

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---|---|-----------------|-----------|--|
| ACMPC California 5, LLC dba Griffith Farms | This project calls for the installation of soil moisture monitoring and a flow meter that is capable of being paired with telemetry on 27 acres of almonds. | \$83,796 | Tulare | Yes |
| Ajit Singh Badhesha | Upgrade from flood irrigation to a drip system. The existing well and pump will be used, but all drip system components will be new. The irrigation scheduling will be based on upon a combination of soil moisture sensors and evapotranspiration (ET) data from California Irrigation Management Information System (CIMIS). | \$47,575 | Fresno | Yes |
| Alliance Backflow | The deployment of three environmentally responsible techniques and equipment to continue production of quality California avocados. The project site covers 10.29 acres of which 9.2 acres contain 1,100 producing adult trees. Two activities will reduce the amount of water required to maintain and enhance the production. The third will produce the electrical power required to pump and move the water to the trees in a manner that will reduce the present greenhouse gas (GHG) levels. The first phase, the acquisition and deployment of soil moisture sensors in conjunction with wireless telemeter controls and battery/solar powered flow valves. The sensors will be positioned at upper and lower areas of the root zones. Irrigating only at night. 20% water reduction. Second phase is the application of 3.0 inches of mulch in the 120 sq.ft. area surrounding each tree. 15% water reduction. Third phase is to deploy a solar array to replace the electricity used by the well pump. Total anticipated GHG reduction >80%. | \$43,300 | Riverside | No |
| ALTA NURSERY, INC. | Project will convert current irrigation system to a drip irrigation system. | \$115,923 | Riverside | No |
| Alyce LLC | Upgrade soil moisture monitoring system so I can more efficiently irrigate our walnut orchard, thereby using only the needed amounts of water to irrigate our walnut orchard. | \$8,750 | Yolo | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|----------|--|
| American Farms LLC | This project will install a 45.99 kilowatt (kW) DC solar photovoltaic (PV) system to power the existing 50 horse power (HP) electric vertical shaft turbine pump and a 50 HP electric booster pump station. This will reduce the amount of greenhouse gas (GHG) emissions created by the energy it requires for pumping. | \$200,000 | Monterey | No |
| Andre Alves | This project will consist of the conversion of the current high pressure micro sprinkler irrigation system to a more efficient, low pressure trickle irrigation system that will save water and energy demand on this almond farm. | \$13,226 | Fresno | Yes |
| Andy Muxlow Farms | We will be installing real time remote field monitoring sensors, flow meters, and a solar system, which will help irrigate more efficiently and reduce greenhouse gas (GHG) emissions. The sensors installed will be reading soil moisture from 6" to 40". The sensors will also read fertilizer applications, and soil temperature at various depths. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, and depth of extraction by roots and adequacy of wetting. These remote field-monitoring units will include weather sensors to help irrigate based on Evapotranspiration (ET) and prevent unnecessary irrigation events. Soil temperature sensors will help me fertilize appropriately at the best temperatures. Flow meters will also aid to improve water use efficiency by allowing us to quantify the water used per irrigation events. The new solar system will allow us to reduce GHG emissions. This project will help us to improve water use efficiency while reducing GHG emissions. | \$200,000 | Tulare | No |

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-------------------------------|--|-----------------|-------------|--|
| Antelope Valley Water Storage | Antelope Valley Water Storage (AVWS) is interested in incorporating the following components to irrigate its 440 acre farming operation at its water bank in Rosamond, California: 1) A Variable Frequency Drive (VFD) at its well at Gaskell and 150th Street West; 2) Install a 50,000 square foot flexible membrane liner for an irrigation holding pond; and 3) Incorporate 5,280 feet of yelomine piping to replace existing leaking pipes to save irrigation water. A contractor would be retained to install the VFD and pond liner. The VFD will enable pumping at variable speeds to reduce overall pumping rates, reducing energy usage and greenhouse gas (GHG) emissions. Once installed, the flexible membrane liner will enable enough water to be stored for a day's worth of alfalfa, barley and carrot field watering. This will allow pumping to fill the holding pond during non-peak energy use hours --- eliminating on-peak pumping, thus reducing energy costs. | \$165,000 | Kern | No |
| Aptos Berry Farms | Being installed is a 45.99 kW DC solar Photovoltaic (PV) system to power a 125 horsepower (HP) electric turbine, which will reduce greenhouse gas (GHG). Also being installed are weather/soil moisture sensors and a flow meter. | \$200,000 | Monterey | No |
| B & B Arboleda Inc | Will install soil moisture stations along with adding a flow meter and pressure sensors. Variable frequency drives (VFD's) will also be installed at two of the pumps. | \$83,473 | Butte | No |
| B & T Farms | This project we are installing Hortau Irrigation Management System with 19 stations that will measure soil tension and enable us to measure plant stress in real time. In addition, we will be installing a weather station to allow correct Evapotranspiration (ET) information for our farming operation. This will ensure we are watering to plant needs. This project will save B & T Farms 15% water, and we will also reduce our greenhouse gas (GHG) emissions by 15%. | \$147,402 | Santa Clara | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-------------------------|---|-----------------|-----------|--|
| B&D Myers | Installing 3 soil moisture stations and a pump monitoring station equipped with a well transducer. Applicant also plans on adding a certified organic acid injection system. | \$34,401 | Colusa | No |
| B&R TeVelde | Three fields totaling 240 acres will be converted from alfalfa, wheat and corn to almond trees. The project reduces water and energy use by replacing flood/furrow-irrigated row crops with a micro jet irrigation system for almonds. A tail water return system will also be put in place to capture and reuse any runoff from the fields. | \$638,083 | Tulare | No |
| Balam | Project includes the installation of soil moisture tensiometers, 4 flow meters, a weather station and a variable frequency drive (VFD) controller. | \$162,161 | Merced | Yes |
| BAY CITY FLOWER COMPANY | <p>We would like to replace two of our old water tanks that are leaking badly and install three frequency drives to our irrigation pumps which currently do not have them. The pumps are either fully "on," or fully off and so much more electricity is being used than required. The frequency drives will allow us to use only the electricity that we require for pumping.</p> <ol style="list-style-type: none"> 1. South Range tank replacement: there is currently a leak of approximately 7 gal/min or 300,000 gal/month 2. McCahon tank replacement: there is currently a leak of about 2.5 gal/min or about 108,000 gal/month 3. Add frequency drive to McCahon irrigation system primary pump 4. Add frequency drive to Bean Hollow irrigation pump#3 5. Add frequency drive to Bean Hollow irrigation pump#2 | \$74,392 | San Mateo | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------------|--|-----------------|-----------------|--|
| Beck Ag Operations, Inc | On 115 acres of wine grapes will be installed; a 41.625 Kilowatt (kW) DC solar panel installation, soil moisture and evapotranspiration (ET) monitoring hardware that will be tied into telemetry. | \$200,000 | San Luis Obispo | No |
| Becky Muxlow Farms | We will be installing real time remote field monitoring sensors, flow meters, and a solar system, which will help irrigate more efficiently and reduce greenhouse gas (GHG) emissions. The sensors installed will be reading soil moisture from 6" to 40". The sensors will also read fertilizer applications, and soil temperature at various depths. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, and depth of extraction by roots and adequacy of wetting. These remote field-monitoring units will include weather sensors to help irrigate based on Evapotranspiration (ET) and prevent unnecessary irrigation events. Soil temperature sensors will help me fertilize appropriately at the best temperatures. Flow meters will also aid to improve water use efficiency by allowing us to quantify the water used per irrigation events. The new solar system will allow us to reduce GHG emissions. This project will help us to improve water use efficiency while reducing GHG emissions. | \$200,000 | Tulare | Yes |
| Bennett & Bennett Irrigation | The project will replace an existing flood irrigation system with a buried drip irrigation system for 65 acres of alfalfa and drip line for 50 acres of pistachios. This conversion will substantially reduce our greenhouse (GHG) emissions by pumping less water and improve our irrigation efficiency from 75% to 97%. Being replaced is an antiquated concrete flood system with low flow buried drip tape (alfalfa) and dripline (pistachios), a variable frequency drive (VFD) to decrease our energy use, a solar array to offset energy, chemical injection pump to prevent over fertilizing, soil moisture probes and a weather station to modernize irrigation practices, a flow meter to measure water use, and online Wiseconn dashboard to monitor and manage system performance. Collaborators include: SCE to reduce energy use, Bennett & Bennett Irrigation to design the system and assist with the grant proposal, and the Tulare County Economic Development Center and Farm Bureau. | \$2,666,498 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------------|--|-----------------|-----------------|--|
| Bettencourt and Marson Dairy | The project will include the installation of new pipeline. | \$196,089 | Merced | No |
| Big Rock Groves, Inc. | Big Rock Groves farm located off of Orange Ave in Ramona, CA will be modernized with the latest irrigation management technology and solar power. | \$200,000 | San Diego | No |
| Black Oaks Assest Management | <p>The purpose of this funding request is to obtain financial assistance for irrigation equipment improvements, including several pieces of technology that will help reduce the carbon and water footprints of our vineyard while simultaneously maximizing wine quality for our winery clients. The vineyard is located in Petaluma, Sonoma County. The 90 acre parcel is planted to 55 acres of wine grapes, and is immediately surrounded by open pasture.</p> <p>The irrigation equipment improvement aspect of the project will entail adding an extra drip emitter to each vine. Currently each vine can only receive 0.5 gallons per hour. By doubling the output per vine, we will be able to cut in half our pumping times. The technology portion of the project will consist of installing Tule Actual Evapotranspiration Monitoring sensors, as well as a Ranch Systems weather station with accompanying soil moisture sensors and remote irrigation controllers for more accurate irrigation during off-peak hours.</p> | \$67,336 | Sonoma | No |
| Blair Ranch LLC | Installation of a Hortau weather monitoring system and 6 soil monitoring stations. | \$77,826 | Riverside | No |
| Boneso Vineyards, LLC | This project will include Tule evapotranspiration (ET) field sensors for irrigation scheduling and management to reduce the total water applied. The installation of a capable solar system will lead to a significant reduction in greenhouse gas (GHG) emissions through pumping with renewable energy. Flow meters will also be installed within the scope of the project. | \$199,278 | San Luis Obispo | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------------|--|-----------------|-----------------|--|
| Boone Organics | Boone Organics is a Limited Liability Corporation in California and a Certified Organic grower of Hass Avocados. Irrigation is from a ground well using a state of the art variable speed submersible pump and an above ground controller that converts from Single Phase Power from SDGE to Three Phase Power. Drip Irrigation is used to water avocados and liquid fertilizer is injected to the avocados during the irrigation cycle. | \$36,764 | San Diego | No |
| Boren Family Partnership, Ltd. | Boren Farms is committed to environmentally friendly farming practices, and is looking to make water and energy system improvements at their existing, certified organic raisin farms in order to save energy and water, while reducing ongoing operating costs. The project would deploy [CONTINUE] | \$235,848 | Fresno | Yes |
| Borzini Farms | The purpose of this project is to install a 45.675 kilowatt (kW) DC solar photovoltaic (PV) system to power the existing 40 horsepower (HP) electric vertical shaft turbine pump on well #2 and 100 HP electric vertical shaft turbine pump | \$200,000 | Monterey | No |
| Briarwood Vineyard LLC | Installed on 80 acres of wine grapes will be soil moisture, evapotranspiration (ET) monitoring hardware along with telemetry technology and flow meters. This project will lead to improved irrigation scheduling and evapotranspiration (ET) monitoring. | \$64,108 | San Luis Obispo | No |
| Bruce | Installing multiple soil stations that will include a soil moisture sensor, pressure sensor and a radio unit. Water sources will all have pump monitoring stations with flowmeter, two pressure sensors (before and after filter) and a radio unit. Water wells will be equipped with a well transducer, which, along with all equipment and sensors, will be linked through telemetry network. | \$108,439 | Colusa | No |
| Bruce Myers | The 212 acre block of almonds will install five soil moisture stations, two pump stations, a full evapotranspiration (ET) weather station and a well transducer. Installed also will be a certified organic acid injection system, which will help improve the water quality, infiltration and will allow for a more efficient system. | \$93,889 | Colusa | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-------------------------|---|-----------------|------------|--|
| Bruscia Ranch | <p>The purpose of this project is to retrofit an existing 50 HP electric submersible pump which has an overall pumping efficiency (OPE) of 21% into a 50 HP electric vertical shaft turbine pump that has an OPE of 65% with variable frequency drive (VFD) control. In addition, an 18.9 kW solar PV system will be installed to reduce the amount of greenhouse gas (GHG) emissions created by this pump.</p> <p>Weather/soil moisture sensors and volumetric management with the existing flow meter will also be implemented 19.273 acres of berries served by this pump to increase water savings. This farm is located on the Pajaro Valley Basin (basin #3-02) which is critically over-drafted.</p> | \$12,500 | Santa Cruz | No |
| Buchignani & Yeung, LLC | <p>Through the use of technology based agricultural tools, on-going education and recognized good farming practices the Buchignani & Yeung, LLC partners will further demonstrate their commitment to manage the use of water, chemicals, energy and limit greenhouse gases (GHG).</p> <p>Install real time remote field monitoring, Flow Meters and water quality treatment equipment to help irrigate more efficiently while saving greenhouse gases. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, depth of extraction by roots and adequacy of wetting. These soil moisture sensors will allow more precise irrigation. These remote field monitoring units will include weather sensors to help irrigate based on (Evapotranspiration) ET and prevent unnecessary irrigation events. Gypsum and acid machines will allow the water to be amended (with gypsum) and reduce the amount of standing water and evaporation.</p> | \$49,994 | Yolo | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---|--|-----------------|------------|--|
| Buon Gusto LLC | 1. Replace off grid diesel system with solar& solid state eco 10yr sealed batteries (non-toxic, non-hazardous, no heat) substantially reduce greenhouse gas (GHG) emissions (95%). 2. Institute water saving measures: irrometers, flow meters and electronic reporting for water use efficiency. 2a. Replace pumps with more energy efficient models and in two locations install solar pumps/aerators for additional irrigation efficiency while reducing GHG emissions. 2b. Replace all old low pressure lines, emitters and micro sprinklers for a higher (distribution uniformity) DU. 2c. Institute gravity fed watering in a major part of orchard, thereby limiting any pumping. 3. Purchase equipment to transport orchard cuttings to a local certified green waste processing center and return with certified organic soil amendments thereby eliminating GHG associated with current in field green waste decomposition and related GHG emissions. No data for reduction of GHG available however process is part of CapNTrade and composting is BMP for soil. | \$171,429 | Ventura | No |
| C & D II Ranch LLC | Being installed during this project will be sulfuric acid machines along with gypsum machines. Soil moisture monitoring technology will also be added to allow for more efficient irrigation. | \$120,869 | Stanislaus | No |
| California Department of Food and Agriculture | Will be installing a variable speed drive (VFD) to the existing irrigation system. | \$11,425 | Sonoma | No |
| California Ozatalar Family Trust | Implement ground moisture sensors and automated controls to improve the water utilization efficiency and greenhouse gas (GHG) reduction of approximately 3 acres of avocado trees. | \$67,200 | Ventura | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---|--|-----------------|-----------------|--|
| California Quinoa LLC | Our project will replace flood irrigation with the Groasis Waterboxx on 20 acres of our 80 acre farm. On the remaining 60 acres, we will start Evapotranspiration (ET) based scheduling. We expect to cut our water use by 32.5% with this project. In 2015, we used 27.1 acre-inches of water over the 80 acres. After the project, we expect to use only 18.3 acre-inches of water over the 80 acres by implementing the Groasis Waterboxx on 20 of the 80 acres. | \$92,215 | Lassen | No |
| Capay Organics | Capay Organics project aims to monitor irrigation in order to improve water use efficiency utilizing Hortau Technology. Capay Organics already implements multiple sustainable practices and the last portion to complete environmental stewardship is irrigation monitoring. | \$82,412 | Yolo | No |
| Capital Agricultural Property Services, Inc | The scope of the proposed project is to install soil moisture and evapotranspiration monitoring hardware along with telemetry. The improved irrigation schedule supported by soil moisture sensors and evapotranspiration (ET) measurements are expected to reduce water usage by 15%. | \$200,000 | San Luis Obispo | No |
