
From: Tom Shapland <tom@tuletechnologies.com>
Sent: Friday, September 3, 2021 4:05 PM
To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>
Subject: 2021 SWEEP Public Comment

CAUTION : [External Email] - This email originated from outside of our CDFA organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe.

Dear CDFA,

I would like to make these two comments concerning the 2021 draft SWEEP application.

1. Many agricultural technology companies provide their services using the Software-As-A-Service (SAAS) model. That is, the grower pays for the data on an annual subscription. In return, the technology provider owns, installs and repairs hardware, processes the data, and serves the data to the customer on web and mobile applications. The SAAS model enables technology companies to provide a) services at lower upfront costs to the grower and b) ongoing grower training and in-field support for the hardware. The SAAS model is not a leasing model, but it is sometimes confused with a leasing model. Leasing is explicitly listed as an "Unallowable Cost" for SWEEP funds. It serves the public and the agriculture community for the SWEEP grants to support grower purchases of SAAS products for irrigation management. Otherwise, the range of products available to growers who wish to use SWEEP funds will be very limited. I suggest the application explicitly states that SAAS products are "Allowable Costs" by changing the fourth bullet point in the "Allowable Costs" section on page 11 (see screenshot below) to "Software associated with sensors and weather stations, including Software-As-A-Service".

Allowable Costs

Project costs must be itemized and clearly support installation or improvement of irrigation systems, including supplies, equipment, labor, and any other allowable cost necessary for project implementation. Project cost must be reasonable and consistent with cost paid for equivalent work on non-grant funded activities or for comparable work in the labor market.

Examples of allowable costs include:

- Installation of photovoltaic panels to power irrigation systems
- All components of irrigation systems
- Sensor hardware and telemetry
- Software associated with sensors and weather stations
- Flow meters
- Permits

2. A relatively new technology was developed at UC Davis called [Surface Renewal](#). Surface Renewal enables growers to measure the Actual Evapotranspiration of their field. Actual Evapotranspiration (i.e., Actual ET) is a measurement of the field's water use. CIMIS provides Reference ET, which is an estimate of the water use of a field. Reference ET is less accurate than Actual ET. Growers can save more water using Actual ET for irrigation scheduling rather than Reference ET. The SWEEP application on page 5 (see screenshot below) says that using "evapotranspiration" for irrigation scheduling is an allowable water saving strategy for receiving SWEEP funds. The application in its current wording is ambiguous, because it does not specify whether it is referring to Reference ET or Actual ET. I suggest the application is updated to provide more clarity. For example, it could say, "...the use of Reference evapotranspiration (ET) or Actual ET based irrigation scheduling, such as the California Irrigation Management Information System, to optimize water use efficiency for crops".

Strategies for Water Savings and GHG Reductions

CDFA has identified the following strategies that address water conservation and GHG emission reductions. Applicants should consider incorporating several strategies listed below to achieve both water conservation and GHG emission reductions.

Water Savings

1. Weather, Soil, or Plant Based Sensors for Irrigation Scheduling
 - Examples include the use of soil moisture or plant sensors (NRCS Conservation Practice Standard (CPS) [449](#) may apply) with electronic data output, the use of weather station(s) linked to an irrigation controller to ensure efficient irrigation scheduling or the use of evapotranspiration (ET) based irrigation scheduling, such as the California Irrigation Management Information System (CIMIS) to optimize water use efficiency for crops.

Thank you,

Tom Shapland, PhD
Tule

From: Kelly O'Roke <raafhumboldt@gmail.com>
Sent: Friday, August 27, 2021 10:26 AM
To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>
Subject: Eligibility for SWEEP Comment

CAUTION : [External Email] - This email originated from outside of our CDFA organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe.

Good Morning,

I was just combing through the SWEEP RGA and I saw that you have intentionally excluded Cannabis farms from seeking drought resiliency funds from this program.

I am very confused as to why CDFA would do this. The cannabis industry in our region has a huge impact on our watersheds and many cultivators are facing enormous challenges to trying to implement water conservation technologies and projects. I am an inspector for Sun+Earth Certified, which is a rigorous environmental certification program for Cannabis which requires regenerative methods. Each and every farm I visited across Mendocino, Lake, Humboldt and Trinity Counties have reported some kind of issue with water, from needing water storage, to being unable to permit a rain catch pond or bladder, to having their wells go dry. Dry Farmers in the eel flood plain are facing crop failures of up to 50% of their canopy. Not only that, but the market has been flooded with industrial cannabis grown in Salinas and LA counties and our sun-growing farmers are this close to losing their farms. Industrial operations have MASSIVE carbon footprints in comparison to a small outdoor cannabis garden and they should have never been allowed to obtain licenses in my opinion. Yet even these folks could benefit from support to implement irrigation systems that are more sustainable. Our region is so heavily dependent on the Cannabis economy, and the value of a gallon of water spent cultivating this crop has an enormous impact here. **I urge you to reconsider excluding these producers as we face the climate crisis together.** I think you might find that there is a large community of growers who would be wonderful allies as you encourage the rest of the agricultural sphere to adopt more sustainable practices. You would find good collaboration in our County governments and local trade organizations for a program like this--it could be a huge success for sustainability in the industry.

I know there are difficulties due to federal prohibition, but surely something could be done to assist with the climate and drought crisis for our Cannabis farms. Not only that, but by assisting regulated

farmers with their water conservation projects, you are potentially preventing reversion to traditional market practices. Unregulated growing in our sensitive watersheds is a devastating practice, and if people can't make their living in the regulated market, I am concerned they will turn back to these harmful practices. Please consider helping those who want to be in full compliance with the state's goals for sustainability. Do you shop for organic produce? Please consider that just like our small organic vegetable farmers, the small regenerative cannabis farm may be a key piece in our battle against climate change.

Our non-profit organization really wanted to help these people with high efficiency drip systems next year potentially through one of your technical assistance programs. I am so disappointed that with \$40 million dollars available, and such massive revenue coming in through cannabis taxes, that not 1 dollar will help one of our farms. Such a shame.

Do you have any suggestions on how groups like ours could seek real help for sustainability projects in Cannabis? Wasn't there 9 million in sustainable cannabis funding allocated in the 2021 budget? What will that mean for us?

Thank you very much for your time.

Kelly O'Roke
Director
The Redwood Alternative Agriculture Fund
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707-630-2275 (c)

From: Kendall Barton <kendall@tuletechnologies.com>

Sent: Friday, September 3, 2021 10:08 AM

To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>

Subject: SWEEP Comments

CAUTION : [External Email] - This email originated from outside of our CDFA organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe.

Hello,

I'm not sure that this is the right channel, but hopefully you can help.

At Tule Technologies, we're thrilled that SWEEP is coming back online!

During the last open period, we had many growers who were able to afford Tule sensors with assistance from SWEEP.

Tule sensors are in-field hardware that measure the Actual Evapotranspiration and crop water stress of a crop. We provide this data to growers so they can make educated decisions about irrigation and only irrigate to the exact needs of their crop.

The only issue is that we had to have multiple meetings with application reviewers to help them understand what Tule sensors are before they could approve them. Is there some collateral we can provide to the reviewing panel to make the process a little simpler? Would sure appreciate any tips you can provide to prevent any confusion!

Here's some information about Tule sensors: <https://www.tuletechnologies.com/sense>

--

Kendall Barton

Marketing Manager

[559-202-3338](tel:559-202-3338)

www.tuletechnologies.com



-----Original Message-----

From: MARIE BORDIN-HUITT <mariemissy@aol.com>

Sent: Thursday, August 26, 2021 3:53 PM

To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>

Subject: Sweep programs

CAUTION : [External Email] - This email originated from outside of our CDFA organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe.

I want to know why can't or can farmers apply for more help for the sweep programs if they already applied and did get some help already. I need more solar and moisture monitors, etc.

Thank you

Sent from my iPhone

From: Jacob T Roberson <jtroberson@ucanr.edu>

Sent: Tuesday, September 21, 2021 9:49 AM

To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>

Subject: FW: Draft Request for Applications for the State Water Efficiency and Enhancement Program

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Good Morning,

I have been assisting farmers with SWEEP applications since March 2017 in both Fresno and Tulare Counties. Please see below for my comments on the Draft RFA for SWEEP which is expected to open for applications later this year:

1. The rolling application submission until a certain date that is still to be determined or until available funds are expended is not a good change for SWEEP. It will make it more difficult for small, socially disadvantaged family farmers to apply and receive funding for their potential projects. Large farmers can pay someone to submit their application, therefore having an advantage by being capable of turning in an application as soon as the applications begin to be accepted. Small farmers do everything on the farm, and they need time to complete the applications and get the required calculations and quotes.

Technical Assistance providers will also be over-worked and stressed to get applications in as fast as they can, possibly resulting in errors being made and applications being disqualified. Take the latest round of Healthy Soils as example. I can personally testify that farmers were very upset about this (rolling application deadline until the funds are expended), and they were also upset with how fast the funds were expended, making them very unlikely to receive funding.

Please consider changing the application deadline to a certain time and date, rather than a rolling deadline until available funds are expended.

2. Thank you for keeping VFDs as a water savings strategy to be funded under SWEEP. A lot of farmers have seen the benefit of having a VFD, both for the pump and for their PG&E/energy costs.

3. Funding amount being increased to \$200,000 and the maximum grant duration being extended to 24-months is great news! A lot more will be able to be implemented on small farms, including increased GHG reductions due to the installation of solar.

Thank you,

Jacob Roberson
Small Farms Assistant
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From: CDFA Office of Environmental Farming & Innovation <cdfa.oefi@cdfa.ca.gov>

Date: Thursday, August 26, 2021 at 1:59 PM

To: Jacob T Roberson <jtroberson@ucanr.edu>

Subject: Draft Request for Applications for the State Water Efficiency and Enhancement Program

[View this email in your browser](#)



The California Department of Food and Agriculture (CDFA) is now accepting public comments on a draft Request for Grant Applications (RGA) for the State Water Efficiency and Enhancement Program (SWEEP). The SWEEP program, which provides farmers and ranchers with grants to implement irrigation systems that save water and reduce greenhouse gas emissions, was allocated \$40 million in the Budget Act of 2021. The draft RGA for the SWEEP program is posted at <https://www.cdfa.ca.gov/oefi/sweep>. Comments on the draft RGA may be submitted to cdfa.oefi@cdfa.ca.gov until no later than 5:00 p.m. Pacific Time on September 23, 2021.

CDFA is preparing to accept SWEEP applications from farmers later in 2021. To be notified of program updates, including when the application period opens, please sign up for email notifications at <https://www.cdfa.ca.gov/subscriptions/MailChimp-signup.html>.



This email was sent to jtroberson@ucanr.edu

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CDFA Office of Environmental Farming and Innovation · 1220 N Street · Sacramento, CA 95814 · USA

From: Nathan Amarante <NAmarante@msn.com>

Sent: Wednesday, September 22, 2021 10:36 AM

To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>

Subject: SWEEP Funding (APN limitation)

CAUTION : [External Email] - This email originated from outside of our CDFA organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe.

Good Afternoon!

My name is Nathan Amarante. My brother and I were proud recipients of SWEEP grant funding in 2015. We're beginning farmers slowly converting one 80 acre parcel (APN) into a diversified orchard operation. We are committed to saving water and implementing solar (among other SWEEP priorities). However, SWEEP grant funding seems to be restricted by APN #. During this public comment period, we are kindly asking that this limitation/restriction be reconsidered. Unlike large corporate farmers with numerous APN's and considerably more land, we only have 1 APN (1 piece of land), but it's a fairly large parcel/family farm from our vantage point. Counties vary, but I believe Merced County allows 20 acre minimum size parcels and Stanislaus County allows 40 acre minimum size parcels. Therefore, it appears a similar farmer with 80 acres in four 20 acre parcels in Merced County (4 APN's) could apply up to 4 times for SWEEP funding. Again, although I couldn't find Amarante Farms listed on the online reports, we were fortunate to receive approximately \$16,000 in 2015 (2014 SWEEP grant) upon implementing micro drip irrigation on the "back 20 acres" of the 40 acres we're able to develop at that time. As beginning family farmers, it was monetarily infeasible and a bit daunting to implement all the conservation and efficiency practices we'd like to - for the full 80 acres - back in 2014/15; we simply thought we'd be able to reapply in the future if the funding was renewed.

In closing, for this grant cycle (or future ones), it may be more equitable (and potentially helpful for beginning family farmers that elected to keep their family farm undivided) if the applicant eligibility requirements/rules were revisited. For instance, we have also been able to receive some smaller grants from the irrigation district we live in and NRCS over the last 10 years. The irrigation district and NRCS grants/contracts were renewable/incremental and we hope to solicit funding for water conservation practices, etc. in the future if the opportunity arises (there isn't a limitation by APN#). However, grants similar to SWEEP are hard to come

by. We believe an advantage should certainly be given to new applicants (those that haven't received any funding since the inception of this program), nonetheless, in lieu of providing a new/unique APN #, we'd encourage a "limitation based on grant funds paid on a per acre basis to a specific grantee" or "new funding solicited must be for a new/different project - when utilizing a the same APN# (among other options a panel of experts may determine); such a revision may be more equitable prospectively, foster a more competitive application environment, and allow SWEEP judges greater flexibility/right-sizing among specific water/irrigation districts, Central Valley counties, etc.

Thanks so much for your consideration...!

Nathan Amarante, CPA & Beginning Farmer

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Osiyo (Greetings),

I hope you are well!

I am the Food Sovereignty Division Manager of the Yurok Tribe and oversee many of our food programs. I had a chance to look over the RFA and provide some feedback, specifically about how it could be made more accessible to Tribal applicants.

