

STATE OF CALIFORNIA  
THE RESOURCES AGENCY  
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
MITIGATED NEGATIVE DECLARATION

FOR

THE 2017 RESTORATION OF HABITAT IMPACTED BY CANNABIS CULTIVATION  
PROJECT  
IN  
HUMBOLDT, MENDOCINO, SISKIYOU, AND TRINITY COUNTIES  
AND  
REQUIRED AGREEMENT REGARDING PROPOSED STREAM OR LAKE  
ALTERATION

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This Report Has Been Prepared Pursuant to the  
California Environmental Quality Act of 1970  
State of California  
The Resources Agency  
California Department of Fish and Wildlife

INITIAL STUDY  
AND  
MITIGATED NEGATIVE DECLARATION  
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**The Project:** The 2017 Restoration of Habitat Impacted by Cannabis Cultivation Project (Cannabis Project) will use funds approved by the California Legislature to award grants through a competitive process to projects designed to restore watersheds damaged by cannabis cultivation.

The environmental impacts associated with cannabis cultivation have had a serious detrimental effect on fish and wildlife and their habitat, which are held in trust by the state for the benefit of the people of the state. The environmental impacts include: land clearing; road construction; unpermitted stream crossings; the use of unregistered pesticides and other environmental contaminants; and unlawful water diversions for irrigation. These proposed projects are designed to improve habitat conditions for wild anadromous fish in coastal streams.

The Cannabis Project's objectives are to improve watershed habitat for coho salmon, Chinook salmon, steelhead trout, and coastal cutthroat trout. Other wildlife species, such as Pacific fisher, foothill yellow legged frog, northern spotted owl, marbled murrelet, bald eagle, golden eagle, black bear, and Coastal marten will also benefit from the Cannabis Project.

**The Finding:** Although the Cannabis Project may have the potential to cause minor short-term impacts on soil, vegetation, wildlife, water quality, and aquatic life, the measures that shall be incorporated into the Cannabis Project will lessen such impacts to a level that is less than significant (see initial study and environmental checklist). The California Department of Fish and Wildlife (CDFW) finds that implementing the Cannabis Project will have no significant environmental impact.

**Basis for the Finding:** Based on the initial study, the CDFW determined there would be no significant adverse environmental effects resulting from implementing the Cannabis Project. In addition, the CDFW expects the Cannabis Project to achieve net benefits to the environment by restoring habitats through

removal of cannabis cultivation materials from individual sites and revegetating those sites with native plants.

Therefore, this proposed mitigated negative declaration is filed pursuant to the California Environmental Quality Act (CEQA), Public Resources Code § 21080(c)(2). This proposed mitigated negative declaration consists of all of the following:

- **Introduction - Project Description and Background Information**
- **Initial Study Environmental Checklist Form**
- **Explanation of Response to Initial Study Environmental Checklist Form**
- **Appendix A: Project list.**
  - **Range Wide Project Location Map**
  - **Bull Creek Cannabis Recovery Project**
  - **Reclaiming our Public Lands and Watersheds from the Environmental Threats of Trespass Cannabis Cultivation**
  - **SF Usal Creek Headwaters – Trash and Toxin Cleanup**
  - **Whitethorn Grove Clean Up**
- **Appendix B. Mitigation Measures, Monitoring and Reporting Program For the 2017 Restoration of Habitat Impacted by Cannabis Cultivation Project**
- **Appendix C. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities For the 2017 Restoration of Habitat Impacted by Cannabis Cultivation Project**
- **Appendix D. Procedure for the Programmatic Evaluation of Paleontological Resources for the 2017 Restoration of Habitat Impacted by Cannabis Cultivation Project**
- **Appendix E. Procedure for the Programmatic Evaluation of Archaeological Resources for the 2017 Restoration of Habitat Impacted by Cannabis Cultivation Project**

## **DETAILED PROJECT DESCRIPTION AND BACKGROUND INFORMATION**

**FOR**

**THE 2017 RESTORATION OF HABITAT IMPACTED BY CANNABIS  
CULTIVATION PROJECT**

**IN**

**HUMBOLDT, MENDOCINO, SISKIYOU, AND TRINITY COUNTIES**

**AND**

**REQUIRED AGREEMENT REGARDING PROPOSED STREAM OR LAKE  
ALTERATION**

### **INTRODUCTION**

The CDFW will award grants to up to four projects proposed by potential grantees to restore watersheds in Humboldt, Mendocino, Siskiyou, and Trinity counties (hereafter, those four proposed projects are referred to as Restoration Items). The Cannabis Project is subject to review under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).

