

Joint Report to the Legislature on the Department of Fish and Wildlife and State Water Resources Control Board pilot project to address the Environmental Impacts of Cannabis Cultivation (Watershed Enforcement Team)



This report is in response to the 2014-2015 Supplemental Report for item 3600-001-0001- Department of Fish and Wildlife (Department or CDFW), which provides the following directive:

“The Department of Finance shall report, on behalf of the Marijuana Task Force, on or before January 10, 2015, to the Assembly and Senate budget committees, on its recommendations to require marijuana producers growing under Proposition 215 protections, to comply with regular permitting, and with any need for regulatory changes to allow law enforcement to accompany regulators for site visits.”

In this report, the Department and the State Water Resources Control Board (Water Board)¹ provide an overview of the joint pilot project to address environmental degradation resulting from marijuana cultivation, a discussion of the agencies’ interaction with other state agencies, and a discussion of the program’s outcomes between August 2014 and February 1, 2015. This report also describes that the CDFW and the Water Board intend to require that marijuana producers growing on private lands comply with CDFW’s and the Water Boards’ existing and soon-to-be adopted permitting programs and current environmental protection laws. There is no need for a regulatory change that would allow law enforcement to accompany regulators on site visits as that authority currently exists.

Background

While the Department, as the trustee agency of the state’s fish and wildlife resources, and the Water Boards, as the trustee agencies of the state’s water quality and water supply, have been engaged in enforcement activities relating to cannabis cultivation for many years, they recently proposed through the Governor’s Office a pilot project to deploy regulatory measures and a focused enforcement effort regarding growers on private lands. The pilot project arose, in part, out of the rapid escalation of cannabis cultivation and proliferation of cultivation sites, primarily in Northern California.

Based on satellite imagery and aerial photography, the Department confirmed in 2014 that streams and rivers that contain threatened and endangered species habitat have experienced a five-fold increase in grading and land clearing activities in the last five years as a result of conversion for cannabis cultivation. The CDFW study results indicate water diversion for marijuana cultivation could completely dewater three of four study streams. Study results were confirmed in the summer of 2014 when water diversion for marijuana cultivation, in combination with severe drought, caused large segments of these same streams to run dry. In all, CDFW personnel documented or received public reports of more than 24 salmon and steelhead streams going dry in the northwestern portion of California due to drought and excessive use for marijuana cultivation.

¹ The Central Valley Regional Water Quality Control Board, the North Coast Regional Water Quality Control Board and the State Water Resources Control Board, distinct state agencies, are all involved in the pilot project with CDFW. For the sake of simplicity, the three Water Board entities will be referred to herein simply as the Water Boards.

Nearly all of the marijuana cultivation in drought-stricken watersheds in the state is occurring without regard to other applicable laws and regulations because cultivators do not apply for permits intended to protect water quality and fish and wildlife resources.