| Castle Farms | Castle Farms proposes improving the irrigation system by changing from not having an irrigation water management plan to irrigation scheduling using soil moisture monitoring, a weather station with evapotranspiration (ET), and in-line irrigation pressure sensors. Soil moisture, ET, and in-line pressure data will be reported in real-time to Observant software, accessible via computer, tablet or phone, along with customizable alerts to the grower. This will help determine when and how to irrigate, monitor irrigation pressure for quick identification of leaks, clogged lines, and overall distribution uniformity (DU). | \$21,504 | Merced | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-----------------------------|--|-----------------|-----------------|--|
| Cavaletto Farm Services | <p>Well pump will be upgraded to a variable frequency drive (VFD) pump. The overhead irrigation delivery system will be upgraded from traditional hand move impact sprinklers to micro-sprinklers. These micro-sprinklers will remain in place through out the growing season to assist in the management of mites and plant stress.</p> <p>10 Hortau field monitoring stations to help facilitate the management of the irrigation. This will be achieved by the utilization of proprietary high-tech tensiometers.</p> <p>The installation of 6 flow meters with Hortaus smart monitoring stations and a Hortau weather station will also be a part of this project.</p> <p>The ultimate outcome will be a healthier crop that will be produced with less resources thus reducing the overall greenhouse gas (GHG) emissions.</p> | \$158,740 | Santa Barbara | No |
| Central Coast Olive Company | <p>Our operation consists of 4 acres of 400 Mission olive trees. The drip irrigation system was installed in 2013, at the time of planting.</p> <p>The proposed project consists of the following project types:</p> <ol style="list-style-type: none"> 1. Water Conservation: We are proposing a soil moisture sensor system for irrigation scheduling. We propose installing soil moisture sensors with electronic data output that will advise us when irrigation is not required. 2. Greenhouse Gas (GHG) Emission Reduction: We are proposing a fuel conversion project and an improved energy efficiency project. Our operation creates GHG emissions from the pumping of well water for irrigation, currently using electrical power from PG&E. In order to reduce emissions, we propose converting from the use of fossil fuel based electricity to a solar powered system. In addition, we propose installing a more efficient pumping system for the well that will significantly reduce the amount of pumping required. | \$22,538 | San Luis Obispo | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------------------|---|-----------------|-----------------|--|
| Chamisal Vineyards | This project combines upgrading existing winery waste water collection and treatment with storm water capture to offset approximately 3 acre feet of groundwater use for irrigation. With winery growth, this may increase to an offset of 5 acre feet. The electrical requirements of this project will be 100% offset by a solar installation resulting in reduced greenhouse gas (GHG). Combined with this will be 9.5 acres of upgraded irrigation and installation of flowmeters for further irrigation efficiency realizing savings of an additional acre foot. | \$199,258 | San Luis Obispo | No |
| Chandler Farms LP | Project will convert 30 acres from furrow irrigation to micro sprinkler and install a solar plant for irrigation power. | \$50,318 | Fresno | Yes |
| Channel Islands Vegetable Farms, Inc. | The aim of this project is to increase water efficiency and to reduce greenhouse gas (GHG) by installing new water filters and micro sprinklers. | \$110,733 | Ventura | No |
| Charles Pfister | The proposed project is water conveyance system efficiency upgrade flood irrigation to micro jet sprinklers and adding a flow meter. | \$155,076 | Butte | No |
| Charles Pfister | The proposed project is a water conveyance efficiency upgrade from flood irrigation to micro jet sprinklers and adding a flow meter. | \$69,241 | Butte | No |
| Charley Tiff | Tiff Farms is a walnut operation in Butte county. The project aims to improve water use efficiency by installing Hortau soil moisture sensors. Real time soil tension monitoring will reduce greenhouse gas (GHG) and improve water use efficiency, reducing total surface water diversion from the Feather River. | \$12,000 | Butte | No |
| Chris Vandborg Farms | The project converts 120 acres of land from the flood irrigation of alfalfa, corn, onions, and carrots to micro irrigation of almonds. It includes installing soil moisture monitoring units throughout the fields to improve irrigation scheduling and efficiency and reduce trips to the field. | \$309,137 | Kern | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------------|--|-----------------|--------|--|
| CJ Shannon & Sons | For this project we would like to upgrade our current pump to a new and more efficient pump. We would also like to install a new sand media filter station and pipeline to connect to our existing drip system. Also, we would like to add soil moisture monitoring equipment along with a pump controller and weather station. | \$85,509 | Tulare | Yes |
| Clark Bros. Farming | Converting a row crop field from flood and/or sprinklers to micro drip irrigation. | \$174,937 | Fresno | Yes |
| Clarklind Farms | This project is convert 230.95 acres of flood irrigated mature pistachio trees to a point source drip irrigation system and add a smart controller and moisture sensors on 2nd year almonds. The irrigation shall use "smart technology" including soil moisture sensors, weather station, irrigation control, and flowmeter. The project will also include solar panels and variable frequency drives (VFD). The proposed system will improve irrigation scheduling and reduce water use and reduce the production of greenhouse gas (GHG). | \$187,889 | Tulare | Yes |
| Clifford | A 327 acre property that will add soil moisture stations, along with a flow meter and pressure sensors. All newly installed hardware will be connected to a telemetry network and will allow for reduced water use and greenhouse gas (GHG) emissions. | \$200,000 | Colusa | No |
| Colusa Indian Community Council | Project calls for the installation of orchard moisture monitoring system. | \$9,995 | Colusa | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-------------------------|--|-----------------|-----------------|--|
| Creston Ridge Vineyards | This project will address the irrigation management of 115 acres of wine grapes in the Paso Robles wine grape growing region. Hortau field and flowmeter monitoring stations will be implemented as a part of this project. We will utilize Hortau's state of the art soil moisture tension sensors to monitor and record data from the field and from pulse output flow meters. This data will be transmitted via cellular network to Hortau servers and then be made available via any web enabled device. A weather station will be installed on-farm to establish an evapotranspiration (ET) which enable us to better know how much water should be applied. | \$90,056 | San Luis Obispo | No |
| Crisalida Farms | Project scope includes 3 major efforts to significantly reduce water usage, emissions, pesticide/fungicide use, and groundwater/runoff contamination. First, replacement of our manual valves with automated valves to eliminate the need to manually walk each valve and adjust its flow. Secondly, connect our microsprinkler system to the valves eliminating the need to manually open sprinkler valves. This drastically increases the efficiency of the system allowing us to leverage the microsprinkler technology and reduce pesticide application. Lastly, we will be programming the valves to allow "spoon-feeding" irrigation. By applying small amounts of water more frequently, we will be able to ensure we apply the minimum needed, reduce leaching of fertilizer, reduce or eliminate standing water in furrows which in turn reduces pesticide/fungicide applications, and finally, increase yields by ensuring the plants go through the appropriate wetting/drying cycle. | \$171,833 | Ventura | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|----------|--|
| Crouch Avenue | The grower is applying to install multiple water management practices on this 25 acres of almonds. This grant request will further reduce greenhouse gas (GHG) emissions for this previously funded SWEEP Project. The first step to further reducing our GHG will be to install a solar system. On the 40 HP Electric pump we request funds to equip a 40 HP Variable Frequency Drive (VFD). A large water management practice is our request to convert the current solid set sprinkler irrigation system to a low pressure buried drip. Our final request will be for a certified organic acid injection system. This project combined with the previously awarded management practices will allow for the most efficient way to monitor and apply irrigation. | \$200,000 | Butte | No |
| Dale Hampton | The 130 acre vineyard will install five irrigation field management stations, a weather station to establish a micro-climate specific Evapotranspiration (ET), and also a 100 horsepower (HP) variable frequency drive pump at the main well. | \$71,013 | Monterey | No |
| Daniel Jackson Farms | We will be installing real time remote field monitoring sensors, flow meters, and a solar system, which will help irrigate more efficiently and reduce greenhouse gas (GHG) emissions. The sensors installed will be reading soil moisture from 6" to 40". The sensors will also read fertilizer applications, and soil temperature at various depths. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, and depth of extraction by roots and adequacy of wetting. These remote field-monitoring units will include weather sensors to help irrigate based on evapotranspiration (ET) and prevent unnecessary irrigation events. Soil temperature sensors will help me fertilize appropriately at the best temperatures. Flow meters will also aid to improve water use efficiency by allowing us to quantify the water used per irrigation events. The new solar system will allow us to reduce GHG emissions. This project will help us to improve water use efficiency while reducing GHG emissions. | \$200,000 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|------------|--|
| Daniel Myers | There will be multiple soil moisture stations installed that will include an Enviro-Pro soil moisture sensor, PA-1 pressure sensor, and an Adcon radio unit. The evapotranspiration (ET) weather station will have a temperature/humidity sensor, a wind speed/direction sensor, rain gauge, pyranometer, and Adcon radio unit. The water sources will all have pump monitoring stations which include a McCrometer Flow meter, 2 pressure sensors (before and after filter), and an Adcon radio unit. | \$200,000 | Yolo | No |
| David Corriea | Project will add Soil Moisture stations from Irrigate.net out in the fields to monitor the irrigation efficiency by being able to view the data online that is relayed through a telemetry network. Also pump efficiency will be monitored by adding a flow meter to the discharge, and pressure sensors before and after the filter. This would be connected to a telemetry network as well. | \$121,176 | Glenn | No |
| David Fantozzi Farms | Converting a surface irrigated tomato row crop field to a highly efficient double line drip irrigation system with electric motor for Almonds. Reducing pumping and maximizing water efficiency, and reducing greenhouse gas (GHG) emissions. Practicing better irrigation practices by installing flow meters on the irrigation system and soil moisture sensors in the field. Using data from soil moisture sensors and data from evapotranspiration (ET) rates for the given area, maximum efficiency will be obtained when irrigating, resulting in less water pumped and less GHG emitted into the environment. | \$23,800 | Stanislaus | Yes |
| David Fantozzi Farms | Converting a 27 acre tomato field and a 74 acre melon field that are both surface irrigated into one 101 acre Almond field. The Almond field will use a highly efficient double line drip irrigation system ran by a 15 HP electric motor. The water project will eliminate the need to surface irrigate for the crop year and also eliminate the need to use a 125 HP diesel pump to irrigate for the first two irrigations on both fields. The end result after the project is completed is to reduce greenhouse gas (GHG) emissions, save surface water, and reduce pumping. | \$59,750 | Stanislaus | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|------------|--|
| David Fantozzi Farms | This project will convert a surface irrigated tomato field to a highly efficient drip irrigation system with electric pump. The Almond field will use a highly efficient double line drip irrigation system ran by a 15 HP electric motor. The water project will eliminate the need to surface irrigate for the crop year and also eliminate the need to use a 125 HP diesel pump to irrigate for the first two irrigations on both fields. The end result after the project is completed is to reduce greenhouse gas(GHG) emissions, save surface water, and reduce pumping. Converting a surface irrigated tomato field to a highly efficient double line drip irrigated almond orchard. | \$27,300 | Stanislaus | Yes |
| David Jackson Farms | We will be installing real time remote field monitoring sensors, flow meters, and a solar system, which will help irrigate more efficiently and reduce greenhouse gas (GHG) emissions. The sensors installed will be reading soil moisture from 6" to 40". The sensors will also read fertilizer applications, and soil temperature at various depths. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, and depth of extraction by roots and adequacy of wetting. These remote field-monitoring units will include weather sensors to help irrigate based on evapotranspiration (ET) and prevent unnecessary irrigation events. Soil temperature sensors will help me fertilize appropriately at the best temperatures. Flow meters will also aid to improve water use efficiency by allowing us to quantify the water used per irrigation events. The new solar system will allow us to reduce GHG emissions. This project will help us to improve water use efficiency while reducing GHG emissions. | \$200,000 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--|---|-----------------|-----------|--|
| David Soeth | This project includes a 140-acre property that we would like to include irrigation management practices on. We are seeking to add Soil Moisture stations from Irrigate.net out in the fields to monitor our irrigation efficiency by being able to view the data online that is relayed through a telemetry network. We also want to monitor our pumps efficiency by adding a flow meter to the discharge at every one, and pressure sensors before and after the filter on one mainline. This would be connected to a telemetry network as well. We believe that with access to this information, along with California Irrigation management Information System (CIMIS) evapotranspiration (ET) data, we could reduce our water use and decrease our greenhouse gas (GHG) emissions by irrigating more effectively. | \$42,436 | Glenn | No |
| Davis Diversified Farms,LP | This project will convert 43 acres of flood irrigated land to a new double line drip system. Included in the project installation is a variable frequency drive (VFD) powered by a 60 horsepower (HP) pump. | \$200,000 | Madera | Yes |
| Demeter Agricultural Properties II LLC | This project will implement an advanced irrigation system using flow meters, soil tensiometers and data software. | \$188,477 | Tulare | Yes |
| Derek Moffitt Farming | The project scope covers the 125 acre Almond and 30 acre Olive production operation in Orland, Ca. The combined 155 planted acreage ranch proposes installation of the following measures to increase efficiency and maximize water and greenhouse gas (GHG) savings: A)New 65 Acre Almond Micro irrigation system with 95% D.U. B)Rain Bird ClimateMinder four site Data logging web based access and reporting for Soil, Climate evapotranspiration (ET), Applied Water, Scheduling, Pressure and Flow meter monitoring system on all 155 acres. C)New High Efficiency Well Pump with Variable Speed Control. D)Rain Bird ClimateMinder web access automation control system and valving to allow micro and soil type management. E)30KW Solar Array | \$127,352 | Glenn | No |
| Desert Fresh Inc | Project consists of the installation of a Hortau weather monitoring system along with a new filter on the existing drip system | \$35,731 | Riverside | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------|--|-----------------|-----------------|--|
| Diamond West Farming Inc. | 8 Diamond West Farming ranches will have pulse output flow meters installed with Hortau's smart flow meter monitoring stations. 15 field monitoring stations will be divided through out the 8 ranches depending on acreage, soil type and irrigation system design. We are requesting to supplement the system with 6 Hortau weather stations to produce a micro-climate specific evapotranspiration (ET). These farm upgrades are intended to increase the efficiency of the irrigation thus reducing water use. This reduction in water use will thus reduce the energy to pump water to the vines ultimately reducing greenhouse gas (GHG) emissions. | \$198,421 | San Luis Obispo | No |
| DLM Ranch LLC | DLM Ranch will implement an array of products and technologies aimed at providing management with the tools and data necessary for better irrigation decisions. This will result in both increased water conservation and a reduction in greenhouse gas (GHG) emissions. Sulfuric acid machines along with gypsum machines will keep the water at an optimal pH while allowing the gypsum to open the ground. This lets the water move through the soil profile, encourages better nutrient uptake and decreases water runoff. Soil moisture monitoring measures water content in the soil and allows for smarter, more efficient irrigation practices. Weather monitoring equipment will deliver data that can be leveraged to accurately calculate evapotranspiration and crop water usage. Finally, telemetry systems will link all of the data to cloud servers where it will be accessible remotely. Utilization of these technologies will result in increased water conservation and a more effective use of water. | \$108,147 | Stanislaus | No |
| Don Headrick | The proposed project will install a low water use drip irrigation system on 55.27 acres near Hanford, Ca. The project site was previously as flood irrigation for grapes but is going to be converted in a pistachio orchard. The change in use along with the increase in irrigation efficiency shall dramatically reduce the amount of water the site uses while promoting irrigation efficiency throughout the region. In addition the project will reduce greenhouse gas (GHG) by installing solar to run the well on the farm. | \$200,000 | Kings | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------|--|-----------------|--------|--|
| Dorothy Vanous | This 20.3 acre property will have installed on it; soil management stations along with a telemetry network and flow meters which will also be attached to a telemetry network. | \$14,826 | Butte | No |
| Double Nut Orchard | This project includes 2 pieces of property that encompasses 144.6 acres of walnuts that will include irrigation management practices. The project seeks to add Soil Moisture stations from Irrigate.net out in the fields to monitor irrigation efficiency | \$193,404 | Glenn | No |
