State Water Efficiency and Enhancement Program

CDFA OFFICE OF ENVIRONMENTAL FARMING & INNOVATION

Request for Grant Applications

Release Date: December 5, 2023

Applications are due by January 26, 2024, at 5:00 p.m. Pacific Time
CDFA will not accept late submissions.

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

Summary of Program Updates from 2021 SWEEP Solicitation

1. Return to a competitive process from the first-come, first-serve process used in 2021.
   - A competitive solicitation is likely to result in applications that are thoroughly developed, resulting in successful projects with fewer project revisions.
   - The first-come, first-serve process resulted in significant workload associated with rolling administrative review, disqualification of projects with some projects resubmitted multiple times without faults being corrected.
   - The competitive process will support SWEEP technical assistance providers as they take time to work with SDFRs to submit high quality project proposals.

2. Revise the scoring criteria to a benefit-focused rubric that incorporates "additional considerations" and sub-surface drip irrigation using manure effluent.
   - The primary intent of this revision is to create a simplified rubric that will allow technical reviewers to focus on validating the water and GHG benefits and advance projects with greater estimated benefits.
   - The updated rubric will provide more guidance to applicants than the more subjective criteria table from the past.
   - The budget portion of the rubric encourages applicants to propose a well-rounded project that will have lasting benefits tied to irrigation improvements. To receive maximum points in the budget category, all the major components of the project must be identified, and costs associated with irrigation water management or renewable energy will be less than 40% of the grant request.

3. Provides an option for applicants to use the new SWEEP Project Assessment Tool to quantify the benefits of their project instead of the two excel-based tools.
   - The new tool includes N_2O emission calculations. This may help additional farmers to be eligible for funding by providing a new pathway to GHG emission reductions.
   - The historic tools will be available as well while CDFA beta tests and evaluates the user-friendliness of the new spatial tool.

4. Parcels that have previously been funded may receive additional funding, if the recipient does not remove the previously funded project within 10 years of installation.
   - The SWEEP is nearly 10 years old. CDFA has excluded parcels from receiving SWEEP funding more than one time resulting in the exclusion of recipients from early funding cycles that have only one farmed parcel. This change will allow producers with one or few parcels to

receive additional support to build upon a past project. Additionally, this can help with flexibility and drought resilience.

5. CDFA will prioritize Socially Disadvantaged Farmers and Ranchers through a carve out of 25% of funding. SDFRs that do not receive funding in that first 25% will also compete for funds with the non-SDFR applicants.
   - In the previous solicitation CDFA prioritized SDFRs for funding, with at least 25% of the funds dedicated to SDFRs. The change is that the solicitation will be competitive. The top scoring applications from SDFRs be awarded from the 25% carve out. Other applications from SDFRs and will compete with non-SDFR applicants for the remaining 75% of funding.

6. Add clarity on the type of technologies and components that CDFA funds as part of a complete irrigation system project.
   - SWEEP funds complete irrigation systems, including components that are not factors in the water and GHG quantification methodology. It is important for the program to provide more transparency about the types of technologies and practices that receive financial support. These are key to the practicality and execution of the systems.

7. Strengthen limits on application submission and awards for the funding cycle. CDFA has aimed to limit an applicant to receiving a single award within a funding cycle. This has been enforced using tax identification number as a reference. This strategy has had limited success as individuals utilize multiple tax identification numbers. Moving forward, SWEEP will limit a user to one application submission. Additionally, CDFA will use mailing address and contact name as two other reference points to ensure that a single individual is not receiving multiple awards within a funding cycle.
   - It is incumbent upon CDFA to distribute grant funds widely and equitably. Efforts to limit awards to one per individual per funding cycle using tax id have been unsuccessful as SWEEP sees in each funding cycle, individuals indicated as the authorized individual or grant manager on multiple grant agreements. While being mindful that California's agricultural operations take many different financial structures, adding both contact name and mailing address as cross-reference points for applications may help to distribute funding more widely.

Contents

Background and Purpose

The California Department of Food and Agriculture (CDFA) is pleased to announce a competitive grant application process for the State Water Efficiency and Enhancement Program (SWEEP). CDFA's Office of Environmental Farming and Innovation (OEFI) administers the program. SWEEP'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

Funding for this solicitation comes from California's General Fund as was appropriated to SWEEP through the 2022 and 2023 state budget process. Through this solicitation SWEEP will award approximately $21 million to California agricultural operations investing in irrigation systems that reduce GHG emissions and save water.

- The maximum grant award is $200,000.
- The maximum grant duration is 18 months. Recipients must complete projects no later than 18 months after the start of the grant agreement. The anticipated start date is June 15, 2024.
- CDFA will not reimburse any costs incurred before the beginning of the grant agreement.
- CDFA reserves the right to offer an award different than the amount requested.

Priority Funding for Socially Disadvantaged Farmers and Ranchers (SDFRs)

CDFA will reserve twenty-five percent (25 percent) of the funds for farmers and ranchers who identify as belonging to a socially disadvantaged group. The 2017 Farmer Equity Act (AB 1348 (Aguiar-Curry, 2017)) defined a socially disadvantaged group as including:

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

The definition of a socially disadvantaged group does not include gender, gender identity, nor sexual orientation. SDFRs that do not receive funding through the prioritization process will also compete for funds with all other applicants for the remaining 75% of funding.

Technical Assistance Resources

CDFA contracts with California academic research institutions, Resource Conservation Districts, and non-profit organizations to provide one-on-one technical assistance through CDFA's Climate Smart Agriculture Technical Assistance Program (CSA TAP). Through these technical assistance providers (TAPs), SWEEP applicants may obtain free assistance with the development and submission of a SWEEP grant application and implementation of an awarded project. Visit the SWEEP webpage to view a list of TAPs.

CDFA also partners with the University of California Division of Agriculture and Natural Resources to support a statewide group of Climate Smart Agriculture Community Education Specialists (Community Educators). Like TAPS, Community Educators provide SWEEP application and implementation assistance to farmers and ranchers.

