State Water Efficiency and Enhancement Program (SWEEP)

Request for Grant Applications

Released: October 19, 2021

Rolling application submission up to 5:00 p.m. PT on January 18, 2022 or until available funds are expended. Information on available funding can be viewed at www.cdfa.ca.gov/oefi/sweep
No late submissions accepted.

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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 (SWEEP). Applications that meet a minimum qualifying score will be funded, in the order received.

The current SWEEP funding arises from the Budget Act of 2021 which allocated $50 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 SWEEP will disperse between $43 and $45 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 October 19, 2021 and continue until January 18, 2022, 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 June 30, 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 SWEEP applicants to obtain assistance with the development and submission of a SWEEP 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 SWEEP 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 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 must 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

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.
<table>
<thead>
<tr>
<th>Program Application Activity</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Release Request for Grant Applications (RGA)</td>
<td>October 19, 2021</td>
</tr>
<tr>
<td>CDFA grant application webinars</td>
<td>October – November 2021</td>
</tr>
<tr>
<td>Grant applications due</td>
<td>No later than January 18, 2022 or when available funding is expended</td>
</tr>
<tr>
<td>Administrative and technical review</td>
<td>October 2021 – January 2022</td>
</tr>
<tr>
<td>Announce and award funding</td>
<td>October 2021 – January 2022</td>
</tr>
<tr>
<td>Award Process Timeline</td>
<td>See Award Process</td>
</tr>
</tbody>
</table>

### 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.
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.

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 on project 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. assessor’s 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.
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 11 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 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 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 (such costs could be 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
- 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.sweeptech@cdfa.ca.gov. CDFA will conduct three 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:

<table>
<thead>
<tr>
<th>Questions Received by:</th>
<th>Responses Posted by:</th>
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<tr>
<td>Monday, October 25, 2021</td>
<td>Friday, October 29, 2021</td>
</tr>
<tr>
<td>Monday, November 15, 2021</td>
<td>Friday, November 19, 2021</td>
</tr>
<tr>
<td>Monday, December 13, 2021</td>
<td>Friday, December 17, 2021</td>
</tr>
</tbody>
</table>

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.

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.

<table>
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<th>Criteria</th>
<th>Maximum Points</th>
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<tr>
<td>Merit and Feasibility</td>
<td>12</td>
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<tr>
<td>Water Savings &amp; Calculations</td>
<td>12</td>
</tr>
<tr>
<td>Greenhouse Gas Reductions &amp; Calculations</td>
<td>12</td>
</tr>
<tr>
<td>Budget</td>
<td>8</td>
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<tr>
<td>Applicant Not Previously Awarded</td>
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<tr>
<td>Additional Considerations</td>
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<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>

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
Irrigation Training (1 Point)
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 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.

**Statewide map of critically over-drafted groundwater basins**

**List of Critically Over-Drafted Groundwater Basins**

<table>
<thead>
<tr>
<th>Basin Number</th>
<th>Basin/Sub basin Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-01</td>
<td>Soquel Valley</td>
</tr>
<tr>
<td>3-02</td>
<td>Pajaro Valley</td>
</tr>
<tr>
<td>3-04.01</td>
<td>180/400 Foot Aquifer</td>
</tr>
<tr>
<td>3-04.06</td>
<td>Paso Robles</td>
</tr>
<tr>
<td>3-08</td>
<td>Los Osos Valley</td>
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<tr>
<td>3-13</td>
<td>Cuyama Valley</td>
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<tr>
<td>4-04.02</td>
<td>Oxnard</td>
</tr>
<tr>
<td>4-06</td>
<td>Pleasant Valley</td>
</tr>
<tr>
<td>5-22.01</td>
<td>Eastern San Joaquin</td>
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<td>Delta-Mendota</td>
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<td>Kings</td>
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<td>Tule</td>
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<td>Kern County</td>
</tr>
<tr>
<td>6-54</td>
<td>Indian Wells Valley</td>
</tr>
<tr>
<td>7-24</td>
<td>Borrego Valley</td>
</tr>
</tbody>
</table>

**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](https://www.nrcs.usda.gov/wps/portal/nrcs公众信息网链接)
- Mulching [USDA NRCS Conservation Practice Standard 484](https://www.nrcs.usda.gov/wps/portal/nrcs公众信息网链接)
- 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
- Native Indians
- Alaskan Natives
- Hispanics
- Asian Americans
- Native Hawaiians and Pacific Islanders

**Benefits to Priority Populations**

Priority Populations\(^2\) 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/](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 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

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1. [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1348](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1348)
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.
- 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. This process of executing a grant agreement is estimated to take several months. 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.