| DOUG & JULIE FREITAS FARM | <p>The Project will include the following:</p> <ol style="list-style-type: none"> 1. Installation of a drip system on 75 acres previously flood irrigated. 2. Installation of electric motors with Variable Frequency Drives (VFD) on two separate drip filter stations serving a total of 129 acres replacing diesel powered pumps. 3. Retrofit 4 shallow wells on the Jones Ranch presently performing at a 4. plant operating efficiency of less than 23-34% (pumps 2,3,4,5). 4. Installation of flow meter on the new drip filter station in order to read flow to the project sites. 5. Installation of a telemetry water monitoring system to read soil moisture. 6 Composting added to each site to increase the soil water holding capacity. 7. Two new electric services will have to be installed to operate the two new pumps with VFD 8. Two new fertilizer injection pumps one for each project. 9. Two new acid injection pumps for the one for each project. | \$142,392 | Kings | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|---|-----------------|--------|--|
| Doug Bentz | This project includes a 28-acre property that we would like to include irrigation management practices on. We are seeking to add Soil Moisture stations from Irrigate.net out in the fields to monitor our irrigation efficiency by being able to view the data online that is relayed through a telemetry network. We also want to monitor our pumps efficiency by adding a flow meter to the discharge, and pressure sensors before and after the filter. We also aim to add a well transducer to help us manage our pump draw down. This would be connected to a telemetry network as well. We believe that with access to this information, along with California Irrigation Management Information System (CIMIS) Evapotranspiration (ET) data, we could reduce our water use and decrease our greenhouse gas (GHG) Emissions by irrigating more effectively. | \$20,930 | Glenn | No |
| DP Farms | Installation of 201 acres of subsurface row crop drip irrigation with an electric booster pump to replace the existing flood irrigation system with a diesel booster pump. The conversion will also include the installation of the following: 1) Pure Sense remote accessible in field soil moisture sensors & in field weather station to help schedule irrigation events 2) Variable frequency drive (VFD) electrical panel to ensure the system operates at the correct pressure and only uses the required electricity 3) Netafim NMC Pro irrigation controller (automation) that will monitor and record the amount of water and fertilizer applied to the field and automatically change field valves based on the current irrigation program 4) Seametrics magnetic flow meter to help monitor the irrigation system flow rate in gallons per minute and the total water applied to the field in acre feet 5) Multiple pressure gauges to verify the system is operating as designed. | \$200,000 | Fresno | No |
| Dustin Fleming | Project will switch from flood irrigation to solid set sprinkle system and install soil moisture sensors. | \$93,784 | Sutter | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|---|-----------------|--------|--|
| Eatwell Farm | <p>Eatwell Farm is a 105 acre certified organic farm near Dixon California.</p> <p>We wish to complete installing solid set sprinklers on 5 blocks of 7.5 acres vegetables and fruit trees/herbs.</p> <p>These sprinklers will be controlled with electronic valves to enable us to maximize the efficiency of water application by irrigating only at night. We can precisely apply water to cool transplanted plants at establishment and convert them to drip for day time water use.</p> <p>Water is drawn from an irrigation canal 24 hours a day this water will be stored for night time use in an existing lined pond. The pond will act as a filter for debris as water will be drawn from a depth of 8 feet removing the need for filter system.</p> <p>An existing diesel pump providing pressurized water at 40 PSI will be replaced with a variable frequency drive electric pump grid tied with solar panels to balance the electricity used at night by the pump.</p> <p>Savings of 35% from night time irrigation are possible.</p> | Not Provided | Solano | No |

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|---|-----------------|----------|--|
| Emerald Seed Company | <p>Emerald Seed is located in the Imperial Valley, served water & power by the IID and owned / operated by Mike Dessert, Phd. Mike and his family history have over 100 years in the vegetable seed business from Grand Junction, Colorado to Toronto, Canada and then in 1940 to the Imperial Valley.</p> <p>Emerald Seed located at Euc 34 is a known local showpiece for new vegetable varieties and education. Combining water efficiencies of sprinkler & drip along with clean electric energy thru a variable drive for high & low water pressure delivery would be a welcomed educational tool to our local ag producers.</p> <p>This project is the replacement of an existing diesel powered pump by an electric pump resulting in cleaner overall emissions including carbon & green house gas. Modern flexible water delivery tools of surface sprinklers for germination and/or drip to finish crops can result in 2-3 feet of water conservation / savings per acre as compared to conventional surface flood models.</p> | \$159,785 | Imperial | Yes |
| Eric M Shannon Jr | <p>The 72 acre ranch in Sanger I'm applying for SWEEP funding is currently planted to irrigated cattle pasture and I want to convert it to a vineyard of Kiwis with your assistance. I just bought this property three months ago so I have very limited history on it because of this circumstance. The ranch is currently irrigated by flood irrigation via a open ditch system. My plan would be to convert the property from flood irrigation to a micro irrigation system operated by a Variable Frequency Drive (VFD). The ranch is in the Kings River Irrigation District which has first water rights off the Kings River and the water is abundant even in the tougher drought years. By installing a micro irrigation system I'll be able to reduce my usage by 50% allowing my excess water to flow downstream to help recharge the aquifer in some of the areas most over drafted areas. To offset the booster pump to power the new micro irrigation system I will install a solar system.</p> | \$200,000 | Fresno | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|--------|--|
| Etchegaray Farms, LLC | This project will install remote field monitoring and water quality treatment equipment to allow for more efficient irrigation practices. Also added will be weather sensors and gypsum machines. | \$159,205 | Kern | Yes |
| F & D Giacomazzi Farms | The project will replace an existing flood irrigation system with a drip irrigation system for almonds with a distribution uniformity (DU) of 96%. This system includes: solar panels to offset 89% of the system energy, a variable frequency drive (VFD) to maintain pumping efficiency, variable rate chemical injection pump to prevent over fertilizing, soil tensiometers and a weather station to acutely manage irrigation practices, a flow meter, and automated valve control. Additionally, a soil variability map will be used to identify soil type zones based on specific evapotranspiration (ET) and water holding capacity. Pressure compensating valves will also be installed to ensure low-pressure irrigation uniformity. Lastly, we are collaborating with Wexus, a cloud based energy efficiency tool, to reduce greenhouse gas (GHG) by shedding our load during peak demand and verify our use. | \$2,037,303 | Kings | Yes |
| Field HD, LLC | Project will convert 52 acres of flood irrigated almonds crops with a new drip irrigation system. Also being installed will be soil moisture monitoring equipment and weather sensors. A flow meter will also be added to keep better records of water use. | \$80,660 | Kern | Yes |
| Fowler Packing | The goal of the project is to convert several ranches in the Arvin area from a fanjet style system to pressure compensating drip which will lead to better distribution uniformity as well as irrigation efficiency. A secondary focus will be to add variable frequency drive (VFD) controls to booster pumps to increase electrical efficiency and reduce emissions. | \$135,500 | Kern | Yes |
| Fred De Boer Farming | Installing high efficiency, low pressure micro sprinkler system on 113 acres of walnuts that are currently flood irrigated. A flow meter and moisture monitors will also be installed and data will be used to better manage irrigation scheduling. | \$200,000 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--|--|-----------------|--------|--|
| Fresno Regional Workforce Investment Board | This specialty vegetable operation will be converting from surface to drip irrigation. Installed on the property will be a variable frequency drive (VFD), which will decrease greenhouse gas emissions (GHG). | \$58,919 | Fresno | No |
| Fresno Regional Workforce Investment Board | This specialty vegetable operation will be converting from surface to drip irrigation. Installed on the property will be a variable frequency drive (VFD), which will decrease greenhouse gas emissions (GHG). | \$55,283 | Fresno | No |
| Fresno Regional Workforce Investment Board | This project will decrease water use by converting from surface to drip irrigation while also repairing a leaking pipe. Greenhouse gas (GHG) emissions will be lowered by installing a variable frequency pump (VFD), which will improve pump efficiency. | \$70,370 | Fresno | Yes |
| Fresno Regional Workforce Investment Board | This project will decrease water use by converting from surface to drip irrigation while also repairing a leaking pipe. Greenhouse gas (GHG) emissions will be lowered by installing a variable frequency pump (VFD), which will improve pump efficiency. | \$58,025 | Fresno | No |
| Fresno Regional Workforce Investment Board | A diversified specialty vegetable operation will decrease water use by converting from surface to drip irrigation and replacing a leaking pipe. Greenhouse gas (GHG) emissions will be decreased by improving pump efficiency and installing a variable frequency drive (VFD). | \$65,623 | Fresno | No |
| Fresno Regional Workforce Investment Board | A diversified specialty vegetable operation for farmers market production will decrease water use by converting from surface to drip irrigation and will decrease greenhouse gas emissions by increasing pump efficiency and installing a variable frequency drive (VFD). | \$64,224 | Fresno | Yes |
| Fresno Regional Workforce Investment Board | An olive orchard will decrease water use by converting from surface to drip irrigation and will decrease greenhouse gas (GHG) emissions by increasing pump efficiency. | \$36,039 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|----------|--|
| Fuentes Berry Farms | The purpose of the project is to remove a 50 HP electric vertical shaft turbine along with a 125 HP diesel booster and install a 125 HP electric powered turbine pump with variable frequency drive (VFD) control. To increase water savings, weather/soil moisture monitoring and volumetric management with the existing flow meter will also be implemented on the 37.262 acres of berries and vegetables. | \$162,552 | Monterey | No |
| G&H Farms, LLC | The purpose of this project is to install a 45.99 kW DC solar PV system to power the existing 60 HP electric vertical shaft turbine pump and a 75 HP electric booster pump. This will reduce the amount of greenhouse gas (GHG) emissions created by the energy it requires for pumping. In addition, weather/soil moisture sensors and volumetric management with the existing flow meter will also be implemented to the 73.5 acres of vegetables served by this pump to increase water savings. This farm is located in the 180/200 Foot Aquifer Subbasin (basin # 3-04.01) which is critically over-drafted. | \$200,000 | Monterey | No |
| Garcia Farms Inc | This project will replace the current diesel engine used for flood irrigation and convert it to an electric motor. | Not Provided | Yolo | No |
| Garry Richardson Farms | On 890 acres of stone fruit will be installed a flow meter that will be paired with telemetry. This combination will conserve energy by improving irrigation efficiency and implement an evapotranspiration (ET) based schedule. | \$97,354 | Kern | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------|--|-----------------|--------------|--|
| Gary Alves | This project includes a 191 acre property that we would like to include irrigation management practices on. We are seeking to add pump monitoring stations from Irrigate.net to monitor our irrigation efficiency by being able to view the data online that is relayed through a telemetry network. By adding pump monitoring stations, in conjunction with our existing soil moisture stations, we can monitor the pumps efficiency by adding a flow meter to the discharge, and pressure sensors before and after the filter. We also aim to add a solar system to power these pumps, therefore reducing greenhouse gas (GHG). We believe that with access to this information, along with Evapotranspiration (ET) data from a proposed ETo station, we could reduce our water use and decrease our GHG emissions by irrigating more effectively. | \$200,000 | Glenn | No |
| Gemstone Properties Inc | On the 148 acre property there will be installed soil moisture stations, which will be monitored through a telemetry system. Also installed will be a flow meter, pressure sensors and variable frequency drives (VFD's). | \$198,136 | Butte | No |
| George Amaral Ranches Inc | We would like to remove use of all aluminum pipe with presurized over land plastic pipe on the Hobson Ranch. Reduces both water usage and soil erosion and herbicide use. | \$200,000 | Monterey | No |
| GMS Farms | Project consists of an Agri. Valley drip irrigation system along with a flow meter and pressure release valves. | \$32,000 | Not Provided | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-------------------------|--|-----------------|-----------|--|
| Golden Valley Farms | This project includes a 176.5-acre property that we would like to include irrigation management practices on. We are seeking to add Soil Moisture stations from Irrigate.net out in the fields to monitor our irrigation efficiency by being able to view the data online that is relayed through a telemetry network. We also want to monitor our pumps efficiency by adding a flow meter to the discharge, and pressure sensors before and after the filter. This would be connected to a telemetry network as well. We aim to add variable frequency drives (VFD) at every pump to improve pumping efficiency and we hope to install underground piping to connect two wells. We believe that with access to this information, along with Evapotranspiration (ET) data from our proposed station, we could reduce our water use and decrease our greenhouse gas (GHG) Emissions by irrigating more effectively. | \$124,867 | Yuba | No |
| Goodman Ranch | This project sets on 401 acres of almonds and will install six soil moisture stations, along with PA-1 pressure sensor and an Adcon radio unit. All water stations will have pump monitoring stations and the project will have a full Evapotranspiration (ET) station and a well transducer. All of the sensors and equipment will be linked through the telemetry network. | \$133,277 | Colusa | No |
| Grangetto Ranches, Inc. | Retrofit irrigation system for Avocados by installing soil moisture sensors, flowmeters, irrigation controllers and water powered fertilizer proportioners using Solar Power to provide electricity and reduce our carbon footprint. Install remote field monitoring systems for irrigation timing management and prevent excess irrigation sets or time. Implement pressure regulated micro sprinklers to improve uniformity and reduce runoff. Install Crop Water Stress Indicators (CWSI) to minimize plant stress due to improper irrigation. Convert to water powered constant feed fertilizer injection rather than sporadic high concentration applications. | \$193,151 | San Diego | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|--------|--|
| Grapeman 320 Ranch LP | 320 Ranch will implement an array of products and technologies aimed at providing farm management with the tools and data necessary to make more informed irrigation decisions. First, soil monitoring equipment will measure the water content of the soil from just below the surface to 60 inches deep. The real-time data will demonstrate how far water is penetrating the soil during irrigation cycles, allowing the grower insight that can lead to smarter, timelier, and more effective irrigation decisions. Weather monitoring equipment will deliver data that can be leveraged to accurately calculate evapotranspiration and crop water usage. This will help with irrigation scheduling and the construction of various models. The telemetry systems aggregate all of the data on the cloud for easy access from computers and mobile devices. Utilization of these technologies and equipment will save water and thereby reduce greenhouse gas (GHG) emissions by effectively giving the grower "eyes under the soil." | \$56,265 | Kern | No |
| Grapeman 476 Ranch LP | 476 Ranch will implement an array of products and technologies aimed at providing farm management with the tools and data necessary to make more informed irrigation decisions. First, soil monitoring equipment will measure the water content of the soil from just below the surface to 60 inches deep. The real-time data will demonstrate how far water is penetrating the soil during irrigation cycles, allowing the grower insight that can lead to smarter, timelier, and more effective irrigation decisions. Weather monitoring equipment will deliver data that can be leveraged to accurately calculate evapotranspiration (ET) and crop water usage. This will help with irrigation scheduling and the construction of various models. The telemetry systems aggregate all of the data on the cloud for easy access from computers and mobile devices. Utilization of these technologies and equipment will save water and thereby reduce greenhouse gas (GHG) emissions by effectively giving the grower "eyes under the soil." | \$67,428 | Kern | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|----------------------------|---|-----------------|--------|--|
| Grapeman Double S Ranch LP | Double S Ranch will implement an array of products and technologies aimed at providing farm management with the tools and data necessary to make more informed irrigation decisions. First, soil monitoring equipment will measure the water content of the soil from just below the surface to 60 inches deep. The real-time data will demonstrate how far water is penetrating the soil during irrigation cycles, allowing the grower insight that can lead to smarter, timelier, and more effective irrigation decisions. Weather monitoring equipment will deliver data that can be leveraged to accurately calculate evapotranspiration (ET) and crop water usage. This will help with irrigation scheduling and the construction of various models. The telemetry systems aggregate all of the data on the cloud for easy access from computers and mobile devices. Utilization of these technologies and equipment will save water and thereby reduce greenhouse gas (GHG) emissions by effectively giving the grower "eyes under the soil." | \$34,933 | Tulare | Yes |