Please let me know if you have any questions about any of the comments I made. Thank you for working so hard to get community member feedback on this RFA!

Wado (Thank you),

Taylor Thompson

Gender Pronouns: They/Them/Theirs

Food Sovereignty Division Manager

[Yurok Tribe Environmental Program](#)

Cell: (707) 458-5184

tthompson@yuroktribe.nsn.us

-



... working to protect the lands, air and water resources of the Yurok Indian Reservation for the benefit of current and future generations of tribal members.

State Water Efficiency and Enhancement Program (SWEEP)

Request for Grant Applications

DRAFT FOR PUBLIC COMMENT

PUBLIC COMMENT WILL BE ACCEPTED THROUGH SEPTEMBER 23, 2021

RELEASED AUGUST 26, 2021

Grant Applications Due: TBD

Rolling application submission up to 5:00 p.m. PT on TBD or until available funds are expended.

No late submissions accepted.



California Department of Food and Agriculture
Office of Environmental Farming and Innovation
1220 N St.
Sacramento, CA 95814
cdfa.sweeptech@cdfa.ca.gov

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Background and Purpose

The California Department of Food and Agriculture (CDFA) is pleased to announce a first come, first served grant application process for the State Water Efficiency and Enhancement Program (SWEET). Applications that meet a minimum qualifying score will be funded, in the order received.

The current SWEET funding arises from the Budget Act of 2021 which allocated \$40 million to CDFA to provide grant funding directly to California agricultural operations to incentivize activities that reduce on-farm water use and reduce greenhouse gas (GHG) emissions from irrigation and water pumping systems on California agriculture operations. The program's objective is to provide financial incentives for California agricultural operations to invest in irrigation systems that save water and reduce GHG emissions.

Funding and Duration

The SWEET will disperse up to \$36 million to California agricultural operations investing in irrigation systems that reduce GHG emissions and save water.

- The application submission period will be on a rolling basis, starting on TBD and continue until TBD, or until available funds are expended, whichever is earlier.
- The maximum grant award is \$200,000
- The maximum grant duration is 24 months.
- Costs incurred before the beginning of the grant agreement will not be reimbursed.
- Awarded project must be complete and operational no later than 24 months after the start of the grant agreement. The anticipated start date is August 1, 2022.
- CDFA reserves the right to offer an award different than the amount requested.
- Grants are paid out on a reimbursement basis following invoice submission by awardee.

Technical Assistance Resources

One-on-one technical assistance will be provided by California academic research institutions, Resource Conservation Districts, and non-profit organizations through CDFA's [Climate Smart Agriculture Technical Assistance Program](#) (CSA TAP). These technical assistance resources provide an opportunity for SWEET applicants to obtain assistance with the development and submission of a SWEET grant application and implementation of an awarded project. Applicants will have access to a computer and internet, and a technical expert will be available to provide guidance on completing the required GHG reductions and water savings calculations and answer technical questions. Technical assistance will be provided free of cost to potential applicants. These providers are contracted with CDFA and may not charge any additional fees or subsequent commitments (financial or otherwise) to help submit applications. A list of CDFA-contracted technical assistance resources is available on the [SWEET webpage](#).

Additionally, CDFA has contracted with the University of California Division of Agriculture and Natural Resources to support a statewide group of [Climate Smart Agriculture Community](#)

Summary of Comments on 2021 State Water Efficiency and Enhancement Program

Page: 4

T Number: 1 Author: tthompson Subject: Comment on Text Date: 9/20/2021 4:26:22 PM

This puts Tribes at a disadvantage to apply, considering many face poor Internet connectivity, have a lengthy internal review process prior to applying to grants, and often have to navigate multiple stakeholders on parcels.

It would be great if there could be a Tribal set-aside for this funding opportunity.

T Number: 2 Author: tthompson Subject: Comment on Text Date: 9/20/2021 4:09:41 PM

Maybe it would need to be under a different grant, but I think it is critical to offer funding to support the implementation of high-efficiency irrigation systems as people begin their food production operations and not only having funding available for upgrading systems already in place.

Education Specialists (CESs). CESs may be able to provide application and implementation assistance to farmers wishing to apply to SWEEP.

CDFA will host three informational webinars to provide an overview of program guidelines and resources. For CDFA grant application workshop schedule, visit the SWEEP website at www.cdfa.ca.gov/oefi/SWEEP. During the informational workshops, CDFA staff will be available to answer programmatic questions but, to uphold the competitive grant process, will not provide one-on-one assistance.

Eligibility and Exclusions

- California farmers, ranchers and Federal and California Recognized Native American Indian Tribes are eligible to apply.
 - The farm location and the business mailing address must be in California.
- The irrigation project must be on a California agricultural operation.
 - For the purposes of this program, an agricultural operation is defined as row, vineyard, field and tree crops, commercial nurseries, nursery stock production, and greenhouse operations producing food crops or flowers as defined in Food and Agricultural Code section 77911.
 - Medical and recreational cannabis crops are excluded from eligibility.
 - Academic university research institutions and state governmental organizations are not eligible for funding.
- An agricultural operation cannot submit more than one application per unique tax identification number.
- An agricultural operation or individual cannot receive a total cumulative SWEEP award amount of more than \$600,000 (since the SWEEP program was initiated in 2014).
- Applications cannot build upon any previously funded SWEEP projects directly affecting the same Assessor's Parcel Numbers (APNs). However, applicants are encouraged to apply for a new project with different APNs.
- An applicant must be at least 18 years old and associated with the project.
- ☐ Projects ... reduce on-farm irrigation water use and reduce GHG emissions.
- SWEEP funds may be combined with other funds as match for the same project, such as funds from the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Environmental Quality Incentive Program (EQIP). However, SWEEP funds cannot cover activities or costs funded by other federal or state grant programs.

SWEEP grant funds cannot be used to:

- ☐ Expand existing agricultural operations (i.e., additional new acreage cannot be converted to farmland)
- Install new groundwater wells or increase well depth
- Test new technology or perform research

T Number: 1 Author: tthompson Subject: Comment on Text Date: 9/20/2021 4:12:49 PM

Like I said above, I think it would be critical to provide funding opportunity for new food producers to apply for funding to start their production with a high-efficiency system instead of encouraging implementing something less efficient with the idea of upgrading later.

T Number: 2 Author: tthompson Subject: Comment on Text Date: 9/20/2021 4:16:53 PM

What about a parcel that used to be pasture land for cattle and the producer is hoping to change over to plant crops and needs to change the irrigation system to accommodate the new process?

Many Tribes are working on reclaiming their ancestral lands and may need assistance with costs to help the land produce culturally relevant foods.

Timeline

CDFA will conduct informational application workshops for the SWEEP grant solicitation process and program requirements. For CDFA grant application workshop schedule and locations, visit the SWEEP website at www.cdfa.ca.gov/oefi/SWEEP.

Rolling Application Submission and Review

CDFA will accept applications for up to twelve weeks or until the funding is depleted.

- As applications are received, they will enter the review process.
- Applications that are disqualified will be notified and may reapply after correcting the reason for disqualification.
- Applications that move to technical review will be scored and funded in the order that they were received if they meet a minimum qualifying score of 30 out of 50 points.

The SWEEP webpage will be updated every two weeks with the total number of applications received and total funds requested until the available fund are depleted.

Program Activity	Timeframe
Release Request for Grant Applications (RGA)	TBD
CDFA grant application webinars	TBD
Grant applications due	TBD
Announce and award funding	TBD

Strategies for Water Savings and GHG Reductions

CDFA has identified the following strategies that address water conservation and GHG emission reductions. Applicants should consider incorporating several strategies listed below to achieve both water conservation and GHG emission reductions.

Water Savings

1. Weather, Soil, or Plant Based Sensors for Irrigation Scheduling
 - Examples include the use of soil moisture or plant sensors (NRCS Conservation Practice Standard (CPS) [449](#) may apply) with electronic data output, the use of weather station(s) linked to an irrigation controller to ensure efficient irrigation scheduling or the use of evapotranspiration (ET) based irrigation scheduling, such as the California Irrigation Management Information System (CIMIS) to optimize water use efficiency for crops.
 - Telemetry components that allow the electronic communication between technology devices are eligible for funding through SWEEP.
 - For use of ET based irrigation scheduling, provide sufficient documentation to show that water deliveries can be made on a consistent basis to accommodate that scheduling.
2. Irrigation System Changes

- Examples include the conversion to a more water efficient irrigation method or improvement of existing method to conserve water.
- Project designs should follow NRCS CPS [441](#), [442](#), [443](#) specifications.
- The applicants currently utilizing surface water (e.g. canal or river water) to flood irrigate crops are encouraged to maintain flood irrigation infrastructure along with the proposed efficient micro/ drip irrigation system(s) to facilitate groundwater recharge when surface water is available for recharge.

Greenhouse Gas Emission Reductions

1. Fuel Conversion

- Examples include pump fuel conversion resulting in reduction of GHG emissions such as replacing a diesel pump with an electric pump and/or the installation of renewable energy.
- Renewable energy that is used to power irrigation systems are eligible for SWEEP funding and can further reduce GHG emissions.

2. Improved Energy Efficiency of Pumps and the Addition of Variable Frequency Drives

- Examples include retrofitting or replacing pumps or the addition of variable frequency drives to reduce energy use and match pump flow to load requirements.
- NRCS CPS [372](#) or [533](#) may apply.

3. Low Pressure Systems

- For example, the conversion of a high-pressure sprinkler system to a low-pressure micro-irrigation system or lower pressure sprinkler system to reduce pumping and energy use.
- Project designs should follow NRCS CPS [441](#) or [442](#) specifications.

4. Reduced Pumping through Water Savings Strategies

- For example, improved irrigation scheduling may lead to reduced pump operation times.

Other Management Practices

CDFA supports innovative projects and recognizes there is variability in irrigation systems throughout California. For this reason, applicants may propose project components that do not fit into the above project types as long as water savings can be estimated and GHG reductions can be quantified using the [GHG Quantification Methodology](#).

Program Requirements

An agricultural operation can only submit one grant application using a unique tax identification number. If an agricultural operation is a sole proprietorship, that individual should use the last four digits of their social security number (e.g., XXX-XX-1234) as their unique business identification number in their grant application. An agricultural operation must use the operation's legal business name and associated tax identification number in the application. The business name provided in the application is the entity to which CDFA will extend a Grant

Agreement if the project is selected for an award. CDFA will not transfer awards to other business names or individuals. Sole proprietors must be 18 years of age or older. See [Award Process](#).

¹ Applicants must include flow meters in their proposed project or demonstrate actual water use will be measured with existing flow meters. See [Project Design](#) for more specifics design requirements.


The California Air Resources Board (ARB) has developed a GHG quantification methodology for estimating GHG reductions from proposed projects. This methodology includes a GHG Calculator Tool intended to assist applicants in determining GHG reductions from estimated on-farm energy savings as a result of project implementation.

Applicants are required to use and submit the ARB GHG Calculator Tool referred to in Section B of the California Air Resources Quantification Methodology for SWEEP, which is available at: https://www.cdfa.ca.gov/oefi/SWEEP/docs/GHG_QuantificationMethodology.pdf. To complete the required calculator, applicants will need to attach a pump efficiency test for all existing irrigation pumps impacted by the proposed project.

If selected for an award, execution of the Grant Agreement is conditional upon applicants agreeing to the following program requirements:

- Pre-project consultation conducted by a CDFA Environmental Scientist to confirm project information and discuss implementation plans. During the pre-project consultation the awardee may be required to provide additional information on the proposed project (e.g. assessors maps, photographs of the site, or quotes).
- Post-project verification project site visit with the awardee conducted by a CDFA Environmental Scientist, or in partnership with a third-party, to evaluate the completed project.
- Provision of post-project records (e.g. water use, energy use, energy generation) to be provided to a CDFA Environmental Scientist or a third-party representative to evaluate project outcomes for three years after the completion of the project.
- Expectation to use and maintain the installed system for a minimum of 10 years.

See [Project Implementation](#) for more details regarding project implementation requirements.

 Number: 1 Author: tthompson Subject: Comment on Text Date: 9/20/2021 5:10:33 PM

It would be great if there were a grant set up as part of this program, or a separate grant, specifically set up to fund the installation of flow meters on new agriculture sites in order to producers to prepare for a full application. This requirement will be a barrier to Tribes and tribal members who maybe don't have the resources to install this without assistance, and they are the ones in most need of resources to improve their systems.

How to Apply


CDFA uses an online application platform to receive SWEEP applications. The application can be accessed at the SWEEP webpage: www.cdfa.ca.gov/oefi/sweep. Applicants must create a user account to submit a grant application. All applications, supporting documents and submissions are subject to public disclosure including posting on the CDFA Office of Environmental Farming and Innovation (OEFI) website.

Prior to completing the online application questionnaire, applicants are encouraged to gather all required information using [Appendix A: Grant Application Checklist](#) and [Appendix B: Preview of Grant Application Questions](#) to facilitate effective and timely submission of the grant application. Applicants are required to submit the following attachments:

- Project design
- Completed [Budget Worksheet](#)
 - Solar system quote if the applicant is proposing a solar installation ([see page 8](#) for more details)
- Completed [SWEEP Irrigation Water Savings Assessment Tool](#)
- Completed [GHG Calculator Tool](#)
- Twelve consecutive months of baseline GHG emission/energy documentation for any pumps that are impacted by the project (e.g., fuel receipts or utility bills)
- Pump efficiency tests and pump specification documents as required by the [Quantification Methodology](#).

Application Attachments

Project Design


Applicants are required to submit a project design for the proposed irrigation system.  All project design costs will be at the expense of the agriculture operation.