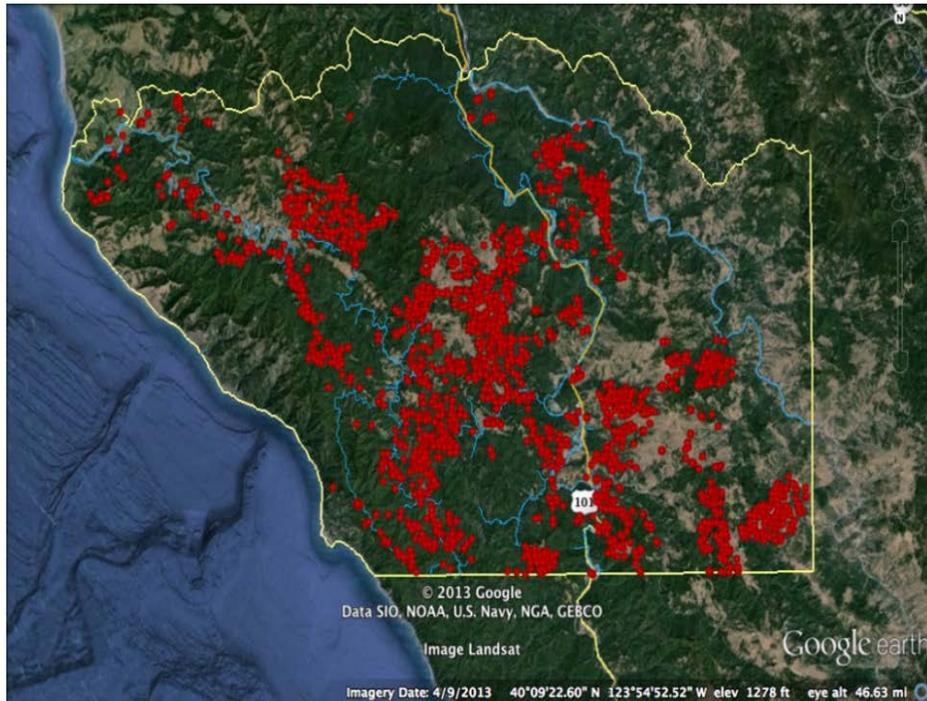


Figure 1. In 2012, southern Humboldt County alone contained more than 2,000 marijuana cultivation sites (each red dot indicates a site). The number of sites and the average size of these operations steadily increase every year.

The Budget Act of 2014 appropriated resources for both CDFW and the Water Board to reduce environmental damage caused by marijuana cultivation on private and high value state-owned public lands in California. CDFW received \$1.5 million and seven positions, and the Water Boards received \$1.8 million and 11 positions, to create a multi-disciplinary Marijuana Task Force, and to implement a priority-driven approach to address the natural resources damages from marijuana cultivation on private lands in northern California and on high conservation value public lands.

The pilot project's initial effort is focused in the geographic area where CDFW and the Water Board have the greatest need, which are those counties covered by CDFW Regions 1 (Del Norte, Siskiyou, Modoc, Humboldt, Trinity, Shasta, Lassen, Mendocino, and Tehama), and Region 4 (Tuolumne, Stanislaus, Mariposa, Merced, Madera, San Benito, Fresno, Monterey, Kings, Tulare, San Luis Obispo, and Kern). These counties are covered by the Central Valley and North Coast Regional Water Quality Control Boards, and the State Water Resources Control Board's Division of Water Rights. The pilot project has four components; (1) the development of a

regulatory program; (2) targeted enforcement in high value watersheds; (3) education and outreach to cultivators about best management practices; and (4) multi-agency coordination at the state and local level. CDFW's and the Water Boards objective is to prevent, assess, and remediate environmental damage from marijuana cultivation sites. CDFW's and the Water Boards' top priorities are to prevent environmental damage impacting streams and habitat and preserve scarce water supplies, each of which is being severely afflicted by the ongoing drought coupled with increased demands on stream flows caused by the rapid proliferation of cannabis cultivation sites.

Overview of the Program

In July 2014, CDFW and the Water Board prepared a Strategic Plan entitled, "Regulation and Enforcement of Unauthorized Diversions; Discharges of Waste to Surface and Groundwater Caused by Marijuana Cultivation." The Strategic Plan describes a multi-agency approach for regulating environmental impacts and enforcing against crimes and civil violations associated with marijuana cultivation. The Plan directs CDFW to investigate and enforce violations of illegal streambed alterations associated with marijuana production, and the Water Board to investigate and enforce against violations of water quality laws, regulations and objectives as well as unauthorized diversions of surface water.

In August 2014, CDFW formed the Watershed Enforcement Team (WET) to implement the Strategic Plan. The specific mission of WET is to accomplish the objectives of the Strategic Plan: permitting, enforcement, education and outreach, as well as coordination with other agencies. WET is composed of one Wildlife Officer Supervisor (Lieutenant), two Wildlife Officers, two Senior Environmental Scientists (Specialist), one Attorney, and one Associate Government Program Analyst. At about the same time, the Water Board formed its WET teams, consisting of water resources control engineers, geologists, environmental scientists and a senior attorney. Four are stationed in the Central Valley Region's Redding office, four are stationed in the North Coast Region's Santa Rosa office, and three, including the senior prosecutor, are stationed at the Office of Enforcement in Sacramento.

Program Outcomes

Permitting

The Water Board is in the process of promulgating a conditional waiver of waste discharge requirements (permit) in both the North Coast and Central Valley Regions. A conditional waiver of waste discharge requirements will require all persons engaged in the activity of cultivating cannabis to enroll in the program, comply with terms and conditions and pay a fee. While the permits must undergo a public process before they can be adopted by the respective Regional Water Boards, they are expected to contain such terms and conditions as, among others, a site operations plan, proper fuel storage and maintenance, appropriately sized and graded stream crossings, appropriately graded grow and structure pads, guidelines for fertilizer use and pest control and water conservation measures. The North Coast Region is expecting to have its

permit available for public comment in March, and hopes to have the permit considered for adoption by its Board in Summer, 2015. The Central Valley Region's permit is approximately 4-6 months behind the North Coast Region's due to differences in the applicable Basin Plan and other existing regulatory programs. The permits only apply to activities conducted on private land.

