Public Comments on the Sustainable California Grown Cannabis Draft Request for Grant Application

April 14, 2022

CCOF
Advancing organic agriculture through certification, education, advocacy, and promotion.

California Department of Food and Agriculture
Office of Environmental Farming and Innovation
1220 N Street,
Sacramento, CA 95814

April 14, 2022

Re: Sustainable California Grown Cannabis Pilot Project Draft Request for Grant Applications

Dear CDFA OEFI Staff,

Thank you for this opportunity to comment on the draft request for grant applications for the Sustainable California Grown Cannabis Pilot Project.

We appreciate that the pilot project's objectives are to

1. Identify, test, and promote environmentally friendly BMPs to reduce the environmental impact of outdoor cannabis cultivation and
2. Provide funding to incentivize licensed legacy outdoor cannabis growers to participate in the collection of data to develop the BMPs and participate in demonstration projects.

CCOF recommends that CDFA prioritize research on equivalent-to-organic cannabis production systems as this will meet project goals and increase the sustainability of California cannabis. The rules governing OCal cannabis production systems are the gold standard of sustainable cannabis production because OCal growers are required by state statute to:

- maintain or improve the natural resources of the operation, including soil, water, wetlands, woodlands, and wildlife (CCR Section 10200 (b))
- select and implement tillage and cultivation practices that maintain or improve the physical, chemical, and biological condition of soil and minimize soil erosion. (CCR Section 10203 (a))
- manage plant and animal materials to maintain or improve soil organic matter content, biological diversity, nutrient cycling, and microbial activity in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances. (CCR Section 10203 (c))

In studies conducted on organic production of crops other than cannabis, organic production methods have been shown to sequester carbon in soils; build long-term soil fertility; reduce soil erosion; and increase soil water holding capacity.[1] Prioritizing research on OCal production

[1] Multiple scientific papers are cited in Benador, L., Damewood, K., & Sooby, J. (2019). *Roadmap to an organic California: Benefits Report.* Santa Cruz, CA: California Certified Organic Farmers (CCOF) Foundation.

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systems will generate a suite of best management practices that address all of CDFA's study focii: sustainable water and energy use, pest management and fertilizer practices, and soil health.

In addition, CDFA should consider including the *California Code of Regulations Title 3. Food And Agriculture, Division 8. Cannabis Cultivation, Chapter 3. OCal Program* text as a resource for applicants to the pilot project because the statute lists numerous "sustainable" practices that OCal growers can use in managing their crops, including:

- manage crop nutrients and soil fertility through rotations, cover crops, intercropping, alley cropping, hedgerows or the application of plant and animal materials. (CCR Section 10203 (b))
- implement a crop rotation which may include but is not limited to sod, cover crops, green manure crops, and catch crops. (CCR Section 10205 (a))
- manage pests through mechanical or physical methods, including but not limited to:
    - augmentation or introduction of predators or parasites of the pest species
    - development of habitat for natural enemies of pests
    - nonsynthetic controls such as lures, traps, and repellents (CCR Section 10206 (b)(1-3))
- manage weeds by
    - mowing
    - livestock grazing
    - hand weeding and mechanical cultivation
    - flame, heat, or electrical means
    - plastic or other synthetic mulches, provided they are removed from the field at the end of the growing or harvest season. (CCR Section 10206 (c)(1-5))
- manage plant disease problems through:
    - management practices which suppress the spread of disease organisms
    - application of nonsynthetic biological, botanical, or mineral inputs (CCR Section 10206 (d)(1-2))

Offering the OCal standards as a resource in the request for grant applications will provide applicants with a convenient reference to many sustainable cannabis production practices.

Thank you for considering our comments,

Jane Sooby, Senior Outreach and Policy Specialist

Cc: April Crittenden, Chief Certification Officer
Rebekah Weber, Policy Director

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April 14, 2022
Sent via email to: CannabisAg@cdfa.ca.gov

Origins Council Public Comments on SCGC Pilot Program

On behalf of Origins Council, representing nearly 900 licensed small and independent cannabis businesses in six legacy producing counties throughout California, we appreciate the opportunity to comment on the draft RGA for the proposed SCGC pilot program.

