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Executive Summary

In late 2015, the California State Legislature passed, and Governor Jerry Brown signed into law, the Medical Cannabis Regulation and Safety Act (MCRSA). This act, initially consisting of three separate bills (Assembly Bill [AB] 243 [2015], AB 266 [2015], and Senate Bill [SB] 643 [2015]) and subsequently amended, outlines a new structure for regulation and enforcement of medical cannabis production and use in California. On November 8, 2016, California voters passed Proposition 64 (the Adult Use of Marijuana Act [AUMA]), legalizing the use and possession of nonmedical cannabis products within California by adults aged 21 years and older.

Both acts establish a regulatory structure for cultivation, processing, manufacturing, tracking, quality control, testing, inspection, distribution, and retail sale of commercial cannabis. The acts designate applicable responsibilities for oversight of cannabis commerce to several State agencies.

It is important to note that, although California now allows for both medical and adult (nonmedical) use of cannabis, cannabis remains classified as a Schedule 1 controlled substance under the federal Controlled Substances Act of 1970. Individuals engaging in cannabis cultivation and other cannabis-related activities risk prosecution under federal law.

The California Department of Food and Agriculture (CDFA) is tasked with licensing commercial cannabis cultivation, as well as establishing a “track-and-trace” system, which involves development of a unique identifier for each plant, a reporting system, and documentation of the path of plants from cultivation to distribution as a commercial cannabis product. To accomplish this, CDFA is proposing to implement the CalCannabis Cultivation Licensing program, by establishing regulations for the medical and adult use licensing program and track-and-trace system.

CDFA has prepared this Draft Program Environmental Impact Report (PEIR) to provide an up-to-date, transparent, and comprehensive evaluation of the proposed regulations and the activities that would occur in compliance with the regulations. The PEIR will serve as an overarching California Environmental Quality Act (CEQA) framework for efficient and proactive implementation of the CalCannabis program. This PEIR is intended to provide CEQA compliance for the adoption of regulations to implement the Proposed Program. To achieve this, it considers future Proposed Program activities as described in Chapter 2, Proposed Program Description, and Chapter 3, Proposed Program Activities. CDFA will use the PEIR in deciding whether to approve, approve with modifications, or deny the Proposed Program. The regulations that CDFA is considering adopting, as they are described in this PEIR, are referred to as the “Proposed Program.”

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1 Formerly known as the Medical Marijuana Regulation and Safety Act; renamed in 2016.
This PEIR is intended to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of implementation of the Proposed Program. This Draft PEIR has been prepared in compliance with the California Environmental Quality Act (CEQA) of 1970 (as amended) and the State CEQA Guidelines (Title 14, California Code of Regulations Section 15000 et seq.).

**ES.1 Overview of the Proposed Program**

**Goals and Objectives**

The overarching goal of the Proposed Program is to establish a regulatory licensing program that would ensure that commercial cannabis cultivation operations would be performed in a manner that protects the general public, cannabis cultivation workers, and the environment from the individual and cumulative effects of these operations. Licensees must also comply with all applicable laws. An additional Program purpose is to establish a track and trace program to ensure the movement of medical and adult-use (nonmedical) cannabis items are tracked throughout the production chain.

In meeting these goals, the Proposed Program has the following objectives:

- Establish minimum requirements for indoor, outdoor, and mixed light commercial cannabis cultivation operations that must be achieved by cultivators in order to obtain a cultivation license from CDFA;
- Establish a license limit for the medium size cultivation categories;
- Require 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 the flows needed to maintain natural flow variability;
- Require that cultivation will not negatively impact springs, riparian wetlands, and aquatic habitats;
- Require that cannabis cultivation by licensees is conducted in accordance with applicable federal, state, and local laws related to land conversion, grading, electricity usage, water usage, water quality, woodland and riparian habitat protection, species protection, agricultural discharges, and similar matters;
- Establish procedures for the issuance and revocation of unique identifiers for activities associated with a cannabis cultivation license;
- Prescribe standards for the reporting of information as necessary related to unique identifiers;
- Establish a scale of application, licensing, and renewal fees, based upon the cost of administering and enforcing the Proposed Program; and
- Develop a cultivation checklist tool that can be used by CDFA, other agencies, and local governments to evaluate environmental impacts of cannabis cultivation license programs.
Program Area

Cannabis cultivation can occur in a combination of urban, rural, natural, and agricultural settings in the State; therefore, Proposed Program activities occur in various locations throughout California (Figure ES-1). The potential geographic extent of a cultivation site depends on a number of factors, including suitable climatic and ecological conditions for the cannabis plants. Cannabis cultivation can be generally divided into three basic categories – outdoor, indoor, and mixed light cultivation techniques. Processing of cannabis may occur as part of cultivation, or as a separately licensed activity. Nurseries also involve a particular type of cultivation, and are also described. A combination of these cultivation techniques may occur at one site. The location, area and extent of specific activities under the Proposed Program ultimately would vary on a site-specific basis, considering the cultivation technique, license procured, the regulatory requirements and the management approaches available.