Eligibility and Exclusions

- California farmers, ranchers and California Native American Tribes are eligible to apply.
    - An applicant must be at least 18 years old.
    - An applicant cannot submit more than one application with a unique user account in the application portal. CDFA will cross reference tax identification number, mailing address and contact name to ensure that an application does not receive multiple awards.
    - An agricultural operation or individual cannot receive a total cumulative SWEEP award amount of more than $600,000 since the CDFA initiated the SWEEP program in 2014. CDFA will determine the progress towards this cap using tax identification number.
- The proposed SWEEP project must be on a California agricultural operation.
    - For the purposes of this program, CDFA defines an agricultural operation 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 not eligible for funding.
    - The farm location and the business mailing address must be in California.

- Universities, research institutions, and state governmental organizations are not eligible for funding.
- Applications may build upon a previously funded SWEEP project directly affecting the same Assessor's Parcel Numbers (APNs), but recipients may not remove projects components funded by SWEEP within the previous ten years.
- Recipients may combine SWEEP funds with other incentives 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, Recipients may not use SWEEP funds to cover costs funded by other federal or state grant programs.
- Projects must reduce on-farm irrigation water use and reduce GHG emissions.

CDFA prohibits SWEEP recipients from using grant funds to:
- Expand existing agricultural operations (producers must not use funding to convert additional new acreage to farmland).
- Install new groundwater wells or increase well depth.
- Test new technology or perform research.

Executive Order N-6-22 – Russia Sanctions On March 4, 2022, Governor Gavin Newsom issued Executive Order N-6-22 regarding Economic Sanctions against Russia and Russian entities and individuals. "Economic Sanctions" refers to sanctions imposed by the U.S. government in response to Russia's actions in Ukraine, as well as any sanctions imposed under state law. By submitting a bid, proposal, or application, Bidder/Applicant represents that it is not a target of Economic Sanctions. Should the State determine Bidder/Applicant is a target of Economic Sanctions or is conducting prohibited transactions with sanctioned individuals or entities, that shall be grounds for rejection of the Bidder's/Applicant's bid/proposal/application any time prior to contract/agreement execution, or, if determined after contract/agreement execution, shall be grounds for termination by the State.

Timeline

During the application period, CDFA will host two informational webinars to provide an overview of program guidelines and resources. For the 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.

Program Activity	Tentative Timeframe
Release Request for Grant Applications (RGA)	Decemeber 5, 2023
CDFA grant application webinars	December 2023 (visit the SWEEP webpage for details)
Grant applications due	January 26, 2024
Administrative and technical review	January – February 2024
Announce and award funding	February 2024
Award Process Timeline	See Award Process

Strategies for Water Savings and GHG Reductions

CDFA has identified the strategies that address water conservation and GHG emission reductions from irrigation systems. Applicants should consider incorporating several strategies to achieve the required water conservation **and** GHG emission reductions.

Water Savings

1. Tools for Irrigation Scheduling
   - Examples: the use of soil moisture or plant sensors (USDA 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, applicants should provide sufficient documentation to show that water deliveries can be made on a consistent basis to accommodate scheduling.

2. Irrigation System Changes
   - Examples: the conversion to a more water efficient irrigation method or improvement of existing method to conserve water.
   - Projects should follow USDA NRCS CPS 441, 442, 443 specifications.
   - CDFA encourages applicants currently utilizing surface water (e.g., canal or river water) to flood irrigate crops to maintain flood irrigation infrastructure along with proposed efficient micro/ drip irrigation system(s) to facilitate groundwater recharge when surface water is available for recharge.
   - Critical components of irrigation systems such as, but not limited to, flow meters, filters and pressure sensors are allowable costs.

Greenhouse Gas Emission Reductions

1. Fuel Conversion
   - Examples: 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 systems that power irrigation systems are eligible for SWEEP funding.

2. Improved Energy Efficiency of Pumps and the Addition of Variable Frequency Drives
   - Examples: retrofitting or replacing pumps or the addition of variable frequency drives to reduce energy use and match pump flow to load requirements.
   - USDA NRCS CPS 372 or 533 may apply.

3. Low Pressure Systems
   - Examples: 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.
   - Projects should follow USDA NRCS CPS 441 or 442 specifications.

4. Reduced Pumping through Water Savings Strategies
   - Example: improved irrigation scheduling leading to reduced pump operation times.

5. Reduced Nitrous Oxide Emissions
   Nitrous oxide (N_2O), a potent greenhouse gas, is released from soils due to microbial processes. In irrigated settings, N_2O emissions increase because of nitrogen fertilizer applications and soil wetting. Agricultural N_2O emissions may be reduced when farmers apply less fertilizer and use micro irrigation, including sub-surface irrigation. Applicants may utilize the new SWEEP calculator tool to estimate water savings and GHG emissions reductions, including N_2O reductions associated with the proposed project. For more information see Greenhouse Gas Emission Documentation

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 strategies as long as the comprehensive project will result in estimated water savings using the SWEEP quantification tools. Examples of components that CDFA may fund through

SWEEP as part of a comprehensive water-saving and GHG-reducing project include:

- On-farm water storage (e.g., rainwater capture, surface water reservoir)
- Irrigation automation
- Surface water interconnection or recycled water interconnection
- Sub-surface drip irrigation including manure effluent mixing and application systems

Program Requirements

An agricultural operation can only submit one grant application. CDFA will cross-reference tax identification number, mailing address and primary contact name to ensure only one award per applicant.

If an agricultural operation is a sole proprietorship, the applicant 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. If selected for an award, CDFA will extend a Grant Agreement to the business name provided in the application. CDFA will not transfer awards to other business names or individuals.

Applicants must include flow meters in their proposed project or demonstrate that existing flow meters measure water use at the project site. See Project Design for more specifics on project design requirements.

Applicants must use and submit the SWEEP quantification tools/report to estimate water and GHG benefits of projects. Applicants must gather baseline information such as utility records and pump efficiency tests to complete these tools.

CDFA requires recipients to:

- Meet with a CDFA Environmental Scientist for a pre-project consultation to confirm project information and discuss implementation plans. During the pre-project consultation CDFA may require the recipient to provide additional information on the proposed project (e.g., assessors maps, photographs of the site, or quotes).
- Complete a post-project verification site visit with a CDFA Environmental Scientist or with a third-party, to evaluate the completed project. In some scenarios, SWEEP staff may opt to perform a project verification remotely. In the case of a remote verification, recipients will provide geo-tagged photographs of all the major

project components and discuss the project via email, telephone call or remote meeting.