Program Application and Implementation Date

The SCGC pilot program is proposed to be implemented on an expedited timeline, with the draft RGA made available on March 14, applications open on June 1, and applications due on July 1. We strongly encourage that this timeline be extended significantly, to push the opening of applications until after the end of harvest at the earliest.

The RGA draft suggests a preference for grant awards to be awarded to strong collaborations between universities, RCDs, nonprofits, and others. Due to the legacy of cannabis prohibition and the exclusion of cannabis from consideration as agriculture, these linkages have not yet been built to the same degree as in other agricultural industries. To build effective collaboration between groups, it is critical that sufficient time is given to build working collaborations which can result in effective program implementation.

Additionally, several other programs and grant opportunities for cannabis cultivators are currently outstanding, including an open DCC regulatory comment period, the impending implementation of the cannabis appellations programs, and grants available through the California Department of Fish and Wildlife. These existing programs must be balanced with the implementation of a new program such as the SCGC, and in the case of new DCC regulations, may impact the work done within the BMP program.

Finally, the expedited timeline for public comment and program implementation has not provided an opportunity for the bulk of the cannabis cultivation community to engage on the program or its details. Cannabis farmers are currently in the midst of planting season, while cannabis associations are engaged in the height of legislative session and DCC regulatory promulgation.

Bandwidth is particularly stressed for small, socially disadvantaged, and equity cultivators who are prioritized under draft RGA guidelines.

For these reasons, we strongly recommend that the opening of the application period be delayed until at least the end harvest to provide additional time for public input and effective collaboration between organizations which may be involved in program implementation.

Benefits of Outdoor Cultivation

The RGA draft identifies the objective of the SCGC grant as to "identify, test, and promote environmentally friendly BMPs to *reduce the environmental impact* of outdoor cannabis cultivation."

This framing assumes that outdoor cannabis cultivation is only responsible for negative environmental impacts, and precludes the possibility that outdoor cultivation could involve forms of land stewardship or regenerative agricultural practices which provide net environmental benefit.

We recommend that the framing of the SCGC grant's objectives remain neutral, and that determinations on the net positive and negative impacts of outdoor cultivation practices are determined objectively based on the findings of the pilot study.

Specifically, we recommend that this section be reworded to read: "Identify, test, and promote environmentally friendly BMPs to *encourage best practices in* outdoor cannabis cultivation."

Inclusion of Mixed-Light 1 Cultivation

We recommend that CDFA open program participation to farmers operating under either or both of an "outdoor" or "mixed-light 1" license type. Although the statutory basis for the SCGC grant is to establish BMPs for "outdoor" cultivation, current DCC definitions for outdoor cultivation are highly restrictive and require operators utilizing a hoop-house or greenhouse to obtain a mixed-light 1 license - even if the cultivator uses little or no artificial supplemental light.

Colloquially, "outdoor" cultivation typically includes farmers formally classified as mixed-light 1 under DCC regulation. In some jurisdictions, such as Humboldt and Trinity counties, the use of light deprivation in a structure such as a hoop-house is classified as "outdoor" cultivation under local rules so long as no additional artificial light is used.

Considering that the purpose of the study is to assess the environmental impact of diverse cultivation practices, we believe it's important for the full range of outdoor cultivation practices be eligible for inclusion, regardless of whether outdoor cultivation occurs under a hoop-house, in pots, or in the ground. Excluding certain cultivation methods from consideration will result in an incomplete picture of the environmental impact of various methods.

Additionally, it is very common for a single small farmer to hold both an outdoor and mixed-light cultivation 1 license in order to cultivate utilizing different methods on a single farm. The use of

multiple cultivation methods by a single farmer should be able to be used as an opportunity for the pilot study to assess diverse cultivation practices, rather than as a reason to exclude these farmers from the study, or to only include part of their cultivation practices.

Prioritization of Funds to Regions with More Eligible Cultivators

The draft RGA suggests that a total of $7.5 million in grant funds will be split between three regions - Northern, Central, and Southern California - with a maximum grant award of $2.5 million for each region.

