

Warning: Read this Instructions Tab thoroughly and entirely. For your application to be deemed complete, you must provide all required information as outlined below and on all subsequent tabs.

This application is specific to Agriculture and Nursery water conservation project types. If your project focuses on improving water use efficiency in an Urban Indoor or Urban Irrigation setting, you are currently using the wrong application. Go back to the Cooperative Funding Program webpage and download the appropriate application (and example application) for your project.

There are EIGHT tabs (listed to the right), SEVEN of which require data input from you.

Enter data in each light blue colored cell -->
 Some cells contain drop down menus -->
 Clicking on these cells will reveal the menu choices

Select One

Gray cells will self calculate. They cannot accept users inputs.

\$2.21

Tabs
1. Entity Information
2. Project Description
3. Project Financing
4. Project Budget
5a. Estimated Water Savings - Indoor & Other
5b. Estimated Water Savings - Irrigation
6. Cost-Effectiveness Calculator
7. Ancillary Information

Please be as BRIEF as possible while still being informative. Note that some narrative answer fields are limited to the requested length and space provided. If we cannot see it, we cannot read it. It is recommended that you prepare your narrative text in Word and then copy/paste into the spaces provided.

Excel Tip: You can begin a new paragraph within a cell by holding down the **Alt key and hitting Enter** (return).

You must show the calculations leading to your project's estimated water savings. This is done on **Tab 5a (Estimated Water Savings - Indoor) and/or Tab 5b (Estimated Water Savings - Irrigation), respectively**. Once completed, you must fill out **Tab 6 (Cost-Effectiveness Calculator)**. If you have difficulty using the calculator, you may contact Robert Wanvestraut at rowanves@sfwmd.gov or 561-682-6615, or Stacey Adams at sadams@sfwmd.gov or 561-682-2577.

On each tab, start at the top and work to the bottom until you reach the following message:

You have reached the end of this tab. Proceed to the next.

1. Entity Information

Applicant Entity Name	Project Name	County	Planning Region	Project Location - Latitude of Project (Decimal Degrees)	Project Location - Longitude of Project (Decimal Degrees)
Harmony Groves	Harmony Groves Irrigation Efficiency Improvement	Lemon	Lower East Coast	-45.5456873	25.64654635

Authorized Representative FIRST Name	Authorized Representative LAST Name	Authorized Representative Email Address	Street Address	City	Zip Code	Phone Number
Jane	Richards	jrichards@buwww.org	14 Nowhere Ave	Lemonville	55555	555-555-5555

If the Authorized Representative is different from the [Project Manager \(Primary Contact\)](#), please provide the following information for the Project Manager.

Project Manager FIRST Name	Project Manager LAST Name	Project Manager Email Address	Street Address	City	Zip Code	Phone Number
Sam	Gamgee	sgamgee@buwww.org	28 Somewhere Ave	Lemonville	55555	999-999-9999

Federal ID Number	Type of Organization/Entity	If applicable, provide the Consumptive Use Permit, etc.	If applicable, provide the Irrigation Ordinance number
28462145	Agricultural Operator	28-123456	N/A

You have reached the end of this tab. Proceed to the next.

2. Project Description

Anticipated Start Date	Anticipated End Date	Is this a multi-year project?	Project Type	Estimated Water Savings (mgy)	\$/kgal	Total Project Cost	Requested Funding
10/1/2021	9/30/2022	No	Agricultural Irrigation	57.70	\$0.21	\$74,660	\$32,340

The gray cells above will auto-populate as you provide inputs elsewhere within this application.

Excel Tip: You can begin a new paragraph within a cell by holding down the **Alt key and hitting Enter** (return).

Project Description Short Form (Limit to THREE sentences or less)	The project will install remote weather sensing, water level monitoring, and datalogging hardware at four (4) locations in a 2,000 acre citrus grove.
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Project Objective (Limit to ONE sentence)	The objective of this project is to improve irrigation water use efficiency by incorporating soil moisture and climate sensing technology.
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Long-Form Project Description (Scope of the Project) Include: Item(s) to be purchased/installed/distributed and quantities of each	Harmony Groves is a 2,000 acre citrus grove originally established in 1982. The groves are irrigated throughout the calendar year on an as-needed basis. The workers currently must drive to remote areas to observe site conditions. This leads to apprehensive decision making on irrigation. Based on NRCS Mobile Irrigation Lab recommendations, at each of four (4) sites, we will install one (1) weather station with remote monitoring capabilities via web-based wi-fi applications, (each station will be capable of measuring real time air and wet bulb temperature, wind speed and direction, dew point, and rainfall), and two (2) soil moisture sensors. One (1) water table level transducers and one (1) data logging unit will also be installed. This information will be used to improve utilization and placement of water nutrients, assist real-time irrigation decision-making and reduce excess use. Irrigation runoff will be reduced as irrigation schedules improve. Please see accompanying Mobile Irrigation Lab report for details.
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Location	Harmony Groves, Western Lemon County
Target Group(s) and Size	2,000 acre citrus grove
Acres Affected (if this is an irrigation project)	2,000

