

California Department of Food and Agriculture  
2019 State Water Efficiency and Enhancement Program  
Summary of Applications Received

Applicant Organization	Project Description	Funds Requested	Cost Share	County
1st and Nine Almonds	This project proposes to install a holistic monitoring system that includes soil moisture sensors, a weather station, and solar system.	\$63,469.00	\$5,400.00	Glenn
A & A Dasso Farms, Inc.	This project proposes to install a solar system, flow meters, and use CIMIS to monitor evapotranspiration.	\$100,000.00	\$19,000.00	San Joaquin
A Farming Trust	This project proposes the conversion from flood irrigation with gated pipe to drip irrigation. The project includes converting an existing 225 HP diesel power pump to a 125 HP premium efficient electric pump powered by electricity (PG&E). It also includes installing a 125 HP variable frequency drive electrical panel, a new drip system. The system will also include Nelson Twig automation system for valve, booster pump and fertilizer pump control. The system will also include 2 Sentek soil moisture probes with remote access to help with irrigation scheduling and inline pressure sensors to record irrigation events and to check line pressure, irrigation duration and irrigation start and end times. The System will also include 1 Puresense field weather station with remote access to determine field weather conditions and a Seametrics magnetic flowmeter to record the amount of water applied to the field.	\$100,000.00	\$206,268.00	Merced
A Farming Trust	This project proposes to convert from flood irrigation with gated pipe to drip irrigation. The project includes converting an existing 225 horsepower diesel power pump to a 125 horsepower premium efficient electric pump powered by electricity (PG&E). It also includes installing a 125 horsepower variable frequency drive electrical panel, a new drip system. The system will also include Nelson Twig automation system for valve, booster pump and fertilizer pump control. The system will also include 2 Sentek soil moisture probes with remote access to help with irrigation scheduling and inline pressure sensors to record irrigation events and to check line pressure, irrigation duration and irrigation start and end times. The system will also include 1 Puresense field weather station with remote access to determine field weather conditions and a Seametrics magnetic flowmeter to record the amount of water applied to the field.	\$100,000.00	\$172,260.00	Merced
A&D Farms LLC	This project intends to convert flood irrigated farmland to micro-sprinklers. The current pump would be replaced with a new more energy efficient 20 HP submersible pump controlled by a variable frequency drive. Irrigation water management will be implemented through the use of telemetry-based moisture sensors combined with a weather station. Flow meters will be installed and used in conjunction with the Rain-bird system to measure water use and be documented through Rain Bird irrigation water management software.	\$61,850.36	\$4,100.00	Fresno
A.P. Esteve Farms L.P.	This project consists of replacing the current pump with a new pump and motor with a higher efficiency, adding a VFD drive with pressure transducer, the installation of a wireless soil moisture monitoring and data logging system, and the addition of wireless soil moisture monitoring utilizing Sentek EnviroScan probes.	\$44,489.59	\$10,725.00	Tehama
ABE Farms LLC	The project proposes converting the 45 acres of the 90 acres of flood irrigation to micro sprinklers, while automating and expanding its soil moisture sensor system. The project proposes converting from diesel to electric and installing two 75 HP electric pumps with variable frequency drives, two filter stations, and a flow meter. The project also proposes applying compost.	\$100,000.00	\$262,700.10	Imperial

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Abel Valdez	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump to several valves corresponding to irrigation sets. Riser sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the riser. Jain blue jets will be installed on the tape at 36" intervals. This system will use the existing 3 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$57,591.76	\$122.50	Fresno
ACM Permanent Crops, LLC	This project allows for the installation of a VFD, automated valves, and soil moisture monitoring. A VFD will be installed, as well as soil moisture monitoring units. The new valves at the filter station will be automated and on-farm weather monitoring will be installed to help schedule future irrigations.	\$93,912.37	\$17,410.00	Tulare
Adam Crowell	This project proposes to convert from low distribution uniformity flood irrigation to micro irrigation with fertigation, the installation of a new VFD to the existing 40 HP groundwater well, 4 tensiometer pairs (4 18" and 4 36") and the implementation of an evapotranspiration-based and sensor based irrigation scheduling with integration of the CIMIS system.	\$100,000.00	\$40,620.00	Stanislaus
Advanced Growth Management	This project proposes installing a highly uniform drip irrigation system, a new pump, a 10 kW solar photovoltaic system, and irrigation water management level 3. In addition, a flow meter and soil moisture monitoring equipment will be installed. Advanced water management using data from the flow meter, soil moisture monitoring, and CIMIS based crop evapotranspiration projections will be used for volumetric irrigation scheduling.	\$100,000.00	\$29,048.74	Fresno
Affentranger Brothers	This project aims to install a variable frequency drive and two soil moisture sensors.	\$38,420.85	\$200.00	Kern
Affentranger Farms, LLC	The goal of this project is to install a variable frequency drive and four soil moisture sensors.	\$44,268.87	\$200.00	Kern
Affentranger Ranches	This project proposed to install a drip irrigation system, deep well electric pump, variable frequency drive pump to pressurize water into the filter station (200 HP), flow meter, and a soil moisture sensor.	\$100,000.00	\$48,229.52	Kern
Ah So Mock Nursery	This project proposes to replace old, leaky irrigation pipe to reduce energy and water use. The project will replace sprinkler heads to improve distribution uniformity and install a flow meter and soil moisture monitors.	\$23,399.28	\$2,750.00	Santa Clara

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Aldo Alberico And Son Inc.	This project proposes to replace below-ground concrete sectional flood irrigation system with surface micro and drip irrigation system on remaining flooded orchards. This project will also tie both wells together to reduce stress on wells and reduce irrigation days per month. The tail water pond would be converted to fish pond with beneficial planting around the pond.	\$100,000.00	\$60,000.00	Glenn
Almond Lane Inc.	This project plans on installing a variable frequency drive pump on the existing 50 HP electric irrigation well pump. Phytech dendrometers will also be installed. A 150 HP propane surface water and well pump will replace the existing 512 HP diesel irrigation well pump. In addition, an 8-station sand media filter station will be installed.	\$75,926.00	\$10,000.00	Yolo
Anthony Chesini	The project proposes converting a flood irrigated field into a linear-move irrigation system.	\$100,000.00	\$116,439.51	Sutter
Antonio Cabrera	The project proposes to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system will use the existing 15 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling.	\$90,007.81	\$32,690.45	Fresno
Apricot Lane Farms	Project seeks to install a solar system on its 500 HP electric well pump and add an atmometer to improve irrigation management.	\$100,000.00	\$80,798.00	Ventura
Ariza Farm	This project proposes to install a 13.4 kW solar array along with a complete pump upgrade to a 40 HP VFD-controlled pump with flow meter and a self-cleaning filter, and a fertilizer injection without head loss. Soil moisture sensors and leaf moisture sensors will be installed to be used in conjunction with state climate data to determine efficient irrigation.	\$100,000.00	\$965.00	Glenn
Arlis Valentine Farming LLC	The proposed project includes installing a high efficiency close coupled turbine pump to allow ditch water to be used for irrigation and installing soil moisture probes to aid in irrigation scheduling. It is proposed that a 20 HP pump be installed to utilize ditch water on the existing micro sprinkler system, eliminating the need to use ground water in the peak irrigation season. A failing screen filter will be replaced with a sand media filter and flow meter will be installed. A VFD will be installed that will control both the 30 HP deep well pump and the new 20 HP close coupled turbine.	\$50,000.00	\$10,248.06	Fresno
ASA Organics	The purpose of this project is to install a 20.9 kW direct current solar photovoltaic system to power the existing two electric turbine pumps (100 HP, 75 HP). In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meters will also be implemented.	\$98,652.18	\$0.00	Monterey

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Audrey Dirickson	This project aims to replace an old energy inefficient 30 HP submersible pump with a new more efficient 30 HP submersible pump with a variable frequency drive control system. The project also includes a battery-powered flow meter with an internal datalogger, 3 irrometer watermark monitor with 12 soil moisture sensors. The project also plans to replace irrigation lines with a center pivot system and refurbish leaking wheel lines.	\$90,228.59	\$18,100.00	Lassen
Autonomy Farms	This project proposes to install a permanent zoned sprinkler system to irrigate pasture and replace the existing flood irrigation system.	\$32,770.27	\$8,000.00	Kern
B & D Farms, Inc	This project proposes installing soil moisture probes in representative locations and a well system monitoring to inform irrigation scheduling. The pumping station will be retrofitted with a new 75 HP motor, VFD and automation.	\$99,811.00	\$35,183.10	Santa Barbara
B&N Farms, LLC	This project allows for the conversion of flood irrigation to drip irrigation by installing a filter station and drip irrigation system. An existing 50 HP pump will be replaced with a 25 HP pump and a soil moisture monitoring unit and weather station will also be installed.	\$100,000.00	\$14,899.61	Fresno
B&R TeVelde	This project plans to convert from flood irrigation to underground drip irrigation by installing a filter station and underground drip irrigation system. An existing 200 HP pump and flow meter will be used to apply and track water runs, and a soil moisture monitoring unit will be installed.	\$100,000.00	\$70,870.68	Tulare
B&S Family Farms	This project proposes to install a 10.4 kW solar system, upgrade irrigation management level from 0 to 3; including soil moisture monitoring equipment, a flow meter, and advanced water management.	\$50,053.38	\$2,515.10	Fresno
B&W Farm LLC, Angels Farm	This project will allow for installation of a 21.6 kW solar photovoltaic system, a flow meter, and 3 soils moisture sensors. A drip irrigation system will replace an above ground sprinkler system and existing leaky drip irrigation.	\$57,404.80	\$63,635.86	San Diego
Backer Vineyards	This project is proposing to add a weather station, upgrading and adding two more soil moisture sensor (Wildecke) locations, and upgrading the telemetry systems to receive real-time data on mobile devices. The project also proposes to install a VFD. The project also involves moving drip hose and emitters, replacing some sections of drip hose, and purchasing new wire to string the drip hose 16 inches off the ground.	\$80,885.16	\$25,020.50	Sacramento

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Bai Thao	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 10 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$100,000.00	\$21,307.75	Fresno
Balbir Samra	This project proposes to install soil moisture stations that are connected to a telemetry network that will be tied into the information from the pumps, which will include flow and pressure. The project proposes to use CIMIS data to facilitate irrigation methods. The project proposes to also install a new flow meter, VFDs, and solar array.	\$100,000.00	\$98,497.07	Sutter
Bar Vee Dairy, Inc.	This project proposes to convert from low distribution uniformity flood irrigation to micro irrigation with fertigation, install a VFD to the existing 40 HP groundwater well, 4 tensiometer pairs (4 18" and 4 36"), and the implementation of an evapotranspiration-based and sensor based irrigation scheduling with integration of the CIMIS system.	\$100,000.00	\$40,620.00	Stanislaus
Basila Farms LLC	This project proposes installing an advanced telemetry system that includes a weather station, moisture sensors, automated irrigation, an automated fertigation system, and fully automated integration with CIMIS and other irrigation water application algorithms. The proposed system will be capable of substantially reducing water application on site, through a combination of improved scheduling and fertigation-related reductions in demand for water application.	\$100,000.00	\$43,099.00	Madera
Bassetti Properties, L.P.	The purpose of this project is to install a 30.4 kW direct current solar photovoltaic system to power the existing 250 HP electric turbine pump. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meter will also be implemented.	\$99,888.54	\$0.00	Monterey
Batth Ranch Inc.	This project proposes to convert to drip irrigation from furrow irrigation.	\$100,000.00	\$171,979.00	San Joaquin