Among the three regions established under the grant proposal, the Northern region includes, by far, the greatest number of farms, outdoor farms, small farms, equity farms, and total acreage under cultivation. Based on February 28, 2022 DCC licensing data, cultivation is distributed in each region as follows:

- Northern California counties: Humboldt, Trinity, Mendocino, Lake, Nevada, Colusa

  Approximately 1,900 independent outdoor/ML 1 farms
  572 acres of outdoor cultivation
  355 acres of mixed-light 1 cultivation

- Central California counties: Santa Cruz, Monterey, Mono, Yolo, Placer, El Dorado, San Mateo, Sonoma, Calaveras, Stanislaus, Fresno, Kings, Inyo, Kern

  Approximately 400 independent outdoor/ML 1 independent farms
  283 acres of outdoor cultivation
  94 acres of mixed-light 1 cultivation

- Southern California counties: Santa Barbara, Los Angeles, Riverside, San Luis Obispo

  Approximately 100 independent outdoor/ML 1 farms
  359 acres of outdoor cultivation
  99 acres of mixed-light 1 cultivation

With this in mind, we recommend that grant funds be split more proportionally based on the number of eligible cannabis farms within a region. A proportional split would capture a greater diversity of cultivation practices in regions with greater number of farms, and would also be consistent with existing wording in the RGA that prioritizes funding small and equity farms, a majority of which are based in the Northern counties.

Inclusion of Sonoma County in Northern California

Draft RGA rules would group Humboldt, Mendocino, Trinity, and Lake counties into a Northern California study, while grouping Sonoma County into a Central California study along with counties as far south as Fresno, Kings, Inyo, and Monterey.

In other contexts, Sonoma County is typically grouped with other “North Coast” counties. Sonoma joins Humboldt, Mendocino, and Trinity counties in contexts including political groupings for federal House districts and statewide Senate and Assembly districts; California climate zones under Title 24; and regulation under the North Coast Regional Water Board (for at least the majority of Sonoma cannabis farms located north and west of Santa Rosa).

From a cultural perspective, Sonoma County is also closely aligned with other northern California counties on cannabis. Sonoma contains a large proportion of small legacy cultivators, hosts the Emerald Cup, and borders Mendocino County. By contrast, Sonoma’s immediate southern neighbors - Marin County, San Francisco County, Alameda County, and San Mateo County - contain little or no outdoor cultivation.

For these reasons, we believe that Sonoma is culturally and geographically significantly more aligned with its northern neighbors than with counties like Monterey and Fresno, and should be included as part of the Northern California study.

Regulatory Recommendations to Promote Environmental BMPs

A primary goal in the draft RGA is to establish a set of best management practices (BMPs) for environmentally sustainable cannabis cultivation.

In addition to this goal, we recommend that an additional deliverable for the program should be a report on regulatory barriers to adopting best management practices. One primary factor that differentiates cannabis farmers from farmers in other sectors of agriculture is the presence of considerable regulatory restrictions specific to cannabis. These regulatory restrictions have a significant impact on cultivation practices, and in some cases may inhibit the ability for farmers to adopt environmentally optimal practices.

A report on regulatory barriers to BMPs could help to inform future DCC, CDFW, Water Board, and even federal rules to help improve environmental outcomes, and to better understand why cultivators have adopted the practices studied under the pilot program.

Thank you for your consideration on these important issues,

Ross Gordon
Policy Chair, Origins Council

April 13, 2022

California Department of Food and Agriculture
Office of Environmental Farming and Innovation,
1220 N Street, Sacramento, CA 95814

RE: Public Comment on the Sustainable California Grown Cannabis Pilot Study

We submit this public comment on behalf of Good Farmers Great Neighbors, which is an alliance of primarily outdoor, sungrown cannabis farmers and auxiliary businesses throughout the central coast that advocates for a supportive legal and regulated market. Our network of 'best in class' expertise unites cannabis farmers in the region who are committed to exceeding the required environmental and public health standards and spurring economic growth and community development.

We applaud the California Department of Food and Agriculture for seeking farmer's perspectives to inform the best sustainable practices for cultivating cannabis. Many cannabis farmers throughout the state have already committed to sustainable cultivation practices, who will undoubtedly have a lot of data to contribute to this pilot study.