In order to describe and analyze the greatest potential significant impacts that could result from the CDFW's implementation of the Cannabis Project, this Initial Study and Mitigated Negative Declaration (MND) describe and analyze the potential significant impacts of the Cannabis Project as though the CDFW will fund all four Restoration Items and all four Restoration Items will be fully implemented. On June 5, 2017, the CDFW published its Proposal Solicitation Notice for the Cannabis Project. The deadline for submission of applications for funding was June 30, 2017. The CDFW has reviewed the applications it received in response to that Proposal Solicitation Notice and narrowed those down to four applications (which correlate to the four Restoration Items), but the CDFW has not yet made final funding decisions. Therefore, some of the Restoration Items may not receive funding from the CDFW.

This Initial Study and MND also address the CDFW's Lake and Streambed Alteration (LSA) authority over the Restoration Items (see Fish and Game Code, § 1600 et seq.). All or a portion of the individual actions necessary to implement the Restoration Items may actually occur in subsequent years, depending on the terms of each CDFW grant award.

### **PROJECT GOAL AND OBJECTIVES**

The primary goal of the Cannabis Project is to restore watersheds damaged by cannabis cultivation, thereby creating habitat characteristics favorable to salmonids.

The objectives of the Restoration Items are to enhance the capability of streams to produce wild anadromous salmonids by maintaining, restoring, and improving stream habitat essential to salmonid production.

Finally, it is the CDFW's objective to implement this project without causing a significant adverse effect on the environment, reducing the number of, or restricting the range of an endangered, threatened, or rare species.

## **BACKGROUND**

Pursuant to Fish and Game Code section 1501.5, the CDFW may grant funds for fish and wildlife habitat preservation, restoration, and enhancement to public agencies, Indian tribes, and nonprofit entities.

The CDFW established its Cannabis Restoration Grant Program in 2017. State laws, including Assembly Bill 243 (Wood), encourage the CDFW to restore watersheds impacted by cannabis cultivation. In his signing message for AB 243, Governor Brown directed, "*the Natural Resources Agency to identify projects to begin the restoration of our most impacted areas in the state.*"

California's fish and wildlife continue to be severely impacted by unregulated cannabis cultivation practices, including unlawful water diversions for irrigation; conversion of lands; and use of unregistered pesticides and other environmental contaminants. The most impacted areas require immediate action on the part of the CDFW.

The Cannabis Restoration Grant Program is associated with the CDFW's Fisheries Restoration Grant Program (FRGP); it uses FRGP project types that are guided by the *California Salmonid Stream Habitat Restoration Manual* 4<sup>th</sup> Edition (Flosi et al., 2010).

## **PROJECT LOCATION**

Cannabis Project activities will occur in watersheds that have been most severely impacted by cannabis cultivation practices, including, but not limited to, land clearing; road construction; unpermitted stream crossings; the use of unregistered pesticides and other environmental contaminants; and unlawful water diversions for irrigation. These cultivation practices and others have had a serious detrimental effect on fish and wildlife and their habitat.

Map 1 illustrates the Cannabis Program geographic range, which is limited to North Coast watersheds known to have been most heavily impacted by cannabis cultivation, extending from Sonoma County to the Oregon Border, as depicted in Map 1. All Cannabis Project activities will occur within the geographic range illustrated by Map 1.