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Bee Yang	This project proposes to replace the current well pump with a new 10 HP electric pump with variable frequency drive. The project also proposes installing a Jain Logic soil moisture sensor, weather station, a Seametrics digital flow meter, and a cost-efficient MicroPro 3000 acid injector system to the pump to neutralize the calcium and keep irrigation lines flowing efficiently.	\$19,067.93	\$1,000.00	Stanislaus
Belo's Farm	This proposed project includes installing a drip irrigation system and replacing the current pump with a new, highly efficient, 75 HP pump with a Variable Frequency Drive and flow meter. The flow and soil moisture components will be remotely monitored and controlled and will also incorporate software that will use local CIMIS data and real time field data to aid with precision irrigation scheduling. The project also proposes the installation of a solar system.	\$100,000.00	\$161,394.72	Tehama
Benny Jefferson	The purpose of this project is to install a 15.2 kW direct current solar photovoltaic system to power the existing three electric turbine pumps (150 HP, 150 HP, 200 HP). In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meters will also be implemented.	\$98,224.40	\$0.00	Monterey
Billiwhack Ranch, LLC	This project proposes a booster pump replacement with a VFD installed and a self-flushing filter. In addition, the irrigation system will be replaced, switching from a sprinkler system to pressure compensating drip lines. The project also aims to install flow meters which, will help with measuring and managing irrigation events, installing soil moisture sensors to fine tune frequency and duration of irrigation events, and an electronic weather station to monitor ET, wind, rain, solar radiation, and frost events.	\$99,923.60	\$47,210.00	Ventura
Bills Et. Al.	This project proposes to replace an above ground, hand-moved sprinkler system with a solid-set, in-ground, micro-sprinkler system. The main post-project components include solid-set, in-ground pipe and 2.5 to 3.5 gpm micro-sprinkler heads, auto-control system, and a weather station with temperature, precipitation, relative humidity, wind, and soil moisture sensors. Pre- and post-power is provided by the PG&E utility via standard above ground power lines. Given the current PG&E operations of power outages to customers to prevent wildfires, the option of an on site backup power source with either a gas generator or solar/wind co-generating capability may be necessary.	\$13,479.00	\$10,695.00	Glenn
Blind Faith II	This project proposes installing soil moisture probes, a weather station capable of calculating evapotranspiration, and well level and flow monitoring to inform irrigation scheduling. Well #1 will be converted from diesel with pump efficiency upgrades and VFD. Pumping stations will receive hardware to automate pump control. Old, damaged and plugged drip tubing and pressure compensating emitters will be replaced with new hardware.	\$99,995.97	\$136,220.58	San Luis Obispo

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Bob Kuang Nursery	Project will replace low efficiency 15 HP booster pump, replace old and leaky 3 inch main line, replace old and leaky 1 1/4 lateral line (and associated valves) and replace old sprinkler heads. The project will also include installation of a flow meter and include soil moisture monitoring as a means of improving irrigation scheduling.	\$26,475.31	\$2,750.00	Santa Clara
Bobby Yamamoto Farms	This project proposes to convert a 100 HP diesel engine to electric motor, install pipeline from the pump to tie into existing micro irrigation system, a monitoring system to accommodate enhanced irrigation scheduling, and new PG&E service to bring power to the new electric motor.	\$100,000.00	\$76,528.17	Stanislaus
Boren Family Partnership LTD	This project proposes to install a VFD onto an existing 150 HP pump, a flow meter, 4 tensiometers, and improve irrigation scheduling by integrating the tensiometers and CIMIS.	\$24,425.71	\$2,000.00	Fresno
Bradley and Nancy Bishel	This project proposes the conversion of fanjet to drip irrigation by installing a new station and drip irrigation system. A soil moisture monitoring unit and weather station will be installed and 30 HP pump will be upgraded to a 25 HP pump with a higher efficiency.	\$100,000.00	\$19,929.22	Fresno
Brady Holder	This project proposes to install a flow meter on 30 HP well pump as well as 36 soil moisture probes (4 per field) to monitor evapotranspiration, in addition to laser leveling equipment, to properly and efficiently level the land.	\$31,955.50	\$2,800.00	Kings
BRAGA FRESH FAMILY FARMS, INC	The purpose of this project is to install a 30.4 kW direct current solar photovoltaic system to power the existing 75 HP electric turbine pump. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meter will also be implemented.	\$99,233.54	\$0.00	Monterey
Bravo View Farms	This project proposes to install micro sprinklers to replace the existing flood irrigation system. The project include a Seametrics flow meter, a 40 HP pump to replace existing low efficiency 25 HP irrigation well pump, a variable frequency drive on the new well pump, and Watermark soil moisture sensors with data logger and telemetry. This irrigation system will be powered by a 15.75 kWh solar system allowing for conversion from PG&E energy to solar energy. CIMIS data will be used to verify and confirm data from the soil moisture sensors.	\$100,000.00	\$62,054.00	Stanislaus
Brennen Ruggieri	This project proposes converting from flood irrigation to a micro-irrigation system and the installation of a VFD and solar panels.	\$99,999.40	\$45,118.75	Colusa

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Brent Storm Farming	This project proposes to convert from flood irrigation to a solid set sprinkler system including the installation of soil moisture sensors, VFD, flow meter and the conversion from a diesel motor to electric motor.	\$99,563.64	\$133,277.67	Butte
Brian K. Jones	The purpose of this project is to install a 30.4 kW direct current solar photovoltaic system to power the existing 150 HP electric turbine pump. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meter will also be implemented.	\$99,233.54	\$0.00	Monterey
Britz Inc.	This project proposes to convert from flood to drip irrigation. The project includes seven electric pumps: 30 HP, 15 HP, 30 HP, 60 HP, 20 HP, 25 HP, and 60 HP and the installation of a variable frequency drive and soil moisture sensors.	\$100,000.00	\$518,325.66	Fresno
Bryan L. Tahmazian	This project proposes replacing antiquated flow meters with new flow meters. The plan also includes installing soil moisture monitors, sand media filters, and a state-of-the-art Wildeye brand weather station with telemetry, and a 25 HP lift pump.	\$49,513.69	\$16,155.76	Kings
Bullero Farms	This project proposes to install a Wiseconn automated irrigation system, two VFDs, and flow meters.	\$98,035.51	\$4,125.00	Yolo
Bullseye Farms	This project proposes to convert bowls to pressure bowls and upgrade motor to 150 HP with a VFD. In addition, soil moisture sensors and a flow meter will be implemented across the field. CIMIS monitoring will also be utilized to receive the most accurate weather information.	\$9,883.00	\$9,625.00	Solano
Byron Vance	This project proposes to convert from flood irrigation pumped by two 10 HP electric booster pumps with no tail water recovery, to a new high efficiency rotating micro sprinkler on tubing system with integrated soil moisture and weather monitoring. The project also proposes to install a soil moisture monitoring station, evapotranspiration (ET) station, flow meter, a 40 HP electric booster pump with VFD, and a new solar array to offset electricity usage.	\$100,000.00	\$29,892.10	Glenn
C&G Farms Inc.	This project proposes to convert the aluminum sprinkler pipe to yellowmine solid set pipe for the entire farmed acreage and add a VFD to the main well pump.	\$100,000.00	\$402,936.12	Monterey



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C.F. Koehnen & Sons	The proposed project includes converting a solid set irrigated walnut orchard to a double line drip irrigated almond orchard. The project includes the installation of a 60 HP electric pump, double line drip with an accessory solid set irrigation system for frost protection, a variable frequency drive, replacement of current flood bowls with pressure bowls for more efficient pumping, a soil moisture probe with remote access to better schedule irrigation events , a pressure sensor, a weather station, and flow meter.	\$99,997.84	\$43,254.15	Butte
Caffese Farming Co.	The proposed project will install pipelines to enable irrigation with surface water rather than ground water. The pipelines will connect the farm to a 75 HP pump with VFD. The project also proposes installing flow meters with data logger, a soil moisture and weather sensing station.	\$78,804.00	\$40,098.80	San Joaquin
Cal Muxlow Farms	This project proposes to install a real time remote field monitoring system, flow meters, and a solar system. Soil moisture sensors will be utilized to determine irrigation intervals as well as length of irrigations. Evapotranspiration (ET) will also be used to determine irrigation scheduling. Spatial CIMIS will be used to determine daily ET levels for the crops.	\$70,243.12	\$5,616.95	Tulare
Cal Muxlow Farms	This project proposes to install soil moisture sensors, flow meters, and a solar system. Spatial CIMIS will also be used.	\$99,961.90	\$77,557.91	Tulare
California Vineyard Properties LLC	This project proposes installing soil moisture probes and a weather station capable of calculating evapotranspiration and well system monitoring. The pumping station will be converted from natural gas to electric power, retrofitted with an electric pump, Variable Frequency Drive, and automation for pump control.	\$99,860.80	\$14,471.61	San Luis Obispo
Capay Hills Orchard	This project proposes installing soil moisture probes in 2 locations at 3 depths and a flow meter to assist in monitoring soil moisture and determining irrigation needs. Currently there are no moisture probes. The project also proposes adding additional solar panels to an existing system.	\$9,921.85	\$2,000.00	Yolo
Carina Trust	This project seeks to replace the current 20 HP booster pump with a 40 HP electric booster pump to reduce overloading pumping and improve irrigation management. In addition, the project proposes to install a Wisconn soil moisture sensor system and weather station to increase information regarding irrigation scheduling.	\$33,602.34	\$2,000.00	Ventura
Carl Giesbrecht Farming	This project proposes installing a new solid set irrigation system to replace flood irrigation.	\$100,000.00	\$141,355.41	Glenn

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Carolyn F. Benson	This project proposes to convert from flood irrigation to a modern solar powered micro irrigation system. The new system will require a new lined reservoir, solar panel-driven battery storage fueling an energy efficient pump, variable frequency drive, automated pump controls, subsurface low pressure drip irrigation system, single line drip hoses for leaching irrigations and soil based moisture sensors plus a weather station for irrigation scheduling.	\$99,926.76	\$24,000.00	Imperial
Casey Bellach	The proposed project consists of installing a 20.8 kW solar photovoltaic system, irrigation water management Level 3 equipment including soil moisture monitoring, flow meter, and advanced water management practices.	\$95,191.37	\$2,017.86	Fresno
CC ORCHARDS LLC	This project proposes to install a micro-drip irrigation system.	\$99,998.42	\$112,262.07	Glenn
Central Valley Organics, Inc	This project proposes to install 3,476 feet of PVC pipeline from the irrigation district meter box to supply the existing micro irrigation system, which currently draws from a deep well that pumps water from the aquifer. It will install a sump and a 25 HP booster pump with VFD and filtration system to pump surface water into the existing micro drip/fan jet irrigation system.	\$99,991.55	\$16,605.18	Madera
Center for Land-Based Learning	The project proposes to install a drip system using an existing pump. Variable frequency drives will also be installed.	\$94,694.22	\$6,200.00	Yolo
CGD Farms	This project proposes to install soil moisture stations out in the field to monitor irrigation efficiency. The project also proposes to install a new wheel line irrigation system to replace flood irrigation and new VFDs at each pump and evapotranspiration station.	\$94,658.73	\$0.00	Glenn
Chan Chankitnapus	The proposed project intends on setting the operating condition of the pump to match the requirements of a drip irrigation system. This system will use the existing 10 HP submersible electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values. Solar panels will be installed as well to help offset the electricity used throughout the growing season.	\$64,004.30	\$17,684.94	Fresno
Charanjit Nijjar	This project proposes to install soil moisture stations, flow meters to the discharges, and pressure sensors before and after the filters. The project also proposes to connect irrigation to telemetry network and convert from flood to drip irrigation to improve efficiency. The project also includes new motors and VFDs at both pumps and evapotranspiration station.	\$100,000.00	\$28,839.08	Yolo

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Charles Marsh Farming	Project proposes to install a solar array and 8 soil tensiometers. The project will use soil moisture data from the tensiometers plus additional data/information from the CIMIS system, to optimize the timing and volume of water application, while avoiding over-application.	\$100,000.00	\$12,452.00	Colusa
Charles Seaver Decedent's Trust	The project proposes installing double drip lines in a new almond orchard and micro drip lines in a new prune orchard. The project also proposes to install a VFD and flow meter, weather station, as well as soil moisture sensors, filter station, and pump retrofit.	\$100,000.00	\$151,385.00	Colusa
Cheema and Ghuman Properties	This project proposes to add a new pump and motor with a VFD, all powered by a solar array.	\$100,000.00	\$224,180.69	Solano
Cher Chong Vang	This project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 15 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$99,999.99	\$23,607.76	Fresno
Christopher Myers	The proposed project includes retrofitting an existing microsprinkler irrigation system with a dual line drip irrigation system. Existing valves will be replaced with automated valves tied into the existing telemetric system. A 10.5 kW Solar system is proposed which would offset power consumed by the pump.	\$43,791.51	\$4,742.50	Fresno
Chue Lee	This project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 10 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$61,003.25	\$1,584.00	Fresno