The Proposed Program outlines specific requirements for license eligibility, including but not limited to:

- Board of Equalization seller’s permit number;
- Proof of fingerprinting submission to the California Department of Justice;
- Under MCRSA, a copy of a local license, permit or other authorization from a local jurisdiction to cultivate;
- Proof of any CEQA compliance which has been completed;
- Documentation issued by the local jurisdiction in which the proposed business would be operating certifying that the applicant is or will be in compliance with all local ordinances and regulations;
- A cultivation plan detailing grow site dimensions, chemical use protocols, water source and storage, waste removal plan, inventory tracking procedures, quality control procedures, product storage and labeling, pest management plan, and details regarding the method of compliance with applicable environmental requirements;
- Proof of the legal right to occupy the proposed cultivation site;
- Proof of a bond in the amount of $5,000;
- If applicable, copy of a valid Fish and Game Code section 1602 lake or streambed alteration agreement or written verification from the Department of Fish and Wildlife that an agreement is not required;
- Evidence that the proposed cultivation site is located beyond a 600-foot radius from a school;
- Information regarding the water source for the operation operation, and if applicable, approval of water diversion and water rights; and
- For each “owner,” a list of convictions and evidence of rehabilitation for each substantially related criminal conviction.
Additionally, as part of the Proposed Program, CDFA would require licensees to attest to the following:

- No owner of the business is a licensed retailer of alcoholic beverages.
- The applicant is an “agricultural employer” as defined by the Alatorre-Zenovich-Dunlap-Berman Agricultural Labor Relations Act of 1975.
- For an applicant with 20 or more employees, the applicant is entered into a Labor Peace Agreement.
- For an indoor license type, that the local fire department has been notified of the cultivation site.
- Under penalty of perjury, the information in the application is complete, true and accurate; all owners agree to operate in compliance with all applicable laws and regulations.

**Summary of the Proposed Program**

The Proposed Program governs the licensing of commercial indoor, outdoor, and mixed-light, processing, and nursery activities; as well as establishing a track-and-trace system, which involves development of a unique identifier for each plant, a reporting system, and documentation of the path of plants from cultivation to product distribution. The Program establishes license definitions, applications requirements, cultivation license fees and requirements, cultivation site requirements, including environmental protection measures and other environmentally beneficial provisions, and requirements related to records and reporting. Activities conducted under the Proposed Program would also be subject to inspection, investigations, audits, and enforcement of license requirements.

Licensing would involve the thorough review and approval of a proposed site-specific plan for cultivation of cannabis. Among many activities, CDFA’s CalCannabis Cultivation Licensing program would be responsible for ensuring licensee compliance with relevant mitigation measure requirements determined by the environmental analysis; requiring compliance with applicable principles, guidelines and requirements established by the State Water Resources Control Board and relevant Regional Water Quality Control Boards; requiring the application of pesticides in connection with cannabis cultivation is compliant with existing pesticide use laws and regulations established by the Department of Pesticide Regulation; and requiring that individual and cumulative effects of water diversion and discharge do not affect instream flows needed for fish spawning, migration and rearing.
Figure ES-1
Proposed Program Area
Table ES-1 specifies the various types of licenses that could be procured by applicants as part of the Proposed Program. Cultivation techniques are specifically defined in the Proposed Program regulations (see Chapter 2, Proposed Program Description). Outdoor cultivation refers to the cultivation of cannabis without the use of light deprivation and/or artificial lighting in the canopy area. Supplemental low intensity lighting is permissible only to maintain immature plants as a source for propagation. Indoor cultivation refers to the cultivation of cannabis within a structure using artificial light, at a rate greater than 25 watts per square foot. Mixed-light cultivation refers to the cultivation of cannabis using light deprivation and/or artificial lighting below a rate of 25 watts per square foot. Outdoor cultivation typically produces one harvest per year, while indoor and mixed-light cultivation can produce multiple harvests per year. Nurseries produce only clones, immature plants, seeds, and other agricultural products used specifically for the planting, propagation, and cultivation of cannabis. Processing operations covered under the processing licenses or the other cultivation license types include trimming, drying, curing, grading or packaging of cannabis and nonmanufactured cannabis products. The Proposed Program outlines license allowances and constraints for licensees, including providing a clear understanding of license combinations, total canopy size allowable for each person, as defined by MCRSA, license renewal requirements, associated fees, and reasons for denial for license approval and/or revocation.