- Provide post-project information or records (e.g., water use, energy use, energy generation) to a CDFA Environmental Scientist or a third-party representative to evaluate project outcomes for three years after the completion of the project.
- Use and maintain the SWEEP project system for an expected project life of 10 years.

See Project Implementation for more details regarding project implementation requirements.

How to Apply

CDFA uses an online application platform, Amplifund, to receive SWEEP applications. Applicants access the application 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 may be subject to public disclosure through the Public Records Act.

To ensure successful submission of applications and attachments, CDFA strongly encourages applicants to comply with the computer system recommendations provided by Amplifund. CDFA cannot guarantee that the Amplifund system will be compatible with other browsers or operating systems. Amplifund recommends that applicants:

- Use Chrome, Firefox, Edge or Safari
- Avoid using an iPad, iPhone or similar mobile device
- Save work often, as the system will time out after a period of time and applicants will lose any unsaved work

For guidance navigating the Amplifund portal, please see the Amplifund Portal User Guide.

Application Questionnaire

The application questionnaire includes questions that address applicant contact information and demographics, project location, description of the current irrigation system, and summary of the proposed irrigation system improvements including the details of all proposed components. Prior to completing the online application questionnaire, CDFA encourages applicants 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 must submit the following attachments:
- Project design
- Completed Budget Worksheet
    - Solar system quote if the applicant is proposing a solar installation.
- Completed SWEEP Irrigation Water Savings Assessment Tool (MS excel) and Completed GHG Calculator Tool (MS excel) OR the report from the SWEEP Project Assessment Tool
- Twelve consecutive months of baseline GHG emission/energy documentation for any pumps that provide water to the project location (e.g., fuel receipts or utility bills)
    - For projects in which irrigation is gravity-fed and there are no existing energy inputs, CDFA will require an attestation that there are no energy inputs at the project site.
- Pump efficiency tests for existing pumps and pump specification documents for any proposed pumps

As outlined under Disqualifications, CDFA will disqualify applications that are incomplete or lacking required attachments. More details about each required attachment follows below.

Project Design
Applicants must submit a project design for the proposed irrigation system. Project design costs are at the expense of the agriculture operation. Applicants may utilize commonly available mapping or imagery platforms to create a holistic project design.
Project designs must include the following:
- Labeled Assessor's Parcel Numbers (APNs)
- 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
- Location of existing and proposed flow meters

Water and Energy Use Calculations and Supporting Documentation
Applicants must submit supporting documentation to substantiate water savings and GHG reductions calculations. Specific requirements pertaining to water and GHG documentation follow.

Water Use Documentation
Applicants must complete either 1) the Microsoft excel-based SWEEP Irrigation Water Savings Assessment tool or 2) the recently developed online SWEEP Project Assessment Tool. CDFA will use this solicitation to beta-test the new tool,

accepting feedback to improve or enhance functionality and design. In addition to completing one of the required tools and uploading the tool or output report to the application, an applicant may attach supplementary information that will allow technical reviewers to refine water savings estimates.

Option 1. [SWEEP Irrigation Water Savings Assessment Tool](#) (Microsoft Excel Workbook)

Applicants will complete 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 must attach the completed excel to the application. **Note: The excel-based tool will not work on a Mac computer. Please use a PC to complete and upload this calculator to the application.**

Option 2. [The SWEEP Project Assessment Tool](#)

CDFA developed this spatial tool in collaboration with Colorado State University to estimate both water savings and GHG emission reductions. It includes spatial layers that are important to a SWEEP project such as soil texture, assessors' parcel numbers, and legislative district. SWEEP applicants may use the resulting map as the foundation for a SWEEP project design. Applicants will complete the tool by identifying the project location and entering critical information about crops, irrigation management and systems. Visit the tool's landing page for instructions.

Greenhouse Gas Emission Documentation

To determine the impact of the proposed project on GHG emissions, applicants must use one of two available calculator tools: 1) the [Microsoft-excel based Greenhouse Gas Calculator Tool](#) developed by the California Air Resources Board (CARB) for SWEEP or 2) the [online SWEEP Project Assessment Tool](#). In addition to completing one of the required tools and uploading the tool or output report to the application, applicants must attach supporting documentation that will allow a technical reviewer to replicate the GHG emission calculations.

Option 1. [CARB GHG Calculator Tool](#) (Microsoft Excel workbook)

CARB, in consultation with CDFA, developed this tool to estimate the potential GHG reductions from a SWEEP project. All GHG benefits relate to the energy attributed to irrigation water pumping. To complete the 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 is a required input of the CARB GHG Calculator Tool so applicants should estimate water savings using the provided tools before attempting to use the GHG Calculator Tool.

Option 2. [The SWEEP Project Assessment Tool](#)
CDFA developed this spatial tool in collaboration with Colorado State University to estimate both water savings and GHG emission reductions. In addition to calculating GHG benefits that are due to changes in energy use from irrigation pumps, this tool will estimate the N_2O reductions of a project that would result from changes in crop or irrigation method. Applicants will complete the tool by identifying the project location and entering critical information about crops and irrigation systems. Depending on an applicants existing irrigation and energy system and proposed changes, the SWEEP Project Assessment Tool may calculate greater GHG benefits than the CARB GHG Calculator Tool, impacting the application score during technical review. Detailed instructions can be found at the tool's landing page.

Supporting Documentation for GHG Calculations
Applicants must submit supporting documentation that relates to baseline energy use. Supporting documentation must be sufficient to allow for reviewers to replicate the GHG calculations. CDFA requires applicants 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, applicants may provide up to three years of supporting documents to substantiate a representative baseline of energy use from pumping.
    - In situations where there are no baseline energy inputs for the project location, applicants will submit an attestation confirming that current irrigation systems have no energy inputs.
    - Documents must capture actual, not estimated or modelled, energy use information (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.
    - CDFA defines field operational logs as on-farm data complied 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.). CDFA does not consider documents that provide estimates to be field operational logs.
- Pump and motor specifications for proposed pumps.
- Pump efficiency tests for existing pump(s) related to the project.
    - Pump efficiency tests should be no older than 3 years. If there are no existing pumps, CDFA will require applicants to attach an attestation confirming that there are no existing irrigation pumps that provide irrigation water to the location.

