their two year metamorphosis (tadpole to juvenile) cycle.

Culverts must be placed at grade, aligned with the channel, and armored with rock to minimize erosion. In addition, culverts must be the proper length to allow for construction of stable roads. Rocked or vented fords may be allowed in small headwater stream crossings on a case by case basis.

#### **Stream Crossings: Culverts, Bridges and Rocked Fords**

Stream crossings are the jurisdiction of CDFW. This includes installation of bridges, culverts and rocked fords, which may alter the bed, bank or channel of a stream or divert and redirect the flow of water. Jurisdiction streams do not need to have water or flow at all times of year, and may be intermittent, with a defined channel or flow path.

Bridges and culverts are required to be sized to pass a 100 year storm event and associated debris.

Calculations for proper culvert sizing should be completed in coordination with a licensed professional or CDFW. Factors controlling the 100 year storm include contributing watershed area and estimated storm intensity based on geographic basis. Off the grid power users should incorporate solar power for summer time dry season power needs.

#### **Violations of Fish and Game Code 5650, 5652, 1602, 5937, 5901**

Specific violations that are common with unauthorized land development include installation of undersized or short culverts, construction of ponds on or off stream without permits or engineering, and erosion and sediment delivery to streams resulting from poorly constructed roads or grading. Mitigation of violations may include pond and road decommissioning (removal), and replacement of infrastructure. Additional penalties include fines and criminal or civil prosecution.

CDFW will work with you to develop your property in compliance with Fish & Game Code, Contact David Manthorne (707) 441-5900 or email: [david.manthorne@wildlife.ca.gov](mailto:david.manthorne@wildlife.ca.gov).

# Complying with the North Coast Regional Water Quality Control Board Cannabis Cultivation Waste Discharge Regulatory Program



On August 13, 2015, the North Coast Regional Water Board adopted a regulatory order to address waste discharges from cannabis and other

similar operations: *Order No. R1-2015-0023 General Waiver of Waste Discharge Requirements and General Water Quality Certification and Monitoring & Reporting Program for Discharges of Waste Resulting from Cannabis Cultivation and Associated Activities or Operations with Similar Environmental Effects in the North Coast Region* (Order). The Order establishes water resource protection requirements, provides a mechanism for water quality compliance, and enables the Regional Water Board to better focus its enforcement resources on environmentally damaging operations. Compliance with this Order will require a critical review of your property, an understanding of land use practices that are protective of water resources and their quality, and a desire and drive to implement those measures to ensure that compliance standards are met.

The Regional Water Board's program and Order are designed to meet the requirements of the California Water Code and the federal Clean Water Act, the regulations which provide the Water Boards with their authority, and the Basin Plan and the State Nonpoint Source Policy, two of the regulatory tools which the Regional Water Board uses to implement its authority. The Regional Water Boards are the state agencies with primary responsibility for the coordination and control of water quality. Nonpoint source (NPS) pollution, also known as polluted runoff, is the leading cause of water quality impairments in the North Coast. The majority of the streams in the North Coast are impacted by excess sediment and elevated temperatures. The problems are often associated with poorly planned forest clearing, earth-moving activities, and other land use management practices, resulting in polluted stormwater runoff to streams. Dry-season surface water

diversions intensify these water quality impacts. The exponential growth of cannabis cultivation throughout the North Coast Region has resulted in significant waste discharges and a loss of instream flows to the cumulative detriment of beneficial uses of water.

Operations with 2,000 square feet or more of cannabis cultivation, or any amount of cultivation that poses a threat to water quality, on private lands in the North Coast region are required to enroll in the Order by February 15, 2016. The Order includes enforceable requirements which cultivators need to become familiar and comply with to ensure their operations do not impact water resources. The basic information needed to begin the process of compliance can be found in the Order Overview section below. The Water Board strongly encourages any member of the public who is engaged in activities associated with cannabis cultivation to read and understand the Order in its entirety, and to seek advice from regulatory officials, certified third party programs that work specifically with this regulation, or from a qualified professional if clarification in understanding any of the Order's parameters or in the implementation of management measures to ensure compliance is needed. Enrollment in the program and compliance with the Order does not preclude the need for permits that may be required by other governmental agencies or supersede any requirements, ordinances, or regulations of any other regulatory agency, including necessary certification and permitting for the application of pesticides and herbicides and proper handling and disposal of solid and domestic wastes.