Project designs must include the following:

- Labeled Assessor's Parcel Numbers (APNs)
- Detailed schematic of the locations of proposed or improved infrastructure and technology including irrigation piping, reservoirs, pumps, and sensors
- Pertinent agronomic information, such as the crop and water source
- Location, engineering and energy output specifications of any proposed renewable energy installations
- Holistic project overview using aerial imagery software (e.g., online or electronic mapping tools)
- Indicate location of existing flow meters and/or flow meters proposed to be installed through the project.

Water and Energy Use Documentation

Applicants are required to submit water and energy use supporting documentation to substantiate water savings and GHG reductions calculations in the application. Grant applications that do not include the required types of water and energy use documentation will

 Number: 1 Author: tthompson Subject: Comment on Text Date: 9/20/2021 5:13:32 PM

This would be great to include in a separate grant, like I mentioned above for water meters. Having a funding opportunity for installing meters, gathering baseline data, and designing the project would make this grant more accessible to Tribal communities.

be disqualified during the administrative review process. Specific requirements pertaining to water and GHG documentation are specified below.

Water Use Documentation

SWEEP Irrigation Water Savings Assessment Tool (Microsoft Excel Workbook)

Applicants must use the [SWEEP Irrigation Water Savings Assessment Tool](#) to demonstrate baseline water use and projected water savings estimates.

Applicants must complete both the “before” tab of the calculator to estimate baseline water use on the field with the current crop and irrigation practice and the “after” tab to estimate the projected water savings after project installation. The estimated water savings will be shown on the “Estimated Water Savings” tab of the calculator.

Applicants may attach supplementary information that will allow technical reviewers to refine water savings estimates.

Greenhouse Gas Emission Documentation

To determine the impact of the proposed project on GHG emissions, applicants must follow the California Air Resources Board (ARB) approved [GHG Quantification Methodology](#). This methodology utilizes a GHG Calculator Tool developed by ARB to estimate GHG emission reductions from changes in fuel use. The Quantification Methodology can be found at: https://www.cdfa.ca.gov/oefi/SWEEP/docs/GHG_QuantificationMethodology.pdf

ARB GHG Calculator Tool (Microsoft Excel workbook)

Applicants are required to complete and attach the [GHG Calculator Tool](#). Applicants must use energy records from the previous calendar year (January through December) and other on-farm specifications (e.g., pump tests) to complete the calculator. Note that the estimated water savings from the SWEEP Water Savings Assessment Tool is a required input of the ARB GHG Calculator Tool.

Supporting Documentation for GHG Calculations

Supporting documentation submitted along with the calculator must be sufficient to allow for reviewers to replicate the calculations. Applicants must provide an explanation of inputs used in the calculator in their application. Applicants are required to attach the following supporting documents:

- Utility bills, actual fuel receipts, and/or field operational logs covering the previous growing year (12 months; January to December).
 - In situations where the project involves crop rotation, up to three years of supporting documents may be provided to substantiate a representative baseline of energy use from pumping.
 - Documents must capture actual, not estimated or modelled, energy use data (e.g., gallons, kWh, etc.).

- Documents must indicate a specific time period (e.g., months/dates) for the on-farm energy use. For months with no on-farm energy use, indicate no usage for those months during the growing season.
- Field operational logs are defined as on-farm data compiled during a growing season and maintained as a common business practice by the agricultural operation to capture an actual time period (e.g., months and dates) of on-farm energy use values (e.g., gallons, kWh, etc.). Documents that provide estimates are not considered field operational logs.
- Pump and motor specifications for proposed pumps.
- Pump tests for existing pump(s) related to the project.

Applicants will be required to describe how the baseline GHG calculation value is supported by the on-farm energy documentation attached to their application. A response must be provided in the grant application explaining how the GHG documentation directly relates to the irrigation system.

Budget Worksheet

Applicants are required to download and complete a SWEEP [Budget Worksheet](#) from the [CDFA SWEEP website](#). The Budget Worksheet includes a breakdown of grant funds budgeted for each of the categories described below and itemization of all costs included in the proposed project. The Budget Worksheet must be attached in Microsoft Excel format and be consistent with the project design. Failure to submit the required Budget Worksheet, including submission of an alternate template/file type, may result in disqualification. Budget Worksheets from past solicitations will not be accepted.

Applicants should use the USDA, NRCS payment schedules as a guide, to the extent feasible, to determine reasonable project costs. See [Appendix C](#) USDA NRCS Payment Schedule for an abridged USDA, NRCS Payment Schedule for many project components eligible for SWEEP funding.

If the project involves the installation of a solar energy system, the applicant must submit a quote to verify the solar system capacity (kW). The quote must also itemize any tax incentives or rebates that the applicant will receive from the installation.

Budget Cost Categories:

Supplies and Equipment

Itemize the estimated cost of supplies and equipment by providing a description and quantity to be purchased. Supplies include all consumable materials with an acquisition cost less than \$5,000 per unit (e.g., pipes, tubing). Supplies must be used exclusively for the project.

Equipment is an article of nonexpendable, tangible personal property with a useful life of more than two years and an acquisition cost which equals or exceeds \$5,000 per unit (e.g., solar panels, irrigation pumps). Equipment must have a useful life of two years or more.

Labor

Labor costs cannot exceed 25 percent of the total SWEEP grant request. Labor costs in excess of 25 percent of the total SWEEP grant request must be covered by cost share. Estimate the cost for any work on the project that will be performed by individuals associated with a contractor. Provide a brief description of services and the cost/hour necessary for installation (e.g., labor for electrician, concrete work).

Other

Itemize the estimated cost of any other allowable expenses not covered in the previous budget categories necessary for project implementation. Project cost typically listed under this category include, but are not limited to, permits and equipment rental.

Allowable Costs

Project costs must be itemized and clearly support installation or improvement of irrigation systems, including supplies, equipment, labor, and any other allowable cost necessary for project implementation. Project cost must be reasonable and consistent with cost paid for equivalent work on non-grant funded activities or for comparable work in the labor market.

Examples of allowable costs include:

- Installation of photovoltaic panels to power irrigation systems
- All components of irrigation systems
- Sensor hardware and telemetry
- Software associated with sensors and weather stations
- Flow meters
- Permits

Unallowable Costs

Unallowable costs, include, but are not limited to:

- Project design costs (e.g., engineering)
- Costs associated with technical assistance or project management, including drive time and fuel cost
- Post-project service charges and maintenance costs associated with the irrigation system
- Non labor costs (e.g., management) and fees associated with project oversight
- Labor costs in excess of 25 percent of the total SWEEP grant request
- Any labor provided by the applicant or applicant's employees categorized as "in kind")
- Supplies and equipment costs not related to irrigation or water distribution systems
- Tools and equipment with useful life of less than two years
- Costs associated with drilling of new or expanding groundwater wells
- Irrigation training courses
- Pump efficiency tests

-
- T** Number: 1 Author: tthompson Subject: Comment on Text Date: 9/20/2021 5:18:44 PM
This is something that Tribes frequently need support for, as agricultural spots within a reservation are often spread out and require lots of transportation between them to implement new systems and share tools and equipment between them.
-
- T** Number: 2 Author: tthompson Subject: Comment on Text Date: 9/20/2021 5:19:58 PM
This is another barrier to Tribes. Tribal governments usually have a mandatory indirect cost, which if not covered by the grant, may make it impossible for them to apply. Maybe indirect expenses are allowable by Tribes (+/- non profits) in order to allow for them to apply.
-
- T** Number: 3 Author: tthompson Subject: Comment on Text Date: 9/20/2021 5:21:44 PM
This is another barrier to tribes, as it reduces internal capacity and training for Tribes to be self sufficient by implementing their own food production systems and improvement.

- Leasing of weather, soil and irrigation water-based sensors for irrigation scheduling
- Purchase trees, crops, or seeds
- Purchase soil amendments

Assistance and Questions

CDFA cannot assist in the preparation of grant applications; however, general questions may be submitted to cdfa.sweepstech@cdfa.ca.gov. CDFA will conduct two rounds of Questions and Answers (Q&A) to address general questions about the application submission process and program requirements. Responses to all questions received during the workshops and webinar or by email will be posted to [CDFA's SWEEP website](#) according to the following schedule:

Questions Received by:	Responses Posted by:
TBD	TBD
TBD	TBD

To maintain the integrity of the grant process, CDFA is unable to advise and/or provide applicants with any information regarding specific grant applications during the solicitation process.

Review Process and Notification of Application Status

Administrative and Technical Review

CDFA will conduct multiple levels of review during the grant application review process. The first level is an administrative review to determine whether application requirements were met. The second level is a technical review to evaluate the merits of the application and overall expected success of the project, including the potential for the project to save water and reduce GHG emissions. The technical reviewers are comprised of agricultural irrigation water system specialists and experts affiliated with the University of California and California State University systems. Applications will be ranked and selected for funding based on the score, estimated water savings and GHG reductions.

Past performance, if applicable, may be taken into consideration during selection. Past performance may include timely and satisfactory completion of funded activities and reporting requirements, data on meeting funding priorities, quantity and quality of past project performance including project termination or incomplete projects, or unresponsiveness.

Scoring Criteria

The technical reviewer(s) will do an in-depth evaluation of each application and will validate water and GHG calculations based upon the supporting documentation and project design provided by the applicant. Reviewers will use a fifty-point scale to evaluate the feasibility and merit of the proposed project and design, budget, estimated water savings and GHG calculations reductions. Applications must meet a minimum score of 30 to be awarded funding. See [Appendix D](#) for detailed scoring guidance.

Criteria	Maximum Points
Merit and Feasibility	12
Water Savings & Calculations	12
Greenhouse Gas Reductions & Calculations	12
Budget	8
Applicant Not Previously Awarded	3
Additional Considerations	3
Total	50


New SWEEP Recipients

To reach new SWEEP applicants, applications from applicants that have not previously received a SWEEP award in any previous funding rounds (2014-2019) will receive 3 points.

Additional Considerations

1 Irrigation Training

Irrigation training is a critical component to irrigation management and agricultural water conservation. CDFA strongly encourages applicants to participate in an irrigation training course to maximize the benefits of a well-designed and maintained irrigation system. During

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Encouraging this training while not allowing the expenses related to it puts Tribes at a disadvantage. Many Tribes do not have the resources to send employees to training without funding to do so.

the review process, grant applications will receive additional consideration if the applicant has attended an irrigation training relevant to the SWEEP project within the last two years or commits to attend an irrigation training course during the course of the project term.

Applicants may consider training resources provided on the program website at <https://www.cdfa.ca.gov/oefi/sweep/IrrigationTechnicalResources.html>. However, applicants may also select an alternative training course that best meets the needs of their operation. Training courses should be focused on efficient and effective irrigation types, water management strategies, and tools.

If awarded, the irrigation training course will become part of the Grant Agreement between the agricultural operation and CDFA. Therefore, project completion will be conditional upon completing the required training course during the grant term. Recipients must provide evidence (i.e., certificate of completion) confirming attendance. CDFA encourages agricultural operations to consider having both the agriculture operation's manager and irrigator attend a training course; however, only one agriculture operation representative is required to attend.

Applicants that previously completed irrigation training must attach evidence (e.g., certificate of completion) to the grant application confirming attendance to receive the extra consideration during the review process. Irrigation training certificate must be submitted to CDFA within 30 days from the date of project verification. The applicant may submit a certified USDA NRCS Irrigation Water Management plan ([CPS 449](#)) as evidence of meeting the irrigation training additional consideration.

Reduced Groundwater Pumping in a Critically Over-Drafted Groundwater Basin (1 point)
Projects that demonstrate reduced groundwater pumping within critically over-drafted groundwater basins will receive extra consideration during the review process. Applicants must use the online map linked below to determine if their project falls within a critically over-drafted groundwater basin as identified by the Department of Water Resources. A list of the basins, including the basin numbers, is identified in Table 1. If a proposed project reduces groundwater pumping within a critically over-drafted ground water basin, applicants must identify the name and number of the basin within the application. Applicants may, but are not required to, submit a letter of support from their Groundwater Sustainability Agency.

[State-wide map of critically over-drafted groundwater basins](#)

List of Critically Over Drafted Groundwater Basins	
Basin Number	Basin/Sub-basin Name
3-01	Soquel Valley
3-02	Pajaro Valley
3-04.01	180/400 Foot Aquifer
3-04.06	Paso Robles

3-08	Los Osos Valley
3-13	Cuyama Valley
4-04.02	Oxnard
4-06	Pleasant Valley
5-22.01	Eastern San Joaquin
5-22.04	Merced
5-22.05	Chowchilla
5-22.06	Madera
5-22.07	Delta-Mendota
5-22.08	Kings
5-22.09	Westside
5-22.11	Kaweah
5-22.12	Tulare Lake
5-22.13	Tule
5-22.14	Kern County
6-54	Indian Wells Valley
7-24	Borrego Valley

Soil Management Practices that Increase Water-Holding Capacity (1 Point)

Increasing soil organic matter has multiple benefits including increased water-holding capacity of the soil and carbon sequestration. Projects that integrate one or more of the following soil management practices identified below will receive additional consideration providing the management practice(s) will not result in an increase in on-farm water demand or energy use.

- Cover cropping ([USDA NRCS Conservation Practice Standard 340](#))
- Mulching ([USDA NRCS Conservation Practice Standard 484](#))
- Compost application
- [Resource conserving crop rotation](#)

Any of the management practices that are indicated in the project application will become part of the grant agreement terms and incorporated into the scope of work. Awardees should follow applicable USDA NRCS Conservation Practice Standards when implementing these management practices.