That said, **we urge CDFA to ensure that the grant awardees/ participants of this SCGC Pilot Study (and partnering cannabis farms) represent a diverse range of cannabis farms.** Diverse applicants will provide CDFA with the more robust data, which bolsters the department's ability to accurately determine the best sustainable practices.

In addition to this study encouraging participation from small and socially disadvantaged farmers including BIMPOC, women and veterans, **this pilot study should seek to establish participation from geographical diversity within the state.** Sustainable practices can vary tremendously throughout different regions of the state. Ensuring participation by **a geographically diverse pool of applicants, will help inform CDFA not only about unique ecological challenges to growing in different regions, but will also highlight the various innovative practices that many farms have already successfully implemented** to make their cultivation practices more sustainable.

Thank you for considering our recommendations. We look forward to the opportunity for some of our farms to partner with grant awardees and provide data for this SCGC Pilot Study.

Sincerely,
Lindsay De May

Associate Policy Director
Good Farmers Great Neighbors

Date: April 13, 2022

To: Office of Environmental Farming and Innovation,

California Department of Food and Agriculture

From: Madison Walker, Grodan

Re: Draft Request for Grant Application (RGA),

Sustainable California Grown Cannabis (SCGC) Pilot Study

Dear Office of Environmental Farming and Innovation,

For over 50 years, Grodan has been producing rock wool growing media that is currently used in about 35 percent of California's indoor/greenhouse cannabis farms. Rooted in science, we have developed precision growing strategies that give the plant exactly what it needs, no more and no less, which not only produces higher yields, but also protects the world's natural resources. Sustainability pervades everything we do at Grodan, and we continually challenge ourselves to create products and strategies that reduce the environmental impact of growing.

Thank you for the opportunity to comment on the Draft Request for Grant Application (RGA) for the Sustainable California Grown Cannabis (SCGC) Pilot Study.

We understand and appreciate the importance of gathering baseline data before making recommendations.

Grodan habitually invests significant resources into scientific studies and data collection surveys to understand how our products are currently being used, and how we can improve our products and recommendations to create more resource efficiencies. For example, we are currently engaged in a USDA-supported study, lead by the Resource Innovation Institute, to benchmark and advance the energy and water efficiency of producers of a range of crops.

As a company that makes products specifically designed to reduce the environmental impact of farming, we applaud the California Department of Food and Agriculture's commitment to collecting data that will reveal and ultimately improve sustainable production practices for cannabis cultivation. As an industry, we can only create and measure improvements after establishing a baseline.

That's why we hope you will include all types of cannabis cultivators – indoor, greenhouse, outdoor – in the SCGC Pilot Study in order to capture the full environmental impact of the industry and provide more nuanced data to inform policymaking. Without an industry-wide, comprehensive, integrated data set on how cannabis is cultivated in California, we risk making costly assumptions about how to grow sustainable cannabis.

The State has already demonstrated they understand the value of data collection. Let's make sure the data set collected is broad enough to represent the entire industry.

Thank you again for the opportunity to comment on the RGA for the SCGC Pilot Study.

Best,

Madison Walker

Head of Public and Government Affairs for North America, Grodan

April 13th, 2022
ATTN: CDFA Sustainable California Grown Cannabis Program
MAILTO: CannabisAg@cdfa.ca.gov

Dear Sustainable California Grown Cannabis Program,

While we appreciate the intention and effort put forth for this program. There are many hindrances and oversights in the structure of this program.

Hessel Farmers Grange has outlined some of these concerns as follows:

- Lack of promotion and education around this program and it's intended purpose
- Lack of engagement with the potentially qualifying stakeholder community
- The comment period is too short without enough meaningful stakeholder input
- Qualified applicants are likely to be small cultivators that can implement these BPM's and they cannot afford to bear an upfront cost burden in anticipation of "possible" reimbursement

The Hessel Farmers Grange membership recommendations:

- CDFA immediately extend the public comment period
- The SCGC Program immediately calendar stakeholder listening sessions and roundtables to garner meaningful input from the stakeholders/qulified cultivators
- The SCGC allocates budget to promote these calendared sessions and input periods
- The SCGC should recognize that limiting this comment period in the spring when the farmers are busy is detrimental to the success of the SCGC Program.
- The SCGC should outline means that will allow sponsors, contractors, consultants, etc. to receive the reimbursements for expenditures that would qualify for reimbursement by the SCGC grant program.