Education and Outreach

Members of the CDFW and Water Board team made presentations on the adverse environmental impacts of cannabis cultivation and the pilot project to the Association of California Water Agencies, the Association of Environmental Planners, the Governor's Prevention and Advisory Council, the Emerald Growers' Association, the Small Farmer's Association, the Humboldt Watershed Council, the California Association of Counties, the California Bar Association (North Coast Environmental Chapter), a group of loosely affiliated medical marijuana advocates from the Central Valley, the Western Plant Science Association, California NORML, California Cannabis Industry Association, American for Safe Access, CalTrout, Trout Unlimited and the Nature Conservancy.

Pilot project staff has distributed over 2,000 flyers providing basic information about safe environmental practices to be printed and distributed at public meetings, at grower's supply shops and other places where cannabis cultivators purchase materials. We have just proofed a flyer to be sent to all licensed grading contractors in the pilot project area warning of the potential liability for improperly graded areas that threaten to discharge sediments or other pollutants to waters.

Between the Department and the Water Boards, we have undertaken over a dozen radio interviews addressing the adverse impacts of cannabis cultivation and the components of the pilot project, in addition to many dozens of newspaper and periodical interviews resulting in print stories. Publications where CDFW and/or the Water Boards have addressed adverse environmental impacts and/or the pilot project include the Associated Press, the New York Times, Discover Magazine, the San Francisco Examiner, the Santa Rosa Press Democrat, the Eureka Times Standard, and the Willits News.

The agencies are working with the California Department of Pesticide Regulation to develop and circulate information about safe, non-chemical pest control practices.

Enforcement

In September of 2014, WET Wildlife Officers received training while working with the CDFW's Marijuana Enforcement Team (MET) and local county drug task forces. During this training, these Wildlife Officers played an important role in seizing several thousand pounds of processed marijuana. WET Environmental Scientists prepared field data sheets and templates for Environmental Impact Assessments and acquired the necessary tools to properly investigate violations. These scientists also worked closely with WET Wildlife Officers to organize case

work and timelines. Meanwhile, Water Board team members received training in inspection protocols and violations and prepared to enter the field.

CDFW and the Water Boards undertook 42 site inspections in the pilot area between September 2014 and February 1, 2015. The multi-disciplinary team noted unauthorized discharges of waste, unauthorized diversions of water, diversions without streambed alteration agreements and other water quality violations. Most cases will result in administrative civil liability actions by CDFW and/or the Water Boards, and/or cleanup and abatement orders. The remaining cases will be referred to the applicable County District Attorneys for criminal prosecution, or to applicable County Counsels' offices for civil code and nuisance abatement actions. WET staff also took 23 public complaints (phone calls, emails, interviews) in September, mostly concerning water trucks diverting stream flow on fish-bearing waterways.

(See Figure 3.)



Figure 3. CDFW personnel inspecting an unpermitted pond found adjacent to a marijuana cultivation site. This pond captured and diverted all the water from a small tributary to an important salmon and steelhead stream.

Multi-Agency Coordination

CDFW and the Water Board have met with the United States Department of Justice and United States Environmental Protection Agency to discuss the pilot project and how it is consistent with recent guidance to the United States Attorneys with respect to cannabis enforcement under federal law. (See 8/29/2013 Memorandum for all United States Attorneys; Guidance Regarding Marijuana Enforcement.)

The agencies are engaged in ongoing meetings with the California Department of Pesticide Regulation regarding the safe use of pesticides and developing educational materials concerning non-chemical pest control. We have also met with a variety of other state agencies to brief them on the pilot project and investigate and ascertain what rolls they can play in helping stop the adverse environmental impacts from cannabis cultivations, including the Department of Toxic Substances Control, CalRecycle, the Department of Forestry and Fire Protection, the Board of Forestry, the Department of Water Resources, the Department of Justice, the District Attorneys' Association, the North Coast Sheriffs, the Rural County Representatives of California, some Resource Conservation Districts, the Agriculture Commissioners and the Board of Equalization.

Critically, we have met with law enforcement and civil officials, including members of Boards of Supervisors, County Counsels, Sheriffs, District Attorneys, County Planners and Code Enforcement officers and County Executives in Butte, Shasta, Siskiyou, Tehama, Mendocino, Trinity, Yuba and Humboldt Counties. The pilot project team members coordinate inspections and enforcement actions with local law enforcement and civil officials to ensure we are leveraging our resources to the maximum extent practicable, and that we are not interfering with local efforts aimed at protection of the environment and/or the public health

DFW and Water Board Recommendations Regarding Possible Legislative/Regulatory Changes Needed to Assure Growers Under Proposition 215 Comply with Existing Permitting Requirements.

