

2015 STATE WATER EFFICIENCY AND ENHANCEMENT PROGRAM

Application Workshop

May – June 2015



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE



WORKSHOP AGENDA

1. State Water Efficiency and Enhancement Program (SWEEP) Requirements
2. Financial Assistance Application Submittal Tool (FAAST) Demonstration
3. SWEEP Application Process
4. SWEEP Application Examples

Questions will be addressed following each presentation.

PROGRAM PURPOSE & FUNDING

PURPOSE:

To provide financial incentives for California agricultural operations to invest in water irrigation treatment and/or distribution systems that save water and reduce greenhouse gas (GHG) emissions.

FUNDING:

- Emergency Drought Legislation (Assembly Bill 91) – \$10M from California's Greenhouse Gas Reduction Fund
- Project Grant Amounts – Maximum grant award is \$150,000
- Project Duration – October 2015 – April 30, 2016
- Project Verification Deadline – May 31, 2016

ELIGIBILITY

- Installation must be on a California agricultural operation.
 - “a row, vineyard, field and tree crops, commercial nurseries, nursery stock production and greenhouse operations.”
- The project **must** reduce water use *and* GHG emissions.

Applicants must provide supporting documentation directly related to actual on-farm water consumption and GHG emissions to be eligible for funding.

TIMELINE

APPLICATION TIMELINE

May 18, 2015 8:00 am PDT	Invitation to submit Grant Applications
May 28 – June 9, 2015	Application Workshops and Webinar
June 29, 2014 5:00 pm PDT	Grant Applications Due
July – September 2015	Grant Application Technical Review Process
September 2015	Announce and Award Funds

PROGRAM REQUIREMENTS

- Agriculture operations can submit one application using a unique tax ID number.
- Agriculture operations awarded a previously funded SWEEP project **cannot** submit an application for the same property location(s) (i.e., Assessor's Parcel Number(s)).
- Funds cannot be used to expand existing agricultural operations.
- SWEEP funding cannot be combined with USDA, NRCS Environmental Quality Incentive Program (EQIP) financial assistance.

PROGRAM REQUIREMENTS (cont.)

- Project Installation: October 1, 2015 – **April 30, 2016**
- Verification Deadline: May 31, 2016

If proposed projects include interconnect or electrical upgrades, applicants must work closely with PG & E and/or local utility companies throughout the application process to ensure project deadlines can be met, if awarded.

PROGRAM REQUIREMENTS (cont.)

- Project design for proposed water irrigation and/or distribution system must be submitted, including an explanation of how water savings and GHG reductions will be achieved.

ALLOWABLE COSTS

- Project costs must clearly support installation of irrigation systems (i.e., supplies, equipment, and contractor (labor)).
- Project costs must be used for products that are directly related to irrigation that reduce GHG emissions and water use.
- Technical reviews will assess whether the itemized budget, submitted along with the application, is reasonable. Applicants should use USDA, NRCS payment schedules as a guide to determine project costs. (See Appendix E)

ALLOWABLE COST (cont.)

- **Supplies:** items with an acquisition cost under \$5,000 per unit and have a useful life of less than one year.
- **Equipment:** an article of nonexpendable, tangible personal property and has a useful life of more than one year, and a purchase cost which is equal or exceeds \$5,000.
- **Contractor:** fees for labor to install project; must be reasonable and consistent with fees in the marketplace for the same or similar services.

UNALLOWABLE COSTS

The following are unallowable costs:

- Project design costs
- Post-project service charges and maintenance costs associated with the irrigation system
- Non-labor (i.e., management) and fees associated with project oversight
- Supplies and equipment costs not related to irrigation or water distribution systems

SUPPORTING DOCUMENTATION REQUIREMENTS

- Since actual on-farm water and energy use documentation ***must*** be used to calculate baseline water use and GHG emissions, applicants are ***required*** to submit (attach) their supporting documentation to substantiate water savings and GHG reductions calculations provided in their application.

*Applicants that do **NOT** attach supporting documentation with their application will not be considered for funding.*

SUPPORTING DOCUMENTATION REQUIREMENTS (cont.)

Water Documentation Requirements:

- The baseline water value provided in the application must be supported by the documentation attached to the application.
- Applicants must address in the application how the baseline water use value is directly related to the actual on-farm water use data in the supporting documents. (See Appendix A, Question #10)

SUPPORTING DOCUMENTATION REQUIREMENTS (cont.)

Baseline water support may include:

- Water bill and/or flow meter readings
- USDA NRCS Irrigation Water Savings Calculator

If applicants have actual on-farm water documentation (i.e., water bill and/or flow meter readings), applicants should submit those documents.

SUPPORTING DOCUMENTATION REQUIREMENTS (cont.)

GHG Documentation Requirements:

- The GHG baseline value provided in the application must be supported by the documentation attached to the application.
- Applicants must explain in the application how GHG baseline calculations relate to the GHG documentation. (See Appendix A, Question #13)

SUPPORTING DOCUMENTATION REQUIREMENTS (cont.)