Priority Funding

Socially Disadvantaged Farmers and Ranchers and Priority Populations

At least twenty-five percent (25 percent), of the funds available for SWEEP projects will be reserved for the following applicants and/or projects:

Socially Disadvantaged Farmers and Ranchers

CDFA will ensure the inclusion of Socially Disadvantaged Farmers and Ranchers (SDFR) in all programs, including SWEEP. Farmers and ranchers who identify as belonging to a socially disadvantaged group will receive priority for funding if they meet a minimum score of 30 points

during the technical review. A socially disadvantaged group is defined by the 2017 Farmer Equity Act (AB 1348 (Aguiar-Curry, 2017))¹ as a group whose members have been subjected to racial, ethnic, or gender prejudice because of their identity as members of a group without regard to their individual qualities. These groups include all of the following:

- African Americans
- ¹ Native Indians
- Alaskan Natives
- Hispanics
- Asian Americans
- Native Hawaiians and Pacific Islanders

Benefits to Priority Populations

Priority Populations² include disadvantaged communities, low-income communities and low-income households and can be identified using the mapping tool provided at <https://webmaps.arb.ca.gov/PriorityPopulations/>. To benefit Priority Populations projects, must be located within an area designated as a Priority Population and reduce on-site emissions of criteria pollutants through reduced combustion of fossil fuels.

Sub-Surface Drip for Dairy Effluent

Due to the multiple environmental co-benefits that can be expected, CDFA will set aside \$2 million for projects that apply for technologies to use sub-surface drip irrigation to apply dairy effluent to field crops. Irrigation systems that utilize dairy manure effluent to irrigate crops via sub-surface drip irrigation may be funded by SWEEP. The project components eligible for funding are limited to those components required for irrigation and excludes technologies that would be funded through CDFA's Alternative Manure Management Program. Proposed projects must result in estimated water savings and GHG reductions as calculated with the SWEEP water savings and GHG reduction tools.

Notification and Feedback


Disqualifications

During the administrative review, the following will result in the disqualification of a grant application:

- Incomplete grant applications: applications with one or more unanswered questions necessary for administrative or technical review.
- Incomplete grant applications: applications with missing, blank, unreadable, corrupt, or otherwise unusable attachments.
- Applications requesting funding for more than the maximum award amount.
- Applications that include activities outside the grant duration.
- Applications with unallowable costs or activities necessary to complete the project objectives.

¹ https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1348

² <http://www.caclimateinvestments.ca.gov/priority-populations>

 Number: 1 Author: tthompson Subject: Comment on Text Date: 9/20/2021 5:27:26 PM
This is fantastic and I appreciate that it is included.

- Applications that do not provide primary applicant contact information in the application.
- Applications that do not comply with Eligibility or meet Program Requirements and Restrictions.

APPEAL RIGHTS: Any disqualification taken by the Office Environmental Farming and Innovation (OEFI) during the administrative review for the preceding reasons may be appealed to CDFA's Office of Hearings and Appeals Office within 10 days of receiving a notice of disqualification from CDFA. The appeal must be in writing and signed by the responsible party name on the grant application or his/her authorized agent. It must state the grounds for the appeal and include any supporting documents and a copy of the OEFI decision being challenged. The submissions must be sent to the California Department of Food and Agriculture, Office of Hearings and Appeals, 1220 N Street, Sacramento, CA 95814 or emailed to CDFA.LegalOffice@cdfa.ca.gov. If submissions are not received within the time frame provided above, the appeal will be denied. Appeal rights are only afforded to disqualifications.

Award Notices and Regrets

- Successful applicants will be notified of their grant award through email and will enter the grant agreement execution process.
- Applications that do not receive the minimum qualifying score will not be awarded funding and will receive feedback on their grant application within 10 business days after receiving notification.

Award Process

Grant Agreement Execution

CDFA will initiate the Grant Agreement process with applicants selected to receive a grant award. A CDFA SWEEP staff member will contact each Recipient to schedule a pre-project consultation to confirm project site information and discuss implementation plans. Applicants who are selected for awards may be required to provide APN map(s) of the impacted acreage and aerial map(s) to confirm the location of the project, photographs of the project site or additional quotes. Applicants with projects selected for award of funds will then receive a Grant Agreement package with specific instructions regarding award requirements including information on project implementation, verification, and payment process.

Project Implementation

Once a Grant Agreement is executed, the grant recipient can begin implementation of the project if it is after or on the official project start date. During project implementation, grant recipients must maintain frequent communication with CDFA staff about the SWEEP project. CDFA staff may regularly send emails or surveys to gauge project progress in addition to quarterly invoicing. Recipients must be responsive.

Recipients are responsible for the overall management of their awarded project to ensure all project activities, including labor associated with installation, are completed no later than TBD. For projects involving utility interconnection, recipients must take the necessary steps to begin the interconnection process after execution of the Grant Agreement to ensure utility interconnection work is complete by this date. Awardees must complete all proposed activities including activities related to cost share by this deadline. All communications (oral or written) related to grant activities including reimbursements must originate from grant awardee, grant awardee's authorized representative or CDFA staff.

Project implementation must occur on the parcels (APNs) identified in the Grant Agreement's Scope of Work (SOW). Failure to install a project on the APNs identified in the scope of work may result in all or any portion of the grant funding withheld or termination of the Grant Agreement.

CDFA may conduct a Critical Project Review, which may involve an on-site visit, upon reasonable notice at any time during the project term. The purpose is to determine whether deliverables are being met and evaluate project progress to ensure installation is complete within the grant term. Recipients may be required to submit financial records and project documentation to ensure SWEEP funds are used in compliance with the Grant Agreement terms and conditions.

Payment Process

The SWEEP is a reimbursement grant program. CDFA will provide the grant recipient with the necessary grant award and invoicing documents for reimbursement process. CDFA will withhold

10 percent from the total grant award reimbursement until the verification requirement is complete and meets the expectations agreed upon in the Scope of Work.

Advanced Payments

If selected for funding, recipients may be eligible for an advance payment of up to ¹25 percent of the grant award, subject to the provisions of section 316.1 “Advance Payments” of the California Code of Regulations, Division 1, Chapter 5. If appropriate justification is submitted and awardee is in compliance with grant management requirements, additional advance payments may be issued in accordance with CDFA’s Grant Administration regulations.

Project Verification

Following project implementation, the grant awardee must inform the assigned grant specialist that the project is complete and operational as proposed. A CDFA Environmental Scientist, or a CDFA-contracted third party, will then initiate the verification process. The verifier will visit the project site and inspect the completed project to ensure design specifications were met and the system is working effectively. In addition, the verifier will take photographs to document project completion. The grant awardee or a documented authorized representative of the agricultural operation must be present during the time of verification. If CDFA determines that remote verification is required, the grant awardee will submit geotagged photos of critical project components so that the project can be verified as complete on the intended APN. The verification component must be completed by TBD.


Post-Project Requirements

Project Outcome Reporting

Execution of the Grant Agreement is conditional upon agreement to post-project reporting requirements. Recipients are expected to maintain documentation related to the SWEEP funded project, including energy and water use documentation, be responsive to requests for information about the project and to report actual water and energy use for a period of three years after project completion. The purpose of this reporting is to evaluate the long-term success of SWEEP awarded projects.

After the project is operational, a CDFA Environmental Scientist will work with recipients to collect the necessary data, evaluate the co-benefits and maintenance of the project and to quantify water savings and GHG emission reductions. This may entail enrollment with a third-party contractor to monitor energy and/or water use from the project site. In the situation that a third-party contractor enrollment is required, the awardee shall take all required steps for timely enrollment. Besides the enrollment, the awardee may be required to provide data which could not be collected utilizing third-party services.

Failure to work with CDFA or its designees to provide the necessary project-related documentation will be considered non-performance. In the event of non-performance, CDFA may take any action deemed necessary to recover all or any portion of the grant funding, including denying eligibility for future funding.

 Number: 1 Author: tthompson Subject: Comment on Text Date: 9/20/2021 5:29:06 PM
This is really helpful for Tribes. Thanks for including it.

State Audit and Accounting Requirements

In addition to SWEEP program requirements, awarded projects may be subject to State Audit and Accounting Requirements listed below.

Audit Requirements

Projects are subject to audit by the State annually and for three (3) years following the final payment of grant funds. If the project is selected for audit, the Grantee will be contacted in advance. The audit shall include all books, papers, accounts, documents, or other records of Grantee, as they relate to the project. All project expenditure documentation should be available for an audit, whether paid with grant funds or other funds.

Grantee must have project records, including source documents and evidence of payment, readily available and must provide an employee with knowledge of the project to assist the auditor. Grantee must provide a copy of any document, paper, record, etc., requested by the auditor.

Accounting Requirements

Grantee must maintain an accounting system that:

- Accurately reflects fiscal transactions, with the necessary controls and safeguards.
- Provides a good audit trail, including original source documents such as purchase orders, receipts, progress payments, invoices, employee paystubs and timecards, evidence of payment, etc.
- Provides accounting data so the total cost of each individual project can be readily determined.

Records Retention

Records must be retained for a period of three (3) years after final payment is made by the State. Grantee must retain all project records at least one (1) year following an audit.

Appendix A: Grant Application Checklist

Application Components

- ☐ Completed Online Application
 - ☐ Section I: Applicant Information
 - ☐ Section II: Previously Funded Project
 - ☐ Section III: Proposed Project Overview
 - ☐ Section IV: Project Location Information
 - ☐ Section V: Current Irrigation System & Practice
 - ☐ Section VI: Proposed Project Types
 - ☐ Section VII: Project Duration
 - ☐ Section VIII: Proposed Irrigation System & Practice
 - ☐ Section IX: Water Calculations
 - ☐ Section X: GHG Calculations
 - ☐ Section XI: Additional Considerations

Application Attachments

- ☐ Project Design (map of components locations including field-based sensors, pumping station, solar, and other project components)
- ☐ Budget Worksheet
- ☐ SWEEP Irrigation Water Savings Assessment Tool
<http://www.cdfa.ca.gov/oefi/SWEEP/docs/IrrigationWaterSavingsAssessmentTool.xlsm>
- ☐ ARB GHG Calculator Tool
http://www.cdfa.ca.gov/oefi/SWEEP/docs/GHG_CalculatorTool.xlsx
- ☐ GHG Baseline Use Documentation (e.g. utility bills, fuel receipts, field operational logs, etc. covering 12 months of peak irrigation season)
- ☐ Pump Efficiency Test (pump efficiency test for current pumps, pump and motor specifications for any proposed pumps)

Optional Application Attachments (only if applicable to project)

- ☐ Cost Share (optional)
- ☐ Quotes for solar projects (required if requesting funding for a solar installation)
- ☐ Letter of Support from Groundwater Sustainability Agency
- ☐ Supplemental information to support water use baseline
- ☐ All Other Supplemental Documents (e.g., irrigation training certificates) (optional)

Appendix B: Preview of Grant Application Questions

Under Development

DRAFT

Appendix C: USDA NRCS Payment Schedule

Adapted from [Environmental Quality Incentives Program Payment Rate Summary List](#) Regular Rates.

This table provides the USDA NRCS EQIP rates for some project components that are relevant to SWEEP. This list is intended to provide guidance for expected costs and is not a complete list of all projects types or items that may be funded through SWEEP.

Practice Code	Practice Name	Component	Unit Type	Unit Cost
372	Combustion System Improvement	Electric Motor in-lieu of IC Engine, >= 500 HP	Ea	\$39,855.25
372	Combustion System Improvement	Electric Motor in-lieu of IC Engine, 125-174 HP	Ea	\$9,488.57
372	Combustion System Improvement	Electric Motor in-lieu of IC Engine, 12-69 HP	Ea	\$3,278.87
372	Combustion System Improvement	Electric Motor in-lieu of IC Engine, 175-224 HP	Ea	\$12,410.81
372	Combustion System Improvement	Electric Motor in-lieu of IC Engine, 225-274 HP	Ea	\$14,837.62
372	Combustion System Improvement	Electric Motor in-lieu of IC Engine, 275-399 HP	Ea	\$19,947.70
372	Combustion System Improvement	Electric Motor in-lieu of IC Engine, 400-499 HP	Ea	\$24,642.42
372	Combustion System Improvement	Electric Motor in-lieu of IC Engine, 70-124 HP	Ea	\$6,799.30
372	Combustion System Improvement	IC Engine Repower, >25 bhp	BHP	\$108.63
441	Irrigation System, Microirrigation	Filter replace	ac	\$294.79
441	Irrigation System, Microirrigation	Orchard-vineyard, >10ac	ac	\$705.40

Practice Code	Practice Name	Component	Unit Type	Unit Cost
441	Irrigation System, Microirrigation	Orchard-vineyard, 10ac or less	ac	\$1,404.47
441	Irrigation System, Microirrigation	Orchard-vineyard, durable tubing replace	ac	\$343.08
441	Irrigation System, Microirrigation	Row Crop, Above Ground PE Manifold	ac	\$1,032.62
441	Irrigation System, Microirrigation	Row Crop, Buried Manifold	ac	\$990.51
441	Irrigation System, Microirrigation	SDI (Subsurface Drip Irrigation)	ac	\$1,245.91
441	Irrigation System, Microirrigation	SDI (Subsurface Drip Irrigation), Manure	ac	\$2,444.28
441	Irrigation System, Microirrigation	Small Acreage	ac	\$2,061.21
442	Sprinkler System	Big Gun, Stationary	Ea	\$3,022.38
442	Sprinkler System	Center Pivot, < 600 Ft	ft	\$49.77
442	Sprinkler System	Center Pivot, > 600 Ft	ft	\$42.68
442	Sprinkler System	Handline system	ft	\$4.27
442	Sprinkler System	Linear Move System	ft	\$57.49
442	Sprinkler System	Pod System	Ea	\$337.11
442	Sprinkler System	Solid Set System	ac	\$1,359.66
442	Sprinkler System	Solid Set, Above Ground Laterals	ac	\$1,558.82
442	Sprinkler System	Traveling Gun System, > 3 inch Hose	Ea	\$22,720.61
442	Sprinkler System	Traveling Gun System, >2 to 3 inch Hose	Ea	\$4,812.03
442	Sprinkler System	Traveling Gun System, 2 inch or less diameter Hose	Ea	\$5,096.56
442	Sprinkler System	Wheel Line System	ft	\$12.88
449	Irrigation Water Management	IWM with Soil Moisture Sensors	Ea	\$768.37