DFW Lake and Streambed Alteration Agreement Fee Enhancement for Marijuana Cultivation Sites that Require Remediation.

CDFW is considering a proposal to modify its Lake and Streambed Alteration (LSA) permitting program by increasing the fees that marijuana growers must pay to apply for LSA permits associated with MCS that require remediation. Specifically, CDFW is considering whether to update California Code of Regulations section 699.5 to add a separate fee schedule specific to MCS that require remediation. CDFW believes that increasing the fee schedule for LSA permits sought for MCS that require remediation will give unpermitted marijuana producers, growing under Proposition 215, an incentive to comply with CDFW's LSA permitting program before MCS remediation is necessary.

In 2014, the Departments' Region 1 office issued LSA permits for approximately 11 MCS's in Humboldt County. The Humboldt County Sheriff's Department estimates there are more than 4,000 such sites spread throughout this mostly rural county. If one compares the number of MCS-related permits issued in Humboldt County to this law enforcement estimate, CDFW has permitted approximately .002% of all MCS in one third of the Emerald Triangle (includes Humboldt, Trinity, and Mendocino counties). If CDFW and SWRCB are successful in getting regulatory compliance with even one quarter of Northern California marijuana growers, one can expect a substantial increase in permit applications for these often complex projects.

The LSA permitting of a MCS cleanup is complex. Most sites, typically inspected on search warrants during the summer cultivation season, require some form of expedited remediation measures before the onset of winter rains due to poorly constructed roads, stream crossings, on-stream dams, and cultivation areas graded into very steep and erosive terrain. Without timely remediation, MCS's can impair water quality through direct and indirect sediment delivery to stream channels, which negatively impacts important habitat for state and federally-listed aquatic species.

The potential for MCS's to significantly impact the state's natural resources requires immediate action on the part of the CDFW's permitting staff. While the governing statutes require staff to issue an LSA within 90 days of receiving a complete application, the permitting of MCS remediation is typically expedited in the interest of protecting public trust resources. Such permitting is often completed well before the 90 day statutory timeline, to ensure construction activities are completed before inclement weather. In addition, given the potential for impacts to sensitive species and habitats, permit application processing for MCS cleanup is often given preference over more typical project applications (i.e. a single culvert installation on a private road in an urbanized setting).

This unconventional permitting process is problematic for a number of reasons. First, the additional workload is unanticipated and strains the CDFW's personnel resources. No additional staff are available to process these unexpected permit applications. Second, application processing and issuance of permits for law-abiding citizens are delayed, creating an unfair burden on those who followed the law. Third, expediting permits for MCS remediation does not dissuade people from continuing to violate Fish and Game Code section 1602. Given that these fees are identical for lawful applications and an expedited timeline to receive a permit, the process could possibly encourage unscrupulous growers to choose the unlawful route.

CDFW regulatory staff spend considerably more time on LSA applications' associated with MCS remediation than more typical permit applications. Remediation plans included in these LSA applications often contain engineered grading plans, habitat restoration or enhancement plans, and strict timelines for completion. CDFW staff must review and approve those plans, and conduct frequent monitoring of sites to ensure proper implementation and completion. More complicated sites require additional staff with different areas of expertise, and thus greater staff time and personnel expenditures.

CDFW's WET program will greatly expand its efforts in 2015 to regulate the marijuana cultivation industry. In addition, the SWRCB will begin a regulatory program involving the permitting of MCS. Part of this new SWRCB program will include the need for applicants to apply for a LSA permit when applicable. If both programs are successful, CDFW expects a substantial increase in LSA permit applications. Existing staff will not be capable of handling this new permit workload in addition to conducting public outreach, working on enforcement efforts, documenting environmental damages, and monitoring existing permitted sites. Additional staffing resources and funding will be necessary to protect public trust resources. A

fee enhancement on these new applicants would provide CDFW with the necessary funding to properly permit MCS.

CDFW proposes a fee enhancement of 300%, up to the statutory cap of \$5,000 (see Fish and Game Code section 1609(b)(1)), to obtain a LSA permit that requires MCS remediation in order to help ameliorate the unconventional permitting process described above. Each segment of the fee schedule would increase correspondingly. This enhancement would help fully fund the true cost of staff processing MCS permits, enable CDFW to hire additional staff to help process these complicated permits and the anticipated increase in permit applications as the WET team expands its operations, and would provide a disincentive for violating Fish and Game Code Section 1602.