Is this a rebate or voucher program?	No
If yes, complete the following:	
a. How many rebates or vouchers in total will be issued within the funding period¹?	
b. What is the maximum number of rebates/vouchers issued to a single participant?	
c. How many dwelling units/facilities will this program attempt to reach <u>at a minimum</u> during the funding period^{2, 3}? This should be equal to a./b. above.	
d. List any additional types of fixtures or devices, such as, but not limited to, a showerhead or faucet aerator that a participant may receive.	

Footnotes:

- ¹Do not enter a range. The final reimbursement will be tied to this number.
- ²This question assumes all participants accept the maximum number of allowable rebates/vouchers.
- ³This is the figure you must use in the calculation in your estimated water savings.

2. Project Description

Identify the water source that will be conserved.	Utility Water Provider or Water Source
Potable water from a utility at risk for saltwater intrusion based on elevated chloride levels in monitoring wells or within a Restricted Allocation Area (Section 3.2.1 of the Applicant's Handbook for Water Use Permit Applications)	
Potable water from a utility not at risk for saltwater intrusion, or in a Restricted Allocation Area	
Potable water, but not sure if the area is with a Restriction Allocation Area or at risk of saltwater intrusion (Specify the provider utility)	
Surficial well water in the service area of a utility at risk for saltwater intrusion based on elevated chloride levels in monitoring wells	
Surficial well water in the service area of a utility not at risk for saltwater intrusion	
Surficial well water, but unsure if at risk of saltwater intrusion (Specify the water body)	
Water from a canal or stormwater catchment area (such as a man-made lake within a housing development)	Lemon Canal
Reclaimed water	
Other (Specify)	

You have reached the end of this tab. Proceed to the next.

3. Project Financing

Total Project Cost (\$)	Funding Requested (\$)	Applicant Match (\$)	Third-Party Match (\$)
\$ 74,660.00	\$ 32,340.00	\$ 32,340.00	\$ 5,000.00

Has this project received previous SFWMD funding?		Yes	
If yes, fill out the table below:			
Year Awarded	Contract Number	Amount Awarded	Amount Spent
2018	460000xxxx	\$ 18,750.00	\$ 18,750.00

Is the applicant receiving other funds for this project?		Yes	
If yes, federal/state/private entity name(s):		If yes, amount(s):	
FDACS Citrus Grove Renovation/Re-establishment Program		\$ 5,000.00	

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4. Project Budget

Project Hardware/Technology Items	Quantity of Items or Rebates	Cost per Item, Rebate, or Voucher	Installation Cost per Item	Total Cost for Each Line
Datalogging System				\$ -
Campbell Scientific Datalogger	4	\$ 1,140.00		\$ 4,560.00
Sierra wireless 4G LTE cellular modem	4	\$ 890.00		\$ 3,560.00
12Vdc 12 ah Sealed Battery w/Mount	4	\$ 100.00		\$ 400.00
Enclosure sealed Mema 4x mount and wiring assembly	4	\$ 690.00		\$ 2,760.00
20Watt Solar panel, pole mount, 15 ft cable	4	\$ 390.00		\$ 1,560.00
Weather Sensors				\$ -
CSI Temp RH sensor 6 ft cable	4	\$ 310.00		\$ 1,240.00
CSI Temp RH Solar rad shield	4	\$ 130.00		\$ 520.00
RM Young Wind Speed/Direction Sensor 15 ft cable	4	\$ 940.00		\$ 3,760.00
Rain gauge, 0.001 Increment, 6" orifice 25 ft cable	4	\$ 425.00		\$ 1,700.00
10 ft tower with base, adjustable mast	4	\$ 860.00		\$ 3,440.00
Sensor crossarm & mounting kit	4	\$ 130.00		\$ 520.00
Grounding Kit	4	\$ 65.00		\$ 260.00
Concrete tower base 2x2x2	4	\$ 3,400.00		\$ 13,600.00
Onsite field installation & programming & training	4	\$ 1,390.00		\$ 5,560.00
Soil Moisture Sensors				\$ -
12cm Soil Water Content Reflectometer Plus with 15ft cable	8	\$ 1,245.00		\$ 9,960.00
Sensor install & trenching	4		\$ 1,900.00	\$ 7,600.00
Water table monitoring				\$ -
Water level transducer with 120 ft cable	4	\$ 815.00	\$ 2,600.00	\$ 13,660.00
				\$ -
				\$ -
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				\$ -
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				\$ -
				\$ -
				\$ -
				\$ -
Hardware & Installation Total				\$ 74,660.00

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5a. Estimated Water Savings Indoor & Other

This tab has been created specifically for non-irrigation water conservation projects that may happen in an agricultural or nursery operation. You are required to provide an explanation of how you arrived at your current water use and water savings estimates. District staff will review the estimates provided and may either accept or, if unreasonable, modify them.