| Grapeman Famosa Ranch LP | Famosa Ranch will implement an array of products and technologies aimed at providing farm management with the tools and data necessary to make more informed irrigation decisions. First, soil monitoring equipment will measure the water content of the soil from just below the surface to 60 inches deep. The real-time data will demonstrate how far water is penetrating the soil during irrigation cycles, allowing the grower insight that can lead to smarter, timelier, and more effective irrigation decisions. Weather monitoring equipment will deliver data that can be leveraged to accurately calculate evapotranspiration (ET) and crop water usage. This will help with irrigation scheduling and the construction of various models. The telemetry systems aggregate all of the data on the cloud for easy access from computers and mobile devices. Utilization of these technologies and equipment will save water and thereby reduce greenhouse gas (GHG) emissions by effectively giving the grower "eyes under the soil." | \$224,060 | Kern | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------------|--|-----------------|--------|--|
| Grapeman Globe Thermal Ranch LP | Globe Ranch will implement an array of products and technologies aimed at providing farm management with the tools and data necessary to make more informed irrigation decisions. First, soil monitoring equipment will measure the water content of the soil from just below the surface to 60 inches deep. The real-time data will demonstrate how far water is penetrating the soil during irrigation cycles, allowing the grower insight that can lead to smarter, timelier, and more effective irrigation decisions. Weather monitoring equipment will deliver data that can be leveraged to accurately calculate evapotranspiration (ET) and crop water usage. This will help with irrigation scheduling and the construction of various models. The telemetry systems aggregate all of the data on the cloud for easy access from computers and mobile devices. Utilization of these technologies and equipment will save water and thereby reduce greenhouse gas (GHG) emissions by effectively giving the grower "eyes under the soil." | \$83,570 | Kern | Yes |
| Grapeman Maricopa 166 Ranch LP | 166 Ranch will implement an array of products and technologies aimed at providing farm management with the tools and data necessary to make more informed irrigation decisions. First, soil monitoring equipment will measure the water content of the soil from just below the surface to 60 inches deep. The real-time data will demonstrate how far water is penetrating the soil during irrigation cycles, allowing the grower insight that can lead to smarter, timelier, and more effective irrigation decisions. Weather monitoring equipment will deliver data that can be leveraged to accurately calculate evapotranspiration (ET) and crop water usage. This will help with irrigation scheduling and the construction of various models. The telemetry systems aggregate all of the data on the cloud for easy access from computers and mobile devices. Utilization of these technologies and equipment will save water and thereby reduce greenhouse gas (GHG) emissions by effectively giving the grower "eyes under the soil." | \$34,120 | Kern | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------|--|-----------------|-----------------|--|
| Grapeman S&S 160 Ranch LP | S&S Ranch will implement an array of products and technologies aimed at providing farm management with the tools and data necessary to make more informed irrigation decisions. First, soil monitoring equipment will measure the water content of the soil from just below the surface to 60 inches deep. The real-time data will demonstrate how far water is penetrating the soil during irrigation cycles, allowing the grower insight that can lead to smarter, timelier, and more effective irrigation decisions. Weather monitoring equipment will deliver data that can be leveraged to accurately calculate evapotranspiration (ET) and crop water usage. This will help with irrigation scheduling and the construction of various models. The telemetry systems aggregate all of the data on the cloud for easy access from computers and mobile devices. Utilization of these technologies and equipment will save water and thereby reduce greenhouse gas (GHG) emissions by effectively giving the grower "eyes under the soil." | \$92,620 | Kern | Yes |
| Grapery, Inc. | Grapery is a table grape growers farming premium table grapevines at Tulare County and Kern County. In this project, Grapery plans to add soil- and plant-based sensors to its existed vineyards to optimize the irrigation scheduling. It is expected that the goal of water conservation can be achieved by accurately monitoring the water efficiency in the soil and closely monitor the water stress of grapevines. Meanwhile, the greenhouse gas (GHG) emission reduction can also be accomplished because of reduced pumping operation time. | \$74,775 | Kern & Tulare | Yes |
| Greengate SLO LLC | The scope of the proposed project is to install soil moisture and evapotranspiration monitoring hardware and telemetry. | \$54,645 | San Luis Obispo | No |

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------------|---|-----------------|----------|--|
| Groveland Projects | <p>Groveland Projects is located in Big Oak Flat, CA on the outskirts of Yosemite National Park. There are multiple products produced on the farm including fruits and nuts from a multi-crop orchard, Community Supported Agriculture (CSA) memberships for a vegetable garden, and goat/sheep/hog value-added products that serve the local community and tourist traffic to Yosemite.</p> <p>This irrigation project will reduce (greenhouse gas) GHG emissions from on-farm groundwater extraction to near zero by updating our solar electric generation system, and bringing the electricity to the well to replace a gas generator.</p> <p>This project will also minimize groundwater pumping time by collecting rain and water from a seep to supplement the use of a stressed groundwater basin.</p> <p>The main water savings goals will be accomplished by installing a sub-surface, branched-drain irrigation system in the orchard. That will be supplied primarily by re-used domestic greywater and secondarily by groundwater.</p> | \$28,145 | Tuolumne | No |
| Guthrie Investment Company Inc. | <p>The focus of this project is to upgrade two inefficient wells and transition the property to an efficient water and greenhouse gas (GHG) citrus operation with fanjet micro-irrigation system with a distribution uniformity of 90%. The main components of this project include: a reservoir to store and capture rain water, soil moisture sensors and a weather station to closely manage water use, variable frequency drive (VFD) to ensure pumping efficiency, variable rate chemical injection pumps to precisely apply fertilizers, flow meters to check water use, and automated valve control to decrease unnecessary travel and soil compaction. Pressure compensating valves will also be installed to ensure uniform and efficient water distribution. Our collaborators include: Southern California Edison to increase energy efficiency, Rain for Rent to assist in water calculation, and the Porterville Economic Development Center and Tulare County Farm Bureau to improve the surrounding community.</p> | \$132,056 | Tulare | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-----------------------------|---|-----------------|-----------------|--|
| H and M Ranches | Installing soil moisture monitoring and a flow meter that is capable of being paired with telemetry on 60 acres of navels. This will conserve water by improving irrigation efficiency and scheduling and result in reduced greenhouse gas (GHG) emission due to lower pumping requirements. | \$51,282 | Tulare & Fresno | Yes |
| Hammond Vineyards LP | Soil moisture sensors and well monitoring tools are being added to an existing monitoring system, which sits on 207 acres of wine grapes | \$48,504 | San Luis Obispo | No |
| Happy Orchards Inc | Happy Orchards is looking to improve water use efficiency by installing Hortau Irrigation Management Systems. This will allow our operations to improve water efficiency and reduce greenhouse gas (GHG) emissions by knowing when to turn pumps on and off real time and only irrigate the amount necessary to replenish the rootzone. | \$94,050 | Butte | Yes |
| Harnish - Five Points, Inc. | Converting two electric deep wells to variable frequency drive (VFD). | \$77,085 | Fresno | No |
| Hass Heights Growers, Inc. | Existing irrigation system with at least 8 watermark sensors will be installed along with a solar array, which will provide 80% of the power to run the well pump. | \$49,962 | San Diego | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---|--|-----------------|-----------|--|
| Henrique Alves | Conversion of existing high-pressure micro sprinkler irrigation system to low-pressure trickle irrigation system in our 16.3 acre family almond orchard. New system will feature pressure compensating emitters that will allow for uniform water distribution throughout the field down to 10 PSI. New system will also result in smaller wetted surface and less evaporation loss. This means more water for the trees and less water for the weeds and atmosphere. Proposed system will also include a flow meter so that irrigation monitoring and scheduling can be optimized. The proposed project also includes soil moisture sensors and a data logger which, when used along side California Irrigation Management Information System (CIMIS) data, will also add to creating a more efficient irrigation schedule. New system will result in less tractor trips through field because of less weeds and less ATV trips through field for system maintenance. This will reduce greenhouse gas (GHG) emissions. This system will also reduce pumping which means big water saving. | \$14,753 | Fresno | Yes |
| Hermosa Tierra Inc. | Will install and implement an advanced irrigation management system with soil tensiometers, flow meters, a variable frequency drive (VFD) and solar panel technology. | \$200,000 | Tulare | Yes |
| Herrera Farming | A micro irrigation system will be added to the 18 acre property. | \$19,632 | Butte | No |
| Highland Springs Conference and Training Center | Will convert an existing irrigation well to a solar powered well. Also existing thin walled drip lines will be replaced with thick walled emitter lines. Moisture sensors will also be installed to prevent overwatering. | \$325,000 | Riverside | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-----------------------------|---|-----------------|-----------|--|
| Highway 58 LLC | Project will use soil moisture, weather, and flow meter data. New A753 McCrometer/Adcon 3G cellular soil moisture station will be installed. Station is solar powered for 24/7 operation. Data will be time stamped every 15 minutes. The stations store 4-6 months of data locally in case cellular communications break down. Site will be equipped with an Adcon SM-1 48" (120cm) soil moisture probe and a pressure sensor. The probe provides a volumetric (vol%) moisture reading every 4" as well as a temperature reading every 12". A pressure sensor will be installed on the drip line near the soil moisture probe to monitor system pressure and will be used to calculate run times. One field station will also be equipped with weather sensors to calculate ETo/ETc values. This includes Temp, RH, Solar Radiation, Wind Speed. ETo values will be used to calculate daily & weekly ETc values and coordinated with soil moisture and flow meter readings. Data all available via CropCONNECT web platform. | \$3,708 | Kern | Yes |
| Howard, Gordon & Sandi, LLC | Eastslope is a 79 acre farm in Coachella Valley that produces table grapes. The farm utilizes an existing lined reservoir, and two pumps to move water to the irrigation system. Currently both pumps are running at a low efficiency rate of 52 percent. The proposed project would change out both pump systems, and increase the efficiency rate to 82 percent. In addition, pumping time will be reduced by another 15-20 percent because of the installation of two new filter systems (filtaworx). The larger of the two pumps, would then be converted to a variable speed drive. Along with the efficiencies created through the new pump systems, a weather based soil monitoring system will also be integrated into the project creating a 10 percent water use efficiency benefit on the farm. | \$159,038 | Riverside | No |
| Huerta Family Farms Inc | The project is a conversion of flood irrigation to drip irrigation. The project's goal is to increase irrigation efficiency and reduce greenhouse gas emissions. The proposed project will include soil moisture sensors to optimize irrigations and utilize evapotranspiration (ET) based irrigation schedules. More efficient pumps will be designed and installed to supply adequate pressure to optimize the distribution uniformity of the proposed system. | \$319,460 | Fresno | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------------------|---|-----------------|-----------------|--|
| Inland Empire Utilities Agency (IEUA) | Cal Poly University Farm Water Conservation Project | \$75,496 | San Bernardino | No |
| Iyer Farms | Project will include the installation of Hortau's irrigation management system. In addition 2 flow meters will be added along with 2 variable frequency drives (VFD's). Also being added is a weather station to help with EFT. | \$193,238 | Merced | Yes |
| J & R Kallfsbeek | This project includes a 273 acre property that we would like to include irrigation management practices on. We are seeking to add Soil Moisture stations from Irrigate.net out in the fields to monitor our irrigation efficiency by being able to view the data online that is relayed through a telemetry network. We also want to monitor our pumps efficiency by adding a flow meter to the discharge, and pressure sensors before and after the filter. This would be connected to a telemetry network as well. We also aim to add an organic acid injector, well transducer to monitor the water table, and a full (Evapotranspiration) ET station. We believe that with access to this information, along with our proposed ET data, we could reduce our water use and decrease our (greenhouse gas) GHG Emissions by irrigating more effectively. | \$85,481 | Colusa | No |
| J & S Farms | The project will remove a 50 horse power (HP) electric vertical shaft turbine along with a 120 HP diesel booster and install a 125 HP electric powered turbine pump with variable frequency drive (VFD) control. To increase water savings, weather/soil moisture monitoring, a flow meter, and volumetric management will also be implemented on the 107.758 acres of vegetables. | \$165,853 | San Benito | No |
| J.G. Boswell Company | Project will install remote field monitoring in pistachio field along with soil moisture sensors. | \$183,921 | Kern | No |
| Jack Ranch SLO | The scope of the proposed project is to install soil moisture and evapotranspiration monitoring hardware and telemetry. | \$61,378 | San Luis Obispo | No |
| Jacklich Farms | This project will install a low pressure micro mister irrigation system, which will replace the current flood irrigation system. In addition the current diesel pump will be replaced with a more efficient electrical pump. | \$89,202 | San Joaquin | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------|---|-----------------|--------|--|
| James Smith Farms | For this project, pump flow meters and soil moisture meters will be installed to improve the monitoring capabilities and efficiency of the existing solar-powered irrigation system on 256 acres of walnuts. | \$75,742 | Glenn | No |
| Jeb Headrick Farming | The Exeter Ranch project is located on 190.16 acres near Exeter, Ca. The existing site is currently being farmed in wheat and corn with flood irrigation. The proposed project will convert the property to a pistachio orchard and change the irrigation type from flood irrigation to drip. A smart irrigation controller and soil moisture sensors will be installed on the project to maximize irrigation efficiency. A variable frequency drive (VFD) and solar system will be installed to dramatically improve the energy efficiency of the system will helping to offset any greenhouse gas (GHG) emissions through the production of green energy. The proposed project will be a model in sustainable agricultural practices for the agricultural community and surrounding region. | \$200,000 | Tulare | Yes |
| Jeff Clark Farms | The proposed project will convert 43.20 acres from flood to drip. The farm currently has 21.6 acres of mature pistachio trees planted in 1994 and 21.6 of eight leaf pistachio planted in 2007. The proposed project shall convert flood irrigated farm land to point source drip with an smart irrigation controller, moisture sensors, weather station, variable frequency drive (VFD), holding pond and solar. This project shall drastically reduce water use and the production of greenhouse gas (GHG). | \$183,590 | Tulare | Yes |
| JEG Livingston Ranch LLC | JEG Livingston Ranch 370 acres of Almonds in Livingston, CA. is proposing to install an advanced irrigation management system which will enable the operation to save water and reduce greenhouse gas (GHG) while farming Almonds. We are proposing soil moisture tensiometers and a weather station both which allow for real time monitoring via mobile electronic devices or computers. With the advanced irrigation equipment. JEG Livingston Ranch will be able to manage the crop's water needs resulting in a 15% water savings and an energy savings reduction. | \$62,745 | Merced | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|---|-----------------|--------|--|
| Jim Jackson Farms | Conversion of existing organic peach orchard from a standard electric motor powered flood irrigation system to a solar powered electric motor sub-surface drip irrigation system. The new system will use Variable Frequency Drive (VFD) technology to allow for irrigation management flexibility, and multiple-point moisture monitoring will allow for precision irrigation applications. | \$133,231 | Fresno | Yes |
| Jim Moglia | This project is for upgrading my current irrigation system to a more efficient system and to also install remote field monitoring systems to monitor soil moisture, weather, and to control the pump on the field. I also want to upgrade my pump to a more efficient and less energy using pump. I would also like to install a gypsum machine. Gypsum machine will allow for better wetting of the root zone for water absorption into the trees and vines. The use of a solution machine will also allow us to amend water quality (with gypsum) and reduce negative impacts on soil structure by increasing water infiltration efficiency and reducing the build-up of harmful salts. The solution machines can also be used to time fertilizer applications which increases the plants ability to utilize nutrients and water applied. | \$167,305 | Fresno | No |
| Joe H. Silva | This project will install a new and more efficient drip irrigation system, a soil moisture sensor station, a pump controller, a weather station and a new pump. | \$43,989 | Fresno | Yes |