Table 2. CDFW Standard LSA Agreement Current Fee Schedule and Proposed Change for MCS Remediation

Project Cost	Current Fee	Proposed Fee
\$0-\$5,000	\$245.50	\$736.50
\$5,000-\$10,000	\$307.25	\$921.75
\$10,000-\$25,000	\$613.75	\$1,841.25
\$25,000-\$100,000	\$921.00	\$2,763.00
\$100,000-\$200,000	\$1,351.50	\$4,054.50
\$200,000-\$350,000	\$1,833.25	\$5,000.00*
\$350,000-\$500,000	\$2,763.25	\$5,000.00
\$500,000 or more	\$4,912.25	\$5,000.00

* Regulatory fee cap per Fish and Game Code section 1609(b)(1).

State Water Resources Control Board Water Diversion/Storage Permit and Waste Discharge Permit.

The Water Board’s Division of Water Rights oversees and regulates California’s system of water rights, including the diversion of surface waters. In the first major category, the Task Force is gathering information about, analyzing and developing solutions to address unauthorized diversions by cannabis cultivators. It is also doing the same with respect to riparian right holders who may be diverting consistent with their right, but are nevertheless adversely affecting in stream flows and, consequently, fish and wildlife habitat and drinking water supplies. In addition to addressing how best to deploy resources to curtail unauthorized diversions, the Task Force is looking at how to work with riparian right holders so that they can divert at high flow periods and stop diverting during low flow periods. This requires looking at storage and permit options, waste and unreasonable use issues and, potentially, public trust issues, all of which are issues of primacy for the water boards.

At this time, the Water Boards plan to transition to a regulatory structure by adopting two “tiered” conditional waivers of waste discharge requirements or “permits” in the North Coast and Central Valley Regions, respectively. The two permits will be substantially similar, but have some nuanced differences based primarily on differences in the Regions’ respective Basin Plans and other existing regulatory programs. The North Coast conditional waiver is being reviewed internally by the Task Force at this time. The North Coast’s conditional waiver is slated for release to the public sometime in March, and should be on track to be considered for adoption after public comments and response sometime in Summer 2015. The Central Valley’s conditional waiver is likely 4-6 months behind this time frame. Once adopted, the Water Boards will expect cannabis cultivators to enroll in the permits and pay an appropriate fee, which will be based on the tier in which the cultivator is slotted. The Water Boards have agreed with local sheriffs and other law enforcement agencies that it will work with them to determine which cultivators qualify, or could qualify with compliance assistance, for inclusion in a regulatory program, and which cultivators cannot qualify and are better suited to referral to law enforcement for criminal or civil prosecution.

Additional Consideration: Regulations/Legislation Related to Diversions or Obstruction of Fish-bearing Waterways, and Transport of Stolen Water.

CDFW and the Water Boards are considering whether legislative or regulatory changes are necessary to help address other cultivation-related activities adversely affecting fish and wildlife resources. For example, the obstruction or impeding of fish passage, unscreened diversions, and vehicular transport of water for marijuana cultivation without a lawful water hauler license may impact fish and wildlife resources. Illegal water drafting by individuals using unscreened diversions, barriers to fish movement, and portable tanks and pumps has increased at an alarming rate, especially during the drought. CDFW is considering proposals to enhance enforcement of Fish and Game Code sections 5901 and 6100. Most laws addressing theft of water are found in the Water Code, but are difficult to enforce. California Health and Safety Code (H&SC) section 111120 requires operators of water haulers (WH) operating in California to obtain a water hauler license issued by the Department of Public Health’s Food and Drug Branch. The water hauler license is required to haul water in bulk for drinking, culinary or other purposes involving a likelihood of the water being ingested by humans. “In bulk” means containers having capacities of 250 gallons or greater. Section 111120 of the H&SC applies to potable water. Based on CDFW and Water Board staff receiving tips on trucks drafting and delivering water for marijuana cultivation, it is reasonable to assume this water is not initially meant for consumption and it is questionable whether a source is potable water. Therefore, CDFW and the Water Boards believe legislative and/or regulatory changes may be necessary to regulate the vehicular transport of water used by marijuana producers growing on private lands.

Additional Consideration: Abandoned and Orphaned Site Cleanup Funds.

CDFW and the Water Boards have discovered many abandoned cannabis cultivation sites and those where the property owner lacks funds to remediate adverse site conditions. These sites

pose significant threats to water quality on both public and private lands. Currently, there are no public funds available to remediate orphaned and abandoned sites.