Baseline GHG support may include:

- Utility bills
- Fuel receipts
- Field operational logs (i.e., tractor passes that relate to irrigation related field operations)

*Applicants using CDFA's GHG calculator for fuels tool **must** provide (attach) actual on-farm energy use documentation to support their GHG baseline value.*

ONLINE APPLICATION

- To streamline and expedite the application process, CDFA partnered with the State Water Resource Control Board
- Financial Assistance Application Submittal Tool (FAAST)

<https://faast.waterboards.ca.gov>

REQUIRED ATTACHMENTS

Applicants are ***required*** to submit five attachments:

1. Project Design
2. Budget Worksheet (See Appendix B)
3. Baseline water use supporting documentation
4. Baseline GHG emissions supporting documentation
5. Disadvantaged Communities Census Tract (See Appendix C)

PROJECT DESIGN

Project Design must include:

- If the project includes new infrastructure, such as new irrigation piping, pumps, or sensors, then a ***detailed schematic*** must be provided and include locations of that infrastructure on the field. .
- When projects involve improvements to existing infrastructure, the project design must include a schematic showing where the improvements will be made to existing infrastructure.
- An explanation of how water efficiencies ***and*** GHG reductions will be achieved.

PROJECT DESIGN (cont.)

- Design plans must include pertinent ***agronomic information***, such as the crop and the water distribution uniformity value of the irrigation system.
- If the design plan calls for the use of evapotranspiration (ET) based irrigation scheduling, the agricultural operator must be able to show that water deliveries can be made on a consistent basis to accommodate that scheduling.
- For projects that do not include water distribution or irrigation equipment, a narrative describing the project and providing agronomic information must be submitted with the grant application as the design plan.

BUDGET WORKSHEET

All budget items must reflect **only** costs incurred during the implementation phase of the proposed project, and should demonstrate that they are reasonable and adequate for the proposed work.

The budget worksheet (an excel file) will be downloaded by applicants from the FAAST system. It will then be completed by the applicant and uploaded as an attachment to the application.

PLEASE VERIFY THAT YOU HAVE ATTACHED THE CORRECT FILES

Budget Worksheet

Complete the budget worksheet to show the breakdown of cost for the proposed project. Matching funds are strongly recommended, but not required. *Matching funds can include cash and/or in-kind contributions. The equation to calculate the percentage of matching funds is as follows: total match/total project cost = percentage match. Cash contributions are the amount of funds that will be contributed by the applicant to this project. In-kind contributions include contributions by the applicant in the form of supplies, equipment, and contractor (labor) involved with the installation of the project. In-kind contributions must be indicated here in monetary value.

Budget Categories	Grant Request (in \$)	*Cash Match (in \$)	*In-kind Contribution (in \$)
Supplies- Itemize all supplies. Supplies are anything with an acquisition cost under \$5,000 per unit. Rows may be added.			
Subtotal (Supplies)	\$ -	\$ -	\$ -
Equipment- Itemize all equipment. Equipment is an article of nonexpendable, tangible personal property having a useful life of more than one year and a purchase cost which equals or exceeds \$5,000 per unit (purchased or cost for rental). Rows may be added.			
Subtotal (Equipment)	\$ -	\$ -	\$ -
Contractor- Compensation for individual contractor fees should be reasonable and consistent with fees in the marketplace for similar services (See NRCS schedules in Appendix E which include labor costs).			
Cost per Hour (including benefits)			
Number of Hours			
Subtotal (Contractor)	\$ -	\$ -	\$ -
Total	\$ -	\$ -	\$ -

SUPPORTING DOCUMENTS FOR WATER AND GHG CALCULATIONS

- Applicants must use actual on-farm water and energy usage information to calculate their baseline water use and GHG emissions.
- Some examples of supporting documents include flow meter readings, utility bills, and fuel invoices. Other types of documentation are also acceptable as long as the document proves ACTUAL water or energy use on the agricultural operation.
- These documents must be listed in the application and submitted as attachments (excel, word, pdf) in FFAST.

DISADVANTAGED COMMUNITIES CENSUS TRACT

- Projects sites located in a disadvantaged community as determined by the census tract number(s) will receive additional consideration for funding.
- Applicant can identify their project's census tract number(s) using the following online tool:

<http://maps.gis.ca.gov/cdfa/tractfinder.html>

DISADVANTAGED COMMUNITIES CENSUS TRACT (cont.)

CA.GOV State Water Efficiency and Enhancement Program
Census Tract and County Information of Field Location **cdfa**

Use this application to find the census tract that contains your field.

Enter a city, county or zip code in the box below and hit 'Go' to zoom to the area, then use the + and - buttons to zoom in or out to find field. Click on map and drag in desired direction to pan map.

If tract numbers aren't visible, zoom in closer. Please use identified tract # and the containing county in the SWEEP application.

Enter City, County, or Zip Code:

Go

Map labels: Medford, Redding, Reno, Carson City, Sacramento, San Francisco, San Jose, San Luis Obispo, Bakersfield, Los Angeles, San Diego, Yuma, Twin Falls, Elko, Salt Lake City, St. George, Henderson, Las Vegas, Prescott, ARIZ, PHOENIX.