Award Timeline

<table>
<thead>
<tr>
<th>Grant Agreement Stage</th>
<th>Estimated Time for Stage Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant packet is completed – During this step, CDFA will</td>
<td>Variable</td>
</tr>
<tr>
<td>work with awardees to get the information the state needs</td>
<td></td>
</tr>
<tr>
<td>to execute the grant. The timeline for this step is</td>
<td></td>
</tr>
<tr>
<td>dependent on how quickly information is provided to</td>
<td></td>
</tr>
<tr>
<td>CDFA staff.</td>
<td></td>
</tr>
<tr>
<td>Grant Execution</td>
<td>Up to 120 days</td>
</tr>
<tr>
<td>Processing advance payments – If awardees request and</td>
<td>Up to 4 weeks</td>
</tr>
<tr>
<td>are granted an advance payment, please be aware that</td>
<td></td>
</tr>
<tr>
<td>it will take up to 4 weeks to process this payment once the</td>
<td></td>
</tr>
<tr>
<td>grant is executed. (See Payment Process)</td>
<td></td>
</tr>
</tbody>
</table>

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 (which is estimated for June 30, 2022). 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 June 30, 2024. 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 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 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 September 30, 2024.

**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 contactor 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.

**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

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

SECTION I: APPLICANT INFORMATION

Provide details about the applicant including the name of the agricultural operation and the personal contact information for the individual affiliated with the agricultural operation. This must be the organization or person who would, if awarded, receive the grant and sign a grant agreement with CDFA.

Name of agricultural operation applying for a SWEEP grant *

Total size of the agricultural operation (acres) *

What is the type of entity applying for the SWEEP grant? *
- Sole Proprietor/individual
- Corporation/partnership/trust

If the applicant has a Federal Employer Identification Number select Cooperation

Enter the applicant's Federal Employer Identification Number (FEIN) *

Physical mailing address *

(Where a letter can be sent)

City *

State *

Applicants outside the state of California will be disqualified

Zip code *

Full name of primary contact person - This the person who would sign a grant agreement if the project is selected for funding *

Primary contact's office phone number *

(xxx) xxx-xxxx

Primary contact's cell phone number

Primary contact's email address *

Applicant's gender *
- Male
- Female
- Decline to state
Has the applicant served on active duty in the U.S. Armed Forces, Reserves, or National Guard? *
- Yes
- No
- Decline to state

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 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? *
- Yes
- No

“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.

If yes, select from the socially disadvantaged groups below: *

Full name of alternate contact person

Alternative contact’s role (e.g., farm manager, family member, adviser)

Alternate contact’s phone number

Alternate contact’s email address

List any additional contacts names and contact information

SECTION II: PREVIOUSLY FUNDED PROJECT

Has the agriculture operation received a SWEEP award in the past? *
- Yes
- No

If "Yes," provide the SWEEP Agreement Number(s) and corresponding Assessor’s Parcel Number(s) of where each of the project(s) were implemented. (ex. SWE50xxx, or 17-0xxx-000) *
SECTION III: PROJECT LOCATION INFORMATION

Provide details about the property location(s) where the proposed project will be implemented. Provide property information for each Assessor's Parcel Number (APN) that will be impacted by the proposed SWEEP project.

County *

Assessor's Parcel Number(s) *

IMPORTANT REMINDER: Be sure to use the APN format that is used by the county's Assessor's Office. Visit the county's Assessor's Office in person or the Assessor's Office webpage to look up or verify the APN(s).