| Joeseph Cinquini | Project will add Soil Moisture stations from Irrigate.net out in the fields to monitor the irrigation efficiency by being able to view the data online that is relayed through a telemetry network. Pressure sensors and flow meters are also being added in the project scope. | \$140,316 | Butte | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-----------------------------|--|-----------------|--------|--|
| Johl Enterprises | We would like to install and implement the use of soil moisture and climate monitoring equipment at the Lincoln road property. The use of soil moisture sensors in this field will reduce erosion caused by overwatering. Knowing the percentage of water in the soil profile is important to nutrient management because excess water will leach the nutrients into the deeper depths of the soil and eventually, into the water table. Preventing this helps to protect the water quality. Air quality will be improved by using less energy, therefore reducing greenhouse gases (GHG). Timing and application of pesticides will be scheduled more effectively, eliminating spray drift. This helps manage pest population, pesticide resistance, human health, and increases environmental quality; fostering a stronger desire for ecological stewardship. | \$15,326 | Sutter | No |
| Jose Jimenez | Installing a weather station, a soil moisture monitoring system and a Seametrics Flow Meter from Irrigation Matters. | \$15,973 | Fresno | No |
| Julian Pierucci & Son Farms | Installing real time remote soil moisture, Evapotranspiration weather, and flow meter monitoring equipment to help irrigate more efficiently. The sensors installed will read soil moisture every 4" down to 48". The sensors will also provide 4 soil temperature readings at 12" intervals. Each station will also have a pressure sensor attached directly to the drip line to monitor proper system pressure and calculate irrigation run time. The sensors will be used to determine the depth of irrigation and the most efficient run time to achieve proper depth of irrigation. Weather sensors will be installed and the data will be used to calculate a local daily evapotranspiration (ET) value. Crop water use observed on the soil moisture sensors will be balanced by calculated ET values and prevent unnecessary irrigation events. Existing flow meters will have telemetry units added to automatically measure reduction in water use and save greenhouse gas (GHG) emissions through reduced pumping/irrigation use. | \$12,940 | Kern | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------|--|-----------------|--------|--|
| Kalfsbeek Land & Holding | This project includes multiple properties encompassing 724 acres that we would like to include irrigation management practices on. We are seeking to add Soil Moisture stations from Irrigate.net out in the fields to monitor our irrigation efficiency by being able to view the data online that is relayed through a telemetry network. We also want to monitor our pumps efficiency by adding a flow meter to the discharge, and pressure sensors before and after the filter. This would be connected to a telemetry network as well. We also want to add 2 organic acid injectors and 1 well transducer to monitor our water table while pumping. We believe that with access to this information, along with California Irrigation Management Information System (CIMIS) Evapotranspiration (ET) data, we could reduce our water use and decrease our greenhouse gas (GHG) emissions by irrigating more effectively. | \$200,000 | Colusa | No |
| KG Farms | The 93 acres of grapes impacted in this project are currently irrigated using a floor irrigation system, which will be converted over to a microspray irrigation system. Solar technology will also be installed which will help to offset greenhouse gas (GHG) emissions. | \$200,000 | Tulare | Yes |
| Killdeer Farms, LLC | Project will be adding a sulfur burner at the pump station to amend water quality, and therefore soil chemistry, to reduce the buildup of harmful salts in the soil. | \$43,025 | Kern | No |
| Kimmelshue Orchards | This project will add Soil Moisture stations from Irrigate.net out in the fields to monitor irrigation efficiency by being able to view the data online that is relayed through a telemetry network. Pump efficiency will be heightened by adding a flow meter to the discharge, and pressure sensors before and after the filter. This will be connected to a telemetry network as well. | \$30,225 | Butte | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-------------------------------|--|-----------------|-------------|--|
| Kirkjan Investment Properties | The proposed project will convert the farm from flood irrigation to a drip irrigation system, reconstruct a unlined water holding basin, and upgrade to new pump station that includes a variable speed drive, and upgraded motor and bowl assembly. | \$193,733 | Riverside | No |
| KTN Joint Ventures | 374 acre project that will add soil moisture stations tied into a telemetry system. Pump efficiency will be monitored by adding a flow meter, which would also be tied into telemetry system. | \$200,000 | Colusa | No |
| L.E. Cooke Co | L.E. Cooke Nursery is located at 26333 Road 140 in Tulare County and sits on approximately 350 acres. The proposed project will install water sensors, a weather station. Two Variable Frequency Drives (VFD) will be installed to reduce energy use and match pump flow to load requirements of the irrigation system along with the installation of a 30 kW solar system. In addition, the project convert overhead spray irrigation to drip in the liner container yard. | \$199,797 | Tulare | Yes |
| Lagorio Properties | Replace existing flood irrigation for alfalfa with drip irrigation for walnuts | \$70,807 | San Joaquin | No |
| Lagorio Properties | Install sub surface drip irrigation system for 68 acres tomatoes which is currently being irrigated by flood irrigation. | \$31,759 | San Joaquin | Yes |
| Lagorio Properties | Convert tomatoes from flood irrigation to drip irrigation with soil moisture monitoring | \$22,975 | San Joaquin | Yes |
| Lambeth Farms | Optimizing energy and water use on farm through installation of: A) Installation of a variable frequency drive (VFD) and electric panel on the 30 horsepower (HP) irrigation pump to improve energy efficiency, reduced peak load, reduce greenhouse gas (GHG) emissions, and B) installation of a real time remote field monitoring equipment and a weather station to assist in the calculation of evapotranspiration (ET) designed to improve irrigation efficiency and reduce vehicular travel and labor. In addition, 4 pressure sensors to monitor line pressure and pre- and post-filter will also be included. | \$24,389 | Fresno | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|----------------------------|--|-----------------|---------------|--|
| Lange Vineyards | This project will convert a canal used for the conveyance of irrigation water into a pipeline to eliminate carriage losses as a result of evapotranspiration (ET). The project will also result in a change from groundwater to surface water. | \$69,470 | San Joaquin | No |
| Larry Hirahara Family Farm | Installation of Web-based System to Monitor Weather, Crop Evapotranspiration (ET), Flowmeter, Soil Moisture and Control Valves. To facilitate ET based irrigation scheduling. Convert blueberry irrigation system from low-volume domestic well to existing 30 hp variable frequency drive (VFD). Connect surface water source to existing drip system. | \$23,224 | Madera | Yes |
| Legacy Growers LLC | The purpose of this project is to remove one portable Chevy 350 V8 propane booster (Asset ID: BP 32, refer to Appendix B.3 in the project design) pump and install a single 60 HP electric booster with variable frequency drive (VFD) control. In addition, 2,388 ft. of concrete pipeline will be removed and replaced with PVC pipeline which will increase water savings and reduce greenhouse gas (GHG) emissions. Weather/soil moisture sensors, a flow meter, and volumetric management will also be implemented to the 76.8 acres of vegetables served by this pump to increase water savings. | \$157,910 | Santa Barbara | No |
| Leo Schulz | The project plan is to convert from flood irrigation on 25.71 acre parcel of almonds due to be planted 1/8/2016 to a micro sprinkler and drip irrigation system. The project plan is also to convert the 10 horsepower (HP) electric agriculture pump/well to a solar electric system. | \$67,793 | Kings | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---|--|-----------------|-----------|--|
| Leroy Del Don - Del Mar Farms Dos Palos | Installation of 130 acres of subsurface row crop drip irrigation with a propane booster pump to replace the existing flood irrigation system with a diesel booster pump. The conversion will also include the installation of the following: 1) Pure Sense remote accessible in field soil moisture sensors & in field weather station to help schedule irrigation events 2) Netafim NMC Pro irrigation controller (automation) that will monitor and record the amount of water and fertilizer applied to the field and automatically change field valves based on the current irrigation program 3) Seametrics magnetic flow meter to help monitor the irrigation system flow rate in gallons per minute and the total water applied to the field in acre feet 4) Multiple pressure gauges to verify the system is operating as designed | \$200,000 | Merced | No |
| Lodge Ranch Enterprises | Retrofit the irrigation system and water management on 40 acre citrus and avocado farm to save water and save energy. Update old irrigation reservoir pump with new efficient motor, variable frequency drive (VFD) and flow metering with pressure sensors to reduce energy use. Installation of solar equipment to power pumps together with weather and soil moisture monitoring hardware. An irrigation scheduling management plan will be implemented based on soil moisture and site-specific evapotranspiration (ET) data to lower water and energy use. | \$200,000 | San Diego | No |
| Lohse Ranch | The project calls for the installation of soil moisture stations, inline pressure sensors, and flow meters throughout the orchard and pump station. | \$11,254 | Glenn | No |
| Lone Palm Ranch LLC | The scope of this project calls for the installation and implementation of a new irrigation management system; this includes installing soil moisture sensors and data management software. In addition 4 flowmeters will be installed along with a weather station. | \$70,301 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|----------------------------|--|-----------------|--------------------------|--|
| Louis Riccomini & Sons | Installing real-time remote soil moisture and evapotranspiration (ET) weather monitoring equipment on 350ac of pistachio to support more efficient irrigation. The sensors installed will read soil moisture every 4" down to 48". The sensors will also provide 4 soil temperature readings at 12" intervals. Each station will also have a pressure sensor attached directly to the drip line to monitor proper system pressure and calculate irrigation run time. The sensors will be used to determine the depth of irrigation and the most efficient run time to achieve proper depth of irrigation. Weather sensors will also be installed and the data used to calculate a local daily ET value. Crop water use observed on the soil moisture sensors will be balanced by calculated ETo/ETC values and prevent unnecessary irrigation events. Existing flow meters will be used to measure reduction in water use and save GHG emissions through reduced pumping/irrigation use. | \$8,343 | Kern | Yes |
| lp farms inc | New yellowmine for watering carrots and potatoes | Not Provided | Kern | Yes |
| Lucas Custom Farming Inc. | Soil moisture stations and weather monitoring stations will be added to ensure water use is better regulated. | \$35,048 | Stanislaus & San Joaquin | Yes |
| Maddox Farms | This project will convert 310 acres of flood irrigated almonds over to a drip irrigation system. | \$200,000 | Fresno | Yes |
| Malcolm McCormack Inc. | The project includes the installation of soil tensiometers to help manage their irrigation. In addition, the two 2 remaining fields will be converted from flood and furrow irrigation to drip | \$184,965 | Sacramento | Yes |
| Manuel C. Leal & Son Dairy | We are converting approximately 96 acres of flood irrigated row crops into drip irrigated orchards. Approximately 63 acres will be planted with pistachios and the remaining 33 acres will be planted with almond trees. | Not Provided | Tulare | Yes |
| Marie Bordin-Huitt | This 2 acre property wil have installed on it; soil management stations along with a telemetry network and flow meters which will also he attached to a telemetry network, and pressure sensors. | \$166,833 | Butte | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|-----------|--|
| Mark Martinez Trust | Project will convert from flood to micro-jet irrigation, changing from not having an irrigation water management plan to irrigation scheduling using soil moisture monitoring, a weather station with evapotranspiration, and an in-line irrigation pressure sensor. Additionally, a solar photovoltaic (PV) array to offset the electric pumps, proactive chemical treatment of drip lines, and filter station with pressure sensing. | \$60,723 | Merced | Yes |
| Marthedal Farms | This project will include the installation of a new turn-key irrigation system comprised of a high efficiency variable frequency drive (VFD) pumping plant, filtration system and a pressure compensating drip irrigation system. | \$200,000 | Fresno | Yes |
| Matt Jackson | Installing a high efficiency, low pressure double line drip irrigation system on 162 acres of stone fruit that is currently flood irrigated. Pressure compensating drip tubing will be used to ensure that high distribution uniformity (DU) is attained. A flow meter and moisture monitors will be installed to effectively manage irrigation scheduling. | \$191,315 | Fresno | Yes |
| Matt W. Fatchen | This 54 acre property will add soil moisture stations that will be connected to a telemetry network. Added also will be a new flow meter and pressure sensors that will also be connected to the telemetry system. | \$20,411 | Butte | No |
| Maurice Dillow | Purple Hills Ranch, 59.2 acres, currently utilizes a reservoir that has no lining for water retention. The proposed project would reconstruct and line the existing reservoir to conserve water and prevent groundwater leakage. Also proposed for the ranch is a variable speed pump to reduce energy usage. upgraded motor and bowl assembly. The third component of the project is to install weather based soil sensors on the ranch to improve water efficiency, reduce water use, and reduce energy demands related to pumping of water. | \$34,078 | Riverside | No |
| Maurice Dillow | The project would install a variable speed drive (VFD) controller and upgrade the bowl assembly at the pumping station on Pink Lady Ranch, which is 100 acres within Riverside County. The VFD pump will improve water use efficiency on the farm, as well as reduce energy required to irrigate because the proposed pump will perform with less energy. | \$67,590 | Riverside | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-----------------------------|---|-----------------|--------|--|
| McLean Spray Co., Inc. | Installing soil moisture monitoring and a flow meter that is capable of being paired with telemetry on 109 acres of citrus. This will conserve water by improving irrigation efficiency and scheduling and result in reduced greenhouse gas (GHG) emission due to lower pumping requirements. | \$173,135 | Tulare | Yes |
| Meena Farms | This project will add an advanced irrigation management system with soil tensiometers linked to smart stations. Included within the project scope also will be 2 flow meters along with 2 variable frequency drives (VFD's). | \$194,659 | Merced | Yes |
| Melba Myers | Project seeks to update irrigation management practices on 300 acres. Soil moisture stations from irrigate will be added along with measurements in irrigation being viewed online using a telemetry network. A new flow meter and pressure sensors would also be added to a telemetry network. All of this, along with on farm evapotranspiration (ET) data, would help reduce water use and lower greenhouse gas (GHG) emissions. | \$105,144 | Colusa | No |
| Melissa Pruitt Farms | Installation of 68 acres of subsurface row crop drip irrigation with an electric booster pump to replace the existing flood irrigation system with a diesel booster pump. The conversion will also include the installation of the following: 1) Pure Sense remote accessible in field soil moisture sensors & in field weather station to help schedule irrigation events 2) Variable frequency drive (VFD) electrical panel to ensure the system operates at the correct pressure and only uses the required electricity 3) Netafim NMC Pro irrigation controller (automation) that will monitor and record the amount of water and fertilizer applied to the field and automatically change field valves based on the current irrigation program 4) Seametrics magnetic flow meter to help monitor the irrigation system flow rate in gallons per minute and the total water applied to the field in acre feet 5) Multiple pressure gauges to verify the system is operating as designed | \$200,000 | Merced | No |
| Michael Banducci Pistachios | This project will upgrade the current flood irrigation system to a more closely monitored, micro-irrigation drip system. Also on the 110 acres of pistachios there will be sand filters installed. | \$155,048 | Kern | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|------------|--|
| Michael Fantozzi Farms | This project will convert an existing row crop field on flood irrigation to a permanent planting of Almonds on a highly efficient double line drip irrigation system. After the project is executed it will save water and carbon emissions. The drip irrigation system will save water and apply water to the field more uniformly than a traditional flood field. The use of a electric motor will eliminate the need to use a diesel motor for sprinklers and surface irrigation. Also with using the irrigation system rather than flooding there will be less passes through the field with a tractor to prepare it for a flood irrigation resulting in saving diesel emissions. After the project is completed, I will be able to prove that the system is more efficient with water than flood irrigation and reduces carbon emissions in the atmosphere. | \$32,600 | Stanislaus | Yes |
| Michael G Jackson | Installing a high efficiency, low pressure double line drip irrigation system on 227 acres of stone fruit that is currently flood irrigated. Pressure compensating drip tubing will be used to ensure that high distribution uniformity (DU) is attained. A flow meter and moisture monitors will be installed to effectively manage irrigation scheduling. | \$200,000 | Tulare | Yes |
| Michael Lee | This project will switch from a diesel powered pump flood irrigation system to a micro irrigation system, which will be powered by solar panels. These new measures aim to reduce water use and greenhouse gas (GHG) emissions. | \$56,291 | Yuba | No |