Table ES-1. License Types

<table>
<thead>
<tr>
<th>Cultivation Category</th>
<th>Outdoor</th>
<th>Indoor</th>
<th>Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialty Cottage Cultivator</td>
<td>Up to 25 mature plants</td>
<td>Up to 500 sq. ft.</td>
<td>Up to 2,500 sq. ft.</td>
</tr>
<tr>
<td>Specialty Cultivator</td>
<td>Up to 5,000 square feet (sq. ft.), or up to 50 mature plants on noncontiguous plots</td>
<td>501 - 5,000 sq. ft.</td>
<td>2,501 to 5,000 sq. ft.</td>
</tr>
<tr>
<td>Small Cultivator</td>
<td>5,001 - 10,000 sq. ft.</td>
<td>5,001 - 10,000 sq. ft.</td>
<td>5,001 - 10,000 sq. ft.</td>
</tr>
<tr>
<td>Cultivator</td>
<td>10,001 sq. ft. to one acre</td>
<td>10,001 - 22,000 sq. ft.</td>
<td>10,001 - 22,000 sq. ft.</td>
</tr>
<tr>
<td>Nursery</td>
<td>No size Restriction</td>
<td>No size Restriction</td>
<td>No size restriction</td>
</tr>
<tr>
<td>Processor</td>
<td>Includes all activities associated with trimming, drying, curing, grading or packaging of cannabis and nonmanufactured cannabis products. No size or location limits.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Proposed Program is described in detail in Chapter 2, Proposed Program Description, and Chapter 3, Proposed Program Activities.
Nature of the Discretionary Action Considered in the PEIR

This PEIR is intended to provide CEQA compliance for the adoption of regulations to implement the Proposed Program. To achieve this, it considers future Proposed Program activities as described in Chapter 2, Proposed Program Description, and Chapter 3, Proposed Program Activities. CDFA will use the PEIR in deciding whether to approve, approve with modifications, or deny the Proposed Program. Note that many aspects of the Proposed Program are prescribed by law, and CDFA's act of discretion in adopting the regulations is therefore limited to those aspects of the regulations not specifically prescribed by law and/or those which have involved CDFA's interpretation or addition of further specificity in the regulations.

This PEIR is intended to meet CEQA requirements for CDFA's CalCannabis Cultivation Licensing program, and consider reasonably foreseeable cannabis cultivation activities associated with the Proposed Program. The Proposed Program does not attempt to capture all potential future cannabis cultivation programs, regulations, and activities, but only those that are reasonably foreseeable based on existing information regarding the status of the cultivation of cannabis for commercial purposes in the State of California.

The PEIR may be used for subsequent CEQA evaluation, to evaluate project-level cannabis cultivation activities, as well as local and regional programs, newly developed management approaches, or other emerging aspects of cannabis cultivation. Use of the PEIR to facilitate CEQA compliance for individual activities and program components will enable CDFA to efficiently implement an adaptable program. The strategy to be implemented for the Proposed Program is described further below.

CEQA Tiering Strategy

To facilitate the determination of whether applications for proposed cultivation activities and related management approaches have been sufficiently described in the Proposed Program and adequately addressed in the PEIR, a CEQA Tiering Strategy and checklist are being developed by CDFA. Using these tools, future commercial cannabis cultivation activities would be assessed to determine the extent to which potentially significant environmental impacts have been adequately addressed in this PEIR, and if not, what additional measures may be necessary.

ES.2 Public Involvement Process

Public disclosure and dialogue are priorities under CEQA and for CDFA. Accordingly, CEQA mandates two periods during the environmental impact report (EIR) process when public and agency comments on the environmental analysis of a project or program are to be solicited: during the scoping comment period and during the review period for the Draft EIR. CEQA and the State CEQA Guidelines also allow for lead agencies to hold public meetings or hearings to obtain scoping comments, and provide the public and agencies with an opportunity to review both the draft and final versions of an EIR. Brief descriptions of these milestones are provided below, as they apply to this document; for a more complete description, please refer to Chapter 1, Introduction.
Notice of Preparation

A Notice of Preparation (NOP) for the Medical Cannabis Cultivation Program (MCCP) was circulated on September 1, 2016, and invited the public to offer comments during the scoping period. The NOP presented general background information on the MCCP, the scoping process, the environmental issues to be addressed in the Draft PEIR, and the anticipated uses of the Draft PEIR.

Following the passage of AUMA, a revised NOP including both medical and adult-use (nonmedical) cultivation activities was circulated on April 27, 2017, and invited the public to offer comments during this second scoping period. The revised NOP presented general background information on the CalCannabis Cultivation Licensing program, the scoping process, the environmental issues being included in the Draft PEIR, and the anticipated uses of the Draft PEIR.