Applicants must describe how the on-farm energy documentation attached to their application supports the baseline GHG calculation.

Budget Worksheet

Applicants must download and complete a SWEEP [Budget Worksheet.](#) 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. Applicants will attach the Budget Worksheet to their application in Microsoft Excel format and be consistent with the project design and application narrative. CDFA will not accept budget worksheets from past solicitations.

Quotes for Proposed Renewable Energy

If the project involves the installation of a renewable energy system, the applicant must submit a quote to verify the 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 purchase cost of supplies and equipment by providing a description and quantity. Supplies include all consumable materials with an acquisition cost less than $5,000 per unit (e.g., pipes, tubing). Recipients must use supplies 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. Recipients will cover labor costs in excess of 25 percent of the total SWEEP grant with cost share funding. Applicants must estimate the cost for any work on the project 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
Applicants must itemize project costs and costs must clearly support installation or improvement of irrigation systems, including supplies, equipment, labor, and any other allowable cost necessary for project implementation. Project costs must be reasonable and consistent with costs 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
Examples of unallowable costs, include:
- 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 (CDFA categorizes these costs 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 lowering groundwater wells
- Irrigation training courses

- Pump efficiency tests
- Purchase of trees, crops, or seeds
- Purchase of soil amendments or implementation of soil management practices
- Costs associated with installing a groundwater recharge basin

Assistance and Questions

CDFA cannot assist in the preparation of grant applications; however, applicants may submit general questions to cdfa.sweeptech@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. CDFA will post responses to questions received during the workshops or by email to CDFA's SWEEP website according to the following schedule:

Questions Received by:	Responses Posted by:
December 14, 2023	December 20, 2023
January 12, 2024	January 17, 2024

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 two 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 benefits of the proposal, including the potential for the project to save water and reduce GHG emissions. The technical reviewers are agricultural irrigation water system specialists and experts affiliated with the University of California and California State University systems.

Scoring Rubric
The technical reviewer(s) will validate water and GHG calculations based upon the supporting documentation and project design provided by the applicant. Reviewers will score projects based on the rubric below.

Category and Criteria	Points Available
Quantity of Estimated Water Savings (acre-inch per acre) • Less than 1 = 0 points - Project is Not Eligible • 1 to 4 = 6 points • >4 to 8 = 8 points • >8 to 12 = 12 points • > 12 = 15 points	15
Quantity of Estimated GHG Reductions (MTCO2e per acre) • Less than .01 =0 points - Project is Not Eligible • .01 to .05 = 6 points • >.05 to .1 = 8 points • Between .1 and .5 = 12 points • > .5 = 15 points	15
Project Expected Benefits (Select up to 5) • **Groundwater Sustainability**: The project reduces groundwater pumping in a [critically over-drafted groundwater basin](#) = 2 points • **Energy Efficiency**: The project improves pump efficiency. Examples: pump retrofit, installation of VFD, replacement of pump = 2 points • **Renewable Energy**: The project includes installation of renewable energy = 2 points • **Protects Water Quality**: The project will protect water quality through improved nutrient management. Examples: sub-surface drip of manure effluent, change to more precise water application to crop = 2 points • **Water Recycling**: The project site will utilize recycled water = 2 points • **Air Quality**: The project will reduce fossil fuel combustion. Example: Conversion from fossil fuel to electricity = 2 points • **Climate & Drought Adaptation**: The project will improve the flexibility of the irrigation system and/or improve irrigation scheduling. Examples: surface water storage or interconnect, Level 3 Irrigation Water Management (IWM), or irrigation automation = 2 points • **Irrigation Training***: The applicant commits to take irrigation training during the course of the agreement = 2 points	10

Budget Completeness: • The itemized budget includes **all** the major components identified in the application = 10 points • The itemized budget is missing one major components from the application = 8 points • The itemized budget is missing more than one major component from the application = 5 points Balance and Irrigation-Focus: • Renewable energy components are greater than 40% of the grant request = -5 points • Irrigation scheduling tools are greater than 40% of the grant request = -5 points	10

*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. The scoring rubric offers applicants two points if they commit to taking an irrigation training course during the term of the grant agreement.

If an applicant commits to completing training, 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, CDFA requires only one agriculture operation representative to attend. Recipients will submit an irrigation training certificate to CDFA within 30 days from the date of project verification.

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. The applicant may submit a certified USDA NRCS Irrigation Water Management plan as evidence of completing irrigation training.

Funding Recommendations

OEFI will consider the following criteria when developing funding recommendations for the California Secretary of Food and Agriculture:
1. Score
2. Previous award status – OEFI will recommend applicants that have never been awarded a SWEEP grant above equally-scoring applicants that have received a previous award.

CDFA may take into consideration the past performance of applicants, if applicable. 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.

Notification and Feedback

Disqualifications
During the administrative review, CDFA will disqualify applications that meet any of the following conditions:
- 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.
- 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.
- Applications from applicants that apply more than one time during the funding cycle.

Appeal Rights
Applicants can appeal to CDFA's Office of Hearings and Appeals over any discretionary action taken by the Office of Environmental Farming and Innovation (OEFI) within ten (10) days of receiving a notice of disqualification from CDFA. The appeal must be in written form and signed by the responsible party named on the grant application, or by an agent whom the applicant has authorized in writing. 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 emailed to CDFA.LegalOffice@cdfa.ca.gov (preferred)or sent to the California Department of Food and Agriculture Office of Hearings and Appeals, 1220 N Street, Sacramento, CA 95814. If CDFA does not receive appeals within the time frame provided above, it will not consider the appeal. Appeal rights are only afforded to disqualifications.

Award and Regrets Notices
CDFA will notify successful applicants of their grant award through email and will initiate the grant agreement execution process. At the time CDFA announces awards, CDFA will also notify unsuccessful applicants. Unsuccessful applicants may request feedback on their applications. If requested, CDFA will provide feedback within 10 business days.

Award Process

Grant Agreement Execution

CDFA estimates that the process of executing a grant agreement will take several months. A SWEEP staff member will contact each Recipient to schedule a pre-project consultation to confirm project site information and discuss implementation plans. CDFA may require applicants to provide APN map(s) of the impacted acreage, confirm the location of the project, provide photographs of the project site or provide additional quotes. Following finalization of the scope of work and budget, CDFA's Office of Grants Administration will send the recipient a Grant Agreement package with instructions regarding award requirements including information on project implementation, verification, and payment process.