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Cindy & Steve McClain	This project proposes installing a new higher efficiency 10 HP pump, flow meter, 2 pressure sensors, and 3 soil moisture sensors.	\$20,293.77	\$960.00	Tehama
Circle G Ranch	The project proposes to install a new optimized booster pump and motor with variable speed control and programmed settings for each zones pressure and flow. The new pump will be larger to avoid overloading the motor but will include a VFD to operate at lower speeds ultimately using less power due to the affinity laws. Water efficiency will be realized with the use of new monitoring and control infrastructure at the major agriculture systems, including the wells and reservoir levels, pumps, and water meters. The valves will also be programmable or automated based on localized intelligence about microclimate with a weather station and soil moisture sensors. The implementation strategy consists of three phases that begin with the installation of the new pump, VFD, and flow monitoring, along with the weather station to record operation. The second phase will proceed with adding controls to recently retrofitted equipment for electronic control and zone-specific flow monitoring. Lastly, soil will be added for moisture sensors. These will be continually improvised through central control by scheduling programming and zone-specific analysis. Smart irrigation will be introduced over time as confidence in data and alignment with technology and field inspections synchronize. As the technology and operating personal synchronize, the transition will result proactively as opposed to reactive maintenance, with a water-efficient outcome.	\$98,593.10	\$62,190.53	Santa Barbara
Clark Goehring Farms	This project proposes the installation of a new drip system, including media filtration and booster pump with VFD, as well as a flow meter and all pipes and manifold systems needed for drip based irrigation. The project will also include installation of new media (sand, etc.) filtration units for the proposed drip system, as well as a flow meter and a 30-HP electric booster pump. Downstream of the booster pump, water will flow along a series of conveyance lines ranging in diameter from 8" to 2". In addition to the drip system installation, the project proposes to update the existing irrigation scheduling practices. Data will be collected from the CIMIS system and water savings will be verified using the proposed flow meter, which will be installed downstream of the media filtration system.	\$99,999.33	\$25,131.50	Kern
Claudio Duran	This project intends to convert from flood/surface irrigation to a micro sprinkler system and replace 4 gasoline powered pumps to 1 electric short set turbine pump regulated by a variable frequency drive and powered by solar panels. The proposed system includes a variable frequency drive and sand media filter at the pumping station. A 7.7 kW solar system would be installed to power the electric pump and eliminate use of motor gasoline. The micro sprinkler system would replace flood irrigation with fanjet emitters.	\$76,600.00	\$23,475.00	Fresno
Clow Ranch	The project proposes to install solar on a 20 HP electric pump and a 40 HP electric pump, adding evapotranspiration for improved irrigation management, replacing inefficient drip lines, flowmeters, and including pressure compensating emitters for improved distribution uniformity.	\$99,819.83	\$31,563.84	Ventura

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Collins Vineyard Inc	This project proposes installing a weather station capable of calculating evapotranspiration and well system monitoring. The pumping station will be retrofitted with a Variable Frequency Drive and automation for pump control.	\$85,025.50	\$27,599.00	Monterey
Conaway Preservation Group	This project proposes removing the diesel engine and gearhead and installing a 125 HP premium efficiency motor and soft state control panel.	\$74,813.61	\$11,222.04	Yolo
Cornerstone Certified Vineyard	This project proposes to replace the current pump with a new submersible 5 HP electric pump. A VFD, flow meter, and a Ranch System Weather Station, connected to 8 soil moisture probes, will be installed as part of this project. The irrigation valves will be connected to the weather station hardware which will allow for remote control of the valves.	\$62,431.82	\$9,740.60	Sonoma
Corradi Farms	This project proposes to switch from sprinkler to surface drip irrigation. A VFD will be installed, as well as a flow meter, a sand media filtration system, a telemetric weather station, and two telemetric soil moisture monitoring sites.	\$57,715.41	\$0.00	San Joaquin
Cottonwood Farms	This project proposes to convert from flood irrigation to drip irrigation, and implement new evapotranspiration-based irrigation scheduling with integration of the CIMIS system.	\$100,000.00	\$92,076.31	Tulare
Craig Sorensen	The proposed project includes installing a highly efficient microsprinkler irrigation system. A 50 HP pump will be replaced with a highly efficient 50 HP with a Variable Frequency Drive. A flow meter and in-field soil moisture monitors will be installed that will produce real time flow rate and soil moisture data.	\$80,000.00	\$18,438.42	Fresno
Creekside Farms Inc.	The purpose of this project is to install a 30.4 kW solar photovoltaic system to power the existing 125 HP turbine well pump, 75 HP submersible well pump, and 50 HP booster pump. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meters will also be implemented.	\$99,246.17	\$0.00	Santa Cruz

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Da Silva Dairy Farms	<p>This project proposes to purchase and install an innovative water recycling system that will reuse process water from an existing milk cooler system. Currently the milk cooler uses up to 200 gpm of water, (up to 110 acre-feet/yr. of water consumed), which is disposed of under the existing system without further benefit. The project will deploy a water recycling system (pump, pipelines, and appurtenances) to transfer cooling water effluent for beneficial use. During normal operations, cooling effluent will be transferred to the dairy's existing ponds, held temporarily, then distributed to the adjacent fields for irrigation, offsetting other on site water use and groundwater pumping. When not needed for irrigation (winter), the water will be used to water cows at the dairy. To further reduce water consumption, the project will deploy a total of 8 tensiometers (4 12-inch and 4 24-inch) across the Applicant's existing agricultural operations. The tensiometers, combined with improved scheduling based on CIMIS data, will greatly improve irrigation water use efficiency on the site, which is currently irrigated with a combination of groundwater and surface water. Tensiometers will be dispersed across the site so as to maximize coverage and provide fine scale soil moisture data. To further improve energy efficiency of the facility, the project will also deploy a high-efficiency lighting system at the dairy, thereby further reducing the amount of electricity that is consumed on site as a preliminary to / upstream of the proposed water recycling and reuse for irrigation.</p>	\$72,378.17	\$12,000.00	San Joaquin
Da Silva Dairy Farms LP	<p>This project proposes to install an innovative water recycling system that will reuse process water from an existing milk cooler system. The project will deploy a water recycling system (pump, pipelines, and appurtenances) to transfer cooling water effluent for beneficial use. When not needed for irrigation (winter), the water will be used to water cows at the dairy. To further reduce water consumption, the project will deploy a total of 8 tensiometers (4 12-inch and 4 24-inch) across the existing agricultural operations. The tensiometers, combined with improved scheduling based on CIMIS data, will greatly improve irrigation water use efficiency on the site, which is currently irrigated with a combination of groundwater and surface water.</p>	\$77,680.88	\$12,000.00	San Joaquin
Daljit Hundal	<p>This project proposes to add soil moisture stations, flow meters, and pressure sensors before and after the filters, connected to CIMIS and, telemetry network. The project also proposes to install a solar array to the pumps to power it along with proposed VFDs.</p>	\$83,806.29	\$0.00	Yuba
Danelle A Grove	<p>This project includes the installation of solar system, a soil moisture sensor station, and the conversion of permanent pasture irrigation from the well to surface water by removing the obsolete open concrete ditch and replacing it with buried pipeline. Flow meters will be installed on both the pump and on the surface water pipe.</p>	\$95,870.68	\$1,500.00	Glenn
Danny Grzanich	<p>The project proposes to install a new 30 HP pump, pump filter, telemetry. A drip system will replace a hand-move system.</p>	\$100,000.00	\$28,553.01	Butte

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Dave J Mendrin Inc.	This project will install a solar system and specially built canopy to power a 30 HP deep well and provide power to a 30 HP lift pump to move irrigation district canal water to an existing drip system. The project also proposes to also install 2 soil moisture monitors with online recording to enhance irrigation management.	\$99,572.47	\$121,698.29	Madera
David Busse	The project proposes replacing a gas generator with a 3,000 watt off-the-grid photovoltaic solar system and installing a modern irrigation system to replace hand-watering.	\$41,305.95	\$16,193.12	San Diego
David Krause	The project proposes to replace existing 10 HP and 20 HP pumps with submersible pumps and Micro VFDs, as well as the installation of a 6.7 kW solar system.	\$45,988.91	\$11,769.52	Fresno
Davis Vineyards	This project proposes the installation of a 154.45 kW solar system to offset the energy use of three irrigation pumps. The project will also include the installation of three flow meters, five soil moisture sensors, and a weather telemetry system.	\$100,000.00	\$365,507.00	Madera
Day's Nuts	This project proposes to add a 3.4 kW solar system to existing electric well pump. Additionally, the project will add soil moisture sensors to more accurately schedule irrigation and reduce pumping.	\$48,940.00	\$2,000.00	Merced
de Jong Dairy Farms, Inc.	This project proposes to convert from flood irrigation to drip irrigation and implement new evapotranspiration-based irrigation scheduling with the integration of the CIMIS system.	\$100,000.00	\$149,929.53	Tulare
Deanoux Estates, LLC	The project proposes installing a soil monitoring system, improved pump efficiency, updated valves for each block, and a water cleaning system.	\$18,050.56	\$0.00	San Luis Obispo
Debbie Del Don	The proposed SWEEP project includes the installation of a 35.8 AC rated solar system to offset the current and future electrical usage of an existing 50 HP irrigation booster pump, the installation of a 50 HP variable frequency drive electric panel, the installation of a premium efficient 50 HP motor on an existing turbine booster pump, the installation of two Sentek soil moisture probes with remote access to help schedule irrigations, 2 inline pressure sensors, 1 Davis field weather station with remote access to determine field weather conditions, a Seametrics magnetic flowmeter to record the amount of water applied to the field, and an automation system to turn on and off the irrigation booster pump and change irrigation sets based on the weekly irrigation schedule entered into the controller.	\$100,000.00	\$58,231.00	Merced

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Del Mar Farms	The project is a conversion from hand move sprinkler irrigation to drip irrigation. The project includes converting a existing 225 HP diesel power pump to a 100 HP premium efficient electric pump powered by electricity (PG&E). The project also includes installing a 100 HP variable frequency drive electrical panel and a new drip system. The system will also include Nelson Twig automation system for valve, booster pump and fertilizer pump control, 2 Sentek soil moisture probes with remote access, and 1 Puresense field weather station, and a Seametrics magnetic flowmeter.	\$100,000.00	\$165,775.00	Merced
Denken Farms	The proposed project includes retrofitting an existing microsprinkler irrigation system with a dual line drip irrigation system. The inefficient 100 HP pump will be replaced with a new efficient pump with a variable frequency drive. A flow meter and moisture soil monitors will also be installed that will produce real time flow rate and soil moisture data that can be remotely monitored. The proposed monitoring and scheduling software will incorporate local CIMIS data and real time field data to precisely time and execute irrigations.	\$100,000.00	\$67,119.88	Madera
Dennis Da Silva	This project proposes to install a surface water system that will capture surface water from the nearby district canal, temporarily store it, filter it, and use it for drip and microsprinkler irrigation. To further reduce water consumption, the project will deploy a total of 8 tensiometers (4 12-inch and 4 24-inch) across the Applicant's existing agricultural operations. The tensiometers, combined with improved scheduling based on CIMIS data, will greatly improve irrigation water use efficiency on the site, which is currently irrigated with a combination of groundwater and surface water. Tensiometers will be dispersed across the site so as to maximize coverage and provide fine scale soil moisture data. To further improve energy efficiency of the facility, the project will also deploy a high-efficiency lighting system at the dairy, thereby further reducing the amount of electricity that is consumed on site as a preliminary to upstream of the proposed water recycling and reuse for irrigation.	\$100,000.00	\$56,440.62	San Joaquin
Dennis Hutson Ranch	The project proposes to replace a leaky cement pipe with a new PVC pipe as well as install soil moisture monitors and a flow meter on a planned retrofitted 50 HP pump.	\$39,854.29	\$2,700.00	Tulare
Der Yang Moua	This project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 2.5 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$56,634.00	\$858.00	Fresno