Scoping Comments and Workshops

During the initial (2016) scoping period, CDFA conducted eight scoping workshops across California, in Sacramento, Redding, Eureka, Oakland, San Luis Obispo, Coalinga, Pasadena, and Desert Hot Springs. These workshops welcomed input from the public and interested public agencies regarding the nature and scope of environmental impacts to be addressed in the Draft PEIR. Scoping workshop information and notices were mailed to potentially interested parties, published in local newspapers, and posted on CDFA’s website before the meetings to invite attendees.

Oral comments were received at the scoping workshops in 2016; in addition, written comment letters were received during both 2016 and 2017 scoping periods. These comments have been summarized, as well as included in their entirety, in a Scoping Summary Report, provided in Appendix D. The information contained in the NOP (e.g., program description, range of topics) was further refined, based on the helpful input received in written and oral comments, and was reflected in the text of the Draft PEIR.

Draft EIR Public Review and Comment Period

CDFA has issued a Notice of Availability (NOA) to provide agencies and the public with formal notification that this Draft PEIR is available for review. The NOA has been sent to all responsible and trustee agencies, any person or organization requesting a copy, and all 58 county clerks’ offices for posting. A legal notice has also been published in a number of general-circulation newspapers. CDFA has also submitted the NOA and a Notice of Completion (NOC) to the State Clearinghouse.

Publication of the NOA initiated a 45-day public review period, during which CDFA will receive and collate public and agency comments on the Proposed Program and the Draft PEIR. CDFA will host multiple public meetings in locations throughout the state after release of the Draft PEIR. The purpose of public circulation and the public meetings is to provide public agencies, other stakeholders, and interested individuals with opportunities to comment on or express concerns regarding the contents of the Draft PEIR.
Areas of Known Controversy

Section 15123(b)(2) of the State CEQA Guidelines requires that the summary of an EIR identify areas of controversy known to the lead agency, including issues raised by agencies and the public. Several potential effects of implementing the Proposed Program are expected to be controversial, including:

- Potential effects of the Proposed Program on the general demand and supply of commercial cannabis, and the Proposed Program’s effects on existing cultivation techniques as a result of new restrictions, regulations, and requirements.
- Potential effects on day and nighttime scenic views or scenic resources from cannabis cultivation operations equipment, land clearing, and light pollution.
- Potential effects related to land clearing or conversion of farmland, agricultural, or Timber Production Zone areas to cannabis cultivation, and general compatibility between cannabis cultivation operations and other surrounding agricultural areas.
- Limited use of pesticides to those analyzed in this PEIR or a subsequent tiering document.
- Potential effects related to grower compliance with local, state, and federal air quality laws, ventilation systems and airborne contaminants, and more generally air quality impacts and emissions resulting from cultivation operations.
- Potential effects related to the protection of endangered and native species and their habitats, compliance and enforcement of appropriate biological mitigation and monitoring measures, and the effects of hazardous chemicals on biological resources.
- Potential effects on cultural and tribal cultural resources, archeological or historic resources, and general consideration of tribal community concerns.
- Potential effects resulting from high energy usage requirements, and associated greenhouse gas emissions resulting from indoor cultivation sites.
- Potential effects from the Proposed Program resulting in the spread of pests and diseases, impacts to crops and livestock, and water sources resulting from the use, transportation and storage of hazardous materials and protecting against the spillage, runoff, and drainage of these substances.
- Potential effects to human health associated with odors and noxious fumes, increased wildfire risk, proper sanitation practices, increased crime, and equipment maintenance.
- Potential effects of the Proposed Program on surface water, groundwater supply, water quality, general excessive water usage by cultivators, obstruction of natural water flows, improper wastewater disposal, illegal water usage, erosion, and runoff.
- Potential effects of the Proposed Program on land use and planning, including land compatibility, establishment of proper setbacks from sensitive receptors, and the physical division of established communities.
- Potential effects of the Proposed Program on noise levels and excessive noise exposure as a result of cannabis cultivation activities.
Potential effects on emergency response and evacuation and costs to local and county departments for a potential need for increased law enforcement and public service agencies.

Potential harassment and rights violations from law enforcement towards growers.

Potential effects of the Proposed Program on the accumulation of solid waste, use of substandard septic systems, and general increased demands on existing utilities.

ES.3 Issues to Be Resolved

Section 15123(b) of the State CEQA Guidelines requires that an EIR summary identify issues to be resolved. The primary issue which is receiving consideration for resolution is the inconsistency between various provisions of MCRSA and AUMA. At the time of publication of this Draft PEIR, a trailer bill has been introduced, and is being considered for adoption by the State legislature. Should the trailer bill pass, the licensing programs may be adjusted to ensure a consistent licensing approach for both types of cultivation (medical and adult use [nonmedical]).