**Cannabis Restoration  
Grant Program  
Geographic Scope**

-  Geographic Scope
-  Watersheds (HUC8)
-  County Lines
- Accounting Units (HUC6)**
-  Klamath
-  Lower Sacramento
-  Northern California Coastal
-  San Francisco Bay
-  Southern Oregon Coastal
-  Upper Sacramento



Geographic scope defined by HUC-8 watersheds from the confluence of the Klamath and Trinity Rivers, extending South to the Russian River Watersheds, and North to the State line. Includes all of the Northern California Coast Accounting Unit and a portion of the Klamath Accounting Unit.

California Department of Fish and Wildlife, Watershed Restoration Grants Branch, D.Mastalir, 20170517

**Map 1: Area covered by Cannabis Restoration Grant Program**

## **SCHEDULE**

Cannabis Project activities will typically occur during the annual period of dry weather. Stream work is normally confined to the period of June 15 through November 1 or the first significant rainfall, whichever comes first. This is to take advantage of low stream flows and is outside the spawning and egg/alevin incubation period of salmon and steelhead.

Generally, upslope work will occur during the same approximate period. Sediment reduction activities are dependent on soil moisture content. Equipment access on dirt roads is inhibited by wet conditions. The scheduling of upslope work may also be affected by the avoidance of nesting or breeding seasons of birds and terrestrial animals.

Some activities may continue after November 1, but the extent of such activities is limited through grant conditions and compliance with any required permit. Post-November 1 activities will generally be limited to hand planting of tree seedlings, which typically does not begin until December 1 and may continue until the end of March. Planting during the wet season is necessary to ensure the best survival of seedlings.

## **PROJECT DESCRIPTION**

On June 5, 2017, the CDFW, through its Cannabis Restoration Grant Program, released its Proposal Solicitation Notice for proposals that will restore watersheds impacted by cannabis cultivation throughout Northern California coastal watersheds, as depicted in Map 1. The deadline for submission of applications for funding was June 30, 2017.

The Department's evaluation process requires consideration of benefits to the fishery resources, the benefit for targeted species, project costs, and positive or negative impacts to the environment. When evaluating and reviewing the need for work in particular drainages or at particular sites, the CDFW utilizes the watershed assessment and planning work funded through the FRGP and from other CDFW and agency programs at work in California.

Proposals received by the CDFW underwent an administrative pass/fail review before proceeding to Technical Review. At least three CDFW staff with expertise in coastal watersheds, specific cannabis cultivation issues, and fish and wildlife species management conducted the Technical Review of proposals. A selection panel comprised of CDFW executive leadership then reviewed the proposals and their technical scores and comments and developed funding recommendations for the Director of the CDFW. After CEWA review is completed, the Director will review the selection panel's recommendations and make final funding decisions. The CDFW will then execute grant agreements with the entity or entities that submitted proposals selected by the CDFW for grant funding.

The Cannabis Restoration Grant Program operates under a Regional General Permit, RGP12, issued by the U.S. Army Corps of Engineers (USACE). This permit covers most of the Restoration Items in the Cannabis Project. RGP12 (file number: 2003-27922N) was issued in 2010 and renewed in 2016 by the USACE and covers Restoration Items implemented within the regulatory boundaries of the USACE's San Francisco District. RGP12 allows the CDFW, grantees, and other individuals and groups to conduct fishery habitat restoration activities using methods described in the *California Salmonid Stream Habitat Restoration Manual* 4<sup>th</sup> edition (Flosi et al. 2010) that have been evaluated by CDFW biologists. The National Oceanic and Atmospheric Administration (NOAA) and the U.S. Fish and Wildlife Service (USFWS) have issued biological opinions that are incorporated into RGP12. The biological opinions address the impacts of the CDFW's restoration projects and stipulate the mitigations that shall be implemented to avoid and/or minimize impacts to listed species.

The CDFW will submit an application for a programmatic Section 401 Water Quality Certificate to the State Water Resources Control Board for the Cannabis Project covered by the RGP12. A description of project work and methods to prevent impacts on water quality shall be provided annually to the State Water Resources Control Board and to the appropriate regional boards.