Address or Nearest Cross Streets of Project Site Location(s) *

City *

Zip Code *

Representative GPS Coordinate *

*Provide a single representative GPS waypoint in decimal degree format.
Example: xx.xxxxx, -xxx.xxxxx
(https://www.google.com/maps/)

Census Tract

*To identify the census tract of each APN use the census tract finder at: https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx type in address and click Census Demographic Data. If the location does not have an address select
"User Select Track" and select its location on a map. Once selected click "Census Demographic Data" and copy the MSA-State County-Track number (ex: xxxxx-06-xxx-xxxx.xx)

Legislative Information: Identify the applicants Senate and Assembly Districts: Click here

Assembly District Number *

Senate District Number *

SECTION IV: CURRENT IRRIGATION SYSTEM & PRACTICE

The questions in Section IV apply to the current irrigation and/or distribution system. The purpose of this section is to understand an applicant’s current irrigation infrastructure and water use system.

Description of current water use system *

Describe in detail the current water use system and the associated energy sources. At a minimum, applicants should address the current crop, irrigation type, irrigation management practices, horsepower of pump(s) and fuel type.

Description of current water use system *

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%) *

Is current water use from all sources measured either on farm or by the water supplier (e.g., with a flow meter)? Please explain. *

SECTION V: PROJECT OVERVIEW

Project title *

Provide a short project title
Provide a concise project description. The project description should summarize the main pre and post project components, crop and acreage, and relevant pump HP and energy conversions. Description should be written in third person and highlight upgrades.

What is the number of acres that would be impacted by the SWEEP project? *

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 the majority of of crops during the irrigation season (Example: Alfalfa: 40 acres, Corn: 20 acres) *

Is the project acreage undergoing a crop conversion? *

List the future crop(s) and corresponding acreage.

All projects must allow for water to be measured after project implementation. Provide an explanation of how the proposed project will measure applied water after the project is installed. *

SECTION VI: PROJECT TYPES

The questions in Section VI apply to the SWEEP project types for which the applicant is applying.

Project Types: Address all applicable project types and provide an explanation for all types selected. Only indicate project types that are being incorporated as part of the project. **Do not indicate a project type if it is already the current practice at the project site.**

Water Conservation

Weather, soil, plant, or flow based sensors for irrigation scheduling *

Examples include soil moisture or plant sensors (NRCS Conservation Practice Standard 449) with electronic data output or electronic weather station linked to irrigation controller for growers to ensure efficient irrigation scheduling. Use of CIMIS

How many new flow meters will be installed as part of this project? Describe
How many new soil moisture stations will be installed as part of this project? Describe

How many new Et/weather stations will be installed as part of this project? Describe

How many new alternative irrigation water management pieces of equipment will be installed as part of this project?

Summarize the proposed irrigation water management changes *

Irrigation system changes *
  ○ Yes ○ No
Use of micro-irrigation or drip systems, including sub-surface drip systems. Should follow NRCS Conservation Practice Standard 441.

What best describes the proposed irrigation system? *

Summarize the proposed irrigation system changes.

Greenhouse Gas Emission Reduction

Fuel conversion *
  ○ Yes ○ No
The conversion of a fossil fuel pumps to solar, wind, electric, or natural gas resulting in a reduction of GHG emissions. Renewable energy, including solar, installations that power irrigation systems are eligible.

Are you installing solar or other forms of renewable energy? *
  ○ Yes ○ No

What is the kW capacity of the system that is proposed? *

Note: use the kW capacity and not the yearly kWh anticipated generation

Summarize the proposed fuel conversion *
Improved energy efficiency of pumps and variable frequency drives (VFD) *

- 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.

Will a VFD be installed as part of the proposed project? *

- Yes
- No

How many VFDs will be installed and what is the horsepower? *

Who is the project's utility provider?

Are there any additional pumps besides those included in the SWEEP proposal for which the applicant is considering installing a VFD?

- Yes
- No

Would you be interested in information on rebates or on-bill financing offered by the utility? If so, CDFA will provide your contact information to your utility provider.

- Yes
- No

Summarize the proposed improvements. *

Converting to a lower pressure systems *

- 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

Summarize the proposed low pressure system improvements. *

Reduced pumping through water savings strategies *
For example, improved irrigation scheduling may lead to reduced pump operation times.

Summarize the proposed improvements that result in reduced pumping.