Practice Code	Practice Name	Component	Unit Type	Unit Cost
449	Irrigation Water Management	IWM with Soil Moisture Sensors with Data Recorder	Ea	\$1,547.61
533	Pumping Plant	Electric-Powered Pump <= 3 Hp	HP	\$1,056.29
533	Pumping Plant	Electric-Powered Pump <= 3 HP with Pressure Tank	HP	\$1,248.06
533	Pumping Plant	Electric-Powered Pump >10 to 40 HP	HP	\$348.81
533	Pumping Plant	Electric-Powered Pump >3 to 10 HP	HP	\$334.96
533	Pumping Plant	Electric-Powered Pump >40 HP, Centrifugal	HP	\$235.14
533	Pumping Plant	Solar <1 Hp	Ea	\$2,535.31
533	Pumping Plant	Solar >3 Hp	Ea	\$6,454.12
533	Pumping Plant	Solar 1-3 Hp	Ea	\$4,233.76
533	Pumping Plant	Turbine, Pump Only	HP	\$145.01
533	Pumping Plant	Variable Frequency Drive only (no pump) <=15Hp	Ea	\$1,910.84
533	Pumping Plant	Variable Frequency Drive only (no pump) >15 Hp	HP	\$92.79
533	Pumping Plant	Vertical Turbine Pump, Deep Well, >100 Hp	HP	\$295.77
533	Pumping Plant	Vertical Turbine Pump, Deep Well, <100 Hp	HP	\$368.43
533	Pumping Plant	Water Ram Pump	In	\$862.28
533	Pumping Plant	Windmill-Powered Pump	ft	\$709.89

Appendix D: Technical Review Scoring Guidance

CRITERIA	MAX POINTS
MERIT AND FEASIBILITY <ul style="list-style-type: none"> Project design clearly identifies the following items: project location (APN and fields where project is to be installed), proposed irrigation system layout, pump locations and any fertigation and filtration stations, location of solar system, sensor locations, water sources, groundwater wells and pump discharge, crops and acreage per crop. The estimated project completion date is compatible with the grant duration of 24 months. The project has merits in terms of water efficiency, GHG reductions and economic return for the farm and the State. The project demonstrates a deliberative and holistic effort by the applicant to improve farm water and energy efficiency. The project has long-term viability. The project improves farm resilience to drought and aligns with sustainable groundwater efforts and /or surface water conservation. The project replaces or reduces diesel fuel consumption. 	12
WATER SAVINGS <ul style="list-style-type: none"> The applicant estimated projected water savings accurately using SWEEP tools and provided sufficient explanation for calculations and/or supporting documentation. Water savings strategies are clear from the baseline scenario to the projected savings. The proposed project will result in measurement of water use from all water sources on the impacted acreage. The proposed project can achieve real and notable per acre water savings and maintain the water benefits over 10 years. 	12
GREENHOUSE GAS REDUCTIONS <ul style="list-style-type: none"> The applicant estimated GHG reductions correctly using the SWEEP GHG calculator tool and provided sufficient explanation and supporting documentation for calculations. The GHG calculator reflects what is included in the project design and application narrative. The GHG reduction strategies are clear in the project design and application. The GHG calculator acreage matches the acreage of the project design. The proposed project will achieve real GHG reductions and maintain these GHG reduction benefits for a project life of 10 years. 	12
BUDGET	8

<ul style="list-style-type: none"> • The project budget worksheet provides sufficient detail on the project components. • If relevant, the project includes the appropriate number of flow meters and irrigation water management (IWM) equipment to meet the project IWM goals. • Labor costs are reasonable and do not exceed 25 percent of the total budget. • The budget does not include unnecessary or duplicative items. • The applicant provides itemized quotes to support the budget. Quotes are required for solar systems, but not for all project components. 	
<p>PREVIOUSLY UNAWARDED APPLICANTS</p> <ul style="list-style-type: none"> • Applicant has not received an award in past SWEEP funding cycles. (CDFA staff to verify). (3 Points) 	3
<p>ADDITIONAL CONSIDERATIONS</p> <ul style="list-style-type: none"> • Applicant commits to completing an irrigation training course during the course of the grant agreement or has completed irrigation training within the last two years. (1 Point) • The proposed project will reduce groundwater pumping within a critically over-drafted groundwater basin. (1 Point) • The applicant indicates that they will implement one or more of the four soil management practices. (1 Point) 	3
Total Points Available: 50	

State Water Efficiency and Enhancement Program Public Comment

Introduction

Soil management practices resulting in soil carbon sequestration and reductions in water use have been identified by the SWEEP program as potential components of an irrigation efficiency and enhancement plan. However, volatility in growing practices due to shifts in agronomic pressures or financial decisions made by growers preferences can result in reversals of long term soil management plans. These decisions can stem from ambiguity in their perceived benefits, which may occur over a time period (several years) that extends beyond growers' typical decision-making window for field management practices. As such, committing to such practices over a multi-year period poses a financial risk and discourages implementation.

Recommendation

The RFA allows applicants to earn an extra point for implementing soil management practices such as cover crops. While it states that they will be bound by the grant agreement to carry out the practice, it is unclear whether it would be a budgetable part of the overall project plan. If so, this should be clarified. If not, we suggest that CDFA consider making these practices budgetable, given the impact they can have on the performance of irrigation systems as a whole, e.g. a cover crop may lower the amount of irrigation needed and thereby enable the installation of even more efficient equipment. This would allow applicants to better pursue a holistic irrigation plan. Furthermore, it would lower the applicant's risk in the event that the agreed-upon soil management practice becomes a liability, as the cost to continue carrying it out would be covered by the grant rather than out of pocket; as currently written, the RFA may discourage applicants from including soil management practices in the first place as there is significant risk but little reward (a single scoring criteria point).



September 22, 2021

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

Re: SWEEP Comments

Dear OEFI Staff:

The Community Alliance with Family Farmers (CAFF) has represented small and mid-scale family farmers in California for over 40 years, seeking to preserve family-scale agriculture, promote local food systems, and advance environmental sustainability.

Drought once again has become the principal preoccupation of farmers in California, and the State Water Efficiency & Enhancement Program (SWEEP) is the state's only program that addresses on-farm irrigation systems. CAFF worked with the Legislature to maximize the funding flowing to SWEEP—especially the additional \$10 million in the drought budget package—and we are requesting that the program work with small and socially disadvantaged farmers to assist them with dewatered wells in this crisis. The state has programs to address dewatered drinking water wells, but SWEEP is the only program that could address similar agricultural wells.

SWEEP is not and should not be principally a Greenhouse Gas Reduction program, but rather a water-use efficiency program. It is valuable to encourage GHG-reducing practices such as solar, but the impact on the climate problem will be small. In contrast, SWEEP's impact on water use in agriculture can be significant and water supply is the principal challenge facing California agriculture. SWEEP's insistence on GHG reductions stems from its initial funding from GGRF, but that is no longer the case, it is being funded from the General Fund and CDFA should seize the opportunity to address the drought crisis as well as expand assistance to areas that use only surface water.

Drought assistance for local agriculture

What the SWEEP program is lacking is a way to help small farmers whose wells are being dewatered in the drought. The SWEEP Request for Grant Applications states explicitly that "SWEEP grant funds cannot be used to... install new groundwater wells or increase well depth." In a drought, this makes SWEEP appear as a program for large-scale farming, supporting operators who are able to obtain their own funding to drill ever deeper wells. And those deeper wells are drying up the shallower wells of small farms since SGMA pumping

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restrictions are not yet in effect and virtually everyone has been cut off from surface water. DWR reports that groundwater levels in many parts of the state have already fallen to record lows.

We asked Darcy Bostic of the Pacific Institute to run an analysis on shallow agricultural wells in the Central Valley.¹ She confined the well failure analysis to wells (built after 1965) that would be completely dewatered if groundwater levels fell similarly to declines in the previous drought. She concludes that 355 agricultural wells would go dry 2021-22 and, just as with the domestic wells, over half of these would be in Fresno and Tulare Counties (Figure 1). She then estimated that 5,524 agricultural wells in the Central Valley would need to have their pumps lowered or replaced. This is a very conservative estimate since it does not consider agricultural regions outside the Central Valley—such as the North Coast where numerous wells have already gone dry. The Central Valley accounts for 58% of the agricultural wells in the state. If the rest of the state’s agricultural wells face similar circumstances, then there would be an additional 4,000 wells needing pump lowering and 257 wells needing deepening or replacement

Consistent with the Legislature’s intent to mitigate drought impacts, we propose that part of the money appropriated by the Legislature be used for a stand-alone program of drought assistance for farmers producing food for local markets, especially socially disadvantaged farmers, focusing on making operable dewatered wells. Since current funding for SWEEP is from the General Fund—and the last round was from Prop 68—and not from the Greenhouse Gas Reduction Fund (GGRF), there is no obligation for SWEEP to reduce greenhouse gases (GHGs) in every instance. General Fund money comes mostly from California taxpayers, who are also the consumers of the food being grown by small, locally-oriented farms, and it seems appropriate that SWEEP would attempt to help such farms survive the drought. This stand-alone program would only continue as long as there is a drought, but it could be replicated during future droughts until SGMA stabilizes the aquifers and reduces the possibility that wells will be dewatered.

A stand-alone drought program would have to be much more agile than the broader SWEEP program. Farmers with dewatered wells cannot wait until August 2022 for assistance, they need to lower their pumps or lower their wells this winter if they are to produce in 2022. As explained above, we have estimated that there will be approximately 9,500 wells that will need their pumps lowered and 600 wells will have to be lowered or replaced if this drought continues in a manner similar to the last drought. Not all of these farms will need state assistance, and SWEEP will not have enough funding to help everyone, but SWEEP could make a significant dent in the problem. We believe that the Legislature would appropriate more money next year if CDFA stepped up and implemented a program of drought assistance now.

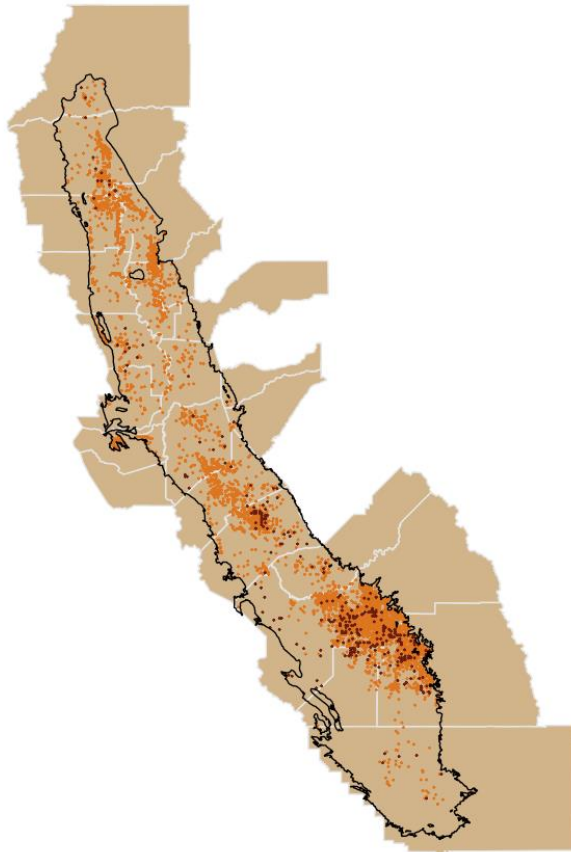
Lowering pumps or wells would also provide an opportunity to implement the types of efficiency measures that SWEEP typically supports, whether more efficient pumps, variable frequency drives, or more efficient irrigation systems. In the process of fixing dewatered wells, deficiencies in the set-up could be identified and then either included in the well fix or

¹ Darcy Bostic, Pacific Institute, personal communication.

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submitted for funding through the SWEEP process. The SWEEP requirement that flow meters be installed would be a step towards SGMA implementation and would remove another cost burden on small farms.

Figure 1: Impacted agricultural wells in the Central Valley



How might such a program work? The California Department of Food and Agriculture (CDFA) could work with their local technical assistance (TA) providers or with well companies to inspect the well, pump, and irrigation system at a farm that applies for assistance, authorizing the immediate fix to the well and a plan for other changes that would be needed for a more efficient system. CDFA should set up a quick mechanism to reimburse bills for pump lowering and any changes to the pump required, as these would typically cost less than \$10,000. CDFA could cost share on well deepening or replacement, capping payments at \$35,000 or a similar reasonable amount. CDFA could also specify that the well should be lowered to the Minimum Threshold specified in the local Groundwater Sustainability Plan, where these exist.

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The CDFA Budget Change Proposal on SWEEP asked for \$20 million a year and CDFA has instead received \$50 million a year, including an additional \$10 million in the final drought package, reflecting the Legislature's intent for CDFA to address drought impacts in the farming community. There are more than sufficient funds available to assist many of the farmers with dewatered wells so that they can stay in business. The current drought is an existential crisis for these farmers and an opportunity for the Newsom administration to devote a sizable portion of these funds to saving their businesses and helping rural communities.