Our small farming community is literally facing an extinction crisis and not allowing significant comment opportunities while requiring upfront costs to be incurred by operators will render this program unsuccessful. Please take these comments into consideration and add them to public comment on behalf of the Hessel Farmers Grange membership (consisting of approximately 100 Members).

Sincerely,
Hessel Farmers Grange #750
5400 Blank Rd
Sebastopol Ca, 95472

RESOURCE INNOVATION INSTITUTE

Date: April 13, 2022

To: Office of Environmental Farming and Innovation,
California Department of Food and Agriculture

From: Derek Smith, Resource Innovation Institute

Re: Draft Request for Grant Application (RGA),
Sustainable California Grown Cannabis (SCGC) Pilot Study

Dear Office of Environmental Farming and Innovation,

Resource Innovation Institute (RII) is a non-profit organization whose mission is to help agricultural producers improve energy and water efficiency. RII is funded by the US Dept. of Agriculture to benchmark and advance the energy and water efficiency of producers growing a range of crops. RII has been funded by Massachusetts to help cannabis producers meet state energy and water usage reporting requirements. Since 2018, our PowerScore resource benchmarking platform has helped hundreds of cannabis producers benchmark their energy and water efficiency performance.

In California, RII has:

- Entered into a contract with Mendocino County to support renewing cannabis cultivation permit holders with streamlined energy and water reporting compliance
- Educated and trained hundreds of indoor, greenhouse and outdoor growers to incorporate efficient energy and water practices into their operations, with funding from Santa Barbara County, Ventura County, San Luis Obispo County, San Diego Gas & Electric, and Southern California Edison
- Supported a Pacific Gas & Electric funded outreach effort to inform Title 24 horticultural codes and standards development
- Informed a California Public Utility Commission horticultural lighting technology study using PowerScore data
- Collaborated with the Berkeley Cannabis Research Center on a publication about cannabis water usage

We appreciate the opportunity to comment on the Draft Request for Grant Application (RGA) for the Sustainable California Grown Cannabis (SCGC) Pilot Study.

RII would like to commend the California Department of Food and Agriculture for your investment in collecting data that will identify sustainable production pathways for cannabis cultivation, as demonstrated in your RGA for your upcoming SCGC Pilot Study. It is a widely held belief throughout the cannabis value chain that data will unlock the knowledge, tools and resources growers need to improve their practices. There is much to learn about sustainable cultivation practices from the legacy farming community.

To broadly inform critical policy considerations that need to be made by multiple agencies with jurisdiction over a range of environmental issues, we encourage the Office of Farming and Innovation (OEFI) to administer the SCGC Pilot Study in a manner that does not preclude the incorporation of data related to:

- Indoor cultivation
- Greenhouse cultivation
- Non-legacy operations (e.g., newer craft producers, multi-state operators)
- Out-of-state operations

What is needed more than anything to drive verifiably improved environmental performance among cannabis cultivation operations is the establishment of reliable baselines on resource usage and impacts, based on vetted key performance indicators for energy, water, waste and carbon emissions. Baselines become the foundation for informed decision making and the measuring stick from which performance can be tracked. Performance resulting from various production practices can be compared against baselines, revealing efficiency and productivity pathways that can then be supported by effective policy. With this RGA, California has the opportunity to lead the world in establishing cannabis cultivation environmental performance baselines.

As it establishes baselines, California can serve its policy interests by comparing a range of cultivation practices to each other, thus enabling state agencies to understand the full market and related policy considerations. As the market evolves, it will be important for the state to broadly consider all forms of cultivation that will be in the mix of cannabis production in the future, and to support methods that are energy, water and carbon efficient. For example, the SCGC Pilot Study may likely validate that regenerative soil practices are more water efficient than typical outdoor approaches.