The Order does not in any way authorize, endorse, sanction, permit or approve the cultivation, possession, use, sale or other activities associated with cannabis. Marijuana is currently a Schedule I controlled substance under federal law. Individuals engaging in cannabis cultivation and other activities risk prosecution under federal, state, or local law.

## Order R1-2015-0023 Overview

The program is structured by tiers, relative to the potential threat to water quality.

**Tier 1** is a low-threat tier based on compliance with standard conditions and site characteristics (less than 5,000 sq ft of cultivation, no cultivation on slopes greater than 35%, and no surface water diversion from May 15 – October 31). The annual fee is \$1,000.

**Tier 2** is a management tier, which requires the development and implementation of a site-specific Water Resource Protection Plan. Tier 2 operations are those that do not meet the standard conditions or otherwise do not qualify for Tier 1. The annual fee is \$2,500.

**Tier 2\*** is a tier for sites with less than 10,000 sq ft of cultivation, where enrollees have fully implemented a water resource protection plan (WRPP), otherwise meet the Tier 1 standard conditions, and are determined by RWB staff or an approved third party to pose a low threat to water quality. The annual fee is \$1,000.

**Tier 3** is a cleanup tier, which requires the development and implementation of a Cleanup and Restoration Plan (CRP). Tier 3 Dischargers who are cultivating cannabis concurrent with or following site cleanup activities must adhere to all standard conditions and develop and implement a Water Resource Protection Plan for cannabis cultivation activities. Tier 3 is not eligible for enrollment via a third party program. The annual fee is \$10,000.

Standard conditions to protect water quality in conjunction with a Best Management Practice (BMP in Appendix B) provide a framework for cultivators to assess their sites for appropriate tiers and determine what management measures are necessary to protect water quality. All BMPs are considered enforceable conditions under the Order as applicable to a given site. The Order includes standard conditions regarding:

- Site maintenance, erosion control and drainage features
- Stream crossing maintenance and improvement
- Stream and wetland buffers
- Spoils management
- Water storage and use
- Irrigation runoff
- Fertilizers and soil amendments
- Pesticides
- Petroleum products and other chemicals
- Cultivation-related wastes
- Refuse and human waste, and

Enrollment in the Order is accomplished by submitting a Notice of Intent (NOI) form, the Monitoring and Reporting Program (MRP) form, and the annual fee. When filling out the NOI and MRP, cultivators should evaluate their sites to ensure that the forms accurately reflect the present conditions of the site. If developing a WRPP or a CRP, cultivators, and/or the professionals they hire, must include any proposed work that is to be performed in order to bring the site into full compliance with the conditions of the Order, as well as a timeline for when that work will be completed.

Enrollees in all tiers must monitor their sites periodically and prepare annual monitoring reports that include verification of conformance with the applicable standard conditions, and effectiveness of BMPs, and Water Resource Protection Plan. Annual reporting is required by March 31, via the MRP form. The form serves to document site monitoring and to verify continued enrollment in the program. Results of the monitoring will be evaluated on a HUC-12 or similar watershed scale.