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Deran Koligian Farms	This project will convert the existing flood irrigation system to a drip system with booster pump with dual VFD capability for booster pump and flood pump control, sand media filtration, automation monitoring and control with soil moisture probes, weather station and recording features, digital flow meter with pulse capabilities, and jet sprinkler system with poly distribution hose.	\$59,626.83	\$2,900.00	Fresno
Dilouie Farm	This project proposes to install soil moisture stations, more efficient sprinklers, and a solar array to the pump to offset the power use. The project also proposes replacing existing, inefficient pump bowls with efficient ones.	\$93,478.21	\$0.00	Tehama
Domingo Mora	The project proposes to set the operating condition of the pump to match the requirements of a drip irrigation system. This system will use the existing 40 HP submersible electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values. Solar panels will be installed as well to help offset the electricity used throughout the growing season.	\$99,703.26	\$38,663.82	Fresno
Donald Rocha II	The proposed project includes several upgrades to the existing drip irrigation system including a flow meter, pumping station, soil moisture monitors, and a weather station. The proposed components will be tied to a telemetry system and irrigation system that incorporates CIMIS data into scheduling software.	\$33,969.60	\$10,000.00	Fresno
Double E Farms, Inc.	This project proposes to install a drip irrigation system and to set the operating condition of the electric turbine ground water well to match the requirements of the drip system. This system will incorporate the use of a 40 HP Cornell booster pump to boost the district surface water and the ground water. The irrigation system will consist of sand media filters, double drip lines, pressure compensating control valves, a soil moisture monitoring system, flow meter and a 40 HP booster pump.	\$100,000.00	\$130,976.53	Fresno
Double Eagle Dover, LLC	This project proposes to replace the existing diesel driven pump with a high efficiency variable speed electric turbine pump. The project proposes adding a filtration system, installing a sulfur burner to increase the electrical conductivity in the soil and lower the pH of the Colorado River water which is the source of irrigation water.	\$82,129.85	\$12,149.00	Riverside
Dustin Timothy Farming	This project proposes to convert from surface irrigation with an unlined ditch to drip irrigation. The project also proposes to install soil moisture sensors, evapotranspiration weather-based scheduling, and a flow meter.	\$99,586.13	\$87,871.68	Solano
Dutra Dairy	This project proposes to install a pressurized drip irrigation system, telemetry-based soil moisture monitoring equipment, flow meters, and fertigation system will be utilized to track water applications.	\$98,969.31	\$78,081.82	Kings

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DWK Ventures 1, LLC	This project plans include replacing a 30 HP pump with a submersible pump and installing a Micro VFD. In addition, the ranch will install a real-time irrigation water management level 3 irrigation monitoring solution from Sentek, that features irrigation monitoring and scheduling software to optimize irrigation management. The project also proposes the installation of a 33 kW solar system that will replace 100% of the ranch's fossil fuel electricity provided by the utility.	\$77,700.80	\$47,484.89	Tulare
Edward Smith	This project proposes to install a 16.12 kW solar system and implement irrigation water management level 3 practices.	\$70,000.00	\$4,739.37	Fresno
Edward W. Boeger Exemption Trust	This project proposes to install a 12.18 kW direct current solar system, a Variable Frequency Drive on a 40 HP pump, soil moisture sensors, and a flow meter, as well as convert to an underground solid state system.	\$97,090.04	\$13,243.90	Butte
Elkhorn 167, LLC	This project aims to install a highly uniform, low pressure drip system, a new well pump, and upgrade to irrigation water management level 3. The existing 20 HP pump will be re-bowled to develop pressure and improve efficiency.	\$97,461.11	\$1,000.41	Fresno
Elkhorn Dairy, LLC	This project proposes to convert from flood irrigation to drip irrigation and implement new evapotranspiration-based irrigation scheduling with integration of the CIMIS system.	\$68,658.07	\$15,849.82	Tulare
Empresas Del Bosque, Inc	This project proposes to replace the current diesel engine on the current booster pump with a more fuel efficient diesel engine. The project also proposes to retrofit the 2 oldest electric booster pumps, add a soil moisture monitoring equipment, and a weather station.	\$100,000.00	\$14,821.65	Fresno
Eric Marthedal	This project proposes to install micro sprinklers to replace the pumping of groundwater for the purposes of flood irrigating. Additionally Jain Logic soil moisture monitoring and irrigation control equipment will be installed. The 20 HP submersible pump that irrigates the field will have a VFD installed as a part of this grant. Additionally a Seametrics flow meter will be installed on the pump and it will be integrated with the Jain Logic software.	\$45,553.65	\$5,000.00	Fresno
Eric Quek Q Ranch	The project proposes to install a new pump, a sand media filter, and a booster pump to take advantage of surface water and reduce groundwater pumping and subsidence, and a variable frequency drive (VFD), microirrigation, and flow meters on both the well pump and booster pump. The project proposal will also add a weather and soil moisture sensor.	\$80,182.25	\$6,075.04	Tulare
Estate Vineyards LLC	This project proposes installing soil moisture sensors, a weather station capable of calculating evapotranspiration, and well system monitoring to inform irrigation scheduling. The booster station will be retrofitted with a Variable Frequency Drive and automation for pump control. Damaged, plugged drip tubing and pressure compensating emitters will be replaced with new hardware.	\$99,656.57	\$24,500.00	San Luis Obispo

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Flight Rail Corp. dba River Bend Vineyards	This project proposes to convert a pump from diesel to grid electric with a VFD to increase pumping efficiency. The project also intends to install a 6 kW solar array and a 1.5 HP submersible pump with a VFD, 3 soil moisture sensors, and two flowmeters.	\$43,352.71	\$4,730.00	Mendocino
Flood to Drip Irrigation	This project proposes to install soil moisture technology. The grower will monitor pump efficiency by adding a flow meter to the discharge and pressure sensors before and after the filter.	\$68,571.00	\$1,800.00	Kings
Florencio Cruz	This project proposes to install a low pressure drip irrigation system, new pump, and irrigation water management level 3. In addition to the flow meter, soil moisture monitoring equipment will be installed. Advanced water management using data from the flow meter, soil moisture monitoring, and CIMIS-based crop evapotranspiration projections will be used for volumetric irrigation scheduling.	\$55,250.23	\$2,500.00	Fresno
Frank V Schott Farming, LLC	The project proposes to convert a flood irrigated block to double line drip irrigation. Irrigation scheduling will be produced by a combination of Watermark moisture sensors connected to internet software via IRRomesh telemetry and reviewed by a third party CCA that will produce weekly irrigation schedules utilizing CIMIS data, field inspections, and soil data. A flow meter will also be installed to measure water usage is placed post filter and recorded electronically.	\$53,424.25	\$6,946.00	Tulare
G4 Enterprises	The proposed project includes retrofitting an existing microsprinkler irrigation system with a dual line drip irrigation system. A reservoir will be constructed which will allow the system to be operated using less horse power. The reservoir will also allow surface water to be used when currently it is not. A flow meter and soil moisture monitors will be installed that will produce real time flow rate and soil moisture data that can be remotely monitored. The proposed monitoring and scheduling software will incorporate local CIMIS data and real time field data to precisely time and execute irrigations.	\$100,000.00	\$199,518.47	Fresno
Gail A Trace DBA Traceland	The purpose of this project is to install a 5.7 kW direct current solar photovoltaic system to power the existing 3 HP electric submersible pump. In addition, weather and soil moisture sensors, volumetric management with the proposed digital flow meter, and well level sensor will also be implemented.	\$33,396.85	\$3,250.00	San Luis Obispo
Gary and Elene Pruitt Family Trust	The project proposes the installation of a 30 HP lift pump and stand pipe for pumping surface water from the canal to the main water line. A 30 HP VFD is also planned as a means to increase pump efficiency. In addition, the installation of flow meters, sand media filters, moisture sensors, and a Wildeye(r) weather station. The project also proposes the use of soil moisture probes to provide soil moisture and temperature data at multiple depths to monitor "bank account" water use.	\$82,266.39	\$25,441.34	Kings

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George Amaral	This project proposes to convert from aluminum sprinkler pipe to pressurized solid-set yellowmine pipe and build a solar array.	\$100,000.00	\$794,803.51	Monterey
George Pendell	This project proposes to convert an open ditch to a sealed pipeline and install new water meter.	\$78,632.00	\$0.00	Colusa
Gianina Thaxoachay	This project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 15 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$57,964.66	\$2,700.00	Fresno
Gill Vineyards	The project proposes installing a highly uniform drip irrigation system. A 116 HP diesel well pump will be replaced by a 50 HP electric pump. Irrigation water management level 3 equipment will be put into place including a new flow meter, a soil moisture monitoring station, and six sensors. Advanced water management using data from the flow meters, soil moisture, and CIMIS evapotranspiration estimates will be used for volumetric irrigation scheduling.	\$93,877.17	\$20,000.00	Fresno
Gilt Edge LLC dba Ruhstaller	This project proposes to install a new solar array, drip irrigation, and an innovative water recycling system that will collect wastewater from the existing adjacent brewery and use it for drip irrigation. The project will also save water by deploying tensiometers and transitioning to irrigation scheduling for the site that relies on a combination of tensiometer data and CIMIS data/interface. The project site is served by an existing electric agricultural well (40 HP) plus a small electric (1 HP) well that serves an existing brewery.	\$88,390.39	\$13,000.00	Solano
Glenn Allen	The proposed project includes the installation of a 22.4 kW ground mount photovoltaic solar system as well as a fully automated telemetry based soil moisture monitoring system. The solar system will be utilized to replace power currently provided by PG&E for a 20 HP submersible pump and previously purchased and soon to be installed 15 HP booster pump that will utilize surface water supplies to facilitate on-farm recharge in support of the Sustainable Groundwater Management Act (SGMA). The automated irrigation and fertilization system will incorporate the use of four Sentek soil moisture probes, pressure transducers, fertilizer injection pumps and flow meters, as well as a weather station.	\$86,706.43	\$14,976.00	Madera

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Glenn Spyksma	This project consists of installing soil moisture monitoring and control equipment along with a weather station to maximize the benefit of current control technologies to reduce water usage. In addition, the pumping system will be upgraded with an electrical control system that will monitor line water pressure and control the corresponding pump frequency.	\$15,931.47	\$0.00	San Joaquin
Global Ag Properties II USA, LLC	This project proposes to install 10 soil moisture monitoring sites, including 10 pressure transducers at each soil moisture site, and a weather station and well ultrasonic depth sensors at all three wells.	\$27,303.67	\$1,407.00	Monterey
Grzanich Brothers Orchards	This project proposes to replace the hand move irrigation system with a dual double line drip irrigation system with a solid set system only for frost. The project proposes replacing the 20 HP pump with a 60 HP with a VFD. Both pumps will be powered by a proposed solar array. The project also proposes to install soil moisture, weather, and pump monitoring equipment, as well as a rainwater capture system.	\$100,000.00	\$122,515.01	Butte
GSA Farms, Inc.	This project proposes to install a 40 kW direct current solar array, including 134 modules of 300-watt panels, along with 134 Chilicon Power CP 250/285 micro-inverters, roof-mounted onto an existing agricultural building. The project also proposes to install a VFD onto the existing 60-HP pump and a Model 615 Pressure Chamber used to directly measure the water demand of trees.	\$100,000.00	\$58,990.00	Glenn
Gulzar Sran	This project proposes the installation of automated plant, soil, and weather monitoring sensors as well as automated pump and flow monitoring. The project also intends to install a VFD and use FarmX NDWI and NDVI imagery technology to determine areas of the field that are being overwatered.	\$86,258.00	\$36,682.00	Fresno
Guo Ping Yuan Nursery	This project proposes the replacement of 2-inch irrigation mainline with 3-inch PVC line and replace leaky laterals and associated valves with 1.5-inch PVC. The well pump will be replaced with a more efficient 5 HP pump. Sprinkler heads will also be replaced to improve distribution uniformity and a flow meter will be added.	\$53,930.64	\$2,750.00	Santa Clara
Gurpreet k Bains	The project proposes to install a drip irrigation system and set the operating condition of the pump to match the requirements of the drip irrigation system.	\$77,851.13	\$6,135.00	Fresno
Han Qiang Kuang	This project proposes to replace a 3-in main line and 1.25-in lateral lines with new lines to reduce friction loss and save energy and water. The project proposes to replace old sprinkler heads with new heads to improve distribution uniformity and add a flow meter and add moisture sensors to aid in irrigation scheduling and reduce water and energy use.	\$28,476.76	\$3,550.00	Santa Clara