Award Timeline

Grant Agreement Stage	Estimated Time for Stage Completion
CDFA prepares the grant packet – During this step, CDFA will work with recipients to get the information the state needs to execute the grant. CDFA requests a response to inquiries or documents within 5 business days.	Approximately 60 days
Grant Execution	Up to 120 days
Processing advance payments – After the grant term begins, recipients may request an advance payment. If	Up to 4 weeks

| CDFA approves the advance, it will take up to 4 weeks to process this payment. ([See Payment Process](#)) | |

Project Implementation

Once CDFA has fully executed the Grant Agreement, 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, ensuring all project activities, including labor associated with installation, are complete no later than March 31, 2026. For projects involving utility interconnection, recipients must take the necessary steps to begin the interconnection process quickly after execution of the Grant Agreement. Recipients must complete all proposed activities including activities related to cost share by the end of the grant term. Awardees must contact CDFA staff for approval if any changes to the scope of work are necessary. CDFA will work with awardees through the scope of work revision process. Applicants that deviate from the approved scope of work will not be reimbursed.

The grant recipient, the grant recipient's authorized representative or CDFA staff will initiate all communications (oral and written) related to the grant activities including reimbursements.

Recipients must install the project on the parcels (APNs) identified in the Grant Agreement's Scope of Work (SOW). CDFA will withhold all or any portion of the grant funding or terminate the Grant Agreement if the recipient fails to install a project on the APNs identified in the scope of work.

CDFA may conduct an on-site visit and inspection of records, upon reasonable notice at any time during the project term. The purpose is to determine whether deliverables are being met and evaluate project progress. CDFA may require recipients to submit financial records and project documentation to ensure that Recipients use SWEEP funds in compliance with the Grant Agreement terms and conditions.

Payment Process

SWEEP is a reimbursement-based grant program. CDFA will provide the grant recipient with the necessary grant award and invoicing documents for reimbursement process. CDFA processes reimbursements on a quarterly basis and requires supporting documentation of actual costs associated with the purchase and/or installation of project components. 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 25 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 recipient follows grant management requirements, CDFA may issue additional advance payments in accordance with CDFA's Grant Administration regulations.

Project Verification

Following project implementation, the grant recipient must inform the assigned grant specialist that the project is complete and operational. 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 recipient 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 recipient will submit geotagged photos of critical project components so that CDFA can verify that the project is complete on the intended APN. CDFA must complete the project verification by April 30, 2026. Recipients must allow sufficient time for verification.

Post-Project Requirements

Project Outcome Reporting

CDFA requires all recipients to maintain documentation related to the funded project, including energy and water use documentation and to be responsive to requests for information about the project. In the three years after project completion, CDFA may request information about the use and maintenance of the project and may request water and energy records associated with the project site.

CDFA will consider failure to provide project-related documentation to SWEEP staff or CDFA's designee as 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 and may deny eligibility for future funding.

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, CDFA will contact the recipient in advance of audit-related requests or visits. The audit shall include all books, papers, accounts, documents, or other records of recipient, as they relate to the project. The recipient must make available all project expenditure documentation for an audit, whether paid with grant funds or other funds.

The recipient 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. The Grantee must provide a copy of any document, paper, record, etc., requested by the auditor.

Accounting Requirements

The recipient 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

Recipients must retain records for a period of three (3) years after final payment and at least one (1) year following an audit.

Other Grant Programs

For a comprehensive list of CDFA's Grant Programs, please visit https://www.cdfa.ca.gov/grants/. A complete list of California grant and loan

programs can also be found on the State Library's California Grants Portal: https://www.grants.ca.gov/.

Appendix A: Grant Application Checklist

Application Components

☐   Completed Online Application

Application Attachments

☐   Project Design
☐   Budget Worksheet
☐   Quotes for solar projects (required if requesting funding for a solar installation)
☐   GHG Baseline Use Documentation (e.g., utility bills, fuel receipts, field operational logs, etc. covering 12 months of peak irrigation season)
☐   Pump Efficiency Test(s) (pump efficiency test for current pumps, pump and motor specifications for any proposed pumps)

   ☐   SWEEP Irrigation Water Savings Assessment Tool **&** ARB GHG Calculator Tool
       OR
   ☐   Output report from the SWEEP Project Assessment Tool

Optional Application Attachments (only if applicable to project)

☐   Cost Share (optional)
☐   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

2023 SWEEP Application

_____

SWEEP Applicant Information

Applicant's Tax Identification Number

Applicants need to provide their tax identification number in the form of either their SSN or FEIN number for an agreement to be setup with an awarded entity. As a reminder, an organization/individual can only apply one time per funding cycle for an award. Entities that apply more than once will be automatically disqualified. CDFA will not be gathering information about income or tax returns, but in order to establish a grant with an agricultural operation, CDFA require applicants to provide either the last four digits of the induvial SSN or the Federal Employer Identification Number.

What type of tax identification number will be used when applying for this grant? (Social Security Number (SSN) or Federal Employer Identification Number (FEIN)) *
Select an item...

Provide the last four digits of SSN *

Provide the federal employer identification number *

What is the entity that matches the Tax ID? *
Select an item...
What is the name that matches the identification number? Use your full legal name if using your SSN, (Ensure that the name exactly matches any tax documentation) *

What is the name that matches the identification number? (Ensure that the name exactly matches any tax documentation) *

Physical Mailing Address *

City *

State (Project must be located in California) *
 CA

Zip code *

Identify your Secretary of State (SOS) File Number using the link below.
This number can be found by selecting this link California Secretary of State
Business Search

Type in your business name into the search bar. Use Advanced setting as
needed.

Identify your Secretary of State (SOS) File Number using the link below.

What is the SOS File Number?
_____

Contact Information
First name of primary contact person - This the person/applicant who would sign
a grant Agreement if the project were selected for funding. *

Last name of the primary contact person *

Primary contact's office phone number

Primary contact's cell phone number *

Primary contact's email address *

Applicant's gender

Has the applicant served on active duty in the U.S. Armed Forces, Reserves, or
National Guard?