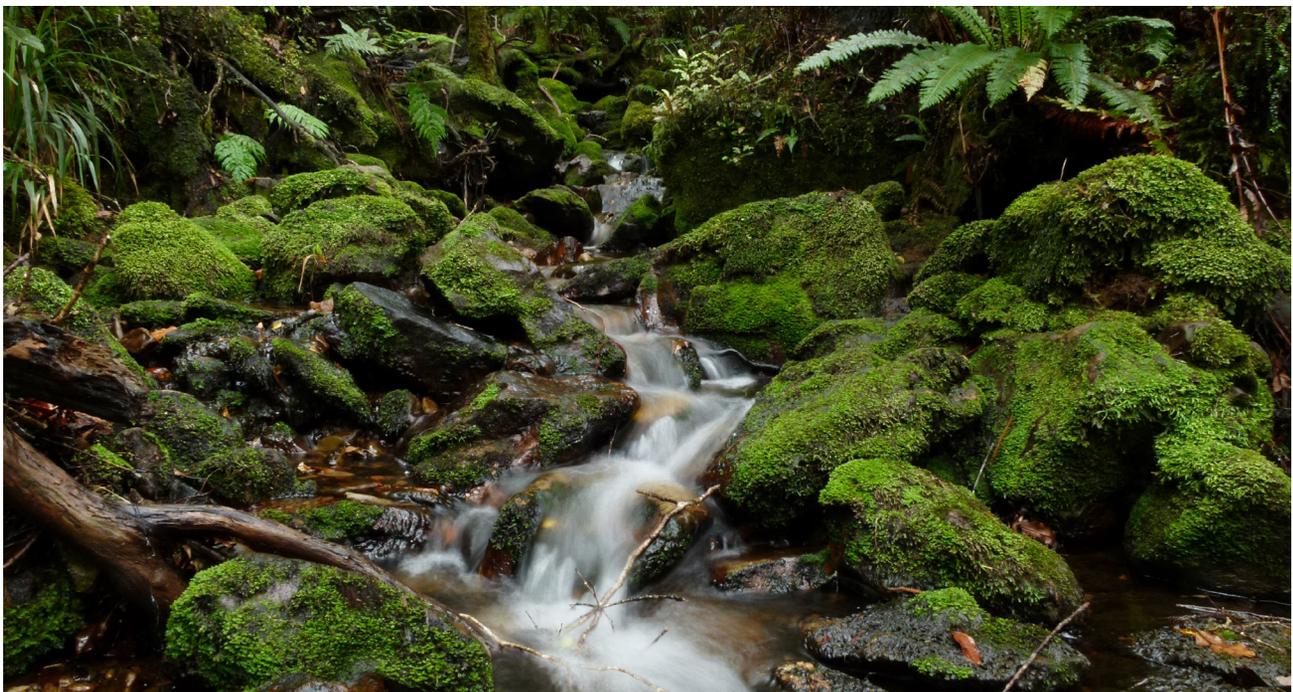
The Order provides a framework for non-governmental third party programs to assist cultivators with enrollment, compliance activities, and monitoring and reporting. Third party programs, which meet certain criteria, can increase

administrative efficiency and program participation and effectiveness. Upon approval, third party programs will be listed on the cannabis regulatory program website.

This regulation has been adopted for the protection of water quality and its benefactors. As a member of any community in the North Coast region, adhering to this Order and its conditions will help to protect water resources for you, your neighbors, and the wildlife that use the resource alongside you. The Water Boards, including all of the staff that work there, appreciate the efforts you and the members of your community take to ensuring stewardship of the land we all cherish continues into the future.

The Cannabis Cultivation Waste Discharge Regulatory Program website offers information, useful resources, and updates: [http://www.waterboards.ca.gov/northcoast/water\\_issues/programs/cannabis/](http://www.waterboards.ca.gov/northcoast/water_issues/programs/cannabis/)

Please subscribe to the email listserv to stay informed on the latest North Coast Cannabis Cultivation Waste Discharge Regulatory Program developments: [http://www.waterboards.ca.gov/resources/email\\_subscriptions/reg1\\_subscribe.shtml](http://www.waterboards.ca.gov/resources/email_subscriptions/reg1_subscribe.shtml)



# A Citizen's Handbook to Complying with the Water Board Cannabis Cultivation Waiver

This handbook is intended to help cultivators comply with all "Standard Conditions" imposed by the North Coast Regional Water Quality Control Board (NCRWQCB) in its Waiver of Waste Discharge Requirements for Discharges of Waste Resulting from Cannabis Cultivation, Order No. R1-2015-0023 (Order). Standard Conditions are conditions that all operators must adhere to. Consultation with Water Board staff or professional in the engineering, or landscaping field is a recommended first step, to attaining compliance.

## Clean Water 101:

It is illegal to discharge waste (sediment, chemical pollution, etc.) or to increase temperatures of "waters of the state" by changing riparian systems, reducing shade, or reducing water flows, unless one is authorized to do so legally. Under the Porter Cologne Water Quality Control Act of California, the Regional Water Quality Control Boards regulates discharges of waste.

Regional Water Boards regulate industries such as: building construction, agriculture, irrigated lands, rice farms, nurseries, wineries, dairies and feedlots, and timber operations are regulated by the National Pollutant Discharge Elimination System (NPDES) and California's Waste Discharge Requirements (WDR) to reduce or eliminate discharges that would negatively impact water quality. Cannabis is the newest industry to be added to a long list.

Everyone can be a discharger. With few exceptions, all parcels, under the right climatic conditions, will discharge surface run-off which contributes to the overall health or lack thereof of the watershed's receiving body. Landowners are responsible for the conditions, activities, and operations occurring on properties that they own, including discharges of waste from past or legacy development features.