Likewise, there is emerging evidence that water use can be more efficient in controlled environments such as greenhouse and indoor operations, as cited in *Cannabis H20: Water Use & Sustainability*, a research report by New Frontier Data, Resource Innovation Institute and Berkeley Cannabis Research Center. The report studied water usage by hundreds of California outdoor farms, as well as greenhouse and indoor farms from California and other states. Because the research was conducted in a manner that standardized data into a common data platform, various practices could be compared, revealing insights that could inform policy decisions. The RGA should be designed to achieve standardized data.

As climate change increases, farming is generally evolving beyond field-only methods and integrating structures that protect crops from increasing weather-related risks. Sungrown cannabis producers are increasingly incorporating elements of "controlled environment" techniques, including targeted usage of indoor and greenhouse cultivation for certain stages of plant growth. Title 24 Energy Codes & Standards will be rolling out in January, and they will apply to some outdoor farms using a certain level of energy. It will be important for the state to track the energy, water and carbon emissions savings these codes and standards will help generate over time.

Further, we suggest OEFI also request information through this RGA about strategies that will inform CDFA's energy, water and waste reporting requirements contained in the Code of Regulations for the Cannabis Cultivation Program, as well as the related need to develop a comprehensive data collection and analysis framework to support effective policy development. Through efficiency strategies, cannabis producers have the opportunity to save 5-50+% on resource-related operating expenses. Longer term, with federal cannabis regulations in place, California will have a higher likelihood to maintain cannabis tax revenues if its producers have lower cost structures and can thereby compete more effectively across state lines.

To summarize, we enthusiastically support the Sustainable California Grown Cannabis Pilot Study and encourage CDFA to not overlook the benefit of connecting this effort to the opportunity to build an objective dataset that points the way to resilience for California’s cannabis cultivation community. To not assess the pool of knowledge you gain from this pilot study within the context of a broader dataset that also includes indoor and greenhouse producers would be a missed opportunity.

Thank you again for the opportunity to comment.

Best regards,

Derek Smith
Executive Director

On behalf of Hawthorne Gardening Co., and ScottsMiracle-Gro, we commend the California Department of Food & Agriculture's effort and intention to collect data identifying sustainable production pathways and practices for cannabis cultivation, as demonstrated in your Request for Grant Application (RGA) for your upcoming Sustainable California Grown Cannabis Pilot Study.

Collection and analysis of this information will unlock the knowledge, tools and resources growers need to improve their practices, to the benefit of the cannabis industry as well as the greater state of California. And it will ultimately shed greater light and guidance needed for future statutory and regulatory measures to ensure the industry remains progressive, energy and water efficient and appropriately well-regulated.

We offer one particular thought in this regard: Expand this effort to include all forms of production, indoor and outdoor, greenhouse, and across the universe of operators, both legacy and non-legacy. Moreover, the analysis would further benefit from a review of out of state operators/operations as they may shed additional light and information based on their own unique experiences. These learnings are imperative to creating better energy, water and environmental policies to guide a valuable growing industry.

Industry-wide and practice-wide benchmarks and baseline assessments related to resource usage and impacts for energy, water, waste and carbon emissions are necessary to establish where the industry and its practices are today, but ultimately provides the state the means to fairly measure improvements and efficiencies in future performance and operation.

Policy interests are best served by comparing a range of cultivation practices to each other, thus enabling state agencies to understand the full market and related policy considerations. As the market evolves, it will be important for the state to broadly consider **all forms of cultivation** that will be in the mix of cannabis production in the future, and to support methods that are energy, water and carbon efficient.

Emerging technologies strongly suggest that water use efficiencies are improved in controlled environments such as greenhouse and indoor operations. Similar advances are emerging in outdoor grow settings well, and it would serve the state well to use this research and funding opportunity to

expand the scope of the effort and capture all aspects of cannabis cultivation at this time rather than bifurcate this project. Certainly, the growing urgency of addressing critical issues such as water and energy efficiencies and climate concerns makes it imperative to unify these assessments across the industry.

Finally, from a competitive standpoint, it is critically important that California understands how its tax-paying producers compare to producers located in other states on issues that drive their cost structures, including water and energy usage. This same analysis may reveal more efficient use of (and return on investment) of state funding related to the cannabis industry.

Please consider expanding the scope this proposal to include assessment of indoor and greenhouse operators.

Thank you for the opportunity to comment.