Other Management Practices

The use of dairy effluent to irrigate using sub-surface drip irrigation

Summarize the proposed use of dairy effluent

Other management practices and items not details in pervious categories

Summarize the proposed other management practices improvements.

Reminder: GHG emission reductions must be calculated according to the ARB GHG Quantification Methodology and with the ARB Calculator Tool.

SECTION VII: DESIGN OF PROPOSED IRRIGATION SYSTEM & PRACTICE

The questions in Section VII apply to the proposed water use system on the property. The purpose of this section is to estimate the potential water savings and reductions in greenhouse gas emissions.

Description of proposed water use system
Explain in detail the proposed water use system and associated energy sources. At a minimum, applicants should address the proposed crop, irrigation type, pump HP and fuel type, irrigation management (e.g., ET irrigation scheduling using CIMIS and/or sensors), fuel source(s), and water source(s).

Are there any anticipated permits that are needed to complete the proposed project?

Describe the permits that may be needed *

Upload the Project Design *

Project design should include the following: APN number, location of critical project components, etc

*Please name file Application ID number - SWEEP Design. Example: "12345678-SWEEP Design".

*ID# is found at the top of the page

Budget Overview - In the fields below enter information about the proposed project budget. The maximum grant request is $200,000. Matching funds are encouraged, but not required. The summary entered here should reflect what is entered on the budget worksheet.

https://www.cdfa.ca.gov/oefi/sweep/docs/2021-sweep-budgetworksheet.xlsx

Will this project use dairy effluent to irrigate using sub-surface drip irrigation? *

Yes No

Attach The Project's Budget Worksheet *

*Please name file Application ID number - SWEEP Budget. Example: "12345678-2019-SWEEP-BudgetWorksheet" *ID# is found at the top of the page

SECTION VIII: PROJECT DURATION

The maximum grant duration for a proposed project is 24 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

SECTION IX: WATER CALCULATIONS

Applicants must use the SWEEP Irrigation Water Savings Assessment Tool to provide an estimate of current baseline water use and the estimated water savings due to the proposed project. Use the units of acre-inches per year per acre. Instructions are provided on the "Instructions" tab of the SWEEP Irrigation Water Savings Assessment Tool.

https://www.cdfa.ca.gov/oefi/sweep/docs/IrrigationWaterSavingsAssessmentTool.xlsm
To determine soil characteristics: [https://casoilresource.lawr.ucdavis.edu/gmap/](https://casoilresource.lawr.ucdavis.edu/gmap/)
To determine baseline, township, and range: [https://apps.wildlife.ca.gov/bios/](https://apps.wildlife.ca.gov/bios/)

- enable PLSS map layer (Humboldt (H), Mount Diablo (M), San Bernardino (S))

Using the 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? *

Water Savings Assessment Tool Upload *

*Please name file Application ID number - SWEEP Water Savings Assessment Tool. Example: "12345678-IrrigationWaterSavingsAssessmentTool" *ID# is found at the top of the page

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

- Yes
- No

If "Yes," provide your explanation. *

SECTION X: GHG CALCULATIONS

Applicants are required to use the California Air Resources Board ARB GHG Calculator Tool, which can be found [HERE](https://casoilresource.lawr.ucdavis.edu/gmap/), to quantify GHG reductions from their proposed project. Attach the entire completed Excel workbook, and attach all supporting documents that provide inputs to the calculator, including pump efficiency tests, pump and motor specifications, actual fuel invoices, electric bills, and field operational logs. After completing all required tabs and saving and attaching the tool, provide a response to the following questions:

What is the total baseline fuel or electricity use for all the fields involved in the proposed SWEEP project? This information is located in cell B14 of the “Input” tab(s) of the workbook. Complete all that apply below.

Select baseline fuel type *
- Electricity (kWh/yr)
- Diesel (gallons/yr)
- Motor gasoline (gallons/yr)
- Biodiesel/renewable diesel (gallons/yr)
- Natural gas (scf/yr)
- Renewable (kwh/yr)

Select secondary baseline fuel type, if applicable
- Electricity (kWh/yr)
- Diesel (gallons/yr)
- Motor gasoline (gallons/yr)
- Biodiesel/renewable diesel (gallons/yr)
- Natural gas (scf/yr)
- Renewable (kwh/yr)

Explain how the supporting baseline GHG documents (such as fuel invoices, electricity bills, pump efficiency tests, field operational logs, etc.) were used to provide inputs to the ARB GHG Calculator Tool. In other words, provide a sufficient explanation to identify inputs of the GHG Calculator to allow the calculations to be replicated.