ES.4 Overview of Environmental Topics Evaluated in the Draft PEIR

This section presents the resource topics evaluated in the PEIR, and presents an overview of key impacts and conclusions. Environmental areas that potentially would be affected by the Proposed Program include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy Use and Greenhouse Gas (GHG) Emissions
- Hazards, Hazardous Materials, and Human Health
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems

ES.5 Alternatives Considered

The purpose of the alternatives analysis in an EIR is to describe a reasonable range of potentially feasible alternatives to a proposed project that could feasibly attain most of the objectives of a proposed project while reducing or eliminating one or more of a proposed project’s significant effects. The range of alternatives considered must include those that offer substantial environmental advantages over the proposed project in question, and may be feasibly accomplished in a successful manner considering economic, environmental, social, technological, and legal factors.
The following alternatives were evaluated for their potential feasibility and their ability to achieve most of the Proposed Program objectives while avoiding, reducing, or minimizing significant impacts identified for the Proposed Program:

- No Program Alternative
- No Natural Light Alternative
- No High-Intensity Grow Light Alternative
- Restricted Size Alternative

**No Program Alternative**

Under the No Program Alternative, CDFA would not implement the CalCannabis Cultivation Licensing program; create, issue, renew, discipline, suspend, or revoke licenses for the cultivation of cannabis; or collect fees in connection with activities regulated by the Proposed Program. CDFA would not implement the proposed track-and-trace system for the purposes of tracking commercial cannabis, nor would the agency implement the proposed reporting system, and documentation requirement imposed by such a program. For the purposes of discussion, it is assumed that existing cannabis cultivation operations (both permitted and unpermitted) would continue to operate under the existing regulatory climate. The No Program Alternative would fail to meet MCRSA and AUMA obligations, which require CDFA to adopt regulations to establish a cannabis cultivation licensing program and track-and-trace system.

Because no information exists to determine whether commercial cannabis cultivation would increase or decrease under the No Program Alternative, it is assumed to remain static in terms of the types of grow operations (outdoor, indoor, mixed light) and the extent of unpermitted operations.

The No Program Alternative would fail to meet MCRSA and AUMA obligations, requiring CDFA to establish a regulatory framework for cannabis cultivation policies, procedures, and regulations in California. CDFA would need to consider appropriate CEQA review and documentation for any new medical or adult-use (non-medical) cannabis cultivation programs that are proposed in the future.

**No Natural Light Alternative**

The No Natural Light Alternative would require that all cultivation be limited to the use of artificial light, and only indoor cultivation would be allowed. This would eliminate license types for outdoor and mixed-light cultivation, as both techniques rely upon natural light. As described in Chapter 3, *Proposed Program Activities*, indoor cultivation is conducted within buildings without the use of any natural light. High-intensity lighting is typically used to stimulate photosynthetic activity and plant growth, and the duration of light and darkness is manipulated to simulate and accelerate the seasonal changes in daylight that trigger various growth stages of the plant. In some cases, the intensity of light is also changed throughout a particular photoperiod to simulate the changing intensity of sunlight throughout the day. The No Natural Light Alternative would include a track-and-trace component similar to that
No High Intensity Grow Light Alternative

The No High-Intensity Grow Light Alternative would require that all cannabis cultivation operations use natural light and/or low-intensity artificial light. This would eliminate the license types for indoor cultivation and would restrict mixed-light cultivation to the use of low-intensity lighting. In addition, outdoor licenses would not be allowed to use high-intensity grow lights for propagation. The No High-Intensity Grow Light Alternative would include a track-and-trace component similar to that described for the Proposed Program. The legislature would need to amend MCRSA and AUMA to allow implementation of this alternative.

Restricted Size Alternative

The Restricted Size Alternative would limit the size of cultivation sites to “Specialty Cottage,” “Specialty,” or “Small Cultivator” sized operations, less than 10,000 square feet. This alternative was suggested during the Draft PEIR scoping process. This would eliminate the issuance of medium cultivation licenses, would eliminate the issuance of licenses for large outdoor cultivation. The Restricted Size Alternative would include a track-and-trace component similar to that described for the Proposed Program. The legislature would need to amend MCRSA and AUMA to allow implementation of this alternative.

Environmentally Superior Alternative

Considering all environmental aspects, the Proposed Program is considered to be environmentally superior to any of the alternatives. It strikes a balance between the various environmental issues and ensures that impacts would not be significant. It is important to note that the California State Legislature and the voters, in adopting MCRSA and AUMA, respectively, directed CDFA to develop regulations, to address environmental impacts of commercial cultivation, and these considerations have guided the development of the Proposed Program.