| Micheal Myers | Multiple weather stations will be added to 254 acres of almonds, grapes and walnuts. Also being added is an evapotranspiration (ET) system, a wind speed/direction sensor, rain gauge and a pyranometer. | \$118,204 | Colusa | No |
| Michigian Home Ranch | This project will reduce water usage by installing an evapotranspiration (ET) based smart irrigation controller system, moisture sensors, flow meters, and a weather station. In addition, the project will reduce greenhouse gas (GHG) by installing a variable frequency drive (VFD), solar panels to power the pump and the current diesel driven pump will be removed. | \$181,190 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|----------------------------|---|-----------------|----------|--|
| Mike Woolf Farming Co. | A 6 acre solar project that will replace energy used to run the current technology installed on site. Moisture probes will be installed to reduce unnecessary irrigating. | \$1,496,844 | Kings | No |
| Mission Holdings | The purpose of this project is to install a 45.99 kW DC solar PV system to power the existing 50 HP electric vertical shaft turbine pump and 100 HP electric booster pump with variable frequency drive (VFD) control. These pumps serve blocks 201, 202, 204, 205, 207, 208, 210, and 211 (total of 156.817 acres) on the ranch map located in Appendix A.1. This will reduce the amount of greenhouse gas (GHG) emissions created by the energy it requires for pumping. In addition, weather/soil moisture sensors and volumetric management with the existing flow meter will also be implemented to the 156.817 acres of vegetables served by these pumps to increase water savings. | \$200,000 | Monterey | No |
| Mission Ranch Vineyard LLC | On 240 acres of wine grapes implementation of a real-time advanced irrigation management system using soil moisture sensors, evapotranspiration (ET) and weather sensors, dendrometers, and flow and pressure indicators. | \$94,217 | Monterey | No |
| MJB | The grower is applying to install multiple water management practices on this 15 acres of almonds. This grant request will further reduce greenhouse gas (GHG) emissions for this previously funded SWEEP Project. The first step to further reducing our GHG will be to install a solar system. The second part of this project is the install equip to generate on-farm evapotranspiration (ET) data for better timed irrigation. Our final request will be for a certified organic acid injection system. This project combined with the previously awarded management practices will allow for the most efficient way to monitor and apply irrigation. | \$62,069 | Butte | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-----------------------------|--|-----------------|-----------------|--|
| Mountain Vista Farms | The AquaMon-Leaf monitors allows growers to irrigate based on the continuous monitoring of plant hydration. The LeafMon integrates a suite of environmental sensors and continuously monitors leaf and air temperature, humidity, and photosynthetically active radiation (PAR). These measurements are used to develop a Crop Water Stress Index (CWSI), which will determine when an irrigation should be applied. The AquaMon system includes five leaf monitoring systems, three soil sensors, and an irrigation line pressure switch. With this system, we can measure water in the entire soil to plant continuum and know how much water was used. | \$13,555 | Tulare | Yes |
| Myers Seed | This project includes a 345-acre property that will include irrigation management practices on. Project will add Soil Moisture stations from Irrigate.net out in the fields to monitor irrigation efficiency by being able to view the data online that is relayed through a telemetry network. Pumps efficiency will be heightened by adding a flow meter to the discharge, and pressure sensors before and after the filter. | \$65,243 | Colusa | No |
| NC Ranches | Project will lead to the Installing of soil moisture monitoring and a flow meter that is capable of being paired with telemetry on 27 acres of almonds. | \$23,300 | Tulare | Yes |
| Neal Springs Vineyard, Inc. | This project will include the conversion of a propane irrigation system into an electric system. The project will also include a solar project to run the converted electric irrigation system to decrease (greenhouse gas) GHG emissions through the conversion and the use of renewable energy. The project includes the installation of Tule ET plant sensors and irrigation management system to improve irrigation scheduling and reduce farm water use. Variable frequency drives (VFD) will be installed to improve energy efficiency and improve overall irrigation system uniformity. A filter will be installed for the irrigation water to prevent clogging and damage to the irrigation system. The filter will improve uniformity and allow less overall water use by improving system accuracy and efficiency. | \$85,681 | San Luis Obispo | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|--------|--|
| New Dawn Farms | The Flood to Drip conversion project is located in Five Points, Ca. The proposed project convert flood irrigation of Pima cotton and installing drip irrigation for a new pistachios trees. The project will include and variable frequency drive (VFD), smart irrigation controller, moisture sensors, and weather station. It will also help to improve greenhouse gas (GHG) emissions by converting a diesel buster pump to electric. | \$199,959 | Kings | Yes |
| Newland Family Farms | Incorporating soil moisture stations along with a telemetry system that will allow data to be viewed online. Will also install a flow meter to better monitor pump efficiency and a pressure sensor that would be attached to the main line. | \$14,820 | Glenn | No |
| Nielsen's Creamery | This project is going to add two additional tulle technology sensors to our ranch, that will help in knowing when the trees need water. We have some installed already, and they reduced our water usage for each field that the sensors were in. We now want to add more to monitor more areas of the orchard. | \$10,000 | Tulare | Yes |
| Nock Orchards Inc | This is a 97 acre property that we seek to add an Evapotranspiration (ET) and solar arrays too. The walnuts and almonds already have existing soil moisture and pump monitoring stations, but we believe adding solar and ET based irrigation scheduling from Irrigate.net, will greatly reduce our water use and greenhouse gas (GHG) emissions. We also intend to add organic acid injectors to the property to help manage our nutrients and also install 2 variable frequency drive (VFD) and a high efficiency motor to reduce our GHGs that much more. | \$191,153 | Butte | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|---|-----------------|--------|--|
| NOR CAL FARMING | On 111 acres of property will be installed soil moisture and pump station monitoring equipment, all of which will be monitored by telemetry software. The current irrigation system on this property will be converted two low pressure irrigation systems; one will be a double line buried drip system, while the other will be a low pressure micro sprinkler system. This new irrigation system will be powered by a 75 horsepower (HP) variable frequency pump (VFD). | \$200,000 | Butte | Yes |
| NorCal Nut Company | This project includes a 117 acre property that we would like to include irrigation management practices on. We are seeking to add Soil Moisture stations from Irrigate.net out in the fields to monitor our irrigation efficiency by being able to view the data online that is relayed through a telemetry network. We also want to monitor our pumps efficiency by adding a flow meter to the discharge, and pressure sensors before and after the filter. This would be connected to a telemetry network as well. We also intend to add an organic acid injector. By adding a certified organic acid injector, we can improve water infiltration, nutrient uptake, and maintain a clean, efficient irrigation system. We will also be able to reduce the migration of applied nutrients below the root zone. We believe that with access to this information, along with California Irrigation Management Information System (CIMIS) Evapotranspiration (ET) data, we could reduce our water use and decrease our greenhouse gas (GHG) emissions by irrigating more effectively. | \$61,966 | Yolo | No |
| Norman Etchison, Inc | Project will be installing telemetry technology. | \$60,277 | Kern | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------|--|-----------------|---------------|--|
| Norman Furtado Farms | Norman Furtado Farms proposes improving the irrigation system by changing from not having an irrigation water management plan to irrigation scheduling using soil moisture monitoring, a weather station with evapotranspiration (ET), and in-line irrigation pressure sensors, as well as maintaining a high distribution uniformity with water treatment equipment. Soil moisture, ET, and in-line pressure data will be reported in real-time to Observant software, accessible via computer, tablet or phone, along with customizable alerts to the grower. This will help determine when and how to irrigate, monitor irrigation pressure for quick identification of leaks, clogged lines, and help maintain overall distribution uniformity. The water treatment injector will help keep the drip lines clear of debris and proactively maintain a high distribution uniformity (DU). | \$11,450 | Fresno | Yes |
| NRG Enterprises, L.P. | The purpose of this project is to remove three portable Chevy 350 V8 propane booster pumps (Asset ID: BP 31, BP 36, BP 42, refer to Appendix B.3) and install a two 75 HP electric boosters with VFD control. In addition, 9,412 ft. of concrete pipeline will be removed and replaced with PVC pipeline which will increase water savings and reduce greenhouse (GHG) emissions. Weather/soil moisture sensors, 3 flow meters, and volumetric management will also be implemented to the 229 acres of vegetables (refer to Appendix A.1) served by this pump to increase water savings. | \$200,000 | Santa Barbara | No |
| Orosi Premium Citrus, LLC | Install a microsprinkler irrigation system on 78 gross acres of mature citrus to reduce both water and energy usage as compared to the inefficient furrow irrigation currently employed. Additionally, the irrigation wells will be retrofitted to improve pumping efficiency and thus further lower energy useage. Soil moisture instrumentation and water meters will be installed to optomize water useage. Finally, the microsprinkler irrigation system will eliminate the need for furrow irrigation tractor work and diesel fuel, resulting in further greenhouse gas (GHG) emissiom reduction. | \$112,600 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|---------------------------------|---|-----------------|---------------|--|
| OSR Enterprises, Inc. | The purpose of this project is to remove two portable Chevy 350 V8 propane booster pumps (Asset ID: BP 39, BP 41, refer to Appendix B.3 in the project design) and install a single 75 HP electric booster with variable frequency drive (VFD) control. In addition, 6,028 ft. of concrete pipeline will be removed and replaced with PVC pipeline which will increase water savings and reduce greenhouse gas (GHG) emissions. Weather/soil moisture sensors, 2 flow meters, and volumetric management will also be implemented to the 130.4 acres of vegetables (refer to Appendix A.1 in the project design) served by this pump to increase water savings. | \$200,000 | Santa Barbara | No |
| Paiva Farms Limited Partnership | This project includes a 100-acre prune property that we would like to include irrigation management practices on. We are seeking to add Soil Moisture stations from Irrigate.net out in the fields to monitor our irrigation efficiency by being able to view the data online that is relayed through a telemetry network. We also want to monitor our pumps efficiency by adding a flow meter to the discharge, and pressure sensors before and after the filter. This would be connected to a telemetry network as well. We also seek funding for drip tubing to finish converting our solid set sprinklers to a drip system. We believe that with access to this information, along with California Irrigation Management Information System (CIMIS) Evapotranspiration (ET) data, we could reduce our water use and decrease our greenhouse gas GHG Emissions by irrigating more effectively. | \$103,620 | Butte | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-------------------------------|--|-----------------|-----------------|--|
| Parks Land and Cattle Company | <p>Upgrade existing irrigation system on 60 acres of avocados to improve irrigation efficiency and reduce greenhouse gas (GHG) emissions.</p> <ol style="list-style-type: none"> 1. Installation of variable frequency drive (VFD) controller on the irrigation reservoir pump. 2. Install new self-cleaning filter which will reduce energy usage in pulling irrigation water from the reservoir. 3. Installation of flow meters on 3 wells and irrigation reservoir output line. 4. Install weather station, moisture sensors and California Irrigation Management Information System (CIMIS) that will be used to help schedule the frequency and duration of irrigation events. | \$26,170 | Santa Barbara | No |
| Paso Ono LLC | <p>Paso Ono Vineyard grows wine grapes on 37 acres near Paso Robles, CA. The vineyard manager currently uses flow meters and maintains data logs. With improved irrigation scheduling informed by soil moisture sensors and evapotranspiration (ET) measurements growers are expected to reduce water usage by 15%. The scope of the proposed project is to install a 20.805 kW DC solar electric (PV) system, soil moisture and ET and plant stress monitoring hardware and telemetry. With 15% savings from increased IWM, the solar component offsets rest of energy consumption for a net zero project. This project is projected to have water savings of 6.5 acre-inches per acre and reduce on farm greenhouse gas (GHG) emissions by 0.242757 Tonnes CO_{2e} per acre.</p> | \$172,421 | San Luis Obispo | No |
| Pepper Tree Ranch | <p>Project calls for the installation of remote field monitoring equipment and water quality treatment equipment. Also being added are soil moisture sensors and gypsum machines.</p> | \$40,868 | Kings | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------------------|--|-----------------|-----------------|--|
| Pomar Junction Vineyard & Winery | Pomar Junction Vineyard and Winery will incorporate Hortau's irrigation management system into 91.44 acres. These stations will monitor both field data weather and flow meter data. Modern day soil moisture tensiometers will monitor and record data from the field. All data will be reported to Hortau servers via cellular network. Once communicated to the Hortau server, it will be made available to the grower to aid in the irrigation decision process. Soil tension is a direct measurement of plant stress. By placing the sensors in the effective root-zone and taking into account weather data we will be proactive in the irrigation management. | \$55,991 | San Luis Obispo | No |
| Premier Agricultural Properties, LLC | <p>A total of 7 (5-avocado, 2-mandarin) field monitoring stations which are comprised of tensiometers, a pressure switch, unshielded temperature sensor and a shielded temperature sensor will monitor soil moisture and weather in the field. This data will aid the grower in maintaining an optimal soil moisture tension to mitigate plant stress. The tensiometers offer the ability for the grower to identify and water to plant needs.</p> <p>A weather station will be installed along with 3 pulse output flow meters will be installed with Hortau smart stations to compliment the field monitoring component of this irrigation management system.</p> <p>By measuring these parameters in the field, the grower will be able to optimize the management of this ranch.</p> | \$83,963 | Santa Barbara | No |
| Premier Mushrooms Inc. | An energy management system (EMS) will be installed to more effectively utilize pumps for the already existing water distribution system. | \$149,941 | Colusa | No |
| Premiere Agricultural Properties LLC | Project will install an advanced irrigation management system along with; soil moisture tensiometers, flowmeters and a weather station. | \$81,614 | Kern | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------------|--|-----------------|--------|--|
| R&D Farms LLC | The scope of the application includes the implementation of: installing a micro sprinkler system in place of a flood irrigation system, installing two gypsum machines, installing two variable frequency drives (VFDs), installing high efficiency motors on two pumping stations, installing high efficiency bowls on two pumping stations, installing a new 3-48 Lakos filter system, installing ten soil moisture monitoring stations, and installing two weather gateway stations and pumping station flow meters with remote field monitoring systems. | \$199,453 | Fresno | Yes |
| Raaviz Farms L.L.C | This 420 acre property will install and implement an advanced irrigation management system which will save water and reduce greenhouse gas (GHG) emissions. Installed in the project will be soil moisture tensiometers, flowmeters and a weather station. | \$93,309 | Kern | Yes |
| Radio Coteau Wine Cellars, LLC | The intent of our project is to reduce our estate vineyards use of irrigation water while reducing greenhouse gas (GHG) emissions with the installation of remote field monitoring equipment as well as a flow meter to monitor vineyard water use more precisely. The idea is to conserve groundwater by irrigating our vineyard blocks as efficient as possible. With the use of various soil moisture probes at specific locations around the ranch we can monitor the soil moisture, which helps us to determine appropriate irrigation intervals and depth of wetting. The moisture probes will allow us to monitor moisture along the vines effective rooting area, from 8" to 48" deep, which will keep us from overwatering. The proposed flowmeter will tell us exactly how much water is being pumped out into our blocks. | \$8,033 | Sonoma | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-----------------------------------|--|-----------------|-------------|--|
| Rajinder Chohan | A current flood irrigated alfalfa field will be converted to orchard production. The existing land is flood irrigated using two groundwater wells. The land will be converted to prunes on Olsen Micro-sprinklers. Solar panels will be installed on the pumps as well to have a fully self sustaining irrigation system, reducing power cost on electrical infrastructure. In addition remote field monitoring will be employed, with a 5-weather variable (Solar Radiation, Wind, Rain, Temperature and humidity). Weather station for Evapotranspiration (ET), and site specific weather conditions. Also flow meters will be placed on the new irrigation system ensuring documentation of applied water over the course of the irrigation season. | \$277,540 | Sutter | No |
| Rajkovich Brothers Partnership LP | This project sits on 293 acres and will have installed an irrigation management system, which includes soil tensiometers. | \$144,378 | Santa Clara | Yes |