The CDFW's lake and streambed alteration agreement process (Fish and Game Code § 1600 et seq.) is an integral part of stream restoration planning and implementation. The CDFW and each grantee will develop a streambed alteration agreement for each Restoration Item. Those agreements will include required measures to minimize disturbance to the stream environment. Procedures to accomplish this task are contained in the CDFW Lake and Streambed Alteration Program (1600) webpage <https://www.wildlife.ca.gov/Conservation/LSA>. Activities such as decommissioning water diversions and operating equipment in or near streams are all discussed in the context of minimizing impacts, and all required measures for species protection discussed in this document will be incorporated into any SAAs required for implementation of the Restoration Items. The four Restoration Items are set out in detail in Appendix A. The location of each Restoration Item is illustrated on a map in Appendix A. One major component of cannabis cultivation is the clearcutting of forest and the use of unregistered pesticides. Upslope components of each Restoration Item will remove hazardous materials and non-hazardous waste from upland areas. Removal of hazardous material is a crucial first step in reducing the possibility that these materials enter the soil and leach into streams. Furthermore, removing hazardous materials from the environment will help to reduce the exposure of other wildlife to these toxicants. Dead wildlife (such as black bears, foxes, and Pacific fishers) have been found near illegal cannabis cultivation sites, and the cause of those mortalities has been attributed to those animals being exposed to hazardous materials that were used at those illegal cannabis cultivation sites. Removal of non-hazardous waste is an important stage in

restoring these areas back to their natural state. Large volumes of waste may need to be moved with heavy equipment. As described in Appendix A: Project List and Appendix B: Mitigation Measures, Monitoring and Reporting Program For the 2017 Restoration of Habitat Impacted by Cannabis Cultivation Project, that work will be limited to specified annual field season and the three year term of each potential grant agreement. Areas cleared of hazardous materials and other waste will be re-vegetated with native species or will be assessed for future restoration. Re-vegetation will help to minimize the habitat fragmentation caused by clearcutting, though it will take time for planted vegetation to mature.

Bauer et al. (2015) found that the amount of water required for cannabis cultivation often exceeds the streamflow during the low-flow period in four Northwestern California watersheds; furthermore, diminished stream flows from diversions may have lethal or sub-lethal effects on listed salmonids. Decommissioning of water diversions allows water to remain in the stream and may reduce erosion if the diversions are gravity driven.

If streambank stabilization is required, it may include the use of boulder and cobble armoring of eroding banks, log cribbing, willow mattresses, or willow siltation baffles. Revegetation of riparian habitat normally involves the use of willow sprigs or willow or alder seedlings or transplants to stabilize banks and slopes, promote long-term shade and channel stability, and enhance large-wood recruitment. Indigenous stocks shall be used when available for all planting work.

Typically, these habitat restoration activities use dump trucks to carry non-hazardous waste from sites. Existing stream crossings will be used to access the stream in most cases. If stream crossings do not exist, the least damaging access points will be selected based upon the size, type, and density of riparian vegetation. Where use of such access points is necessary, riparian vegetation can be affected, particularly the upper part of plants may be damaged, with the roots and lower parts receiving minimal damage. Plants damaged in this way usually re-sprout and recover. Access to restoration activity sites will be identified before implementation of the Restoration Item and shall not create bank erosion or cause the removal of riparian trees. Staging areas at the activity sites will be set up in upland or on dry stream banks, where they would cause a minimal, and less than significant, impact to vegetation. Disturbed or bare mineral soils resulting from work activities, which are subject to surface erosion, will be seeded and straw mulched.

Removing all cannabis cultivation materials will help to prevent re-establishment of cannabis cultivation practices at these sites. The techniques that are used for these Restoration Items have proven successful on many coastal streams and are detailed in the current version of the *California Salmonid Stream Habitat Restoration Manual* (4<sup>th</sup> edition). This manual describes in detail how the work shall be performed in the field.

All work, except for the revegetation, shall take place during the summer and fall (low flow period) and shall be completed by November 1 or before the first significant seasonal rainfall, whichever comes first. Planting of seedlings shall take place after December 1, or when sufficient rainfall has occurred, to ensure the best

chance of survival of the seedlings, but in no case later than April 15. All habitat improvements shall be done in accordance with techniques described in the *California Salmonid Stream Habitat Restoration Manual* (4<sup>th</sup> edition).