## Complying with "Standard Conditions":

The Regional Water Board's Order requires cultivators adhere to a list of "Standard Conditions," located at section (I)(A) of the Waiver. You can read the Order here: <http://bit.ly/1ok2QR6>. The Regional Board also produced a list of "Best Management Practices," available here: <http://bit.ly/1U3PbK1>. These Best Management Practices are considered enforceable conditions at a given site. Through accomplishing the Best Management Practices, cultivators will likely meet the Standard Conditions. Standard Conditions are grouped together by category below. Under each Standard Condition are Best Management Practices which may help in meeting the Standard Condition. *\*Note, the list of Standard Conditions and Best Management Practices are not exhaustive.*

Measures to comply with these requirements will vary from parcel to parcel and are identified through consultation with the NCRWQCB or third party. The BMP manual provided by the Regional Water Board contains in-depth discussion of the various engineering, landscaping, and operational measures which can be used to comply with the Standard Conditions. BMPs listed may be applicable to prevent, minimize, control and mitigate the discharge of waste and other controllable water quality factors.

## Site Maintenance, Erosion Control and Drainage Features:

Roads, clearing and terraces shall be maintained to avoid erosion that results in sediment delivery to surface waters.

### Best Management Practices

- Proper design of roads and location is critical to ensuring adequate drainage. Consult with a qualified, licensed professional.
- Road surfacing can include pavement, rock or other materials appropriate for timing and nature of use (see BMP #72).
- Road shaping to optimize drainage and minimize direct flow runoff (see BMP #73). This includes working with designs to include shaping features such as rolling dips and breaking up continuous drainage features with water bars and/or culverts. Surfacing of exposed/disturbed/bare surfaces with vegetative cover, straw, mulch, fiber rolls, etc. (see BMP #71).

## Stream Crossing Maintenance

Culverts and stream crossings shall be sized for 100-year peak flows and shall allow passage for all life stages of fish on fish-bearing or restorable streams.

### Best Management Practices

- Stream crossing design and installation is best accomplished with the assistance of a qualified, licensed professional.
- A variety of crossing options exist, and the best options are site-specific. Options include rocked fords, culverts, bridges, etc. At a minimum, consult road design handbooks, such as the rural ranch roads handbook for guidance. Seek out a professional when technical assistance is necessary.
- Regular inspection of the stream crossing is appropriate to identify changed conditions within the stream channel.

## Riparian and Wetland Protection

Establish buffers between cultivation areas and watercourses or wetlands in accordance with Water Board Order (R1-2015-0023) and if in Humboldt County, the Streamside Management Area Ordinance (<http://www.humboldt.gov/DocumentCenter/Home/View/198>).

### Best Management Practices

- Tier 1 sites: 200 foot buffers between cultivation area and surface waters.
- Tier 2 sites, 200 feet is preferred, but at a minimum 100 foot buffers of any Class I or II watercourse, or 50 feet from and Class III watercourse or wetland.

## Demonstrate Responsible Water Use

### Best Management Practices

- Maximize storage to avoid diversions during low flow periods
- Apply water at accepted agronomic rates
- Implement water conservation measures, such as: use of rainwater catchment or drip irrigation
- Diversions shall be legal and compliant with Water Code section 5101
- <http://calsalmon.org/programs/water-rights-education>

## Water Use

Size and scope of an operation shall be such that the amount of water used shall not adversely impact water quality and/or beneficial uses.

### Best Management Practices

- Conduct operations on a size and scale that considers available water sources and water use and users in the planning watershed.
- Implement water conservation measures such as: rainwater catchment systems, drip irrigation, mulching, and/or irrigation water recycling.
- Do not overwater plants.

## Water Storage

Develop off-stream storage facilities to minimize surface water diversion during low flow periods. The State's Division of Water Rights, and County of Humboldt provide permitting for storage tanks. Professional consultation is recommended. \*See *Sanctuary Forest and/or SRF for more information*.

Diversion and/or storage of water from a stream shall be conducted pursuant to a valid water right and in compliance with reporting requirements under Water Code section 5101. Visit <http://bit.ly/20TZySk> for more information.

Water storage features, such as ponds, tanks, and other vessels shall be selected, sited, designed, and maintained so as to insure integrity and to prevent release into waters of the state in the event of a containment failure.

### Best Management Practices

- No surface water diversions from May 15-October 31.
- Vertical tanks should be installed on firm compacted soil. Installation of tanks 8,000 gallons or more must be on a reinforced concrete pad, especially where seismic or large wind forces are present.