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Hand in Garden	This project proposes to install 2 soil moisture sensors, a weather station, a VFD, a 20 HP submersible pump, a solar array and new drip tubing.	\$100,000.00	\$39,709.00	Butte
Hansen Family Revocable Living Trust of 2005	This project allows for the installation of a new drip system, a soil moisture probe, on-farm weather station, flow meters, pump and valve control, and the conversion of an existing 40 HP diesel pump to an 20 HP electric pump.	\$69,741.80	\$0.00	Fresno
Haupt and Sons Farms	The project proposes installing dual-line drip irrigation system, including a booster pump on the existing 75 HP turbine pump with VFD, sand media filtration, moisture sensors, and weather station.	\$81,751.66	\$4,425.00	Fresno
HB Ag Investments	This project proposes the installation of a 42.75 kW direct current solar system to power an existing 75 HP electric pump. Soil moisture monitoring units and a weather station will be installed to utilize evapotranspiration-based scheduling along with an acid injection and gypsum injection system.	\$100,000.00	\$57,054.44	Kern
Hector Hernandez	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump to several valves corresponding to irrigation sets. Riser sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the riser. Fan jets will be installed on the tape at 36" intervals. This system will use the existing 1.5 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$96,704.17	\$25,869.08	Fresno
Hershel Hill Inc.	This project proposes to purchase and install a replacement pump and motor system, along with a new adequately sized drip filtration and metering system. The project will also deploy a total of six new tensiometers, to be placed in pairs (one 12-inch and one 24-inch tensiometer) and dispersed across the project area so as to maximize coverage and provide fine scale soil moisture data. The project will achieve water savings by using a new and more effective drip system. The project will leverage soil moisture data from the tensiometers plus additional data from the CIMIS system.	\$43,304.29	\$2,400.00	Fresno
Heu Long Siong	The project proposes to set the operating condition of the pump to match the requirements of a drip irrigation system. This system will use the existing 10 HP submersible electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values. Solar panels will be installed to help offset the electricity used throughout the growing season.	\$89,686.85	\$35,817.60	Fresno

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High Ground Organics	This proposal would provide a 16.8 kW solar photovoltaic system to power the existing 25 HP submersible irrigation pump. Additionally, the current leaky, portable, aluminum pipe irrigation system will be replaced with a portable, leak-proof, solid-set system with high efficiency sprinkler heads, pressure regulators, and check valves. Tensiometers and a flow meter will be used to monitor soil moisture and aid in irrigation scheduling.	\$62,536.46	\$16,480.00	Santa Cruz
Hines Family Farms, Inc	The project proposes to install a highly uniform micro-irrigation system, a new high efficiency 25 HP reservoir pump, and a reservoir with surface water delivery. An additional field with an existing micro-irrigation system will also be connected to this system. Both fields will be supplied with surface water for the first time. Irrigation water management level 3 equipment and management will be added to each field.	\$100,000.00	\$59,025.16	Fresno
Hines Properties, LLC	The proposed project involves installing soil moisture monitoring, flow meter monitoring, and pump and valve automation. A close coupled turbine pump will be installed to gain access to ditch water and irrigate using less horse power. Flow and moisture components will be remotely monitored and controlled. The monitoring and scheduling software will incorporate local CIMIS data and real time field data to precisely time and execute irrigations.	\$80,000.00	\$24,378.62	Fresno
Holman and Holman	This project proposes to add a soil moisture station to view the data online that is relayed through a telemetry network. The project intends to remove the diesel engine and replace it with a new electric motor and add a solar array to the new electric pump to power it. The project also plans to add new sprinklers and a evapotranspiration station.	\$82,980.59	\$9,678.06	Butte
Hopson Farms LLC	The project proposes the installation of 3 moisture probes, 5 pressure sensors (two at the flow meter and one each at the moisture probe sites), a flow meter, and use of CIMIS to guide the timing and length of irrigation. The moisture probes will sense moisture every 4" down to a depth of 48". Pressure bombs will also be incorporated to provide additional data regarding tree stress to insure precision irrigation scheduling. The project also includes a 63 KW solar power generation system to power the 12 5HP electric pump.	\$85,354.00	\$97,195.00	Glenn
Horn Brothers, LLC	This project proposes installing a 10 kW solar system, replacing an 81.8 HP diesel well pump with a 40 HP electric pump and VFD, replacing a 7.5 HP well pump with a 20 HP well pump and VFD, installing a 15 HP ditch pump, resulting in a reduction in pump total dynamic head and increasing overall pump efficiency on 2 well pumps.	\$100,000.00	\$9,999.80	Fresno
Hummingbird Ranch	This project will support the installation of a 10.4 kW solar photovoltaic system, the conversion of sprinkler irrigation to a drip system, and the adoption of soil moisture sensors.	\$46,805.78	\$4,350.00	Santa Cruz
IV Farming Trust	This project proposes the conversion from flood irrigation to drip irrigation. The project proposes converting an existing 225 HP diesel power pump to a 100 HP electric pump powered by electricity (PG&E). It also includes installing a 100 HP variable frequency drive electrical panel, Nelson Twig automation system for valve, booster pump, and fertilizer pump control. The system will also include 2 Sentek soil moisture probes and 1 Puresense field weather station with remote access and a Seametrics magnetic flowmeter to record the amount of water applied to the field.	\$100,000.00	\$184,624.00	Merced

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JAC Ranch, LLC	The purpose of this project is to install a 30.4 kW direct current solar photovoltaic system to power the existing 60 HP electric turbine pump. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meters will also be implemented.	\$99,834.29	\$0.00	Monterey
Jackknife LLC	This project proposes to install soil moisture probes, a weather station capable of calculating evapotranspiration, and a well system. Well #1 will be converted from natural gas powered turbine to an electric powered submersible with VFD and new media filter system. All pumping stations will be outfitted with automation for pump control.	\$99,975.32	\$28,289.85	San Luis Obispo
Jacob Turnbull	The project proposes to replace an electric 20 HP pump with a new solar powered 50 HP pump. The project will include the installation of a new 7.5 KW solar system on the property to supply power to the upgraded pump, installation a flow meter and Variable Frequency Drive, microsprinklers, as well as a pressure chamber.	\$100,000.00	\$5,049.40	Tehama
Jacquelyn Goss	This project proposes to convert a 110 HP diesel motor to 60 HP propane motor, replace an inefficient 40 HP pump with a new 40 HP pump, replace a leaking and inefficient drip system, add pressure compensating valves, and install a flow meter at the new pump and at a existing 10 HP electric pump.	\$74,242.29	\$1,493.26	Butte
James and Amanda Lefor	The project proposes to convert existing flood irrigated pasture to micro-sprinkler irrigated almonds. The project includes installing real-time remote soil moisture sensing equipment to help irrigate more efficiently. The project also includes the installation of a weather station equipped with weather sensors will be used to calculate reference evapotranspiration (evapotranspiration)/crop evapotranspiration (ETc). A flow meter will be added. Finally an electric 75 HP pump motor equipped with a Variable Frequency Drive will replace the current Tier-0 173 HP diesel pump engine.	\$59,501.77	\$1,930.00	Tehama
James Hansen	This project proposes the installation of a new drip system, a soil moisture probe, flow meters, pump and valve control, and the conversion of an existing 40 HP diesel pump to an 20 HP electric pump.	\$100,000.00	\$1,019.64	Fresno
James Jackson Farms	This project proposes the replacement of a 20 HP submersible pump with a very high efficiency 40 HP turbine pump and Variable Frequency Drive on an existing micro-irrigation system. The efficiency upgrade will also include the installation of a new, higher capacity sand media filtration system and automatic valving. This project also proposes the installation of weather stations and soil moisture monitoring stations at four separate ranch locations.	\$72,697.35	\$19,928.00	Tulare
James R Davis	This project proposes the addition of sensors for water flow, soil moisture, weather, and solar monitoring.	\$6,291.00	\$3,750.00	San Diego
Jason Yamamoto	This project proposes to add new electricity service to provide power to new electric motor, install a VFD, pipeline to move water from the pump to existing micro irrigation system, and monitoring equipment, as well as the conversion of a 100 HP diesel engine to electric motor.	\$100,000.00	\$53,494.25	Stanislaus



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Jay Ohri	This project proposes to convert from flood irrigation with a diesel pump to micro-irrigation using an electric pump, install soil moisture sensors and a VFD.	\$98,977.47	\$177,993.55	Sutter
Jeret Rogers	This project proposes to install a pressure compensating drip irrigation system and to set the operating condition of the pump to match the requirements of the drip irrigation system. The proposed irrigation system includes filtration, flow meters, and PVC manifolds from the pumps to several valves corresponding to irrigation sets, followed by pressure reducers and pressure compensating drip lines. The existing 5 HP pump will be replaced with an efficient 5 HP pump and VFD. Two tanks will be replaced with larger 1,100 and 5,000 gallon tanks. A rain catchment system will be constructed to capture all available runoff into a new 5,000 gallon water tank to be pumped into the irrigation system with a 2 HP booster pump and VFD. An additional well will be fitted with a 3-phase 5 HP pump and VFD to achieve the highest efficiency possible. Six soil moisture sensors, a weather station, and CIMIS will be used to determine irrigation scheduling. Three new flow meters will be installed for all 3 water sources. The irrigation system will also be fitted with a Motorola automation controller capable of reading soil moisture sensors, flow meters, and flow irregularities. Mulching will be done on the property to improve soil biomass, reduce erosion, carbon sequestration, and increase the water holding capacity of the soil. A 9 kW direct current solar array will also be installed to service the pumps.	\$99,096.71	\$48,210.11	San Diego
Jerry & Carole, LLC	This project proposes to add soil moisture stations in the field to monitor irrigation efficiency by being able to view the data online that is relayed through a telemetry network. Project proposes adding a flow meter to the discharge, and pressure sensors before and after the filters, an evapotranspiration station, and connecting the system to a telemetry network to support automation.	\$24,825.00	\$17,302.33	Glenn
Jerry Da Silva	This project proposes to install solar panels, double drip line tape for irrigation, and a 7.5 HP pump. The project also proposes to use cover cropping and composting methods to improve soil quality.	\$99,948.48	\$11,584.99	San Joaquin
Jesse Khosa	The proposed project plans to use the existing 100 HP turbine electric pump. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values. Solar panels will be installed to help offset the electricity used throughout the growing season.	\$100,000.00	\$95,222.01	Fresno
JM Farms	This project proposes to automate current pump start, valve switch, and pump shut down. In combination with moisture monitoring, pressure bombs, automation, and moving the tree irrigation supply lines underground. The project also proposes to install a 18 kW solar system.	\$93,461.29	\$41,594.14	Tehama

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Joe & Anna Da Silva Trust	This project proposes to install an innovative water recycling system that will reuse process water from an existing milk cooler system. The project will deploy a water recycling system (pump, pipelines, and appurtenances) to transfer cooling water effluent for beneficial use. During normal operations, cooling effluent will be transferred to the dairy's existing ponds, held temporarily, then distributed to the adjacent fields for irrigation, offsetting other on site water use and groundwater pumping. When not needed for irrigation (winter), the water will be used to water cows at the dairy. To further reduce water consumption, the project will deploy a total of 8 tensiometers (4 12-inch and 4 24-inch) across the Applicant's existing agricultural operations. The tensiometers, combined with improved scheduling based on CIMIS data, will greatly improve irrigation water use efficiency on the site, which is currently irrigated with a combination of groundwater and surface water. Tensiometers will be dispersed across the site so as to maximize coverage and provide fine scale soil moisture data. To further improve energy efficiency of the facility, the project will also deploy a high-efficiency lighting system at the dairy, thereby further reducing the amount of electricity that is consumed on site as a preliminary to upstream of the proposed water recycling and reuse for irrigation.	\$62,360.11	\$10,000.00	San Joaquin
John and Carmen Berns	The project proposes to install an irrigation management system and a 33 kW solar power system. The irrigation management system will consists of soil moisture sensors, cloud-based data collection, a flow meter and a weather station.	\$100,000.00	\$11,113.89	San Diego
John Wu Nursery	The project proposes to replace existing galvanized main line pipe with PVC pipe and add soil moisture sensors to improve system uniformity, reduce friction loss, and reduce energy use.	\$38,046.91	\$3,800.00	Santa Clara
K D Helms Farms	The proposed project includes the installation of a 28 kW ground mount photovoltaic solar system as well as a fully automated telemetry based soil moisture monitoring system. The solar system will be utilized to replace power currently provided by PG&E for a 25 HP submersible pump and booster pump that will utilize surface water supplies to facilitate on-farm recharge in support of the Sustainable Groundwater Management Act (SGMA). The automated irrigation and fertilization system will incorporate the use of three Sentek soil moisture probes, pressure transducers, fertilizer injection pumps, and flow meters. The project also includes the installation of four hydraulically controlled valves that will be connected to the automation system.	\$99,996.28	\$18,252.00	Madera
K&G Ranches	This project proposes to use irrigation water management level 3 including the installation of a weather station, soil moisture sensors, plant stress sensors and pressure sensors, and VFD.	\$66,159.00	\$38,370.23	Tulare
KAHAL SATGUR S	This project proposes installing a VFD on a 100 HP well pump , a flow meter on each pump, and the conversion from time-based irrigation scheduling to irrigation water management-3 irrigation scheduling, using the FarmX system.	\$75,061.81	\$45,298.00	Madera
Kandarian & Sons, LLC	This project proposes to install a micro irrigation system, new pump, solar system, and irrigation water management level 3 equipment.	\$94,852.00	\$1,039.31	Fresno