Other Comments on SWEEP draft RGA

As a member of the California Climate and Agriculture Network (CalCAN) coalition, we also join CalCAN in making the following recommendations to ensure the long-term success of small and mid-scale growers:

- Awards be capped at \$100,000, which permits more farmers to receive funding from this over-subscribed program. As a participant in the SWEEP review process, I note that no one recommended an increase in the award cap to \$200,000.
- The program should change the proposal for a first-come first-served application process back to a 12-week application period and competitive review process so that small and socially-disadvantaged farmers who need more time and assistance are not discriminated against. We saw this result in the Healthy Soils Program and the same would be true in SWEEP.
- SWEEP should allow grants to projects that do not reduce GHGs to any significant degree, such as projects in areas that are completely reliant on surface water. SWEEP is not using GGRF and so should be able to accommodate these projects. For the same reason SWEEP should be able to help small farms with dewatered wells.

We thank you for consideration of our comments and our efforts to ensure the long-term success and prosperity of California farmers, ecosystems and communities. If you have any questions, feel free to reach me at 310-925-0857 or dave@caff.org.

Sincerely,



David Runsten
Policy Director

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September 22, 2021

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

Re: Comments on the State Water Efficiency & Enhancement Program (SWEEP)

Dear OEFI staff:

I write on behalf of the California Climate and Agriculture Network (CalCAN).¹ Thank you for the opportunity to provide comments on the State Water Efficiency & Enhancement Program (SWEEP). Since its creation in 2014, CalCAN has advocated for funding SWEEP and has simultaneously tracked its progress in two reports in 2016² and 2018³. Our coalition is thrilled by the legislature's timely investment of a record \$50 million from the General Fund in FY 21-22 and commitment to invest another \$50 million from the General Fund in FY 22-23.

The current drought has again laid bare the vulnerability of California farmers to the vicissitudes of a changing climate. With nearly 90 percent of the state experiencing extreme drought, the need is great for assistance to keep farms afloat through the current drought and make them more resilient. The stories of increased groundwater pumping, increased water costs, fallowed fields, wells run dry, and questions about family farm viability for the next generation seem to permeate every conversation we have with farmers.

This stark reality draws into focus the need to both mitigate and adapt to climate change simultaneously. SWEEP, which remains the state's only on-farm water efficiency and drought resilience program, has a critical role to play in addressing this dual need. Unfortunately, SWEEP's requirement for the past seven years that every project demonstrate GHG reductions has often precluded the program from recognizing and investing in worthwhile drought resilience and irrigation efficiency projects that cannot document an immediate on-farm reduction in GHG emissions. This GHG requirement stemmed from SWEEP's original funding source, the Greenhouse Gas Reduction Fund, but is *not* mandated by statute and is *not* a requirement with its current General Fund source.

¹ CalCAN is a statewide coalition of farmers and ranchers, allied organizations, ag professionals, scientists and advocates that advances policy to realize the powerful climate solutions offered by sustainable and organic agriculture.

² California's State Water Efficiency and Enhancement Program: A Progress Report. Available at: calclimateag.org/wp-content/uploads/2018/10/SWEEP-Report-Rounds-1-4-combined-2016.pdf

³ Climate Smart: Saving Water and Energy on California Farms. Available at: calclimateag.org/wp-content/uploads/2018/09/SWEEP-Policy-Brief-CalCAN-9-11-18.pdf

With the change in funding sources to General Funds for FY 21-22 and FY 22-23, CDFA and the Science Advisory Panel have the flexibility to consider a more holistic suite of drought resilience and irrigation efficiency projects and ensure equal access to the program for farms that have been historically excluded. Recommendations #2 and #3 below address these new opportunities.

Given the historically high demand for this program and current statewide drought, it is more important than ever to enable as many farmers as possible to participate in SWEEP, especially first-time applicants and farmers who have fewer resources to upgrade their irrigation systems on their own and weather this drought. Recommendations #1 and #4 address this specifically.

Of the few changes we could identify that were proposed in the draft RGA, we do want to highlight our support for allowing additional advance payments, which was one of the recommendations of the SWEEP ad hoc advisory group and will alleviate some of the cashflow challenges that some small farms have faced in implementing SWEEP grants.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Shobe". The signature is fluid and cursive, with the first name "Brian" and last name "Shobe" clearly distinguishable.

Brian Shobe

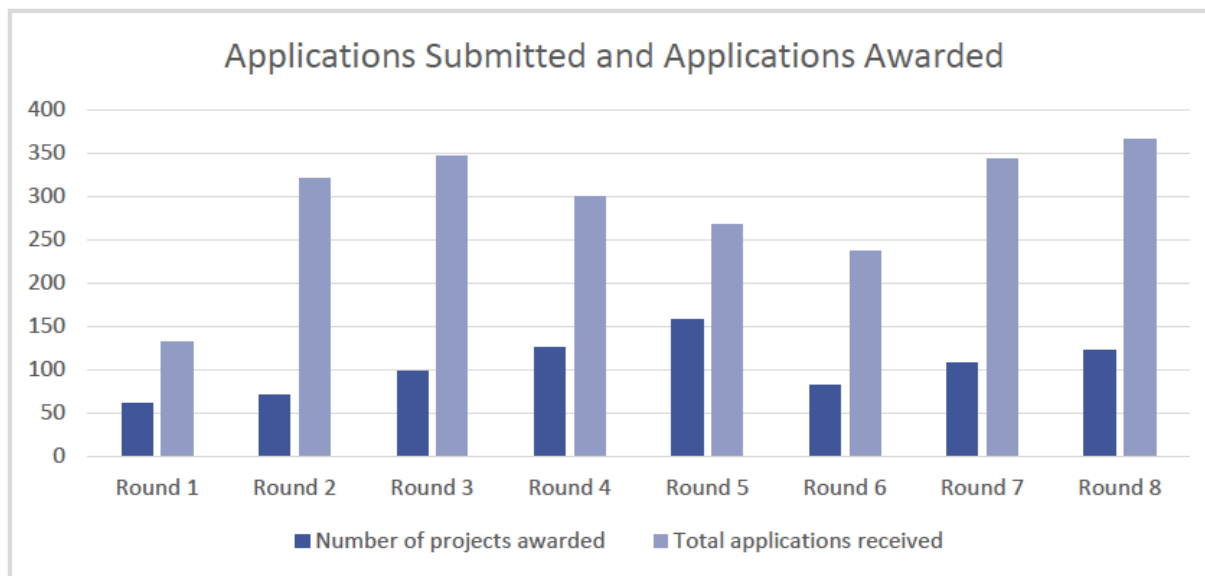
Associate Policy Director

Email: Brian@calclimateag.org

Recommendations

1. Maintain a maximum award limit of \$100,000 to enable 50% more farmers to participate in this consistently oversubscribed, urgent drought resilience program.

SWEEP has an average oversubscription rate of 280 percent, which means that for approximately every three farmers who have applied, only one received a grant.⁴

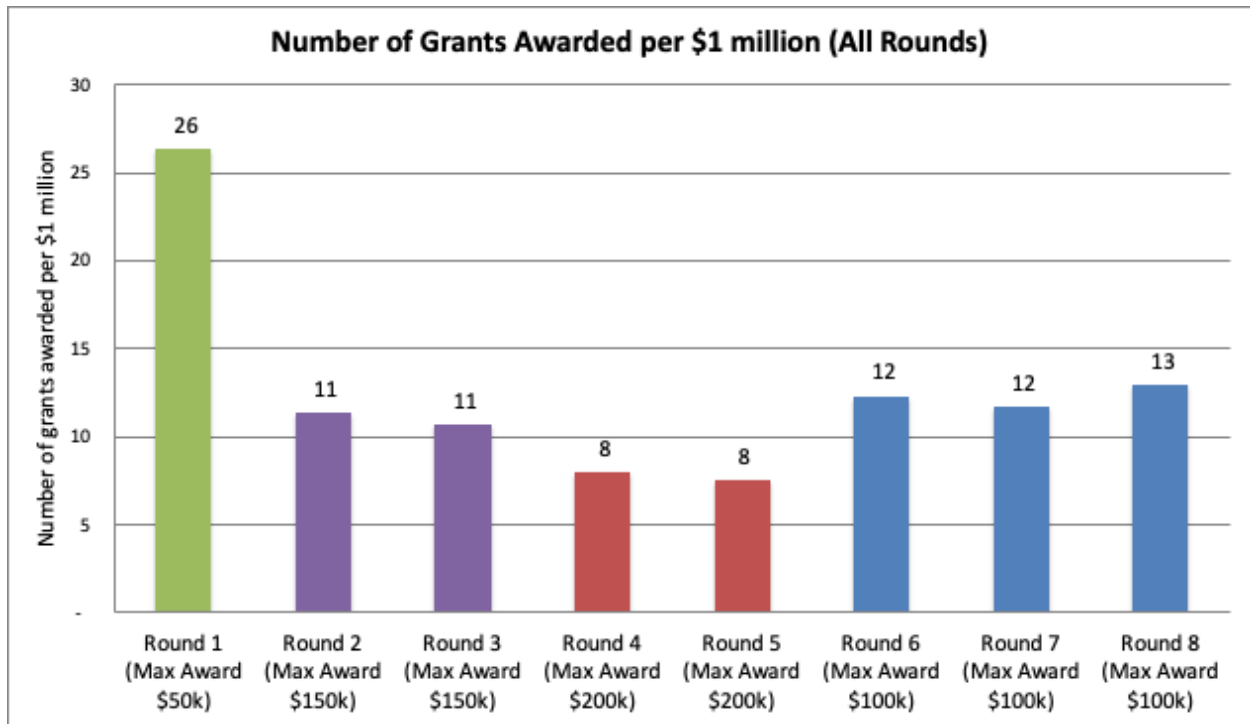


Of the roughly 70,000 farms in the state, a little over one percent have received a SWEEP grant. Meanwhile, nearly 90 percent of the state is experiencing extreme drought, according to the US Drought Monitor.⁵ In that context, it is more important than ever for SWEEP to reach as many farms as possible, especially farmers who do not have adequate access to capital and other resources to upgrade their irrigation systems and survive this drought.

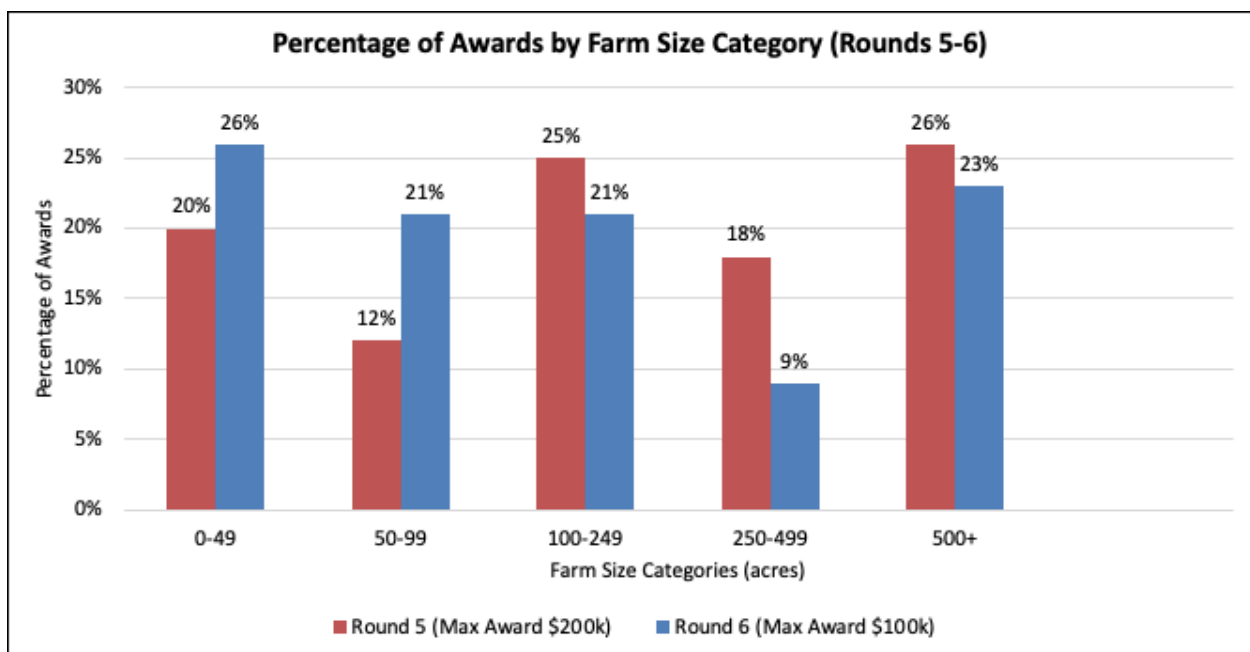
Increasing the maximum grant award from \$100,000 to \$200,000, as the draft RGA proposes, would do the opposite, significantly reducing the number of farms that can benefit from the program. SWEEP data from previous rounds of the program proves this. As seen in the graph below, the number of SWEEP grants awarded per \$1 million drops significantly when the maximum award limit increases. Reducing the maximum award limit, as was done between Rounds 5 and 6, increased the number of SWEEP grants awarded per \$1 million. **Data from Rounds 4-8 indicate that a \$100,000 maximum award limit enables approximately 50% more farmers to participate in the program when compared to a \$200,000 maximum award limit.**

⁴ Draft Report on the Recommendations of the SWEEP Ad Hoc Advisory Group, available at: https://www.cdfa.ca.gov/oefi/sweep/docs/SWEEPAAGReport_final.pdf

⁵ Current drought conditions available at: <https://www.drought.gov/states/california>



Program data from Rounds 5-6 also reveals that **a lower maximum award of \$100,000 is associated with higher participation rates by small-scale farms** (see chart below). These farms are, by the nature of their size, less likely to have access to capital and other resources to upgrade their irrigation systems and weather this drought, making them a priority for relief through this program.