DISADVANTAGED COMMUNITIES CENSUS TRACT (cont.)

Disadvantaged Communities Census Tract

2015 State Water Efficiency and Enhancement Program

Instructions: Identify the census tract ID Number and County information for each Assessor’s Parcel Number impacted by a project using the online tool below.

Online Tool: <http://maps.gis.ca.gov/cdfa/tractfinder.html>

Assessor’s Parcel Number (APN)	Census Tract ID Number	County

MATCHING FUNDS DOCUMENTATION

If contributing funds to the project, applicants are encouraged to attach:

- **MATCHING FUNDS DOCUMENTATION**

To ensure that the cash component of matching funds has been secured, attach written documentation to support the project (if needed). The documentation should confirm the contribution source, type, and amount of the contribution.

REVIEW PROCESS

CDFA's intent is to fund projects that can produce the highest degree of water savings **AND** GHG reductions.

Two Levels of Review:

1. Administrative – Internal
2. Technical – External

PROJECT CRITERIA AND RANKING

- Applications will be ranked based on the level of water savings (acre-inches/year/acre) **and** GHG reductions (Tonnes CO₂ equivalent/year/acre).
- Applicants will need to address multiple project criteria listed below to achieve the water savings and GHG reductions values in their application.

PROJECT CRITERIA AND RANKING (cont.)

Soil Moisture Sensors:

Use of soil moisture sensors (NRCS Practice Standard 449) with electronic data output and flow meters, or electronic weather station linked to irrigation controller, for growers to ensure efficient irrigation scheduling (must specify with a new or existing system); new systems will receive additional consideration for funding.

Evapotranspiration (ET) based Scheduling:

Use of ET based irrigation scheduling, such as the California Irrigation Management Information System (CIMIS), and flow meters on existing or proposed projects to optimize water efficiency for crops.

PROJECT CRITERIA AND RANKING (cont.)

Water Pumping:

Reduction of GHGs from water pumping, including (1) fuel conversion; (2) improved energy efficiency of existing systems; and (3) reduced pumping due to the other criteria. For example, the conversion of a fossil fuel pump to solar, wind or electric will result in a reduction of carbon dioxide GHGs. NRCS Conservation Practice Standard 372 may apply.

Micro-Irrigation or Drip Systems:

Use of micro-irrigation or drip systems to replace flood or furrow irrigation. Should follow NRCS Conservation Practice Standards 441 or 442.

PROJECT CRITERIA AND RANKING (cont.)

Low Pressure Systems:

Use of low pressure irrigation systems to reduce pumping and energy use.

Variable Frequency Drives:

Use of Variable Frequency Drives to reduce energy use and match pump flow to load requirements. Should follow NRCS Conservation Practice Standard 533.

Other Management Practices:

The use of any other management practice(s) that will result in water savings and GHG reductions.

ENVIRONMENTAL CO-BENEFITS

- The environmental co-benefits of a proposed project will be considered during the review process.
- Examples of co-benefits, include, but not limited to:
 - Improved air quality
 - Facilitation of nitrogen fertilizer management with irrigation management to reduce movement of nitrates to groundwater

Online Water and GHG Tools

- USDA NRCS has an online water use tool, the Irrigation Water Savings Calculator, that will consider irrigation type, crop type and regional considerations. (See Appendix D for more specifics on how to access and use the calculator).
- CDFA developed a GHG calculator for fuel and electricity savings. (See SWEEP website to access the calculator).
- Additional GHG tools are listed in Appendix D.

*The CDFA GHG calculator tool **cannot** be attached to an application as the supporting documentation for baseline GHG emissions value.*

AWARD REQUIREMENTS

Project Implementation:

- Projects must be installed by **April 30, 2016**.
- Grant Recipients are expected to use and maintain their system for a minimum of 10 years or according to the USDA NRCS Practice Life Span Table.

Project Verification:

- CDFA, in partnership with a Resource Conservation District, will conduct the verification component to confirm that projects will result in water savings and GHG reductions.
- The verifier will visit the project site, and evaluate the completed project to ensure design specifications were met and the system is working effectively.
- The verification component must be completed by **May 31, 2016**.

AWARD REQUIREMENTS (cont.)

Payment Process:

- CDFA will provide grant recipients with the necessary grant award and invoicing documents.
- Grant recipient may be eligible to receive an advance payment up to 25% of the total grant award.
- Remaining funds will be allocated on a reimbursement basis through monthly invoicing.
- CDFA will withhold 10% of the total grant award until the verification component is complete to ensure projects are installed as approved by CDFA.
- Invoicing and closeout of all projects must be completed by **June 30, 2016**.



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QUESTIONS?

Refer to CDFA's State Water Efficiency and Enhancement Program website for copies of workshop presentations, the application guidelines, and a set of Frequently Asked Questions

<http://www.cdfa.ca.gov/go/SWEEP>

General questions may also be submitted to
grants@cdfa.ca.gov