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Kao Sue Lee	The project includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 10 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$70,407.23	\$2,226.00	Fresno
Karen Yamamoto	The proposed project aims to convert the diesel engine to a vertical turbine pump powered by an electric motor and convert from flood and high-pressure sprinklers to micro-sprinklers and double line drip. The project also proposes to add a weather station, soil moisture probes, pump station monitoring, and field valve automation to increase water scheduling efficiency.	\$100,000.00	\$144,521.52	Stanislaus
Kathryn Wilkins	This proposed project will consist of placing 4 soil moisture units with 2 units for each block, positioned for optimum representation of elevation.	\$12,731.16	\$0.00	Stanislaus
Kautz, John H & Gail E TR	This project proposes to replace a 50 HP groundwater pump with a 30 HP VFD surface water pump. The project also intends to repair leaks in the drip irrigation. A 1,500 foot pipeline will be constructed along part of the slough, to connect to an existing pipeline that will transfer the water to the existing irrigation system station. A flow meter with a Remote Telemetry Unit will be installed on the new pump and a capacitance probe will be placed in a representative spot in the field and monitored remotely.	\$87,663.38	\$27,684.42	San Joaquin
Kautz, Kurt A & Sandra TR	This project proposes substituting a 50 HP groundwater pump for a 50 HP VFD surface water pump, replacing sections of drip hose damaged by wildlife, and installing a pump station and 50 HP pump with VFD and flow meter. The project also proposes to install a 1,150 foot pipeline under the field's road to connect diverted water from the slough to the existing filters and irrigation system. A Remote Telemetry Unit will be installed on the new pump to measure water remotely and a capacitive probe will be placed in a representative spot in the field and monitored remotely.	\$84,631.12	\$14,450.00	San Joaquin
Keith Yamamoto	The proposed project aims to convert the diesel engine to a vertical turbine pump powered by a 100 HP electric motor. The project also aims to install a weather station, soil moisture probes, pump station monitoring, and field valve automation to increase water scheduling efficiency.	\$100,000.00	\$25,375.35	Stanislaus
Keo Vanh	The project proposes to set the operating condition of the pump to match the requirements of a drip irrigation system. This system will use the existing 10 HP submersible electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values. Solar panels will be installed as well to help offset the electricity used throughout the growing season.	\$86,685.50	\$32,427.72	Fresno
Kerry Brooks	This project proposes to replace the existing pump well and install 3 flow meters.	\$100,000.00	\$0.00	Santa Barbara

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Kevin Hebrew	This project proposes to add soil moisture stations in the field to monitor irrigation efficiency by being able to view the data online that is relayed through a telemetry network. Project proposes adding a flow meter to the discharge, and pressure sensors before and after the filters, an evapotranspiration station, and connecting the system to a telemetry network to support automation.	\$44,982.06	\$0.00	Tehama
Kevin Herman	The goal of this project is to replace an inefficient 225 HP diesel pump with a new efficient electric 75 HP pump and a 75 HP VFD. Another inefficient 225 HP diesel pump will also be replaced by a new efficient electric 60 HP pump and a 60 HP VFD and a flow meter. A subsequent pump will also have a flow meter installed.	\$100,000.00	\$15,597.52	Madera
KidCo	The project proposes five irrigation system upgrades including the installation of four variable frequency drives, fourteen remotely-accessed soil moisture probes, fourteen remotely-accessed pressure transducers at the pumps and in the field, flow-meter monitors at the pumps, and remote valve control and irrigation controllers. Existing flow meters, electrical valves, crop water-use modeling, and weather stations will be integrated.	\$97,952.07	\$67,128.66	San Joaquin
King & King Ranch	The proposed project will install a variable frequency drive (VFD) and a new high efficiency filter on the 25 HP electric main well pump and four soil moisture sensors throughout the property.	\$28,519.83	\$2,500.00	Ventura
Kings Land Company	The proposed project involves installing soil moisture monitors and a weather station. A flow meter and valves will be retrofit. Flow and moisture components will be remotely monitored and controlled. The proposed monitoring and scheduling software will incorporate local CIMIS data and real-time field data to precisely time and execute irrigations.	\$30,000.00	\$7,399.08	Fresno
La Fuente Farming, Inc.	This project proposes to convert from high-pressure aluminum sprinklers to the use of low pressure micro-sprinklers. Flow meters will also be installed in the field blocks to better determine water usage.	\$67,714.97	\$0.00	Santa Barbara
La Mesa Vineyards LLC	The project proposes installing a 10 kW direct current solar photovoltaic and battery system to power agricultural needs, including a main well with submersible pump. The current 10 HP pump will be upgraded and a flow meter will be installed. An additional 5,000 gallon water tank will be installed to improve water distribution for irrigation. Drip lines will be upgraded with low flow emitters and valves to allow individual rows to be watered when needed. A weather sensor will also be installed to monitor rainfall, temperature, and wind speed for improved decisions on irrigation.	\$100,000.00	\$7,471.00	Amador
Lakshmi Farms	This project proposes installing an irrigation water management-3 water savings solution, 150 HP well pump motor, well casing/bowl replacement, and VFD on the well pump. The project will convert from time based irrigation scheduling to irrigation water management-3 irrigation scheduling using the FarmX system. The project will also install a flow meter to monitor water usage. The project plans on using FarmX NDWI and NDVI images to determine areas of the field are over watered.	\$79,751.00	\$260,549.38	Tulare

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Larry and Nancy Bradley	This project proposes the installation of a drip irrigation system to replace the current solid set system for irrigation, a new 50 HP motor and VFD. The project also proposes to add soil moisture stations out in the field to monitor irrigation efficiency by viewing the data online relayed through a telemetry network. Flow meters will also be installed and pressure sensors before and after the filters, connected to a telemetry network. The project will install a solar array to power the pump.	\$69,716.24	\$0.00	Butte
Lee Del Don	This project proposes to install a 71.6 AC rated solar system, a 75 HP variable frequency drive electric panel, a premium efficient electric motor on an existing turbine booster pump, two Sentek soil moisture probes, 2 inline pressure sensors, 1 Davis field weather station with remote access, a Seametrics magnetic flowmeter, and an automation system.	\$100,000.00	\$149,208.00	Merced
Le-Fort's Organic Crops, Inc.	This project proposes to implement improved irrigation scheduling of micro-irrigation system with addition of leaf wetness, soil moisture and temperature sensors, a rain catchment system designed to capture over 12,000 gallons of water per year, and the installation of a 7 kW solar photovoltaic system.	\$28,393.00	\$1,297.40	San Luis Obispo
Leo Schulz	This project proposes to install a 7.7 kW solar photovoltaic system, with panels located on a new shade structure next to the irrigation well and PG&E meter. Irrigation water management level 3 equipment will be put into place along with a flow meter and soil moisture monitoring equipment. Advanced water management using data from the flow meter, soil moisture monitoring, and CIMIS based crop ET projections, will be used for volumetric irrigation scheduling.	\$96,437.10	\$3,000.00	Fresno
Leoni Farms	This project proposes the conversion of flood irrigation to a uniform double line drip irrigation system, a 10 acre-foot capacity reservoir will be installed to use surface water for the new system, a 50 HP turbine, and VFD will be installed at the reservoir, and irrigation water management level 3 adopted.	\$100,000.00	\$72,792.91	Fresno
Lewis Yang	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 10 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$98,665.71	\$4,539.00	Fresno

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Lilian Yang	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. Crops will remain the same (diversified specialty vegetables). The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 15 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$62,689.31	\$2,709.00	Fresno
Linda Chu	This project proposes to install a solar system for an existing irrigation pump, and convert the sprinkler heads to wind-fighter heads, as well as install Certa-set pipes.	\$98,804.00	\$9,872.00	San Benito
Linda Garabedian Cole	The project proposes to include a new 300-foot well with a high efficiency VFD 100-horsepower pump that will supply the existing double-drip irrigation system with a feed conversion, moisture sensors controlled by telemetry and measured by a water meter. The irrigation will be powered by a new 60 KW solar array.	\$100,000.00	\$246,723.13	Fresno
Lindsey Farms	The project proposes to install a highly uniform low pressure drip system, a booster pump for surface water application, irrigation water management level 3 management and a 10 HP booster pump. Irrigation water management upgrades include the installation of a flow meter and soil moisture monitoring equipment.	\$48,907.31	\$3,945.00	Fresno
Lindstrom Vineyard	This project proposes to install a 27.75 kW solar array supplying electricity to a 50 HP submersible pump, installation of 4 soil moisture meters, and a weather station connected to a monitoring system to best determine irrigation cycles. Improvements also include upgrading the existing flow meter to a digital flow meter connected to the monitoring system, and electric solenoid valves installed in the irrigation system connected to a irrigation controller to pinpoint best time-of-day to irrigate without the chance of leaving the system on too long.	\$100,000.00	\$40,665.67	San Luis Obispo
Lisa Chorbajian	This project proposes to replace antiquated flow meters with new flow meters. The plan also includes installing soil moisture monitors, sand media filters, and a state-of-the-art Wildeye brand weather station with telemetry. The water and energy improvements requested under this grant also includes a 20 HP lift pump that will increase the ranch's access to surface water and reduce dependency on ground water currently pumped by a 40 HP pump. The project also proposes installing a 16.8 kW solar system.	\$71,632.23	\$24,845.00	Tulare

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Lockewood Acres	This project proposes to retrofit existing 5 HP pump and replace 0.75 HP electric booster pump with a solar powered pump that will pump from a new, above-ground 5000 gallon storage tank. A weather station capable of calculating evapotranspiration and soil moisture probes will also be installed to inform irrigation scheduling. New irrigation components will be installed to improve system uniformity, including pressure compensating emitters and a backflush system. A flow meter and a VFD remote monitoring system will also be installed.	\$52,210.38	\$1,500.00	Solano
Lohse Ranch	This proposed project will replace existing flood irrigation system with low pressure double line drip system. A VFD pump will also be installed. Furthermore, the ranch will be installing a Rain Bird weather and soil moisture monitoring system to track real time soil moisture, applied water, and evapotranspiration. A 30 kW solar ground mount system will be installed. Furthermore, the ranch will implement the planting of cover crops, mulching, and compost applications during project term.	\$100,000.00	\$124,462.76	Glenn
Long Valley Partners LP	The purpose of this project is to install a 20.9 kW direct current solar photovoltaic system to power the existing four electric turbine pumps. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meters will also be implemented.	\$99,745.28	\$0.00	Monterey
Lor Chang	This project proposes to replace the drip system with new below-ground PVC, new layflat submains, and more valves for more efficient irrigation sets. Additionally, the project proposes to add soil moisture sensors, a flow meter, a sand media filter, and pump retrofit.	\$69,325.18	\$2,850.00	Merced
Loretta J Taylor and Brad Taylor	This project proposes to increase the efficiency of an existing irrigation system by replacing the drip hose. Project also proposes purchasing a Pressure Chamber Instrument Model 615 and accessories to make routine measurements of tree stress and guide irrigation scheduling decisions. This proposed project will also use 3 pressure monitoring and soil moisture probes with electronic output and feedback for management of the irrigation system.	\$32,000.35	\$5,080.00	Tehama
Lyll Enterprises, Inc	This project proposes the installation of a 37.92 kW solar system that will help offset the electricity used to operate two water wells (one is a 30 HP motor and one is a 40 HP motor). The project will allow for the installation of another flow meter and 8 soil moisture sensors. There will be 4 stations with 2 sensors at each station measuring soil moisture at different depths. These new tools will provide real time soil moisture data along with using CIMIS to make evapotranspiration-based irrigation decisions.	\$100,000.00	\$6,027.00	San Diego
M&J, LP	This project proposes to install a 36.96 kW solar array, 4 tensiometers along with weather system integration and advanced controls, and an evapotranspiration-based irrigation scheduling with integration of the CIMIS system.	\$99,999.94	\$18,708.00	Tulare