It is worth noting that increasing the maximum award limit was *not* one of the 48 recommendations made by the SWEEP ad hoc advisory group.

We strongly recommend CDFA maintain the maximum award limit of \$100,000 for SWEEP to enable more farms to participate in the program at a time when more farmers than ever are in need of resources to help them manage their irrigation as efficiently as possible.

2. Establish a pilot to address a long-standing program inequity and enable more farmers in southern California to participate in SWEEP

Continuing the theme of allowing more farmers to participate in the program, we strongly recommend CDFA take advantage of the flexibility that comes with General Funds and establish a pilot within SWEEP to enable more farmers in Southern California to participate in the program. The vast majority of farmers in this region have effectively been excluded from the program because of the program requirement to demonstrate GHG emissions reductions from on-farm energy use – a requirement they cannot meet because they rely solely on gravity-fed surface water or pressurized water delivery from an irrigation district or municipality. Imperial County, for example, is the 10th largest ag-producing county in the state, but has received only two out of 835 SWEEP grants.

The map screenshots on the right, taken from CARB's California Climate Investments map of SWEEP projects, also illustrate this long-standing regional program inequity visually.⁶ Compare the density of projects (each water drop represents one project) in the Central Valley and Central Coast with the small handful of projects in the southern California counties of San Diego, Riverside, and Imperial (zoomed in on second image).

In May, 2020, CalCAN, the California Farm Bureau Federation, and SWEEP TA providers wrote a letter to CDFA's Science Advisory Panel requesting the Panel and CDFA establish an ad hoc advisory to review and recommend updates to the SWEEP program. In that letter, we



⁶Map available at: <https://webmaps.arb.ca.gov/ccimap/>

specifically requested the advisory group make recommendations to “improve participation by operations that have historically faced barriers in accessing or utilizing the program,” especially in light of changing funding sources for SWEEP.

The ad hoc advisory group convened by CDFA and the Panel addressed this issue in its May report. To improve participation by farms in the desert region and other regions of the state where farms cannot meet SWEEP's GHG requirement, the advisory group recommended: “CDFA should divide funding into two categories: ‘Water-focused’ and ‘Water- and GHG-focused,’ potentially setting aside a specific funding amount for each category of project.”

The advisory group ranked this recommendation 6th overall out of 48 recommendations, demonstrating its high level of consensus and support within the 40+ member advisory group. Multiple stakeholder comment letters in June also supported this idea.

OEFI staff presented their "determinations" on the advisory group recommendations on July 15 and labeled the "two funding categories" recommendation above as "Do Not Adopt." One of reasons given for this determination is that "Water-focused projects would not be eligible for Greenhouse Gas Reduction Funds (GGRF) and so could result in confusion and complication if SWEEP has rotating or multiple funding sources."

SWEEP has not received GGRF funds since 2016. Funding in 2018 came from Proposition 68, current funding is from the General Fund, and the legislature has already proposed another \$50 million from the General fund for FY 22-23.

The severity of the drought, the geographic disparities of the program, and the flexibility of the General Fund require CDFA to act to make the program work statewide. We believe a pilot is the right approach and could be expanded upon next year.

The other concern OEFI staff expressed about the “two funding categories” recommendation is that it "Would require additional staff resources to administer if the program were to be split into two buckets." We understand administering a high volume of grants is a lot of work and that staff have at times been overwhelmed. With the allocation of \$50 million to SWEEP for FY 21-22, CDFA is receiving \$2.5 million (five percent of the total allocation) to administer SWEEP funding, which should allow OEFI to increase its staff capacity.

In the meantime, we recommend a path forward that would alleviate some of that staff burden by setting aside a portion of SWEEP's \$50 million to pilot the "water-focused" concept in one or more southern California counties. If OEFI staff feel they have the authority and staff capacity to set-aside \$2 million specifically for “Sub-Surface Drip for Dairy Effluent” (a practice that will, at most, benefit ~1,200 dairies), as is proposed in the draft RGA, it seems reasonable that OEFI staff can find a way to do the same for a region of farmers that have been historically excluded from the program for seven years.

3. Support immediate drought assistance for small farms with dewatered wells

We support the proposal from the Community Alliance with Family Farmers (CAFF) to utilize a portion of SWEEP's funding for immediate drought assistance for small farmers whose wells have been dewatered as a result of the drought. While there are statewide programs to address the issue of dewatered *drinking* wells for disadvantaged communities, no such program exists for dewatered *agricultural* wells for disadvantaged farmers. Many of these small farmers are on the brink of losing the family farm and the knowledge and legacy of stewardship that go with it.

An analysis run by Darcy Bostic of the Pacific Institute concluded that approximately 600 agricultural wells will have to be lowered or replaced and 9,500 agricultural wells will need their pumps lowered in the state if groundwater levels fall similarly to declines in the last drought. While the Sustainable Groundwater Management Act (SGMA) is intended to prevent this problem in the future, it provides no relief or recourse to farmers in the present. Not all farmers whose wells are dewatered will require assistance and SWEEP will certainly not have enough funding to save every farm. But saving some is better than saving none, and piloting a portion of SWEEP funds now to lower pumps or wells for small farms in dire straits would pave the way for the legislature to allocate more funding next year for more robust drought assistance. Pairing such investments with SWEEP's existing irrigation efficiency incentives would ensure multiple short- and long-term benefits for these small farms and the state.

As noted above, SWEEP is the state's only on-farm drought resilience program, and the shift in SWEEP's funding to the General Fund enables CDFA and the Science Advisory Panel to be nimbler and more innovative than in the past in responding to farmers suffering from this drought. We urge CDFA and the Panel to lean into this moment and see the opportunity in it. For a more detailed analysis and description of the proposal, see CAFF's letter.

4. Carefully weigh the pros/cons of a first-come, first-serve selection process and consider a return to a 12-week application period and competitive grant review process.

We recognize a first-come, first-serve grant selection process allows OEFI staff to process applications, announce grantees, and initiate contract agreements on a rolling basis, thus reducing the bottlenecks, delays, and stress that can come from processing a large volume of applications and grant contracts all at once. At the same time, a first-come, first-serve grant selection process can have some significant drawbacks, which we witnessed in the Healthy Soils Program when it experimented with a first-come, first-serve process in 2020.

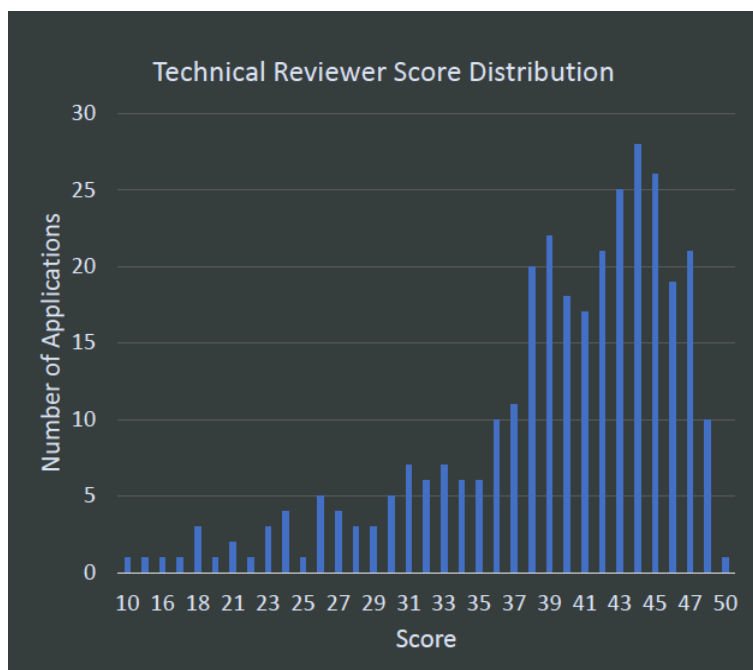
The first drawback is that a first-come, first serve process disadvantages a number of groups: first-time applicants to the program, smaller-scale farmers, and farmers who face language barriers, who often need more time to learn about and apply for the program than farmers who have previously applied or farmers who have staff or professional grant-writing consultants to complete the application on their behalf. Given the farmer equity implications of this process, we strongly advise OEFI staff and the Science Advisory Panel to consult with CDFA's Farmer Equity Advisor about this decision.

For SWEEP specifically, the first-come, first-serve process will also disadvantage farmers who have to get a pump test done, which can sometimes take weeks or months in some regions with a shortage of pump testing service providers, an issue that was discussed in the ad hoc advisory

group process (see the advisory group’s Pump Test recommendations).

The second drawback is that the minimum score required to be approved in the first-come, first-serve process (30 out of 50 points) will likely have the unintended consequence of rendering the extra points inconsequential in most cases for being a “previously unawarded applicant” (3 points) and meeting the criteria for the “additional considerations” related to irrigation training (1 point), being located in a critically overdrafted basin (1 point), and implementing healthy soils management practices (1 point). For reference, the average scores in the past two rounds were 39 and 40, respectively. The chart on the right shows the distribution of SWEEP application scores from 2018.⁷

A 12-week application period and a competitive grant review process would address these drawbacks. CDFA is receiving \$2.5 million to administer the program, which should allow OEFI to hire more staff to assist with the grant selection and contract agreement process. If limited application reviewers are a barrier, we encourage staff to share this with the Panel and advocates so we can recruit irrigation experts to serve in this important role; the 40+ member advisory group proved there are plenty who care about this program.



⁷ Source: OEFI staff presentation to the Science Advisory Panel, July 18, 2019.

From: Caddie M Bergren <cmbergren@ucanr.edu>
Sent: Thursday, September 23, 2021 10:23 AM
To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>
Subject: Group comments for SWEEP RGA

CAUTION : [External Email] - This email originated from outside of our CDFA organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe.

Good morning!

Please see below for our brief comments from our cohort of UCANR climate-smart agriculture community education specialists to the 2021 SWEEP draft RGA.

First-come, First-Served model

We strongly suggest that SWEEP applications be accepted during a set application window instead of on a rolling basis. Applicants who do not speak English, small growers, or others who have less knowledge of the program ahead of time are significantly disadvantaged by this system. It takes time to get quotes from companies, complete pump tests, and access past energy records. As this is a very popular program, funds could be expended before many competitive applications are submitted, especially by disadvantaged growers.

Pump testing requirements and costs

The requirement to test every pump that is part of a SWEEP project will discourage smaller growers from applying. This up-front cost can range from \$200-\$500, along with the added energy cost of running the test itself, which can be significant. Rebates for pump tests from companies such as PG&E and Southern California Edison are only available for pumps with larger horsepower, which again favors larger growers.

One solution would be to allow a pump test cost as a reimbursement if the applicant is successfully awarded a SWEEP grant.

Multiple applications per grower

We are happy to see that there are extra points awarded for new SWEEP applicants

this round. However, we are continuing to have growers approach us who have a list of different tax IDs to use on separate applications, or list the social security numbers of multiple family members to max out on many grants. We understand there is not an easy solution to this problem, but we want to continue to push for a way to discourage these practices.

Thank you,

Caddie Bergren

Climate Smart Agriculture

Community Education Specialist

2145 Wardrobe Ave, Merced, CA 95341

209.385.7403 (o)

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September 23, 2021

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

Re: Comments to draft SWEEP RFP and to the SWEEP Program

Dear OEFI Staff:

As a technical reviewer of SWEEP applications since 2014, and also a member of the SWEEP Ad Hoc Advisory Group, I provide below a few key comments/recommendations to the on the SWEEP Draft RFP that could be considered by CDFA – OEFI as possible improvements of the funding program.

- 1) Reduce the maximum award limit to \$100,000 to enable more farmers to participate in this urgent drought relief and resilience program, which has been consistently over-subscribed since its inception.
- 2) Reserve funds to enable more farmers in the agricultural production areas of southern California to participate in SWEEP, thus addressing the existing program inequity in providing financial assistance throughout the state. This could be done by adopting the recommendation given by the Ad Hoc Advisory Group according to which “CDFA should divide funding into two categories: Water-focused and Water- and GHG-focused projects” and potentially allocate specific funding amounts for each category of projects.
- 3) Utilize a portion of SWEEP’s funding for assistance to small farms where the wells have run dry and been dewatered as a consequence of groundwater level drop due to prolonged severe drought of 2020-2021 and of recurring heat waves during the last few years. These funds could be utilized to lower down and/or re-construct the existing wells that have been dewatered.
- 4) Adopt the recommendation of the Ad Hoc Advisory Group to have a two-step application process, and request documentation such as pump test, power bills, and water application records only during the second stage of the application. This will allow sufficient time to small farmers for getting organized with all the information and documents needed for a successful application to the SWEEP program.
- 5) Allow additional advance payments, especially for small and disadvantaged farmers. This was one of the recommendations of the SWEEP Ad Hoc Advisory Group to help easing cashflow burden and challenges that many farmers faced in implementing SWEEP grants during the previous funding rounds.
- 6) Allow other sub-surface water application methods for the dairy effluents relative to SDI systems. Please note that the viability of the SDI technology is questionable even with good quality water, due to many problems and challenges faced by growers in various agricultural production areas. Rodent

damages, leaks and their problematic detection, physical damages by field operation equipment, use of low-quality waters with extensive emitter clogging problems that may go undetected for long periods, and build-up of salinity and toxic elements are among serious problems that encouraged growers to abandon SDI systems and revert to sprinkler and surface irrigation methods. Using dairy effluents with SDI systems will add more burden to existing problems and challenges, and possibly will not be conducive to resource-efficiency gains.