From among the alternatives, the No High-Intensity Grow Light Alternative is considered environmentally superior. This alternative would focus cultivation activities on outdoor and mixed-light techniques using natural lighting and would prohibit indoor cultivation and some mixed-light cultivation techniques that rely solely or partially on high-intensity grow lights. Therefore, this alternative would lead to a substantial reduction in energy use and related air quality and GHG emissions associated with indoor cultivation. It would also avoid the various fire and health risks associated with indoor cultivation. Because indoor cultivation typically occurs in more urban settings, impacts in these locations may be reduced, although if they were replaced with outdoor or mixed-light cultivation in urban settings, this could create greater security issues, as these operations are easier to detect. The No High-Intensity Grow Light Alternative could also result in other adverse environmental impacts. Outdoor and mixed-light cultivation sites are typically located in more rural settings, with greater potential for aesthetic impacts, forestland conversion, and effects on biological resources, cultural resources, hydrology and water quality, noise, and
tribal cultural resources. However, compliance with Proposed Program requirements, other applicable laws and regulations, and requirements from local jurisdictions would ensure that such impacts would not be significant.

The other alternatives were not selected as the environmentally superior alternative for the following reasons:

**No Program Alternative.** Because a greater number of unpermitted cultivators would continue to operate under this alternative, it would result in impacts due to noncompliance with requirements related to water use, illegal use of pesticides, waste disposal, and illegally obtained energy. In addition, the activities of permitted growers would not benefit from the implementation of environmental protection measures contained within the Proposed Program regulations. As a result, impacts would be greater overall than those of either the Proposed Program or the No High-Intensity Grow Light Alternative (the Environmentally Superior Alternative), including the significant noise and biological resources impacts of the Proposed Program, rendering this alternative less environmentally desirable.

**No Natural Light Alternative.** This alternative would avoid potential impacts associated with outdoor and mixed-light cultivation techniques, which rely on natural light, and instead would encourage the use of indoor cultivation techniques that utilize artificial lighting. This would generally lead to a reduction of impacts in more rural settings, where outdoor and mixed-light cultivation is much more common. These reduced impacts may include issues such as aesthetics, biological resources, cultural resources, hydrology and water quality, forest conversion, noise, and tribal cultural resources. However, the No Natural Alternative could also result in other adverse environmental impacts. Because indoor cultivation methods rely heavily on high-intensity grow lights and other equipment to regulate indoor artificial environments, this alternative would result in greater impacts related to energy use, air quality, and GHG emissions. Additionally, indoor practices are much more commonly associated with fire and other health risks, such as elevated levels of mold and CO₂. These offsetting adverse effects from a potential increase in indoor cultivation as a result of restricting outdoor and mixed-light cultivation render this alternative less environmentally desirable than either the Proposed Program or the No High-Intensity Grow Light Alternative (the Environmentally Superior Alternative).

**Restricted Size Alternative.** This alternative would generally reduce potential impacts at any given site but there may be a larger number of sites, which may collectively have similar impacts to the Proposed Program. It is unclear whether this alternative would reduce the significant biological resources or noise impacts of the Proposed Program. Therefore, this alternative was not selected as environmentally superior as it did not deviate meaningfully from the Proposed Program and would not avoid the substantial impacts addressed by the No High-Intensity Grow Light Alternative (the Environmentally Superior Alternative).
ES.6 Submittal of Comments

The purpose of circulating the Draft PEIR is to provide agencies and interested individuals with opportunities to comment on or express concerns regarding its contents and analysis. During the public review period, CDFA will be holding public meetings, which will have the same purpose. Specific dates, times, and locations for these meetings will be provided in the NOA, on CDFA’s website (calcannabis.cdfa.ca.gov), and in newspaper notices.

For those interested, written comments or questions concerning this Draft PEIR should be submitted (preferably via email in Microsoft Word format) within this review period and directed to the following:

Attention: Amber Morris
CalCannabis Cultivation Licensing Program Comments
California Department of Food and Agriculture
1220 N Street, Suite 400
Sacramento, CA 95814
Email: calcannabis.peir@cdfa.ca.gov

This CEQA document is available for review at the Proposed Program website: calcannabis.cdfa.ca.gov. In addition, hard copies can be reviewed at CDFA’s offices in Sacramento, California. To arrange to view documents during business hours, call (916) 263-0801. This Draft PEIR also can be reviewed electronically at libraries throughout the state that are serving as document repositories; a full list of locations is provided on the Proposed Program website.