Energy Documents Attachment

Choose File

Will need to combine files into single document. This can be done using adobe or scan all the documents into a single file. *Please name file: Application ID number - Energy Doc. Example: "12345678-Energy Doc". *ID# is found at the top of the page

Additional Energy Documents (If needed)

Choose File

Will need to combine files into single document

Were operational logs included in the GHG calculations?

- Yes
- No

If "Yes," explain how those logs were maintained and how data was collected on-farm. Note: If field operational logs were used, the logs MUST be attached as supporting documentation.

Attach operational logs.

Choose File

Pump test(s)

Choose File

Will need to combine files into single document. *Please name file: Application ID number - Pump Test. Example: "12345678-Pump Test". *ID# is found at the top of the page

Indicate the estimated greenhouse gas emission reductions per acre from the project (Tonnes of CO2 equivalent/acre), located in cell B16 of the “Summary” tab of the ARB GHG Calculator Tool.

Upload the ARB GHG Calculator
SECTION XI: ADDITIONAL CONSIDERATIONS

Section XI is not required, but the following will receive additional consideration

Training

If awarded funding, will a representative from the agriculture operation agree to attend irrigation training?

☐ Yes  ☐ No

IMPORTANT REMINDER: If the answer is indicated as “Yes,” irrigation training will become a term of the Grant Agreement if the project is awarded funding. This training will be at the cost of the agriculture operation.

Does the project location fall within a critically over-drafted groundwater basin as identified by the Department of Water Resources?

☐ Yes  ☐ No

Critically Over-Drafted Groundwater Basin: [Click Here]

If "Yes," identify the basin number.

Indicate which, if any, of these management practices will be implemented with the goal of increasing soil organic matter and water-holding capacity of the soil.

☐ Cover cropping ☐ Mulching ☐ Compost application ☐ Resource conserving crop rotation

IMPORTANT REMINDER: If these practices are selected and additional consideration is awarded, the selected practices will become a term of the Grant Agreement and are at the cost of the agricultural operation (these soil management practices are not eligible for funding through SWEEP).

Linked Profile

Type to search...

SECTION XII: ADDITIONAL ATTACHMENTS

(Optional) Did the local ground water sustainability agency (GSA) provide a letter of support? If so, attach here.

Choose File

This is where the applicant can attach price quotes, additional water and energy use data, and/or any additional consideration
Additional attachment 1
Choose File
*Please name file: Application ID number - additional. Example: "12345678-quote". *ID# is found at the top of the page
Description of attachment 1

Additional attachment 2
Choose File
Description of attachment 2

Additional attachment 3
Choose File
Description of attachment 3

Additional attachment 4
Choose File
Description of attachment 4

SECTION XIII: ACKNOWLEDGMENT

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 ☐ CDFA lead workshop ☐ Irrigation Company/Vendor

What organization provided the bulk of the assistance?

What is the name of the individual that provided the bulk of the assistance?

Would you be interested to have your project highlighted/showcased?

CDFA would first notify you and seek additional consent before showcasing any individual project

Please write your name in the signature box. By doing this you are indicating that all information submitted is true and current to the best of your knowledge

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

Date *
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.