The California Department of Food and Agriculture (CDFA) is committed to equitable access for all Californians and investing in the long-term prosperity of our food and farming systems, starting with our farmers. To better ensure the inclusion of California's socially disadvantaged farmers and ranchers in this and other Climate Smart Agriculture grant programs, CDFA requests that applicants self-identify as part of the application process by responding to the question below:

Does the applicant belong to a socially disadvantaged group as defined below? "Socially disadvantaged group" means 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. The Farmer Equity Act of 2017 identifies the following as socially disadvantaged groups: African Americans; Native Indians; Alaskan Natives; Hispanics; Asian Americans; and Native Hawaiians and Pacific Islanders. *
Select an item...

If yes, select from the socially disadvantaged groups below *
Select an item...

Is the primary contact the same individual who will be the day-to-day contact and/or project manager? If not, please include the day to day contact as the alternative contact. *
Select an item...

First name of alternative contact *

Last name of alternative contact *

Role of alternative contact *

Alternate contact's phone number *

Alternate contact's email address *

List any additional contacts names, role, email and phone number

_____

Proposed Project Location

Select the county of the project location *

List the Assessor's Parcel Number(s) where the project would be installed *

Address or nearest cross street(s) of project site(s) *

City *
Zip Code *
5
Provide a single representative GPS waypoint in decimal degree format.
Example: xx.xxxxx, -xxx.xxxxx (https://www.google.com/maps/ and right click on
the field to obtain latitude and longitude)
https://www.google.com/maps/

Representative GPS Coordinates *
Has an APN included in this list been previously funded by SWEEP? *
 Yes
 No
Yes - Identify the APN previously funded and the SWEEP agreement number
assoicated with the project. *
Legislative Information: Identify the California Senate and Assembly Districts for
the project location. Click below to find the districts.
https://findyourrep.legislature.ca.gov/

Assembly District Number (Number only) *
3
Senate District Number (Number only) *
3
Critically Overdrafted Groundwater Basin are identified by the Department of
Water Resources. Check if the project is using groundwater in one of these
basins. Map of Critically Overdrafted Groundwater Basins

Is the project in a Critically Overdrafted Groundwater Basin and does it utilize
ground water? *
 Yes
 No

What is the total acreage farmed by the applicant organization or sole proprietor? *

_____

Previously Funded

Has the applicant previously been funded by SWEEP? *

 Yes

 No

Identify the agreement numbers and the amount awarded from the previously funded projects. *

_____

Current Irrigation System and Practice

The questions in this section apply to the current irrigation and/or distribution system where the proposed project will take place. The purpose of this section is to understand an applicant's current irrigation infrastructure and water use system

Describe in detail the current water use system and the associated energy sources at the site where the proposed project would be implemented. At a minimum, applicants should address the current crop, irrigation type, irrigation management practices, horsepower of pump(s) and fuel type. *

What is the current irrigation system type*

 Surface/flood irrigation

 Hand-moved sprinklers

 Solid set sprinklers

 Micro sprinklers

 Drip irrigation

 Sub surface drip irrigation

 Center pivot

 Other

Describe "Other" *

Indicate if the property location(s) water source is surface water (i.e., water delivered to the property) or groundwater pumped from on-farm wells. If the property utilizes both surface water and groundwater, provide an estimate of the percentage from both sources (Example: surface water 50%, groundwater 50%) *

 Ground Water

Surface Water
Combination of Both

What is the ratio of ground water and surface water on a normal year? (Example: 50/50) *

Is current water use from all sources measured either by flow meters on the farm or by the water supplier?
Yes
No

Explain the current method for measuring water supply *

List current crop(s) and corresponding acreage that would be impacted by the proposed SWEEP project. If crops are in rotation, list the primary crops which are present during the irrigation season (Example: Alfalfa: 40 acres, Lettuce, Carrot, Cauliflower: 20 acres))

Current Crop(s) on the proposed acreage *

Corresponding acreage of each crop type *

Total acreage for the proposed project (a total of the crops' acreages) *

_____

Project Proposal
Provide a concise project description. The project description should summarize the existing irrigation system, the main irrigation system improvements that will be installed with the proposed project, the existing and future crop, the acreage impacted by the project, and relevant pump information (including HP and energy conversions). The description should be written in third person and emphasize the planned upgrades. This description may be posted the SWEEP website before awards are announced. Do not include the estimated water savings or GHG reductions.
Project Description *
Is the project acreage undergoing a crop conversion? *
Yes - Crop Conversion
No

What are the anticipated new crop(s) and corresponding acreage *

_____

Water Savings and GHG Reduction Strategies and Components
The questions in this section apply to the SWEEP project components. Indicate project components that would be incorporated as part of the SWEEP project. Do not indicate a project component if it is already the current practice at the project site.

_____

Water Conservation Strategies
Does the project involve installing irrigation scheduling sensors or tools? *
 Yes
 No
Examples include the use of soil moisture or plant sensors, the use of electronic data output and telemetry, and the use of weather station(s), the use of evapotranspiration (ET) based irrigation scheduling, or the California Irrigation Management Information System (CIMIS) to optimize irrigation timing. The use of an on-farm irrigation automation system for scheduling irrigation is allowable and should be described here if funding for automation is sought."
Describe the irrigation scheduling tools *
Identify the number of soil moisture stations proposed to be installed. *

Select an item...
Identify the number of flow meters proposed to be installed *

Select an item...
Identify the number of ET/Weather stations proposed to be installed *

Select an item...
Does the project include the use of wireless communication/telemetry for the irrigation water management system? *
 Yes
 No
Does the project involve the installation of an automated irrigation system? This can include automated valves or gates that can be inabled remotely. *
 Yes
 No

Describe the automated irrigation system including details of what components are involved *

Does the project involve a change of or improvement to the irrigation method? *

 Yes
 No

Examples include the conversion to a more water efficient irrigation method or improvement of existing method to conserve water. On-farm practices such as adding/repairing a pipeline, lining water ways or outlets, and installing drip line or other forms of irrigation line are allowable.

Describe the irrigation method changes *

Which type of irrigation method is proposed? *
 Flood irrigation
 Solid set sprinklers
 Micro sprinklers
 Drip irrigation
 Sub surface drip irrigation
 Center pivot
 Other

Describe "Other" *

Does the project involve a change or improvement to the irrigation infrastructure? *
 Yes
 No

Examples include land leveling, increasing flow rates, replacing or installing on farm water delivery gates, and installing a tail water recovery system.