- 7) Allow sufficient time to technical reviewers to perform a high-quality work in reviewing SWEEP applications, and do not give them heavy workloads with weekly or limited timelines. High-quality work of the technical reviewers is a crucial component for the success of the SWEEP program, and should not be performed in an emergency, rush, or time constrained mode. Drought and water supply limitations are to be considered specific features of the California climatic conditions, so also the financial assistance programs to farmers should be managed as regular activity and as drought and water limitation preparedness and not as “emergency” drought relief/response programs.

I truly consider making these improvements to SWEEP very necessary and urgent because the prolonged severe drought and extreme weather events that occurred in the last few years, along with the large weather variations, have generated significant adverse impacts on the economic viability for a large number of growers across the state.

Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Daniele Zaccaria', written in black ink.

Daniele Zaccaria
Cooperative Extension Specialist in Agricultural Water Management
University of California, Davis
Department of Land, Air and Water Resources (LAWR)
One Shields Avenue, Dept. LAWR, PES 1111, Davis, CA 95616
Web: <https://caes.ucdavis.edu/people/daniele-zaccaria>

From: Daniele Zaccaria <dzaccaria@ucdavis.edu>
Sent: Thursday, September 23, 2021 1:55 PM
To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>
Subject: Additional comment on the draft SWEEP RFP

CAUTION : [External Email] - This email originated from outside of our CDFA organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe.

Dear CDFA-OEFI Staff

Further my previous email and letter including comments to the SWEEP draft RFP, please consider the additional comment below:

#) Allow SWEEP funds to be spent also for sub-surface application of other effluents, such as process water from food processing plants (wineries, nut and fruit processing plants, etc.) in addition to dairy effluents.

My comment about the technical viability of SDI systems for application of effluents remains valid, so allow the use of SWEEP funds for other sub-surface water application systems rather than for SDI systems.

Kind regards

Daniele Zaccaria

--

Daniele Zaccaria, Ph.D.
Agricultural Water Management Specialist in Cooperative Extension
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September 23, 2021

Office of Environmental Farming and Innovation
California Department of Food and Agriculture

Sacramento, CA 95814

Re: Draft 2021 SWEEP Program Request for Grant Applications (RGA)


Dear OEFI:

As you know, California is home to 95 Resource Conservation Districts (RCDs) that serve rural, urban, and suburban populations throughout the state and work at the intersection of agriculture, conservation and community. CARCD represents the network of RCDs comprised of conservation professionals and local experts committed to seeing our communities and agriculture thrive and build resilience to the impacts of climate change.

In the spirit of partnership on behalf of the California Association of Resource Conservation Districts (CARCD), I am writing to provide some feedback and ideas for your consideration that we feel would make the program stronger related to the **Draft 2021 SWEEP Program Request for Grant Applications (RGA)**.

RCDs play a critical role in providing technical assistance to farmers engaging with the SWEEP program: including outreach, application assistance, and implementation assistance. We would like to see that an applicant can clearly be able to pay for technical assistance with SWEEP awards. This is especially necessary because sometimes an applicant might be in a location where there is no CDFA TA grant recipient to offer free services.

Thank you for the opportunity to provide this feedback.
Sincerely,


Karen Buhr
Executive Director



September 23, 2021

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

Re: SWEEP Comments

Dear OEFI Staff:

I am the Chief of Staff at Ceres Imaging. Ceres is an irrigation efficiency company that sells its data analytics service to nearly 1M acres of specialty crop farmland across California including tree nuts, wine grapes and more. We are headquartered in Oakland, CA and our 100+ employee team is based primarily in California. Our vision is to solve agriculture's freshwater crisis, and we were recently awarded the Global Zayed Sustainability Prize in the water category by the Crown Prince of Abu Dhabi for this work.

SWEEP is a critical mechanism to increase the environmental impact of efficiency technologies and practices at the farm level, as well as ensure that the benefits of such technologies is more equitably distributed.

As the largest irrigation analytics company serving the California market, Ceres Imaging has a unique perspective on the quickly evolving landscape of irrigation efficiency technology. Today, the majority of innovation in irrigation efficiency technologies is not in physical hardware, but in data analytics and artificial intelligence. For example, upon completion of a study conducted with Blake Sanden of the UC Cooperative Extension, Ceres technology was found to have "the best correlation to applied water," when compared to older legacy technologies¹.

Ceres Imaging is not alone. Today, companies such as Netafim, Jain, and Yara are a part of a widespread movement of companies combining physical on farm hardware such as a moisture sensor, with moveable technologies such as aerial imagery or other products to increase irrigation efficiency.

As such, we support the Ad Hoc Advisory Group on State Water Efficiency and Program Enhancement's suggestions. Specifically:

- 1- CDFA should allow for moveable technologies.

¹ <https://californiaagtoday.com/tag/aerial-imagery/>

- a. The majority of innovation in water efficiency technology in agriculture the last decade falls into something called “precision agriculture”, or “precision irrigation.” Technologies in this category are comprised of physical hardware like soil moisture sensors, as well as remote hardware (also known as remote sensing) such as aerial imagery, as well as non-physical technologies such as data analytics products.

According to the October 2020 Irrigation Today Magazine the “acceleration of imagery for irrigation management has been particularly swift” with an estimated “30% of growers in California,” currently using imagery. Likewise, according to a study published in 2020 called the Environmental Benefits of Precision Agriculture published by the National Corn Growers Association and Crop Life, “water use has decreased an estimated 4% as a result of current precision agriculture and has the potential to decrease 21% at full precision agriculture adoption².”

By focusing on only non-moveable technology, the current SWEEP program excludes the majority of innovation in the space and puts its resources towards incumbent technologies less likely to bring about the next wave of environmental benefits.

- 2- CDFA should clarify in the application that other practices, besides the short list of common practices (drip irrigation, pump conversion, etc.), are allowed and encouraged.
 - a. Greater specificity in the application will make for an easier process for producers and increases the pool of producers who may be interested in applying for funding
 - b. If does include, then should specifically include “remote sensing technologies” and “water efficiency data products”.

Thank you for your consideration.

Sincerely,
Najee Johnson
Ceres Imaging

² <https://app.box.com/s/3s8x8xq1olm2ygmsguo8iu56mgaowl4l>



September 23, 2021

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

RE: SWEEP Draft Request for Grant Applications - SUPPORT

To Whom it May Concern,

Sustainable Conservation would like to note its support of the Draft Request for Grant Applications released for the State Water Efficiency and Enhancement Program (SWEEP). We would like to thank the Office of Environmental Farming and Innovation for its leadership in developing the draft grant eligibility requirements, and for its commitment to working with stakeholders as part of this process.

SWEEP is a valuable tool for helping farms and dairies to do their part in addressing the climate and water conservation challenges that California faces. Sustainable Conservation supports efforts such as SWEEP to provide incentives to leaders in the agricultural sector to implement environmentally responsible and sustainable practices. Our partners on farms and dairies throughout the state have a key role to play in fostering practices that will ensure that our valuable natural resources are managed responsibly for generations to come.

Of the provisions in the Draft Request for Grant Applications, we particularly support the changes in this version establishing the maximum grant award at \$200,000, and the \$2 million set-aside for sub-surface drip irrigation (SDI) systems to apply dairy effluent to field crops. SDI systems fit perfectly within the priorities identified by SWEEP; these projects achieve substantial water savings, decreasing overall water use by 36%, in addition to notable reductions in nitrous oxide emissions, decreasing emissions by 70% or more.

In our conversations with our partners in the dairy industry, we have noted great interest among operators in applying for SWEEP grants upon the release of the Draft Request for Grant Applications for public review. The changes made in this version of the Draft Request for Grant Applications will lead directly to greater participation among dairy operators and result in greater climate and water conservation benefits than before.

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Sustainable Conservation

If you have any questions about our feedback, please feel free to contact me at 916.469.5159, or cdelgado@suscon.org.

Sincerely,

Charles R. Delgado

Charles R. Delgado
Policy Director

www.suscon.org • suscon@suscon.org

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From: Ruth M Dahlquist-Willard <rdwillard@ucanr.edu>
Sent: Thursday, September 23, 2021 4:59 PM
To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>
Subject: Public comment on Draft SWEEP Request for Grant Applications

CAUTION : [External Email] - This email originated from outside of our CDFA organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe.

Dear OEFI Staff,

Thank you for the opportunity to provide comments on the draft RGA.

I strongly support the revision to provide additional advance payments, as it will greatly assist the small-scale farmers I work with. Thank you for including this provision in the draft language.

Also, I am in support of the comments provided by CalCAN in their letter, including the following recommendations:

- 1) Maintain the maximum award limit of \$100,000 to allow more farmers overall to participate, and especially small farms.
- 2) Support drought assistance for farmers whose wells have gone dry.
- 3) Instead of a first-come, first-serve process, return to the competitive grant review process. The first-come, first-serve process does not promote an equitable distribution of grant funding in the SWEEP program, as larger farms with more resources and capacity and less need for technical assistance will likely apply earlier in the process.

Best regards,
Ruth Dahlquist-Willard

Ruth Dahlquist-Willard, Ph.D.
Small Farms and Specialty Crops Farm Advisor
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September 23, 2021

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

Re: Comments on draft SWEEP RFP

Dear OEFI Staff:

As a technical reviewer of SWEEP applications since 2015, and a member of the SWEEP Ad Hoc Advisory Group, please find my comments on the SWEEP Draft RFP:

- Reduce the maximum award limit to \$100,000 to enable more farmers to participate in this program.
- For the funds allocated to dairy effluent, in addition to subsurface drip irrigation (SDI), consider other viable technologies such as automated surface (flood) irrigation, subsurface irrigation methods (other than SDI), and other technologies recommend by research institutions. The current SDI technology is not well developed for mixing dairy effluent with irrigation water. Only a handful of growers have experience in such technology. Giving the growers the ability to select other technologies to apply dairy effluent will give growers the opportunity to choose what works best on their farms.

Thank for your time and consideration.

Please contact me at 559-646-6541 or kmbali@ucanr.edu if you have any questions or if there is any other way that we can be of assistance.

Sincerely,

Khaled Bali

Khaled M. Bali, Ph.D.
Statewide Irrigation Water Management Specialist and Interim Director- KARE
Associate Editor, California Agriculture Journal
University of California- Division of Agriculture and Natural Resources
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<http://californiaagriculture.ucanr.org/>

From: Jason Morris <jasonjmorris2@gmail.com>
Sent: Thursday, September 23, 2021 1:54 PM
To: CDFA OEFI@CDFA <CDFA.OEFI@cdfa.ca.gov>
Subject: Deteriorated Well Question Comment (RGA 2021)

CAUTION : [External Email] - This email originated from outside of our CDFA organization. Do not click links or open attachments unless you recognize the sender and know the content is expected and is safe.

To whom it may concern,

I am writing today to comment on the DRAFT 2021 CDFA SWEEP RGA. Like many in California, my small farm has been affected by the ongoing drought. Several years ago, I took steps to reduce my groundwater usage, by switching from flood alfalfa production to micro irrigated stone fruit, saving an estimated 3 acre feet per year (at full production.) The 12" inch well that had served me for decades for alfalfa began to fail shortly after the new orchard was established, the case collapsing. I attempted to swage the well and reduce the pump horsepower to remedy the situation, eventually finding that I can now only produce 50 GPM with a 3 hp pump on what was once a 15 hp well producing 250 gpm. While I can still irrigate my crop, it requires that I pump continuously while dumping 5 gpm to keep the filter clean due to the sandy water. The most efficient thing to do would be to develop a new well and retire the old shaft, install a 10 hp VFD, and use a solar farm to use renewable energy to irrigate my crop, which is what I would like to do. However, due to the rules in the RGA, this is not allowed. If I had developed the well and flood established the plums three years ago, applying for micro irrigation would be allowed, but because I tried to be efficient first, I am barred from receiving help.

This leads to my second point. My 14 acre orchard is already at a competitive disadvantage to my neighbors; larger farms can afford to drill multiple wells, and then wait to apply for and receive conservation funds while pumping deeper and deeper. Meanwhile, small producers cannot wait, and if their one historic well goes out, too bad. This seems to go against the stated goals of equity by the State of California for its conservation programs. I understand that the goal is to reduce groundwater pumping, but small farmers are being driven out, and larger farms receive incentives for investments they can afford to make.

I ask that you reconsider the rules for well replacement, especially for small acreage farms. I am not asking to be able to

expand my farm or redevelop an orchard planting new water intensive crops but replace the well that has served me for years with something more efficient.

Thank you for your consideration,

Jason J. Morris

Comments Received at September 15, 2021 Farmer Advisory Committee meeting with CDFA Farm Equity Advisor

Dennis Hutson Comment:

Dennis would like to see the ability for historically underserved, small-scale farmers be able to apply for SWEEP funding more than once on 1 APN, especially under drought conditions, when farmers need to adapt to changing circumstances and water supply. Farmers need the ability to apply for funding in changing conditions to adapt to new circumstances.

Roosevelt Tarlesson Comment:

In general, there is a lack of outreach to socially disadvantaged farmers on this program. Farmers need to get program information in advance, and they need to be able to understand all parts of the program rules. Many times, farms needing a service or program do not have the information they need to apply, and they must also understand how the program works. They need to build relationships with TA providers. Some are still struggling with trying to understand all the information on programs. There is lack of information/dissemination of program info. CDFA needs to take a closer look at outreach.