Cannabis Project restoration work will only be carried out at sites that are impacted by cannabis cultivation. No Cannabis Project restoration work will be carried out to improve aesthetic values only.

Appendix A contains a list of each Restoration Item title, location, and description of work that will be implemented at each site. The Restoration Item designs were reviewed by the CDFW and will be implemented by grantees utilizing hand labor crews and heavy equipment when needed. During a pre-project inspection, the grantee and the CDFW will tour the entire activity area and identify the sites and techniques necessary to carry out the recommendations. The site-specific recommendations shall be listed in an inspection report, which will be acknowledged by the grantee's signature as a required element of the activity. The CDFW will continue to inspect the work site during and after completion of each Restoration Item. Implementation of each Restoration Item will be conditioned and controlled to prevent any significant impacts.

Complete site plans and prescriptions for each Restoration Item are available for review at the California Department of Fish and Wildlife Cannabis Restoration Grant Program headquarters, office of Permit/Regulatory Coordinator, Karen Carpio, 1700 9<sup>th</sup> Street, 2<sup>nd</sup> Floor, Sacramento, CA 95811. Appointments may be made by telephoning (916) 327-8658, Monday through Thursday, between the hours of 9 a.m. and 4 p.m.

### **Environmental Assessment of Each Restoration Item**

After CDFW makes its final decisions regarding which Restoration Items to fund, CDFW will apply the various protocols/mitigation measures set out in this MND to those specific Restoration Items and prescribe mandatory site-specific conditions that will ensure avoidance of potentially significant negative effects on the environment, including such effects on endangered, rare, or threatened species and their habitat

First, all Restoration Items listed in Appendix A shall comply with CDFW policies to protect rare, endangered, and listed animal species. A review of the CDFW's CNDDDB for the entire project location area indicated which animal species found on a State or Federal special status list may be present at the work sites. This site specific information is attached to each statement of work in Appendix A. Mitigation measures to avoid impacts to these species are presented along with other mitigation measures in Appendix B; Mitigation Measures, Monitoring and Reporting Program. In the absence of site-specific information, species identified as having potential to be affected at a work site shall be assumed present at the work site and the CDFW will require the grantees to implement mitigation measures to avoid impact to that species. Any site-specific surveys to confirm the presence, or absence, of a listed animal species at a work site shall be performed by qualified biologists according to protocols described in Appendix B. The CDFW will include conditions in

Streambed alteration agreements and grant agreements to avoid impacts at each site to any special status species that could potentially be affected at that site. The CDFW shall ensure that the grantee or responsible party is aware of all specific conditions that apply to each work site. Also, the CDFW shall inspect each work site before, during, and after completion of the restoration activities to ensure compliance with mitigation measures to avoid potential impacts to endangered, rare, or threatened species. Grantees shall immediately rectify any violation of mitigation measures. If a grantee fails to immediately rectify any violation of required measures, the grantee must cease all work until the grantee develops a remediation plan and the CDFW approves that plan.

Second, all Restoration Items listed in Appendix A shall comply with CDFW policies regarding rare plant surveys. Grantees shall contract out for qualified botanist to complete rare plant surveys following the Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (California Department of Fish and Wildlife, 2009), Appendix C. In Appendix A, a review of the CDFW's current California Natural Diversity Data Base (CNDDDB) for sites where restoration activity will occur is attached to the statement of work for each Restoration Item. That review indicates which plant species found on a State or Federal special status list could potentially be affected at the work sites. Rare plant surveys shall be completed prior to any ground disturbing activities. If any potentially significant impact cannot be avoided, the portion of the Restoration Item that would cause that potentially significant impact shall not be implemented. Any site specific recommendations made by a CDFW biologist, or other qualified biological consultant, to avoid any potentially significant impacts shall become part of the work plan and incorporated into the required measures in the issued streambed alteration agreement (Fish and Game Code § 1600 et seq.). The CDFW's grant managers shall ensure that the grantee or responsible party is aware of, and implements, these site specific conditions during routine inspections. The CDFW shall inspect the work sites before, during, and after completion each Restoration Item. Grantees shall immediately rectify any violation of mitigation measures. If a grantee fails to immediately rectify any violation of required measures, the grantee must cease all work until the grantee develops a remediation plan and the CDFW approves that plan.