Describe the changes to irrigation infrastructure* *

Does the project protect water quality by improving nutrient management? *
 Yes
 No

Describe how the project will protect water quality by improving nutrient management *

Does the project utilize recycled water? *

 Yes

 No

Describe how the project will utilize recycled water. *

_____

Energy Use Reductions or Installation of Renewable Energy

Does the project involve a fuel conversion and/or the installation of renewable energy? *

 Yes

 No

The conversion of a fossil fuel pump to solar, wind, electric, or natural gas that will not result in an increase in GHG emissions. Renewable energy installation, including solar, installations that power irrigation systems are allowable costs.
Describe fuel conversion *

Will the project involve installing on farm renewable energy? *

 On-farm renewables

 No renewables

What is the proposed size of the on-farm renewable energy system? (kW) *

What is the anticipated yearly energy generation of the renewable energy system? *

Add solar quote (A quote is required if proposing installing a solar array) *

Does the project involve improving the energy efficiency of pumps or adding variable frequency drives (VFDs)? *

 Yes

 No

Examples include retrofitting or replacing pumps and the use of variable frequency drives to reduce energy use and match pump flow to load requirements. NRCS Conservation Practice Standard 372 or 533 may apply.
Describe energy efficiency improvements *

If installing VFD(s), how many will be installed?

Does the project involve converting from a higher-pressure irrigation system to a lower pressure irrigation system? *
 Yes
 No

Use of low-pressure irrigation systems to reduce pumping and energy use. For example, the conversion of a high-pressure sprinkler system to a low-pressure micro-irrigation system or lower pressure sprinkler system. NRCS Conservation Practice 441 or 442
Describe the lower pressure system *

Does the project result in reduced water pumping through the water savings strategies indicated above? *
 Yes
 No

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

Describe reduced pumping *
_____
Other Management Practices

Does the project involve other management practices or technologies that are not described in the previous categories? *
 Yes
 No

For projects implementing any other management practices that result in water savings or a decrease in on-farm GHG emissions.

Describe other management practices *

_____

SWEEP Water Savings Estimates and Greenhouse Gas (GHG) Reductions Estimates

CDFA requires that each proposed project use the tools developed to estimate water savings and GHG reductions associated with the implementation of the proposed project.   CDFA and its partners have worked to create two different pathways to estimate these numbers.

Option 1:
Use the Microsoft Excel Workbooks to estimate the water savings and GHG reductions from this proposed project. An applicant will need to download, complete, save, and upload the following tools with the supporting documentation:
SWEEP Irrigation Water Savings Assessment Tool
CARB GHG Calculator Tool

Option 2:
Use the online SWEEP Project Assessment tool. An applicant will need to complete the online tool, save the results, and upload the files to this application. Additionally, all supporting documentation will need to be included in the application. Applicants will complete the tool by identifying the project location and entering critical information about crops and irrigation systems. Depending on an applicants existing irrigation and energy system and proposed changes, the SWEEP Project Assessment Tool may calculate greater GHG benefits than the CARB GHG Calculator Tool, impacting the application score during technical review.

The SWEEP Project Assessment Tool

Water and GHG Tools
Which method of water and GHG assessment will be provided? *
 Option 1: Excel-Based Water and GHG Calculator Tools
 Option 2: Web-Based SWEEP Project Assessment Tool

Option 1: Using the Microsoft Excel-based tools for water savings and GHG reduction estimates.

The applicant will need to download, complete, and upload the following excel files.

SWEEP Irrigation Water Savings Assessment tool:

Download, complete and save the SWEEP Irrigation Water Savings Assessment Tool from the SWEEP website. Please provide outputs of the calculator here and upload the completed tool

SWEEP Irrigation Water Savings Assessment Tool

To determine soil characteristics use the link below

https://casoilresource.lawr.ucdavis.edu/gmap/

To determine baseline, township, and range use the link below and enable Public Lands Survey Sytstem (PLSS) map layer in the geolocation references(Humboldt (H), Mount Diablo (M), San Bernardino (S))

https://apps.wildlife.ca.gov/bios6/

CARB GHG Calculator Tool:

Download, complete and save the CARB GHG Calculator Tool from the SWEEP website. Please provide outputs of the calculator here and upload the completed tool

CARB GHG Calculator Tool

To complete the tool an applicant will need the following items

A recent overall pumping efficiency test

One year of utility/energy records

A completed SWEEP Irrigation Water Savings Assessment Tool

_____

SWEEP Irrigation Water Savings Assessment Tool

What is the baseline water use (acre-inches/acre) from the SWEEP Irrigation Water Savings Assessment Tool, located in cell F3 of the "Water Savings Estimate" tab? *

What is the estimated "after' scenario water use (acre-inch/acre) from the SWEEP Irrigation Water Savings Assessment Tool, located in cell F4? *

What is the estimated water savings (acre-inches/acre) from the project, located in cell F5? *

Upload Water Savings Assessment Tool Upload. *
Note: You cannot upload a macro enabled excel file. If needed, convert file to an .xlsx file and verify that the information is retained before uploading.

Are there any further comments or clarifications regarding the supporting water documentation or calculations? Indicate "Yes" or "No." *
 Yes
 No

Describe the further clarifications *

CARB GHG Calculator Tool
Indicate the estimated greenhouse gas emission reductions per acre from the project (Tonnes of CO_2 equivalent/acre), located in cell B16 of the "Summary" tab of the CARB GHG Calculator Tool. *

Upload the CARB GHG Calculator *
Reminder: Applicants are required to attach the completed CARB GHG Calculator Tool, the SWEEP Irrigation Water Savings Assessment Tool, and all supporting on-farm documents that were used to provide inputs to the CARB GHG Calculator Tool such as pump efficiency tests, pump specifications, fuel invoices, electric bills, etc. You will be able to attach these files below

Option 2: Web-Based SWEEP Project Assessment Tool

CDFA developed this spatial tool in collaboration with Colorado State University to estimate both water savings and GHG emission reductions. In addition to calculating GHG benefits that are due to changes in energy use from irrigation pumps, this tool will estimate the N_2O reductions of a project that would result from changes in crop or irrigation method. Applicants will complete the tool by identifying the project location and entering critical information about crops and irrigation systems. Depending on an applicants existing irrigation and energy system and proposed changes, the SWEEP Project Assessment Tool may calculate greater GHG benefits than the CARB GHG Calculator Tool, impacting

the application score during technical review. Detailed instructions can be found at the tool's landing page.