Written comments received in response to the Draft PEIR during the public review period will be addressed in the Response to Comments chapter of the Final PEIR. Comments submitted to CDFA, and the commentor’s name, are considered public information. Contact information will be redacted, and the commentor’s name can also be redacted by providing a request in the comment.
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## Table ES-2. Summary of Impacts and Mitigation

<table>
<thead>
<tr>
<th>Impact</th>
<th>Significance Before Mitigation</th>
<th>Mitigation Measures</th>
<th>Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aesthetics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AES-1: Result in a substantial adverse effect on a scenic vista, scenic resource, or State-designated scenic highway, and/or the existing visual character or quality of a site and its surroundings.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>AES-2: Create a new source of substantial light or glare as a result of outdoor security lighting.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>AES-3: Create a new source of substantial light or glare as a result of indoor cultivation techniques.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>AES-4: Create a new source of substantial light or glare as a result of mixed-light cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td><strong>Agriculture and Forestry Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use.</td>
<td>NI</td>
<td>None required</td>
<td>NI</td>
</tr>
<tr>
<td>AG-2: Convert farmland to cannabis cultivation from other crops.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>AG-3: Potential conflict with existing zoning for agricultural use or Williamson Act contract.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>AG-4: Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned for timberland production.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>AG-5: Cause loss of forestland or conversion of forestland to nonforest uses.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>AG-6: Involve other changes in the existing environment that, because of their location or nature, could result in conversion of farmland to nonagricultural use or conversion of forest land to nonforest use.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
</tbody>
</table>
### Impact

<table>
<thead>
<tr>
<th>Impact</th>
<th>Significance Before Mitigation</th>
<th>Mitigation Measures</th>
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<tr>
<td><strong>Air Quality</strong></td>
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</tr>
<tr>
<td>AQ-1: Conflict with or obstruct implementation of an applicable air quality plan, and/or violate any air quality standard or contribute substantially to an existing or projected air quality violation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>AQ-2: Expose sensitive receptors to substantial pollutant concentrations as a result of cannabis cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>AQ-3: Create objectionable odors affecting a substantial number of people as a result of cannabis cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td><strong>Biological Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BIO-1: Cause adverse effects on aquatic and semi-aquatic special-status species.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>BIO-2: Cause substantial adverse effects on special-status plant species.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>BIO-3: Cause substantial adverse effects on wildlife due to increased light, including special-status terrestrial wildlife species.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>BIO-4: Cause substantial adverse effects on special-status terrestrial wildlife species due to increased noise and human presence.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>BIO-5: Cause substantial adverse effects on riparian habitat, other sensitive natural communities, or federally protected wetlands.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>BIO-6: Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or wildlife corridor, or impede the use of native wildlife nursery sites.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>BIO-7: Conflict with applicable habitat conservation plans or natural community conservation plans.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>Impact</td>
<td>Significance Before Mitigation</td>
<td>Mitigation Measures</td>
<td>Significance After Mitigation</td>
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</tr>
<tr>
<td>BIO-8: Conflict with local policies or ordinances protecting biological resources.</td>
<td>NI</td>
<td>None required</td>
<td>NI</td>
</tr>
<tr>
<td>BIO-9: Cause substantial adverse effects on wildlife due to pesticide use (besides rodenticides).</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>BIO-10: Cause substantial adverse effects on wildlife due to rodenticide use.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>BIO-11: Cause substantial adverse impact on nesting birds as a result of outdoor cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td><strong>Cultural Resources</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR-1: Cause substantial adverse impacts on historical resources, archaeological resources, and human remains.</td>
<td>S</td>
<td>CR-1: Suspend Cultivation Immediately if Cultural Resources are Discovered, Evaluate All Identified Cultural Resources for CRHR Eligibility, and Implement Appropriate Mitigation Measures for Eligible Resources.</td>
<td>LSM</td>
</tr>
<tr>
<td><strong>Energy Use and Greenhouse Gas Emissions</strong></td>
<td></td>
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</tr>
<tr>
<td>GHG-1: Potential to conflict with an applicable plan, policy, or regulation adopted to reduce the emissions of GHGs, result in wasteful, inefficient, and unnecessary consumption of energy, or cause a substantial increase in energy demand and the need for additional energy resources.</td>
<td>Beneficial</td>
<td>None required</td>
<td>Beneficial</td>
</tr>
<tr>
<td>GHG-2: Use off-road equipment and motor vehicles for outdoor cultivation activities, resulting in GHG emissions.</td>
<td>NI</td>
<td>None required</td>
<td>NI</td>
</tr>
<tr>
<td><strong>Hazards, Hazardous Materials, and Human Health</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>HAZ-1: Release hazardous materials from routine transport, use, and disposal.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HAZ-2: Create a significant hazard through release of hazardous materials from upset or accident conditions.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HAZ-3: Cause health risks from pesticide use.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HAZ-4: Emit hazardous emissions or materials within 0.25 mile of a school.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>Impact</td>
<td>Significance Before Mitigation</td>
<td>Mitigation Measures</td>
<td>Significance After Mitigation</td>
</tr>
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<td>-----------------------------------------------------------------------</td>
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</tr>
<tr>
<td>HAZ-5: Locate project activities on a hazardous materials site.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HAZ-6: Locate project activities near an airport or private airstrip such as to increase hazards.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HAZ-7: Expose people or structures to substantial risk of loss from wildfire.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HAZ-8: Create substantial hazards for firefighters and first responders from indoor cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
</tbody>
</table>