Estimated Water Savings Explanation for Other Conservation Project Types

Please enter the following:

Current Water Use	0.0	mg
Estimated Post-project Water Use	0.0	mg
Potential Savings	0.0	mg

Briefly provide the basis for your Current Water Use estimate (e.g., metered data, water bills, zone use calculations)

Briefly explain the basis for your Post-project Water Use estimate.

You have reached the end of this tab. Proceed to the next.

5b. Estimated Water Savings - Irrigation

This tab contains two sections. The first section, "Irrigation System Conversion Projects", is to be used if your project entails an irrigation system conversion.

The second section, "Precision Management Improvements", is to be used if your project entails hardware or technology meant to help better manage your irrigation system.

Section 1. Irrigation System Conversion Projects

Water Use Permit Number	<input type="text" value="28-123456"/>	
Total permitted acres	<input type="text"/>	
Total irrigated acres affected by this conservation project	<input type="text"/>	
Estimate of supplemental irrigation currently being used on affected acres	<input type="text"/>	mg
Current irrigation method	<input type="text" value="Select Irrigation Method"/>	
New irrigation method per this project conversion	<input type="text" value="Select Irrigation Method"/>	
Estimated average use after project completion	<input type="text"/>	mg
Conservation water savings	<input type="text"/>	mg

For this mock application, the applicant is not proposing to convert their irrigation system. Scroll down to Section 2 to see how they have presented their estimates.

Briefly provide the basis for your Current Water Use estimate.

Section 2. Precision Management Improvements

Project Size	<input type="text" value="2000.0"/>	acres affected
Current Water Use	<input type="text" value="823.8"/>	mg
Estimated Post-project Water Use	<input type="text" value="766.1"/>	mg
Potential Savings	<input type="text" value="57.7"/>	mg

Briefly provide the basis for your Current Water Use estimate (e.g., metered data, water bills, zone use calculations).

NRCS Mobile Irrigation Lab use of a Ploysonic Flow meters to determine flow from the grove's three pumps (2,710 gpm, 2,654 gpm, and 2,225 gpm) and developed an Irrigation Water Management Plan. Gross daily needs and net irrigation requirements for a dry year were calculated.

Briefly explain the basis for your Post-project Water Use estimate.

The property already uses microspray emitters, so this project will not improve system irrigation efficiency. However, the NRCS Mobile Irrigation Lab report states the addition of the management equipment including soil moisture probes, tensiometers, weather stations, and wireless telemetry is projected to improve the FIRI factor to produce a 7% reduction in water use. The NRCS Mobile Irrigation Labe report will be uploaded with this application.

You have reached the end of this tab. Proceed to the next.

7. Ancillary Information

Does any contractor or other affiliate of the applicant have a financial interest in this project, the property associated with this project, or with any party that may profit financially from this project?	No
If yes, list the parties and interests:	
Is the project part of your institution/facility's conservation plan?	Yes
This is a State of Florida reimbursement program. The entire project scope is expected to be completed within the funding period, regardless of amount awarded. There is no guarantee the applicant will be awarded the amount requested. Are budgeted funds available to pay for the entire scope of the project?	Yes
Does the applicant understand that if, for any reason, the project scope is not fulfilled to 100% completion as outlined in the statement of work, the funding amount will be reduced to match the original percentage of funding in the contract/purchase order based on the estimated project cost provided in the application?	Yes
Does the applicant understand that funds are only for expenses incurred during the funding period?	Yes
Does the applicant understand this program is not meant to replace or upgrade equipment that is less than 2 years old?	Yes
Is the property located within the SFWMD boundary?	Yes
Is the property in compliance with the District's regulatory requirements?	Yes
Is the applicant willing to host educational/demonstration activities highlighting the project site at reasonable times and under reasonable conditions? Your answer will not affect your project's eligibility or review.	Yes

**You have reached the end of the application.
Go back and check that all required information has been entered.
It is recommended you review all inputs on all tabs.**