The SWEEP Project Assessment Tool
Once the tool has been completed the user can download three reports, which will need to be uploaded to this application. The reports can be downloaded by clicking the three blue buttons at the top of the "SWEEP Reports" page:

Report
Map
Project File
At the top of the report, in the purple section labeled "Total Greenhouse Gas Emission Reductions for Proposed Project" section include the following

Input the "Total GHG Benefits per Growing Season" from the report *

Input the "N2O GHG Benefits per Growing Season" from the report *

Input the "Pumping GHG Benefits per Growing Season" from the report *

Input the "GHG Benefits per Acre-Year" from the report *
At the bottom of the report, in the blue section labeled " Annual Irrigation Water Savings from Irrigation System Enhancements in Proposed Project" section include the following

Input the "Total Acres" from the report *

Input the "Total Before Water Use (ac-in/ac)" from the report *

Input the "Total After Water Use (ac-in/ac)" from the report *

Input the "Total Water Savings (ac-in/ac)" from the report *
At the top of the report there is three blue buttons to download your three reports. The are labeled "Download Report" , "Download Map", and "Download Project File"

Attach the Download Report that is labeled SWEEP Report" *

(Optional) Attach the Download Map report

Attach the Download Project File report that is labeled based off the date it was generated. It is a .txt file *

(Optional) Do you have any constructive feedback on the usability of the new tool?
 Yes
 No

Feedback: *
_____
Design

Are there any permits needed to complete the proposed project? *
 Yes
 No

Describe the anticipated permits *
Note: The online SWEEP Project Assessment Tool does create a map of the field site location(s) when the user is generating reports. A user could use this a base map to build upon when creating a project design. However, the map generated by the Project Assessment Tool does not provide sufficient detail that is required when creating a project design. The project design would also need to include other details such as the APN numbers, where proposed items are expected to be place (including but not limited to soil moisture stations, weather stations, flow meters, VFD, filtration station, renewable energy, pump plant location, and other critical project components).

Upload the Project Design *
At a minimum the project design should include the APN number, location of critical project components, etc.

_____
 On-Farm GHG Statements and Documentation

Does the current irrigation system require energy to operate? *

Yes
No

Describe on-farm energy use associated with irrigation *

How many pumps are currently associated with this project? What is the HP of this/these pump(s)? *

Provide a pump efficiency test for each pump assoicated with this project. *

What is the current fuel type? *
 Electricity (kWh/yr)
 Diesel (gallons/yr)
 Motor gasoline (gallons/yr)
 Biodiesel/renewable diesel (gallons/yr)
 Natural gas (scf/yr)
 Renewable (kwh/yr)

How many kWh were used in the last calendar year for the pump(s) that support the irrigation on the project fields? *

How many diesel gallons were used in the last calendar year for the pump(s) that support the irrigation on the project fields? *

How many gasoline gallons were used in the last calendar year for the pump(s) that support the irrigation on the project fields? *

How many biodiesel gallons were used in the last calendar year for the pump(s) that support the irrigation on the project fields? *

How many natural gas square cubic feet (scf) were used in the last calendar year for the pump(s) that support the irrigation on the project fields? *

How many renewable electricity kWh were used in the last calendar year for the pump(s) that support the irrigation on the project fields? *

Provide supporting documentation/energy records *

Additional supporting documentation, if needed.

Describe how the project does not currently require energy use for irrigating *

Will the proposal result in any on farm energy use associated with irrigation after the project is complete? *
 Yes
 No

What will the proposed fuel type be? *
 Electricity
 Diesel
 Motor gasoline
 Biodiesel/Renewable diesel
 Natural gas
 On-farm produced renewable

_____

Budget

Download, complete and save the new 2023 budget template linked below. Items are divided into irrigation improvements, irrigation water management equipment, pump and energy equipment, renewable energy equipment, and other management practices. Labor cannot exceed 25% of the total grant request. Matching funds are encouraged but not required. Review the request for grant application document for a list of unallowable costs. Older budget formats will not be accepted.

Link: 2023 SWEEP Budget Worksheet

What is the total grant request? This is the amount requested from CDFA and should match what is on the attached CDFA budget in cell H2 *

What is the matching funds amount that is contributed by the applicant and that matches the budget in cell H3? *

Attach The Project's Completed Budget Worksheet *

_____

Additional Attachments

(Optional) This is where the applicant can attach quotes, additional water and energy use data, and/or any additional considerations. You may attach multiple files in this field, but each item will need to be briefly described. Description of attachments

_____

Project Duration and Acknowledgement

The maximum grant duration for a proposed project is 18 months. Grant funds cannot be expended before the project start date and a grant agreement has been fully executed. Does the applicant acknowledge that the project will be completed within the grant term? *
 Yes
 No

A subset of awarded projects will be required to provide water and energy use records to CDFA for three calendar years after the project has been installed. Does the applicant agree to provide these records upon request if the project is selected for an award? *
 Yes
 No

Would you be willing to have your project highlighted/showcased on CDFA's website or other outreach materials? CDFA would first notify you and seek additional consent before showcasing any individual project *
 Yes
 No

Will the applicant agree to take irrigation training as part of the grant agreement? The training will need to be completed within the grant term and CDFA has a list of available trainings on the SWEEP website. *
 Yes
 No

Did the applicant receive any technical assistance in completing the application? *
 Yes
 No

Check the boxes for all technical assistance that was provided *
 Non-Profit
 University
 Resource Conservation District (RCD)
 CDFA lead workshop
 Irrigation company/vendor

What organization provided the majority of the assistance? *

What is the name of the individual that provided the majority of the assistance? *

CDFA will limit applicants to submitting one application to this solicitation. Does the applicant acknowledge that they have applied only once? *
 Yes - there is only one application.
 No - I have applied multiple times and will be excluded from this round of funding.

The information in this application is true and current to the best of my knowledge *
 Yes
 No

Please type your name here *