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M. M. Jackson Farms, Inc.	The proposed project includes installing a dual line drip irrigation system and microsprinkler irrigation systems on two walnut ranches. All ranches are currently flood irrigated. An inefficient pump will be replaced and another abandoned and all systems will have Variable Frequency Drives. Flow meters and moisture monitors will be installed on all ranches that will produce real time flow rate and soil moisture data. Flow and moisture components will be remotely monitored and controlled. The proposed monitoring and scheduling software will incorporate local CIMIS data and real time field data to precisely time and execute irrigations.	\$100,000.00	\$120,101.55	Kings
Magnolia Pacific Farms, LLC	This project proposes the upgrade of a filter station and upgrade of a 50 HP electric pump to a 40 hp electric pump. Soil moisture monitoring units will be installed and the new valves at the filter station will be automated.	\$100,000.00	\$11,144.27	Kern
Mai Ka Xiong	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 5 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$83,794.53	\$2,997.00	Fresno
Marc Isaak	This project proposes to install a new 9.6 kW solar array, 4 tensiometers, along with weather system integration and advanced controls, and the implementation of new evapotranspiration-based irrigation scheduling, with integration of the CIMIS system.	\$34,749.94	\$6,364.00	Tulare
Marie Ferreira	This project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Riser sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the riser. Fan jets will be installed on the tape at 36" intervals. This system will use the existing 15 HP submersible electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$99,643.43	\$12,443.32	Fresno
Maring Partners	The purpose of this project is to install a 20.9 kW direct current solar photovoltaic system to power the existing two electric turbine pumps (60 HP, 50 HP). In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meters will also be implemented.	\$98,780.18	\$0.00	Monterey



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Mark Patterson	This project proposes to add a soil moisture sensors and a weather station, connected through a telemetry network for remote viewing. The project also proposes to replace the pump and motor with a 50 HP premium efficient motor and pump, a VFD, and solar array.	\$89,331.84	\$16,505.00	Tehama
Marthedal Enterprises, Inc.	The project plans to replace flood irrigation with pressure compensating micro sprinklers. One of the two blocks will have new mainlines and manifolds installed to support the conversion to micro sprinklers. A VFD will be installed at each pump location, along with all necessary support equipment. A Seametrics flow meter will be installed at each pump location as well. Additionally Jain Logic hardware will be installed on each block for the purposes of soil moisture monitoring, irrigation scheduling and record keeping.	\$98,949.12	\$33,189.93	Fresno
Marthedal Farms	Microsprinklers will be added to replace the pumping of groundwater for the purposes of flood irrigating. Jain Logic soil moisture monitoring and irrigation control equipment will be installed. One of two pumps will have a VFD installed. A flow meter will be installed on both active pumps and integrated with the Jain Logic software to provide for real time monitoring of actual applied water. An onsite weather station will also be installed.	\$99,569.88	\$12,500.00	Fresno
Marvin Taylor	This project proposes installing a dual line drip irrigation system, an irrigation mainline, a flow meter, a 56.9 kW solar energy system, and an automated system with dendrometers, soil moisture, and water pressure sensors.	\$100,000.00	\$156,284.37	Glenn
Mary Segura	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump to several valves corresponding to irrigation sets. Riser sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the riser. Jain jets will be installed on the tape at 36" intervals. This system will use the existing 7.5 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$100,000.00	\$18,245.46	Tulare
Maskell Growers	The purpose of this project is to install a 9 kW direct current solar photovoltaic (PV) system to power a proposed, more efficient pump motor, VFD, weather and soil moisture sensors. In addition, the proposed water tanks will allow for pumping water to the upper grove, using solar energy during daylight, and then irrigate at night, when evaporation is slow with no need to use irrigation pumps.	\$45,367.70	\$5,500.00	San Diego
Materra LLC	The project proposes installing two 125 HP electric powered turbine pumps, replacing the three portable diesel pumps currently being used to irrigate. The project also proposes the installation of two variable frequency drives, two filter stations, and a flow meter, and a soil moisture sensor system.	\$100,000.00	\$270,797.68	Imperial
Matt W. Koball	This project proposes to install new sensor and control technology as well as install a solar system.	\$71,224.00	\$20,000.00	Tehama

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May Xiong Vang	This project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 2.5 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$56,634.00	\$858.00	Fresno
McKellar Ranch Co., Inc.	The project proposes to add a VFD to the primary well, flow meters on all wells and booster stations, and add soil and weather monitoring stations.	\$71,912.46	\$0.00	Tulare
Medefind Farm	This project proposes to replace a highly inefficient 40 HP electric booster pump with a new 40 HP electric pump with variable frequency drive. Additionally, the project proposes to add a new solar array with a 7.44 kW capacity, a new flowmeter, and a soil moisture sensor.	\$52,462.97	\$9,700.34	Merced
MFC Imperial 1 LLC	The project proposes replacing a 116.9 HP diesel pump with a 40 HP electric pump with a Variable Frequency Drive, filter station, and a flow meter. The project also proposes updating the current soil moisture sensor system by replacing it with an automated system with electronic data output that allows for greater optimization of water usage.	\$100,000.00	\$37,422.47	Imperial
Michael H Nielsen	This project allows for the installation of two 9 kW solar systems to power the existing electric pumps. A weather station will be installed to utilize evapotranspiration based scheduling. Pump control technology will also be used for remote scheduling of the pump. Flow meters will also be installed and a Diamond K mixer will be used to apply soluble calcium to the soil and improve water infiltration into the root zone.	\$95,759.40	\$0.00	Fresno
Michelle Rossow Farms	This project proposes to convert from surface sprinkler hand move irrigation to sub-surface drip irrigation. The project will also integrate winter cover cropping and compost application. If the project is selected for funding, an application for an irrigation automation system will be done through NRCS. The automation system will further increase the effectiveness of water use and placement of the drip system.	\$100,000.00	\$33,482.96	Merced
Mikaelian & Sons, Inc.	This project proposes converting flood irrigated stone fruit to drip irrigation (micro-sprinklers) and installing remotely monitored flow meters, in-field moisture monitoring systems, a 20 HP booster pump with VFD, and 6.7 kW solar system.	\$88,347.22	\$51,302.00	Tulare
Mike Anderson	This project proposes the conversion of flood to micro irrigation by installing a drip irrigation system. An existing 10 HP pump will be used to apply well water and a booster will pull from the canal through an upgraded pipeline. The project will include a flow meter, soil moisture sensors, and weather monitors.	\$90,213.03	\$0.00	Fresno

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MK Neubert Farms	This project will convert two electric pumps, 20 HP and 15 HP, to solar electric. The project will also implement soil moisture monitoring meters and a weather telemetry system to improve irrigation scheduling.	\$57,700.25	\$12,077.55	Yuba
Natalie Behr	This project proposes to install a solar energy system, a new drip irrigation system, and soil moisture monitoring equipment for irrigation scheduling.	\$41,643.86	\$12,872.00	Glenn
Navid Khan	This project includes the installation of a 42.9 kW solar system to offset the energy used by a 60 HP electric irrigation pump. The project will include the installation of flow meter, soil moisture monitoring sensor, and a weather telemetry system to improve water scheduling.	\$83,220.71	\$28,779.29	Glenn
Neilson Ranch	This project will replace old, leaky, two-line drip tubing to a one-line, below ground, drip tubing to be placed only around the root zone of each tree. An existing old, leaky pipeline irrigation system, that uses a 5 HP submersible pump, will be replaced with a new, more efficient, professionally designed irrigation system that will meet NRCS standards. A new irrigation control system and soil moisture sensors and weather sensors will be installed. The new irrigation system will also include a new flow meter, variable frequency drive, and new 10 HP pump.	\$25,799.20	\$17,000.00	Tulare
Neufeld Farms, Inc.	This proposed project includes installing a dual line drip irrigation system on a stone fruit orchard that is currently flood irrigated. The existing inefficient 60 HP pump will be replaced with a highly efficient 60 HP pump with a VFD. A flow meter and in-field soil moisture monitors will be installed that will produce real time data to properly time and ensure the efficiency and effectiveness of irrigations.	\$100,000.00	\$55,015.27	Tulare
Nicholas Boldt Farms	The project plans to convert a diversified stone fruit orchard from an inefficient furrow irrigation to micro-irrigation (Fan-Jet system), add soil moisture monitoring, flow meters, automation, and a solar system. The project will include adding a 10 HP electric lift pump to the existing 15 HP electric well pump to pressurize the irrigation system and allow for surface water to be utilized when available using a VFD to match water requirements. The project will implement cover cropping and mulching during the project term.	\$99,811.50	\$43,496.00	Fresno
NK Development	This project proposes to automate the irrigation system by retrofitting the pumps, wells, and valves with Hotspot Ag, Inc. hardware. The 48 3" manually actuated gate and brass valves that were installed with the drip systems need to be retrofitted to the modern hydraulically activated valves with direct current latching solenoids. In addition, the valves will be remotely monitored with a downstream pressure transducer and the Hotspot Ag, Inc. hardware will actuate the solenoids when commanded. Six Irrrometer soil moisture tensiometers will also be installed to monitor soil moisture. The Hotspot Ag, Inc. software will utilize both external data sources and on farm data collected by the Hotspot Ag, Inc. hardware to optimize energy and water management. Crop coefficients, the National Weather Service evapotranspiration (ET) forecast, and historical spatial CIMIS will be programmed into the software to build a yearly, monthly, and weekly water budget. The downstream valve pressure transducers will be utilized to verify the ET forecast or irrigation plan was met. The soil moisture sensors will be utilized in the software to provide feedback to the ET irrigation plan.	\$97,861.52	\$36,751.00	Fresno
NMD Land LLC	This project will convert flood irrigated vineyards to low pressure micro-sprinkler irrigation for almond production.	\$99,649.14	\$88,293.14	Fresno