| Ramos & Kley Ranches, LLC | Ramos & Kley farm 610 acres of almonds in Arbuckle, CA. is proposing to install an advanced irrigation system which will enable the operation to save water and reduce greenhouse gas (GHG). We are proposing soil moisture tensiometers and weather stations, all which allow for real time monitoring via mobile electronic devices or computers. Ramos & Kley will be able to manage the crop's water needs resulting in a 15% water savings and an energy savings reduction thus lowering pumping. | \$109,317 | Colusa | No |
| Rancho Santa Maria | Will install new water storage tanks, a variable speed pressure pump, pressure equalizing micro sprinklers and moisture irrigation sprinklers. | \$47,536 | Ventura | No |
| Reager Ranch | 54 acres of almonds will be converted from flood irrigation system to a micro irrigation system. | \$468,576 | Glenn | No |
| Reamer Farms | Project will change current crop of alfalfa over to vineyards. This project also includes the installation of a remotely controlled drip irrigation system along with a weather station and soil moisture sensors. | \$199,945 | Sacramento | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-----------------------------|--|-----------------|--------|--|
| Redwood Ranch and Vineyards | Moisture probes and a new telemetry system will be installed along with new software for more efficient irrigation of vineyards. Also added will be a flow meter to the irrigation pump. | \$23,140 | Sonoma | No |
| Reina Properties | This 420 acre property will install and implement an advanced irrigation management system which will save water and reduce greenhouse gas (GHG) emissions. Installed in the project will be soil moisture tensiometers, flowmeters, 1 variable drive frequency (VFD) and 1 weather station. | \$107,475 | Kern | Yes |
| Richard Atherton | On 26 acres of prunes will be added a soil moisture station connected to a telemetry station, along with flow meters and a 40 horse power (HP) variable frequency drive (VFD) added to the pump. | \$64,259 | Yolo | No |
| Rich-Pak Farms, LLC. | This project will install a soil moisture sensor and a weather sensor, along with a flow meter that will be paired with telemetry on 400 acres of clementines. | \$30,648 | Kern | Yes |
| Rick Jackson Farms | We will be installing real time remote field monitoring and water quality treatment equipment to help irrigate more efficiently. The sensors installed will be reading soil moisture from 6" to 40". The sensors will also read fertilizer applications, and soil temperature at various depths. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, depth of extraction by roots and adequacy of wetting. These remote field-monitoring units will include weather sensors to help irrigate based on evatranspiration (ET) and prevent unnecessary irrigation events. Soil temperature sensors will help me fertilize appropriately at the best temperatures. Not only am I going to be able to increase my water and fertilizer efficiency, but also I will be able to reduce energy usage by not irrigating only when necessary. Also, a solar project will be installed, which will help to reduce greenhouse gas (GHG) emissions due to energy demand from our irrigation pumps. | \$200,000 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|------------|--|
| Rio Blanco Dairy | Project will replace current flood irrigation system with subsurface drip tape irrigation. | \$103,766 | Tulare | Yes |
| RKJ Avocados | <p>The project will reduce energy use resulting in greenhouse gas (GHG) emission reductions and water savings. Current municipal water (8M gal/yr) and all electrical use will be eliminated.</p> <p>The 12-month project, beginning in Q2 2016, will install a new high-efficiency water treatment and distribution system. The Wellpure Water Treatment System uses no electricity or chemicals, produces no waste and allows "salty" well-water use on intolerant crops (avocados) while significantly reducing both water and fertilizer usage. The system will be integrated with 2, existing 500,000 gallon retaining ponds and will use ultra high efficiency variable speed pumps, solar panels, high efficiency sprinkler heads and sensors monitoring grove moisture and humidity. The irrigation system will be automated via a central computer. A hydroelectric system will also be added to recapture energy from waterfalls between the ponds. An eco system will be cultivated in the ponds to provide nitrates for fertilizer</p> | \$275,980 | San Diego | No |
| Robert Ott | Install a drip irrigation system according to Natural Resource Conservation Service (NRCS) Standard 441 on approximately 40 acres of almonds. This system will have a 92% distribution uniformity (DU) and is capable of meeting evapotranspiration (ET). Also to be installed will be a solution machine with gypsum silo and acid injection pump that will help with water infiltration reducing water use and pump run times. The project will also incorporate a soil moisture monitoring and weather data station in order to calculate crop demand based on ET data on site. | \$166,824 | Stanislaus | Yes |
| Rockn R Ranch | Rockn R Ranch is located Laton CA and farms both almonds and alfalfa. We are proposing the installation of an advanced irrigation system complete with soil tensiometers, smart stations, flow meters, a 125 HP and a weather station. All these components combined will save us water and reduce our green house gas emissions. | \$104,918 | Fresno | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------|--|-----------------|-----------|--|
| Rocky H Ranch, Inc | Installation of 50 KW Solar PV system and weather and soil moisture monitoring will be implemented on 60 acres of avocados. | \$200,000 | San Diego | No |
| Ronald R. Samuelson | The project will focus on installing tools including drip irrigation systems, a Variable Frequency Drive (VFD), soil moisture sensors/water management system, and adding & interconnecting mainlines to supply water efficiently. | \$200,000 | Fresno | Yes |
| Rosser Ranches | Installation of a new irrigation pump to improve irrigation efficiency by 50% on flood irrigated land. Installation of flow meter and solar system to monitor applied water and power irrigation pump in efforts to reduce greenhouse gas (GHG) emissions. | \$112,825 | Yuba | No |
| Rothfleisch Ranches | Installed in this project will be an advanced irrigation system which includes soil moisture sensors and flow meter monitoring. Tier 4 pump and data management software will also be implemented. | \$165,953 | Imperial | No |
| Salinas Land Company | On 328 acres of winegrapes, implement a real-time advanced irrigation management system using soil moisture sensors, (Evapotranspiration) ET and weather sensors, dendrometers, and flow and pressure indicators. ESI soil moisture Gropoint sensors will be used to measure available soil water to determine frequency and duration of irrigation, depth of wetting, root zone water extraction. Knowledge of soil water bank enables delay of first irrigation until soil water runs out providing large savings and regular water and (greenhouse gas) GHG savings on carefully targeted irrigations. Tule ET and weather sensors enable ET based irrigation, targeting replacement of actual water used by vines and so reducing overall water use. Flow meter and in-line pressure sensors provide oversight of water applied per set and total water used. Dendrometers will measure plant stress. All data will be delivered realtime to the manager via a wireless telemetry system. Ground water and GHG will be saved by more efficient irrigation decisions. | Not Provided | Monterey | No |
| Sam & Suzanne Etchegaray | Will be installing real time remote field monitoring and water quality treatment equipment to help irrigate more efficiently. | \$226,205 | Tulare | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-------------------------------|--|-----------------|---------------|--|
| San Bernardo Rancho 4-Way LLC | The purpose of the project is to convert a 275 bhp C9 Industrial diesel engine into a 250 HP electric vertical shaft turbine pump with variable frequency drives (VFD) control. In addition, weather/soil moisture sensors, a flow meter, and volumetric management will be implemented to the 125.860 acres (refer to Appendix A.1 in the project design) of organic vegetables served by this pump to increase water savings. | \$148,401 | Monterey | No |
| Sani Citrus | This project will include the installation of a full evapotranspiration (ET) station and a well transducer for monitoring water levels. | \$48,763 | Fresno | Yes |
| Santa Rita Ranch, LLC | Santa Rita Farms, 1265 acres of Almonds in Atwater, CA. is proposing to install and implement Hortau's Irrigation Management System which will enable the operation to save water and reduce greenhouse gas (GHG) emission while farming Almonds. Hortau's Irrigation Management System will allow for real time monitoring via mobile electronic devices or computers. With the advanced irrigation equipment. Santa Rita Farms will be able to manage the crop's water needs resulting in a 15% water savings and an energy savings reduction. | \$133,720 | Merced | Yes |
| Santa Rosa Road Ranch LLC | Project will add meter, variable speed device, weather station and solar panels to existing well and vertical turbine 20 horsepower (HP) pump. Project will allow drip system as well as sprinklers to work at different pressure levels. | \$79,662 | Santa Barbara | No |
| Saul Medina | This project scope calls for the addition of soil moisture stations connected to a telemetry network, along with pressure sensors that would also be connected to telemetry. | \$45,843 | Glenn | No |
| Scheid Vineyards, Inc. | Installation of variable frequency drives (VFD's), soil moisture probes, weather stations, flow meters, pressure reduction valves, remote valve control and an irrigation controller. | \$171,515 | Monterey | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------------|---|-----------------|------------|--|
| Schmall Farms | Project will add soil moisture monitoring, a weather station with evapotranspiration (ET), a water filter station, pressure monitoring and also a water filter station. | \$32,227 | Madera | Yes |
| Scott Anthony Ranch, L.P. | The purpose of this project is to convert a 173 bhp 3056E Caterpillar industrial diesel booster pump into 75 HP electric booster pump with variable frequency drive (VFD) control on three different sites (site 604, site 615, site 626). In addition, weather/soil moisture sensors, a flow meter, and volumetric management will also be implemented to the 449.6 acres of vegetables served by these pumps to increase water savings. | \$200,000 | Monterey | No |
| Serpa Ranch | To conserve water and reduce greenhouse gas (GHG) emissions, the ranch will install a new micro irrigation system and a water flow meter. | \$34,102 | Stanislaus | No |
| Seth and Michelle Rossow Farms | Rossow farms has sub-surface drip irrigation across all of its fields. We would like to implement a soil moisture monitoring system to better manage when to get irrigate and the length of time to irrigate. Currently the irrigation system is set up for manual on and off. Implementing an automation system to switch the water from field to field will allow shorter intervals of irrigation. Pulsing the water pulls water to the surface more quickly where the feeder roots are. This allows for less water to go to deeper levels where it is not necessarily needed. With this technology we are able to use less water per crop ton. | \$117,343 | Merced | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-----------------------------|---|-----------------|---------------|--|
| Shafer Vineyards | <p>The long-term drought and climate conditions in California require the agricultural community to implement new water savings and greenhouse gas (GHG) reductions. In this spirit Shafer Vineyards will install Tule evapotranspiration (ET) sensors and Fruition sap flow sensors to make more informed irrigation decisions. These technologies make real-time data from vineyards available on mobile devices and desktop dashboards giving crop water status and irrigation recommendations. We expect that using these innovations will result in a 15% savings in irrigation water and a 15% reduction of GHG emissions. By tracking flow meters and electricity bills we will be able to validate the efficiency of the project.</p> <p>Shafer Vineyards has a long tradition of adopting technology to solve farming and environmental problems including the 2004 installation of a solar array that supplies 100% of the electrical needs for our facility. Installing Tule and Fruition technologies will continue this tradition.</p> | \$99,675 | Napa | No |
| Sharyne Merritt | <p>The project includes replacing above ground aluminum latch lateral mainlines with underground PVC with permanent riser valves to minimize leaks; installing a Variable Frequency Drive on a 30 horse power (HP)/425 gallons per minute (GPM) pump to improve efficiency thus lowering pump use and Greenhouse gas (GHG) emissions; installing solar panels to reduce GHG emissions from energy supplied by public utility; installing Rainbird Climate Master weather and soil monitoring to permit precise timing and application of irrigation; installing a flow meter to monitor irrigation; installing a filtration system to prevent clogging drip tape and a backflow preventer; and planting a cover crop to improve soil nitrogen, prevent erosion, and suppress weeds.</p> | \$160,496 | Santa Barbara | No |
| Shasti Farm LLC | <p>This project will implement a Hortau's Irrigation Management System along with soil moisture sensors and data management software.</p> | \$78,685 | Kern | Yes |
| Sierra Gold Nurseries, Inc. | <p>This agricultural operation, which consists of 19.5 acres of commercial nursery trees, seeks to reduce water use and greenhouse gas by installing a new drip irrigation system.</p> | \$200,000 | Sutter | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|-------------------------|--|-----------------|--------|--|
| Sierra Orchards | 15 acre property that will convert flood irrigated walnuts to a micro sprinkler system. New micro sprinkler system will include new soil moisture stations along with solar panel technology to make the project more sustainable long term. Also added will be a flow meter, pressure sensors and a weather station. | \$164,994 | Yolo | No |
| Sierra Shadows Ranch LP | A turn-key contractor procurement and installation, which will augment the 15 horse power (HP) and 50hp wells with variable frequency drive (VFD) controllers with optional micro processing cards for computer control and integration to supervisory control and data acquisition (SCADA) networking facility for start of 2016 irrigation season. A series of eight software processing tasks have been identified as essential and necessary for developing an experience operational knowledge base of remote digital converted sensing and controlling devices sent hourly | \$19,266 | Kern | No |
| Sill Properties Inc. | Sill Properties, 1130 acres of Almonds in Kern County, CA., is proposing to install and implement an advanced irrigation management system which will enable the operation to save water and reduce greenhouse gas (GHG) emission while farming almonds. This project will include soil moisture tensiometers, flowmeters, a variable frequency drive and a weather station. With the advanced irrigation equipment, Sill Properties will be able to manage the crop's water needs resulting in at least a 15% water savings and a 15% energy savings. | \$199,911 | Kern | Yes |
| Simoes Farms | The proposed project shall convert 35 acres of flood irrigated second leaf almonds to point source drip irrigation with a smart controller, weather station, soil moisture sensors. A variable frequency drive (VFD) will be installed on the electric pump and a solar system will be installed to further reduce green house gas (GHG) emissions related to the project. | \$188,481 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------------------|---|-----------------|-----------------|--|
| SOLANA FARMS, INC. | Install a new ag well flow meter with variable frequency drive (VFD), install a 40 kW DC solar system to a pumping site that consist of a 20 HP submersible pump. The solar system will reduce the amount of greenhouse gas (GHG) produced. In addition to reducing our energy consumption we will reduce our water consumption by installing a new weather station, soil moisture sensors and sap sensors. These sensors will monitor the amount of water that is needed and will prevent water waste. | \$197,460 | San Luis Obispo | Yes |
| St. Francis Winery & Vineyards, L.P. | Project will add soil moisture probes to preexisting weather stations to better assist with irrigation scheduling. | \$18,183 | Sonoma | No |
| Stenderup Ag Partners | Section 21: Currently 2 small blocks (41.67 acres combined) are furrow irrigated. Fields are land locked by county roads and the Eastside canal. Irrigation uniformity is difficult and inefficient. Installation of a drip system, sand media filter station, soil moisture sensors and a Variable Frequency Drive (VFD) (due to the size of the fields). Section 20: Variable Frequency Drive (VFD). Improved efficiency with the installation of a VFD at existing reservoir and booster. System irrigates both lateral line sprinklers and double line drip. During double line drip events the pressure is relieved by returning excess water to the reservoir. | \$107,485 | Kern | Yes |
| Steve Neill | This project will install and implement full pump and valve automation with remote pump access. Also being installed is a soil/climate sensor system that monitors the flow of irrigation. | \$15,196 | Glenn | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------|--|-----------------|--------------|--|
| Stone Ranch | The proposed project will convert row crops to alfalfa and tomatoes and changing from flood/furrow irrigation to drip on 299 acres. Two diesel pump will be removed and replaced with electric pumps and variable frequency drives (VFD). A smart irrigation controller and soil moisture sensors will also be added to maximize the efficiency and decrease the water loss for the irrigation system. Solar panels will be installed to help offset the green house gasses (GHG) emitted through the installation of the electric pumps and drip system. The proposed project will reduce water use in an overdrafted basin, demonstrate the highest level of irrigation efficiency and irrigation scheduling while preserving agricultural production and jobs within a disadvantaged community. | \$200,000 | Kings | No |
| StoneMar Properties, LLC | Install pond liner to reduce water loss during summer storage, capture run off water and reduce dependency on groundwater supply. Install solar to reduce dependency on PG&E for electricity and install irrigation monitoring system to maximize efficacy of water on cherry orchard. | \$37,820 | Contra Costa | No |
| Strain Westside Land | Strain Farming 710 acres Almonds in Arbuckle, CA. is proposing to install and implement soil tensiometers and a weather station which will enable the operation to save water and reduce greenhouse gas (GHG) while farming Pistachios. | \$56,223 | Colusa | No |