<table>
<thead>
<tr>
<th>Practice Code</th>
<th>Practice Name</th>
<th>Component</th>
<th>Unit Type</th>
<th>Unit Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>372</td>
<td>Combustion System Improvement</td>
<td>Electric Motor in-lieu of IC Engine, &gt;= 500 HP</td>
<td>Ea</td>
<td>$39,855.25</td>
</tr>
<tr>
<td>372</td>
<td>Combustion System Improvement</td>
<td>Electric Motor in-lieu of IC Engine, 125-174 HP</td>
<td>Ea</td>
<td>$9,488.57</td>
</tr>
<tr>
<td>372</td>
<td>Combustion System Improvement</td>
<td>Electric Motor in-lieu of IC Engine, 12-69 HP</td>
<td>Ea</td>
<td>$3,278.87</td>
</tr>
<tr>
<td>372</td>
<td>Combustion System Improvement</td>
<td>Electric Motor in-lieu of IC Engine, 175-224 HP</td>
<td>Ea</td>
<td>$12,410.81</td>
</tr>
<tr>
<td>372</td>
<td>Combustion System Improvement</td>
<td>Electric Motor in-lieu of IC Engine, 225-274 HP</td>
<td>Ea</td>
<td>$14,837.62</td>
</tr>
<tr>
<td>372</td>
<td>Combustion System Improvement</td>
<td>Electric Motor in-lieu of IC Engine, 275-399 HP</td>
<td>Ea</td>
<td>$19,947.70</td>
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<td>372</td>
<td>Combustion System Improvement</td>
<td>Electric Motor in-lieu of IC Engine, 400-499 HP</td>
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<td>Combustion System Improvement</td>
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<td>Component</td>
<td>Unit Type</td>
<td>Unit Cost</td>
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<td>------------------------------------------------</td>
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<tr>
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<td>Orchard-vineyard, &gt;10ac</td>
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<td>SDI (Subsurface Drip Irrigation)</td>
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<td>SDI (Subsurface Drip Irrigation), Manure</td>
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<td>Small Acreage</td>
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<td>Center Pivot, &lt; 600 Ft</td>
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<td>Center Pivot, &gt; 600 Ft</td>
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<td>Handline system</td>
<td>ft</td>
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<td>Linear Move System</td>
<td>ft</td>
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<td>Pod System</td>
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<td>442</td>
<td>Sprinkler System</td>
<td>Solid Set System</td>
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<td>442</td>
<td>Sprinkler System</td>
<td>Solid Set, Above Ground Laterals</td>
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<td>Traveling Gun System, &gt; 3 inch Hose</td>
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<tr>
<td>442</td>
<td>Sprinkler System</td>
<td>Traveling Gun System, &gt;2 to 3 inch Hose</td>
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<td>Practice Code</td>
<td>Practice Name</td>
<td>Component</td>
<td>Unit Type</td>
<td>Unit Cost</td>
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<tr>
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<td>Sprinkler System</td>
<td>Traveling Gun System, 2 inch or less diameter Hose</td>
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<td>Sprinkler System</td>
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<td>Irrigation Water</td>
<td>Management IWM with Soil Moisture Sensors</td>
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<td>449</td>
<td>Irrigation Water</td>
<td>Management IWM with Soil Moisture Sensors with Data Recorder</td>
<td>Ea</td>
<td>$1,547.61</td>
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<tr>
<td>533</td>
<td>Pumping Plant</td>
<td>Electric-Powered Pump &lt;= 3 Hp</td>
<td>HP</td>
<td>$1,056.29</td>
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<td>533</td>
<td>Pumping Plant</td>
<td>Electric-Powered Pump &lt;= 3 HP with Pressure Tank</td>
<td>HP</td>
<td>$1,248.06</td>
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<td>Pumping Plant</td>
<td>Electric-Powered Pump &gt;10 to 40 HP</td>
<td>HP</td>
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<td>533</td>
<td>Pumping Plant</td>
<td>Electric-Powered Pump &gt;3 to 10 HP</td>
<td>HP</td>
<td>$334.96</td>
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<td>533</td>
<td>Pumping Plant</td>
<td>Electric-Powered Pump &gt;40 HP, Centrifugal</td>
<td>HP</td>
<td>$235.14</td>
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<td>533</td>
<td>Pumping Plant</td>
<td>Solar &lt;1 Hp</td>
<td>Ea</td>
<td>$2,535.31</td>
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<tr>
<td>533</td>
<td>Pumping Plant</td>
<td>Solar &gt;3 Hp</td>
<td>Ea</td>
<td>$6,454.12</td>
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<td>Pumping Plant</td>
<td>Solar 1-3 Hp</td>
<td>Ea</td>
<td>$4,233.76</td>
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<td>Pumping Plant</td>
<td>Turbine, Pump Only</td>
<td>HP</td>
<td>$145.01</td>
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<td>533</td>
<td>Pumping Plant</td>
<td>Variable Frequency Drive only (no pump) &lt;=15Hp</td>
<td>Ea</td>
<td>$1,910.84</td>
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<td>533</td>
<td>Pumping Plant</td>
<td>Variable Frequency Drive only (no pump) &gt;15Hp</td>
<td>HP</td>
<td>$92.79</td>
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<tr>
<td>533</td>
<td>Pumping Plant</td>
<td>Vertical Turbine Pump, Deep Well, &gt;100 Hp</td>
<td>HP</td>
<td>$295.77</td>
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<tr>
<td>533</td>
<td>Pumping Plant</td>
<td>Vertical Turbine Pump, Deep Well, &lt;100 Hp</td>
<td>HP</td>
<td>$368.43</td>
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<td>533</td>
<td>Pumping Plant</td>
<td>Water Ram Pump</td>
<td>In</td>
<td>$862.28</td>
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<td>533</td>
<td>Pumping Plant</td>
<td>Windmill-Powered Pump</td>
<td>ft</td>
<td>$709.89</td>
</tr>
</tbody>
</table>
# Appendix D: Technical Review Scoring Guidance