Third, all Restoration Items listed in Appendix A shall comply with CDFW policies regarding cultural resource surveys, including archaeological or paleontological surveys (if necessary). Grantees shall contract out a qualified cultural resource specialist or qualified cultural resource specialists to complete the surveys using protocols listed in Appendix D: Procedure for the Programmatic Evaluation of Paleontological Resources and Appendix E: Procedure for the Programmatic Evaluation of Archaeological Resources. Grantees must conduct research on available cultural data repositories and a review of cultural resources with regional experts to identify possible areas of importance within the project area will occur. Site specific detailed research shall be done for projects sites deemed likely to encounter cultural resources (Appendix C & D). Review of cultural surveys shall be completed

prior to any ground disturbing activities. If any potentially significant impact cannot be avoided, the portion of the Restoration Item that would cause that potentially significant impact shall not be implemented. Any site specific recommendations made by a qualified cultural specialist to avoid any potentially significant impacts shall become part of the work plan and incorporated into the measures required in the issued streambed alteration agreement (Fish and Game Code § 1600 et seq.). The CDFW's grant managers shall ensure that the grantee or responsible party is aware of, and implements, these site specific conditions during routine inspections. The CDFW shall inspect the work sites before, during, and after completion of each Restoration Item. Grantees shall immediately rectify any violation of mitigation measures. If a grantee fails to immediately rectify any violation of required measures, the grantee must cease all work until the grantee develops a remediation plan and the CDFW approves that plan.

Through careful design, scheduling, and monitoring, any and all potentially significant impacts associated with the Restoration Items will be avoided or mitigated to a less than significant level. To ensure that each Restoration Item adheres to avoidance and mitigation measures, a CDFW grant manager will be assigned to each Restoration Item. Additional details regarding implementation of Restoration Items, including required mitigation measures, are detailed in the environmental checklist section below.

### **Monitoring**

Project monitoring is considered an important element in the activity development and implementation process. The monitoring process provides performance control during the activity and helps provide a measure of the benefits, insight, and guidance for future projects.

A CDFW grant manager will oversee activity during implementation to ensure the following: that all regulatory environmental issues are strictly addressed, including air, water, and avoiding impacts to sensitive plant and animal species; that plans are followed; and that the correct materials and techniques are used so that the objectives of the activities are met while protecting the environment.

Post-activity monitoring begins with information collected immediately after the grantee has completed implementation at a specific site. Post-activity monitoring will document whether the project was completed as designed and according to grant specifications. This information includes documenting the exact location where the activity has occurred with reference points and survey marks. Final project reports should contain "as-built" descriptions with design drawings and photographs (both before and after the activity). Grantees must retain a complete activity description, including the objectives of the activity.

The next phase of post-activity monitoring is designed to assess the efficacy of the project and shall occur within one to three years after a Restoration Item is complete. In accordance with the CDFW's RGP12, the CDFW shall randomly select ten percent of the Restoration Items for effectiveness/validation monitoring. A random sample shall be chosen from the pool of restoration projects approved for funding

each year. This evaluation shall be recorded on standard project evaluation forms. Effectiveness monitoring addresses the physical response associated with an activity, while validation monitoring evaluates fish response to the project. Complete monitoring specifications can be found in Part VIII of the *California Salmonid Stream Habitat Restoration Manual* 4<sup>th</sup> edition (Flosi et al 2010) (<http://www.dfg.ca.gov/fish/Resources/HabitatManual.asp>). Additional details on monitoring and reporting requirements are presented in Appendix B.

## **REFERENCES**

- California Department of Fish and Game. Lake and Streambed Alteration Program (1600) webpage <https://www.wildlife.ca.gov/Conservation/LSA>
- California Department of Fish and Game. 2000. Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities. The Resources Agency, State of California, Sacramento, CA.
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