### **Irrigation Run-off**

Implement water conservation measures, irrigate and apply fertilizer to minimize runoff and concentration of chemicals in the soil and water.

#### **Best Management Practices**

- Do not overwater plants.
- Regularly inspect for, and repair leaks.
- Dig swales along the perimeter of greenhouses and cultivated sites, back fill swale with woody mulch.
- Plant cover crops and/or use mulching in the winter to prevent runoff from winter rains.
- Regularly inspect for leaks in mains and laterals, in irrigation connections, or at the ends of drip tape and feeder lines. Repair any found leaks. Leave a vegetative barrier along the property boundary and interior watercourses to act as a pollutant filter.

### **Cultivation Related Wastes and Other Spoils**

Cultivation-related wastes including empty soil/soil amendment/fertilizer/pesticide bags and containers, plant pots or containers, dead or harvested waste, and spent growth medium shall be stored and/or disposed of at locations where they will not enter surface waters, including leaching of nutrients and/or other chemicals into surface or ground waters. Spoils generated through development or maintenance of roads, driveways, earthen fill pads, or other cleared or filled areas shall not be sidecast in any location where they can enter or be transported to surface waters.

#### **Best Management Practices**

- Minimize imported soil for cultivation purposes. Reuse as much of the cultivation related materials as possible.
- Use of compost increases the humic acid content and water retention capacity of soils while reducing need for fertilizer application.
- Compact and contour stored spoils to mimic the natural slope contours and drainage patterns of the landscape.
- Ensure spoil materials are free of woody debris.
- Do not place spoils on unstable or wet ground.
- Do not locate spoils in or adjacent to wetlands and watercourses.
- Vegetate the disposal site with a mix of native plant species. Cover the seeded and planted areas with mulch or other erosion control techniques.

### **Petroleum Products and Other Chemicals**

Diesel, biodiesel, gasoline, and oils shall be stored so as to prevent their spillage or seepage into receiving waters.

#### **Best Management Practices**

- Above ground storage tanks and containers shall be provided with a secondary means of containment for the entire capacity of the largest single container.
- Ensure diked areas are sufficiently impervious to contain discharged chemicals.
- Have appropriate cleanup materials available onsite.

### **Refuse and Human Waste**

Disposal of domestic sewage shall meet applicable County health standards, local agency management plans and ordinances, and/or the Regional Water Board's Onsite Wastewater Treatment System Policy. Trash containers of sufficient size and number shall be provided and properly serviced to contain the solid waste generated by the project. Refuse shall be removed from the site on a frequency that does not result in nuisance conditions, transported in a manner that they remain contained during transport, and the contents shall be disposed of properly at a proper disposal facility.

#### **Best Management Practices**

- Ensure that human waste disposal systems do not pose a threat to surface or ground water quality or create a nuisance.
- Design trash container areas so that drainage from adjoining roofs and pavement is diverted around the area(s) to avoid run-on.
- Consider using refuse containers that are bear-proof and/or secure from wildlife.

## A Citizen's Guide to Developing a Water Resource Protection Plan

This guide is intended to help cultivators develop a "Water Resources Protection Plan," a requirement for farms in Tier 2 and Tier 3 imposed by the North Coast Regional Water Quality Control Board in its Order. Please read, understand and familiarize the Order prior to developing a Water Resource Protection Plan, available at: <http://bit.ly/1ok2QR6>. Following this guide is not a guaranteed to produce a legally defensible plan. Consultation with Water Board staff or professional in the engineering or landscaping field is a recommended first step.

### What is a Water Resource Protection Plan?

A Water Resource Protection Plan serves multiple purposes. First, it requires cannabis cultivators to think about their operations and ways to improve water use over the course of a growing season before plants are in the ground. Second, it provides a tool for regulators to evaluate how farms are meeting their targets, including meeting deadlines and measurable milestones.

Plans are to be kept on site and produced upon a request by Regional Water Board Staff. Farmers must annually certify to the Regional Water Board or to a registered third-party program that the plan is being implemented, water quality is being protected, and if remediation activities are required, progress is being made to bring the site into compliance with the Order.