## CRITERIA

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>MAX POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MERIT AND FEASIBILITY</strong></td>
<td></td>
</tr>
<tr>
<td>- 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.</td>
<td></td>
</tr>
<tr>
<td>- The estimated project completion date is compatible with the grant duration of 24 months.</td>
<td>12</td>
</tr>
<tr>
<td>- The project has merits in terms of water efficiency, GHG reductions and economic return for the farm and the State.</td>
<td></td>
</tr>
<tr>
<td>- The project demonstrates a deliberative and holistic effort by the applicant to improve farm water and energy efficiency.</td>
<td></td>
</tr>
<tr>
<td>- The project has long-term viability.</td>
<td></td>
</tr>
<tr>
<td>- The project improves farm resilience to drought and aligns with sustainable groundwater efforts and /or surface water conservation.</td>
<td></td>
</tr>
<tr>
<td>- The project replaces or reduces diesel fuel consumption.</td>
<td></td>
</tr>
<tr>
<td><strong>WATER SAVINGS</strong></td>
<td></td>
</tr>
<tr>
<td>- The applicant estimated projected water savings accurately using SWEEP tools and provided sufficient explanation for calculations and/or supporting documentation.</td>
<td>12</td>
</tr>
<tr>
<td>- Water savings strategies are clear from the baseline scenario to the projected savings.</td>
<td></td>
</tr>
<tr>
<td>- The proposed project will result in measurement of water use from all water sources on the impacted acreage.</td>
<td></td>
</tr>
<tr>
<td>- The proposed project can achieve real and notable per acre water savings and maintain the water benefits over 10 years.</td>
<td></td>
</tr>
<tr>
<td><strong>GREENHOUSE GAS REDUCTIONS</strong></td>
<td></td>
</tr>
<tr>
<td>- The applicant estimated GHG reductions correctly using the SWEEP GHG calculator tool and provided sufficient explanation and supporting documentation for calculations.</td>
<td>12</td>
</tr>
<tr>
<td>- The GHG calculator reflects what is included in the project design and application narrative.</td>
<td></td>
</tr>
<tr>
<td>- The GHG reduction strategies are clear in the project design and application.</td>
<td></td>
</tr>
<tr>
<td>- The GHG calculator acreage matches the acreage of the project design.</td>
<td></td>
</tr>
</tbody>
</table>
- The proposed project will achieve real GHG reductions and maintain these GHG reduction benefits for a project life of 10 years.

**BUDGET**
- 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.

<table>
<thead>
<tr>
<th>PREVIOUSLY UNAWARDED APPLICANTS</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicant has not received an award in past SWEEP funding cycles. (CDFA staff to verify). (3 Points)</td>
<td></td>
</tr>
</tbody>
</table>

**ADDITIONAL CONSIDERATIONS**
- 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)

<table>
<thead>
<tr>
<th>Total Points Available</th>
<th>50</th>
</tr>
</thead>
</table>