**Hydrology and Water Quality**

<table>
<thead>
<tr>
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<th>Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HWQ-1: Cause adverse effects on beneficial uses from surface water diversions for crop irrigation, or cause insufficiency of surface water supplies.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HWQ-2: Cause aquifer depletion from use of groundwater for crop irrigation and result in insufficiency of groundwater supplies.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HWQ-3: Cause discharges of sediment, nutrients, or other contaminants (excluding pesticides) from outdoor or mixed-light cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HWQ-4: Cause water quality impacts from pesticide use in outdoor or mixed-light cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HWQ-5: Cause discharges of sediment, nutrients, and other contaminants (excluding pesticides) from indoor cultivation operations.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>HWQ-6: Cause water quality impacts from pesticide use in indoor cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
</tbody>
</table>

**Land Use and Planning**

<table>
<thead>
<tr>
<th>Impact</th>
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<th>Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>LU-1: Physically divide an established community.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>LU-2: Conflict with applicable land use plans, policies, or regulations.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
</tbody>
</table>
### Impact

<table>
<thead>
<tr>
<th>Impact</th>
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<th>Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Noise</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOI-1: Expose people or residences to excessive noise levels within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>NOI-2: Use mechanical equipment for the cultivation of cannabis resulting in generation of excessive groundborne vibration or groundborne noise levels.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>NOI-3: Use of mechanical equipment for the cultivation of cannabis resulting in a substantial permanent increase in ambient noise levels in the vicinity of a Proposed Program activity above levels existing without the Proposed Program.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>NOI-4: Use mechanical equipment for the cultivation of cannabis resulting in excessive noise for sensitive receptors, and/or resulting in a substantial temporary or periodic increase in ambient noise levels.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td><strong>Public Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS-1: Cause a substantial adverse impact related to police protection services.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>PS-2: Cause a substantial adverse impact related to schools.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>PS-3: Cause a substantial adverse impact related to parks or other public services.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>PS-4: Cause a substantial adverse impact related to fire protection services from outdoor cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>PS-5: Cause a substantial adverse impact related to fire protection services from indoor cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>PS-6: Cause a substantial adverse impact related to fire protection services from mixed-light cultivation.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
</tbody>
</table>
### Transportation and Traffic

<table>
<thead>
<tr>
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<th>Mitigation Measures</th>
<th>Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRA-1: Conflict with circulation plans, ordinances, or policies.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>TRA-2: Conflict with congestion management programs.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>TRA-3: Result in a change to air traffic patterns.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>TRA-4: Increase hazards due to a design feature or incompatible uses.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>TRA-5: Result in effects on emergency access.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>TRA-6: Result in effects related to public transit, bicycle, or pedestrian facilities.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
</tbody>
</table>

### Tribal Cultural Resources

<table>
<thead>
<tr>
<th>Impact</th>
<th>Significance Before Mitigation</th>
<th>Mitigation Measures</th>
<th>Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCR-1: Cause a substantial adverse impact on tribal cultural resources.</td>
<td>S</td>
<td>TCR-1: Consult with Native American Tribes and Prepare and Implement Treatment Plans for any TCRs Identified at the Site.</td>
<td>LSM</td>
</tr>
</tbody>
</table>

### Utilities

<table>
<thead>
<tr>
<th>Impact</th>
<th>Significance Before Mitigation</th>
<th>Mitigation Measures</th>
<th>Significance After Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UTL-1: Exceed wastewater treatment requirements, result in expansion of wastewater treatment facilities, or result in a determination by the wastewater treatment provider that it has inadequate capacity to serve Proposed Program activities.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>UTL-2: Require or result in the construction of new or expanded water treatment facilities.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>UTL-3: Require or result in the construction of new or expanded stormwater facilities.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>UTL-4: Potential to be served by a landfill with insufficient capacity.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
<tr>
<td>UTL-5: Failure to comply with existing statutes related to solid waste.</td>
<td>LTS</td>
<td>None required</td>
<td>LTS</td>
</tr>
</tbody>
</table>

**Notes:** LSM = less than significant with mitigation incorporated; LTS = less than significant; NI = no impact; S = significant.
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