### What must be in a Water Resource Protection Plan?

Farms in Tier 2 and Tier 3 that intend to cultivate cannabis before, during or following site clean-up must develop and implement a water resource protection plan that contains the elements listed below:

- Map of the property including: areas of operation, roads, water bodies, all cleared/developed areas, and general drainage patterns and directions.
- Design drawings for watercourse structures, fish passages, roads, septic tanks, fill prisms, pads, ponds, or any constructed feature that has been designed or engineered.
- Assessment of current conditions and identification of any features needing improvements to correct the function of roads or developed areas, drainage features or measure, encroachments into riparian buffer areas, controllable sediment delivery sites, including stream crossing in need of correction.
- Detailed list of specific management practices designed to meet Standard Conditions (above), incorporating applicable BMPs needed to bring site into compliance with Standard Conditions.
- If site problems are identified, include a prioritization and implementation schedule for corrective action.
- List of chemicals on site.
- Monitoring plan.
- Water use plan shall record water source, water right documentation and amount used monthly. Plan must describe water conservation measures and document approach to ensure that the quantity and timing of water use is not impacting water quality objectives and beneficial uses.

# Cannabis Consultants and Services

## Regulatory Agencies

Bureau of Medical Marijuana Regulation

North Coast Water Quality Control Board  
[http://www.waterboards.ca.gov/northcoast/water\\_issues/programs/cannabis/](http://www.waterboards.ca.gov/northcoast/water_issues/programs/cannabis/)

California Department of Fish and Wildlife  
David Manthorne, (707) 441-5900  
[david.manthorne@wildlife.ca.gov](mailto:david.manthorne@wildlife.ca.gov)

State Water Resources Control Board

Humboldt County Planning & Building  
<http://www.humboldt.gov.org/2159/Medical-Marijuana-Permits> Cannabis Hotline: (707) 268-3795

Humboldt County Agriculture Commissioner

Humboldt County Environmental Health

## Engineering Firms

GHD Engineering  
(707) 443-8326

Omsberg & Preston Engineering  
(707) 443-8651

Manhard Consulting, Ltd.  
(707) 444-3800

Pacific Watersheds Associates  
(707) 839-5130

SHN Engineering & Geologists  
(707) 441-8855

Timberland Resource Consultants  
(707) 725-1897

## Permitting Consultants

AgDynamix  
(707) 502-0217 [www.AgDynamix.com](http://www.AgDynamix.com)

Compliant Farms  
(707) 502-4870 [hightidepermaculture.com](http://hightidepermaculture.com)

Green Road Consulting Engineers  
(707) 479-5646

High Tide Permaculture  
(707) 633-5403 [Hightidepermaculture@gmail.com](mailto:Hightidepermaculture@gmail.com)

Hollie Hall and Associates  
(707) 502-4870 <http://www.holliehall.com>

Humboldt Green  
(707) 362-6511 [www.Humboldt.Green](http://www.Humboldt.Green)

Samara Restoration  
(707) 601-3478 [www.samararestoration.com](http://www.samararestoration.com)

Verdant Bridge Enterprise, Ron Mattson  
(707) 720-7647

## Soil Consultants

Beneficial Living Center, Seth Geddes  
(707) 633-6125 [beneficiallivingcenter.com](http://beneficiallivingcenter.com)

DBS Agricultural Consulting and Analysis  
(707) 633-8885 [www.dbsanalytics.com](http://www.dbsanalytics.com)

BioVortex Living Soil Specialist, Jesse Dodd  
(707) 874-0743 [athenesav@gmail.com](mailto:athenesav@gmail.com)

Soilscape Solutions, Certified Soil Consultants  
(707) 273-8758, [www.soilscapecolutions.com](http://www.soilscapecolutions.com)

## Attorneys

Janssen Malloy LLP  
(707) 445-2071

Gallegos Law Firm  
(707) 441-8477

Paul Hagen North Coast Environmental Law Office  
(707) 630-5012

Tom Hicks, Attorney at Law  
(415) 309-2098

Law Office of Kathleen Bryson  
(707) 268-8600

Ed Denson, Attorney at Law  
(707) 923-4764

## Cannabis Insurance Agent

John Ford Insurance Agency  
[ford.insurance@att.net](mailto:ford.insurance@att.net)

## Public Interest Organizations

California Growers Association  
[www.calgrowersassociation.org](http://www.calgrowersassociation.org)

Environmental Protection Information Center (EPIC)  
[www.wildcalifornia.org](http://www.wildcalifornia.org)

Sanctuary Forest  
[www.sanctuaryforest.org](http://www.sanctuaryforest.org)

Salmon Restoration Federation  
[www.calsalmon.org](http://www.calsalmon.org)

Mad River Alliance  
[www.madriveralliance.org](http://www.madriveralliance.org)

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