| Struckmeyer Family Farms | 184 acres of flood irrigated alfalfa will be converted to 64 acres of Walnuts on buried micro drip, and 120 acres of Tomatoes on buried manifold drip tape. The new system will include flow meter, sand media filter tanks, variable frequency drive (VFD) control of irrigation booster pump, pressure transducer for pump control, and soil moisture/evapotranspiration (ET) stations connected via cellular data link to internet for irrigation monitoring and scheduling. | \$197,281 | Colusa | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|----------------------------|---|-----------------|----------------|--|
| Sun Valley Orchards | This project includes multiple properties that encompass 337 acres that we would like to include irrigation management practices on. We are seeking to add Soil Moisture stations from Irrigate.net out in the fields to monitor our irrigation efficiency by being able to view the data online that is relayed through a telemetry network. We also want to monitor our pumps efficiency by adding a flow meter to the discharge, and pressure sensors before and after the filter. This would be connected to a telemetry network as well. We also aim to add variable frequency drives (VFD) at multiple pumps. We believe that with access to this information, along with data from a proposed evapotranspiration (ET) station, we could reduce our water use and decrease our greenhouse gas (GHG) emissions by irrigating more effectively. | \$200,000 | Sutter & Butte | Yes |
| Sun World International | Sun World International (SWI) is a table grape grower in the in the San Joaquin Valley region. Our project aims to address water efficiency and greenhouse gas (GHG) emissions from our ranch operations on our 320-acre table grape vineyard. Project types include installation of soil moisture sensors with electronic data output, use of Evapotranspiration (ET) based irrigation scheduling, use of variable frequency drives, installing vertical turbine pump and drive engines, and conversion of electric grid fuel pumps to solar powered pumps. | \$1,176,265 | Kern | Yes |
| Sunny Acre Farming Inc | Installing high efficiency, low pressure micro sprinkler system on 69 acres of walnuts that are currently flood irrigated. A flow meter and moisture monitors will also be installed and data will be used to better manage irrigation scheduling. | \$78,341 | Kings | Yes |
| Sunwest Fruit Co, Inc. | This project will result in the installation of a Fanjet Micro Irrigation System. | \$194,770 | Fresno | Yes |
| Taylor Brothers Farms Inc. | Proposing to install a Hortau's Irrigation Management System, this includes soil moisture tensiometers and weather stations. All of which would result in water and energy savings, thus lowering water use and reducing Greenhouse Gas (GHG) emissions. | \$122,168 | Sutter | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|--------|--|
| Terranova Ranch, Inc. | Project will integrate a 1-megawatt solar array into an existing group of electric ag well pumps by utilizing Net Energy Metering Aggregation (NEMA). Project includes the installation of a subsurface drip irrigation system. | \$200,000 | Fresno | Yes |
| The Puls Ranch | This project will replace outdated, overhead sprinklers with a new, highly efficient drip irrigation system. This new drip irrigation system will be paired with a weather station, and soil moisture sensors. | \$199,950 | Tulare | No |
| Thomas Myers | Project will add Soil Moisture stations from Irrigate.net out in the fields to monitor irrigation efficiency by being able to view the data online that is relayed through a telemetry network. Pumps efficiency will be heightened by adding a flow meter to the discharge, and pressure sensors before and after the filter. This would be connected to a telemetry network as well. | \$128,469 | Colusa | No |
| THREE STAR FARMS, INC. | Replacing old subsurface drip irrigation tape on 115 acres of vegetable crop and also change diesel pump over to electric pump on 2 irrigation systems, irrigating 343 acres. | \$157,222 | Fresno | No |
| Tiffany Del Don | Project Proposal: 1)Install a 60.2 KW AC solar system that will produce enough electricity to offset the energy use of a 50 HP centrifugal booster pump used for drip irrigation. 2)Install new drip tape to increase irrigation system uniformity. 3)Install a Pure Sense soil moisture monitoring system with a weather station that will be used to help schedule the frequency and duration of irrigation events. 4)Install a Netafim NMC Pro Automation system that will monitor and control fertilizer injection into the irrigation system and electronically change water for the irrigation system based on a schedule created from soil moisture sensor readings. 5) Install a 50 HP variable frequency drive (VFD) electric panel on the irrigation system booster pump to ensure the irrigation system operates at the designed pressure and conserves energy. 6)Install a magnetic flow meter on the drip system to record applied water in gallons per minute and total acre feet. | \$200,000 | Merced | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|--------|--|
| Trebee Faarms | There will be multiple soil moisture stations installed that will include an Enviro-Pro soil moisture sensor, PA-1 pressure sensor, and an Adcon radio unit. The evapotranspiration (ET) weather station will have a temperature/humidity sensor, a wind speed/direction sensor, rain gauge, pyranometer, and Adcon radio unit. The water sources will all have pump monitoring stations which include a McCrometer Flow meter, 2 pressure sensors (before and after filter), and an Adcon radio unit. | \$67,350 | Colusa | No |
| Tree Clams Inc | This project will switch 40 acres of flood irrigated land to a point source drip irrigation system. Also included in this project will be a smart irrigation controller, moisture sensors, flow meters and a weather station. | \$168,528 | Tulare | Yes |
| Trent Jackson Farms | We will be installing real time remote field monitoring and water quality treatment equipment to help irrigate more efficiently. The sensors installed will be reading soil moisture from 6" to 40". The sensors will also read fertilizer applications, and soil temperature at various depths. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, depth of extraction by roots and adequacy of wetting. These remote field-monitoring units will include weather sensors to help irrigate based on evapotranspiration (ET) and prevent unnecessary irrigation events. Soil temperature sensors will help me fertilize appropriately at the best temperatures. Not only am I going to be able to increase my water and fertilizer efficiency, but also I will be able to reduce energy usage by not irrigating only when necessary. Also, a solar project will be installed, which will help to reduce greenhouse gas (GHG) emissions due to energy demand from our irrigation pumps. | \$200,000 | Kings | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------------|--|-----------------|--------|--|
| Tri M Orchards | This project will be adding 17 acres of prunes and 25 acres of peaches to the already 185 acres of established crops. This project will install 42 acres of Dual Line Drip with spacing every 30". This project will reduce our water consumption from 3 1/2 acre feet per year to 1 1/4 acre feet per year. We currently flood irrigate and want to implement water efficient, eco friendly drip irrigation into our future farming plan. Because of the cost of drip irrigation we will need this grant in order to implement this drip system. | \$67,368 | Butte | Yes |
| Triple C Farms | This project will convert 260 total acres from rice production to subsurface tomato production. Project will also eliminate 1 of 2 diesel pumps currently on the property and also will implement telemetry technology. | \$119,421 | Sutter | No |
| Triple E Livestock & Land, Co. | Will be installing real time remote field monitoring and water quality treatment equipment to help irrigate more efficiently. | \$223,100 | Tulare | No |
| Troy Jackson Farms | We will be installing real time remote field monitoring and water quality treatment equipment to help irrigate more efficiently. The sensors installed will be reading soil moisture from 6" to 40". The sensors will also read fertilizer applications, and soil temperature at various depths. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, depth of extraction by roots and adequacy of wetting. These remote field-monitoring units will include weather sensors to help irrigate based on evapotranspiration (ET) and prevent unnecessary irrigation events. Soil temperature sensors will help me fertilize appropriately at the best temperatures. Not only am I going to be able to increase my water and fertilizer efficiency, but also I will be able to reduce energy usage by not irrigating only when necessary. Also, a solar project will be installed, which will help to reduce greenhouse gas (GHG) emissions due to energy demand from our irrigation pumps. | \$200,000 | Tulare | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|---|-----------------|-------------|--|
| Tucker Drip Systems | The proposed project will install a new drip irrigation system in two traditional rice fields in south Sutter County. The project will save water and reduce greenhouse gas emissions (GHG) in multiple ways, including: 1) the reduction of gross applied water through new cropping patterns (shifting from flooded rice to drip irrigated tomatoes, for example) 2) the elimination of three diesel booster pumps (currently used for sprinkler irrigation of row crops) 3) reduced tractor passes to apply fertilizer. Fertilizers will be injected into the drip irrigation system 4) the introduction of evapotranspiration (ET) and soil moisture based irrigation scheduling. | \$375,856 | Sutter | No |
| Ty Muxlow Farms | We will be installing real time remote field monitoring and water quality treatment equipment to help irrigate more efficiently. The sensors installed will be reading soil moisture from 6" to 40". The sensors will also read fertilizer applications, and soil temperature at various depths. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, depth of extraction by roots and adequacy of wetting. These remote field-monitoring units will include weather sensors to help irrigate based on evapotranspiration (ET) and prevent unnecessary irrigation events. Soil temperature sensors will help me fertilize appropriately at the best temperatures. Not only am I going to be able to increase my water and fertilizer efficiency, but also I will be able to reduce energy usage by not irrigating only when necessary. Also, a solar project will be installed, which will help to reduce GHG emissions due to energy demand from our irrigation pumps. | \$200,000 | Tulare | Yes |
| Uesugi Farms, Inc. | On these 600 acres of rotational crops a new irrigation system along with soil moisture sensors, flow meters and a weather station will be installed to save water and reduce greenhouse gas (GHG). | \$197,878 | Santa Clara | Yes |
| Underwood Land LP | Project calls for the repair of an extremely low efficiency pump, bringing its efficiency from 32.8% to 68%. Installation of three soil moisture stations to help set up an irrigation system based on evapotranspiration (ET) rates, lowering energy and water consumption. | \$35,000 | Ventura | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------|--|-----------------|-----------------|--|
| Underwood Ranches | Peppers will be irrigated using sub-surface drip irrigation, meaning the current irrigation system consisting of surface and sprinkler irrigation will be retrofitted and brought up to the NRCS standards for drip irrigation. A Davis weather station along with California Irrigation Management Information System (CIMIS) evapotranspiration (ET) values will help us set up a better irrigation schedule based on crop water needs. | \$200,000 | Kern | No |
| Valk Ranch | Project will be updating existing pump with variable frequency drive (VFD) and installing soil moisture in newly developed orchards | \$28,566 | Stanislaus | No |
| Valor Wine Co LLC | The scope of the proposed project is to install soil moisture and evapotranspiration monitoring hardware and telemetry. | \$40,479 | San Luis Obispo | No |
| Vital Farmland LP | Project will supplant flood irrigation on fields with a buried-manifold drip system that can apply water precisely according to crop water use (as measured by soil moisture sensors). | \$200,000 | San Joaquin | Yes |
| VRE Spanish Springs, LLC | The purpose of the project is to remove a 120 kW diesel Genset and provide an electrical source in order to power two 15 HP electric submersible pumps. Also, the project will include the application of reservoir liners to reduce water loss due to percolation. In addition, weather/soil moisture sensors, the existing flow meters, and volumetric management will be implemented to the 92.9 acres of grapes served by these pumps to increase water savings. | \$199,488 | San Luis Obispo | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|---|-----------------|--------|--|
| Wade Jackson Farms | We will be installing real time remote field monitoring and water quality treatment equipment to help irrigate more efficiently. The sensors installed will be reading soil moisture from 6" to 40". The sensors will also read fertilizer applications, and soil temperature at various depths. Soil moisture sensors will be used to determine the appropriate interval between irrigation, depth of wetting, depth of extraction by roots and adequacy of wetting. These remote field-monitoring units will include weather sensors to help irrigate based one evapotranspiration (ET) and prevent unnecessary irrigation events. Soil temperature sensors will help me fertilize appropriately at the best temperatures. Not only am I going to be able to increase my water and fertilizer efficiency, but also I will be able to reduce energy usage by not irrigating only when necessary. Also, a solar project will be installed, which will help to reduce greenhouse gas (GHG) emissions due to energy demand from our irrigation pumps. | \$200,000 | Kings | Yes |
| Wahtoke Farms, LLC | The project includes the installation of real time remote field monitoring and water quality treatment equipment/agents, along with a water management system to help irrigate and manage water efficiently while saving green house gases (GHG). Remote field monitoring sensors will be used to determined the appropriate interval between irrigation, depth of wetting, depth extraction by roots and adequacy of wetting. | \$59,700 | Fresno | Yes |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|---|-----------------|--------|--|
| Walter Mizuno | Funding is requested to convert an existing flood irrigated system to a dual line drip system. The farming operation at this location consists of approximately 37 acres of stone fruit trees. The entire acreage will be upgraded to include soil moisture sensors integrated with a remote weather station and the irrigation system controller. Eighteen acres of orchards will be converted at this time from flood to drip irrigation. The remaining flood irrigated fields will be converted to drip, with 5 more acres in late 2017, with the entire farm converted to drip by the end of 2019. Additionally, a more energy efficient pump and motor with a variable frequency drive (VFD) are to be installed to reduce energy usage thus reducing the amount of greenhouse gas (GHG) emitted. Smartphones will also be integrated to manage energy and water usage in real time. A drone mounted camera system will be employed to inspect the drip system for coverage and leaks eliminating ATV and pickup trips through fields. | \$92,820 | Fresno | Yes |
| Westside Ranch | The flood to drip conversion project is located in Five Points, Ca. The proposed project convert flood irrigation of alfalfa and installing drip irrigation for a new pistachios trees. The project will include and vaiable frequency drive (VFD), smart irrigation controller, moisture sensors, weather station and solar power. It will also help to improve greenhouse gas (GHG) emissions by converting a diesel buster pump to electric. This project will continue Freitas Farms goal of agricultural sustainability and long term solutions. | \$187,356 | Kings | Yes |

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|--------------------------------|---|-----------------|-----------|--|
| William Pruitt | Installation of 100 acres of subsurface row crop drip irrigation with an electric booster pump to replace the existing flood irrigation system with a diesel booster pump. The conversion will also include the installation of the following: 1) Pure Sense remote accessible in field soil moisture sensors & in field weather station to help schedule irrigation events 2) Variable frequency drive (VFD) electrical panel to ensure the system operates at the correct pressure and only uses the required electricity 3) Netafim NMC Pro irrigation controller (automation) that will monitor and record the amount of water and fertilizer applied to the field and automatically change field valves based on the current irrigation program 4) Seametrics magnetic flow meter to help monitor the irrigation system flow rate in gallons per minute and the total water applied to the field in acre feet 5) Multiple pressure gauges to verify the system is operating as designed. | \$122,280 | Merced | No |
| Winner's Circle Vineyards, LLC | Installation of Ranch Systems data network, fitted with three wireless cellular telemetry nodes (two different models) and a full weather station at one of the locations. This is in coordination with the installation of an extensive soil moisture monitoring program using Aquacheck subsurface and basic probe models. Probes will be connected to the greater telemetry system using Rover technology which allows multiple probes to connect to a single cell node using antennas. By using this telemetry network the vineyard manager can make precise irrigation decisions based on actual vineyard soil water status, reducing both water usage and pumping costs. | \$25,954 | Sonoma | No |
| Wm. Bolthouse Farms, Inc. | The project will replace 184 acres (~38 linear miles) of 3" diameter aluminum pipe with new 3" diameter Certa-Lok Yelomine PVC pipe and fittings. | \$200,000 | Kings | No |
| WRK LLC | The money from this grant will allow for the install of a 77kW DC Power Solar electric energy system, a Davis Weather Station with moisture sensor and remote monitoring and data collection as well as 3 flow meters. | \$236,840 | San Diego | No |

*Project sites located in disadvantaged communities were determined using CalEPA's CalEnviroScreen 2.0

California Department of Food and Agriculture
 2016 State Water Efficiency and Enhancement Program Round 1
 Grant Applications Submitted as of January 8, 2016

The 2016 SWEEP Round 1 application information was extracted from the application system as submitted, therefore, the California Department of Food and Agriculture cannot guarantee accuracy of the information.

| Applicant Organization | Project Description | Funds Requested | County | * Located in a Disadvantaged Community |
|------------------------|--|-----------------|--------|--|
| Yurosek Farming Co LLC | Installing and implementing an advanced irrigation system that will allow the farm to reduce water and greenhouse gas (GHG) emissions. Also being installed is a new irrigation system, soil moisture tensiometers, flowmeters, a weather station and also a variable frequency drive (VFD). | \$200,000 | Kern | Yes |