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Oosterkamp Farms Inc	This project proposes to build a new pump station with a VFD that can irrigate the new almond field in two 60 acre blocks. They propose installing a new filter station for Oosterkamp Farms at this Vernalis block of walnuts. Central irrigation will replace a turnout gate located in the nearby dirt floor canal with a new 15" screw gate and run a new 15" supply line to a new elevator screen box and pump suction box where a new 50 HP short coupled turbine pump will be placed. A new electrical backboard and Variable Frequency Drive for the new pump along with a timer will be installed. A new concrete pad will be poured downstream of the new booster pump where a 5-tank sand media filter station will be used to filter the water. Two Bermad set control valves will be placed downstream the filters to change between set when the orchard is redeveloped. pH Technologies will help monitor the pH of the water and automatically adjust the sulfuric acid to achieve a desirable pH for the trees. Irrigation Matters will run gypsum through the water to the field which will also help treat the water. Hortau Simplified Irrigation soil monitor stations, climate monitor stations will also be installed.	\$99,569.20	\$32,256.70	Stanislaus
Padilla Farms, Inc.	This project proposes to convert from metal sprinklers to mini-sprinklers and replace the booster pump, with an energy efficient pump that would save electricity, and install an automatic fertilizing system.	\$82,000.00	\$16,400.00	Ventura
Pantaleoni Ag Enterprises	This project proposes to retrofit the pump, install a VFD, and add solar panels to reduce greenhouse gas emissions and run the irrigation system more efficiently. Soil moisture sensors and a flow meter will also be added to help monitor and improve water use.	\$59,856.68	\$5,000.00	Butte
Parampreet Sekhon	This project proposes to install 2 soil moisture sensors and a weather station (all connected through a telemetry network for remote viewing), as well as a VFD to the pump and a solar array to power the pump.	\$96,423.16	\$0.00	Solano
Parga Partners	The proposed project includes retrofitting an existing microsprinkler irrigation system with a dual line drip irrigation system on a citrus ranch. A reservoir will be constructed which will allow the system to be operated using less horse power. A flow meter and soil moisture monitors will be installed to produce real time flow rate and soil moisture data that can be remotely monitored. The proposed monitoring and scheduling software will incorporate local CIMIS data and real time field data to precisely time and execute irrigation events.	\$100,000.00	\$221,684.83	Fresno
Paso Robles Vineyard Inc	This project proposes installing weather station capable of calculating evapotranspiration, a digital flow meter, and well system monitoring. Well #3 will be converted from diesel to electric power and a Variable Frequency Drive will be installed. All pumping stations will be outfitted with automation for pump control.	\$99,929.32	\$4,000.00	San Luis Obispo
Paul & Kathy Richter	The project is proposing to install sub-surface drip system, remote field monitoring technology, a new propane powered engine, flow meter, and improvements to the existing pump to pressurize the system.	\$81,317.78	\$1,837.20	Colusa
Payne Brothers Ranches	This project plans to repair the well and install a VFD, soil moisture monitors, and leaf wetness sensors.	\$88,708.03	\$105,326.29	Yolo
Pellegrini Ranches	This project proposes installing a flow meter on the pump, soil moisture and water pressure sensors in every irrigation block, a weather station, and Farm(x) software.	\$26,123.00	\$9,409.46	Sonoma

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Phillip Tubbs	This project includes the installation of a 25.2 kW solar photovoltaic system to supply electricity for the 30 HP well pump. The project also proposes to install a Variable Frequency Drive, acid injection system, and a field moisture monitoring system, including electronic flow meter and pressure sensor, four soil moisture sensors, and a weather station.	\$80,676.21	\$17,558.00	San Luis Obispo
Phoenix Orchard Group II	This project will convert 2 existing 300 HP diesel pumps to 140 HP and 250 HP natural gas pumps. The pumps and wells will be rehabilitated to reduce the pumping of sand and increase well efficiency and flowmeters will also be added to each well.	\$100,000.00	\$223,150.00	Fresno
Pia Moua	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 1 HP submersible electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$74,261.46	\$600.00	Fresno
Ping Huang Cheng Nursery	This project proposes to replace old and leaky lateral irrigation lines (and associated valves) and add overhead sprinkler nozzles to improve irrigation application uniformity and reduce water use. The project also proposes to install a flow meter to accurately monitor water and utilize tensiometers as an aid in irrigation scheduling.	\$12,969.73	\$2,700.00	Santa Clara
Pisoni Farms	This project proposes to upgrade the current, inefficient pump to a high efficiency turbine pump with a variable frequency drive. The project will also convert from sprinkler irrigation to drip irrigation.	\$88,968.51	\$86,335.49	Monterey
Polestar Farm	This project proposes install soil moisture monitors, flow meters, a variable frequency drive, 3-phase pump and new irrigation piping and fixtures.	\$49,804.00	\$25,800.00	Yolo
PT Ranch	The project proposes to upgrade a diesel pump to a 75% efficient electric pump that will be connected to solar power. The project also proposes to place a valve at each check. A soil moisture sensor and flow meter will also be installed.	\$97,947.58	\$50,083.20	Amador
Quail Valley Ranch	This project proposes to convert a 25 HP submersible open discharge direct drive well into a mainline pipe while adding a VFD to the pumping station. The project also proposes to convert two 1,100 ft wheelines into a 589 ft center pivot and install an iMetos D3 weather station with soil moisture monitors.	\$89,946.62	\$17,885.00	Modoc

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Quaker Oaks Farm Environmental and Cultural Learning Center	The proposed project consists of four major components including the installation of an 8.64-KW solar array system that will supply 100% of energy needed for irrigation. The current 3 HP pump will be replaced with a new highly efficient 5 HP pump with a Variable Frequency Drive. A 10,000-gallon rainwater catchment system will be installed to supplement groundwater pumping from the well. Four acres of mixed crops including alfalfa, pasture walnuts and stone fruit will be converted from high-pressure sprinkler or furrow irrigation to drip irrigation. The proposed drip system includes buried PVC manifolds from the pump to several valves corresponding to irrigation sets, CIMIS, monitoring weather data from an onsite weather station, and three soil moisture monitor stations with sensors at 3 depths connected through telemetry. A flow meter will be used to estimate the amount of water applied. In addition, the project will implement three conservation management practices: mulching, cover cropping, and composting application.	\$82,501.22	\$13,154.44	Tulare
R Gorrill Ranch Enterprises	This project proposes to install a 75 HP booster and VFD with necessary filters and piping, soil moisture sensors, and a weather station, with CIMIS connection and telemetry.	\$90,074.31	\$0.00	Butte
R&R Ranches Inc.	The proposed project plans to convert a formerly flood irrigated block to drip irrigation. The project proposes to install a 40 HP turbine with VFD controller to increase the orchards ability to utilize surface water sources through the new drip system. Double line drip irrigation will be installed to reduce irrigation applications. Irrigation will also be further controlled by data gathered by a Wiseconn monitoring system and flow meters allowing for irrigation to be matched to site specific evapotranspiration(ET).	\$99,433.71	\$32,198.38	Fresno
Rabb Family Properties LP	This project proposes to install a new 125 HP VFD pump, 10 tank sand media filter stations, and upgrade the main lines to accommodate the proper flow of water.	\$100,000.00	\$77,094.45	San Joaquin
Regenerative Farms	The project proposes to install a solar photovoltaic system with an electric vehicle outlet to run the groundwater pump and charge electric vehicles for use on the farm. The project also proposes to install a variable frequency drive and soil moisture sensors.	\$99,860.00	\$4,620.00	Santa Cruz
Reiter Brothers, Inc.	The purpose of this project is to install a micro drip irrigation system and a 50 HP VFD to power the existing 50 HP electric pump.	\$99,991.00	\$70,000.00	Ventura
Renge Farms	This project proposes to replace the current flood system with a drip irrigation system, including sand media filtration system, a VFD, flow meters, soil moisture sensors, weather station and irrigation automation. Both deep well water and surface water will charge the proposed drip system.	\$99,989.27	\$56,528.25	Fresno
Richard and Susan Markarian Trust	This project proposes to install a highly uniform, low pressure drip irrigation system, a new pump, flow meter, and soil moisture monitoring equipment. Advanced water management using data from the flow meter, soil moisture monitoring, and CIMIS-based crop evapotranspiration projections will be used for volumetric irrigation scheduling.	\$100,000.00	\$24,837.31	Fresno

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Richard Lauchland	The purpose of this project is to install a 100 HP VFD and a 20.4 kW solar photovoltaic system to power the existing 100 HP electric submersible pump. In addition, weather and soil moisture sensors, and volumetric management with the existing digital flow meter and well level sensor will also be implemented.	\$99,583.32	\$0.00	San Luis Obispo
Richard Peeren	This project plans on upgrading the existing micro-irrigation system to a full control automated irrigation system with moisture monitoring, weather monitoring, dual line drip irrigation, with upgraded sand media filter system and 20 HP submersible pump.	\$40,817.84	\$6,815.18	Fresno
Richter AG Inc.	This project proposes to convert from a flood irrigation system to a sub-surface drip system and install remote field monitoring technology to improve water management.	\$97,362.58	\$48,346.61	Colusa
River Garden Farms	Project proposes to increase pumping efficiency, control and monitoring of three irrigation lift pumps. The project proposes to also install a VFD on two pumps and a soft start on a third motor. In addition to the motor controls, the proposal also includes a weather station that will be tied into the SCADA system for onsite data analytics and monitoring trends.	\$98,629.00	\$11,657.00	Yolo
Robert Carter	The project proposes the installation of a flow meter to the existing pump, pressure sensors before and after the pump to better monitor efficiency, and a pressure chamber to improve efficiency. The project also plans to upgrade the filtration system to reduce greenhouse gas emissions by closing the current bypass system to slow down the pump, and decrease sediment build up consequently reducing energy requirements. Moisture sensors and a weather station will also be installed.	\$22,318.22	\$500.00	Glenn
Robert Montgomery	This project includes the installation of a 4 kW solar system to offset the energy used by a 1.5 horsepower electric irrigation pump. The project also proposes a pump retrofit, the installation of a Tesla Powerwall 2, flow meter, and soil moisture sensors.	\$33,461.65	\$8,945.25	Butte
Robert Silacci	The purpose of this project is to install a 15.2 kW direct current solar photovoltaic system to power the existing 50 HP electric turbine pump. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meters will also be implemented.	\$98,541.08	\$0.00	Monterey
Robertson Marquardt	The project proposes to retrofit the filtration system to accommodate a water flow meter, replace pump motor and pump bowls, and replace old sprinklers with identical water efficient sprinkler heads and nozzles that use only enough water to sustain the crop. The project also proposes to install a pressure chamber, soil moisture sensors, solar panels, and 50 HP VFD.	\$75,637.22	\$6,725.00	Butte
Rolling Hills RR, Inc	This project includes the installation of double line drip irrigation, VFD, real-time remote field monitoring sensors, flow meters and a solar system.	\$100,000.00	\$11,636.59	Tehama
Rosalio Curiel	This project proposes to install soil moisture stations, a solar array , pump replacement with a VFD, evapotranspiration station, and new drip tubing to replace the leaky tubing in the field.	\$89,193.11	\$0.00	Tehama
Rosie Lee	The project proposes to install a drip irrigation system and solar panels as well as convert from flood to drip irrigation. The project also proposes to install a VFD, a flow meter, and soil moisture sensors to reduce water use.	\$58,342.18	\$2,800.00	Merced

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Rui Kuang Nursery	This project proposes the replacement of old and leaky irrigation mainlines and laterals, and associated valves, while adding new spray nozzles.	\$22,125.74	\$2,700.00	Santa Clara
Rusty Wire Ranch	This project proposes to install a soil moisture and weather station in the field that will be tied to a telemetry network for remote viewing. The project also proposes to install a pressure chamber to complement the soil sensors and a flow meter.	\$39,279.86	\$0.00	Tehama
Rutz Family LLC	This project proposes installing a weather station capable of calculating evapotranspiration and well system monitoring. The pumping station will be retrofitted with a Variable Frequency Drive, new booster pump, new filter station, automation for pump on/off. 409,000 feet of damaged, plugged drip tubing and pressure compensating emitters will be replaced with new hardware.	\$99,698.39	\$13,250.00	San Luis Obispo
Ryan Land co	The purpose of this project is to install a 30.4 kW direct current solar photovoltaic system to power the existing 50 HP electric turbine pump. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meter will also be implemented.	\$99,233.54	\$0.00	Monterey
Sadie Ranch	This project proposes to replace antiquated flow meters with new flow meters and install soil moisture monitors, sand media filters, a state-of-the-art Wildeye brand weather station with telemetry, and a 20 HP lift pump.	\$41,742.59	\$15,132.35	Tulare
Salman Farms Inc.	This project proposes installing a drip irrigation system, including a 25 HP centrifugal pump combined with a variable frequency drive, a flow meter, and two soil moisture probes.	\$99,879.00	\$19,280.00	Sacramento
Sandhu Farms	This project proposes to convert from flood irrigation to micro sprinkler irrigation. The project proposes to install a submersible well with a new pump, solar panels, and irrometer. The project proposes to use evapotranspiration(ET) reports and base irrigation on ET reports and the use of a pressure chamber.	\$100,000.00	\$57,088.00	Tehama
Santa Fe Farms	This project proposes the conversion of flood irrigation to micro-sprinkler irrigation, the installation of a flow meter and a new filter station.	\$53,984.51	\$7,028.94	Tulare
Saul Medina	This project proposes to replace the existing 150 HP diesel pump with a new 100 HP high efficiency NRR Vertical Electric Motor and install a 100 HP VFD. The project also proposes to install a new soil moisture monitoring system and solar system to run the new electric pump.	\$99,621.76	\$5,000.00	Glenn
Scarface Cattle Co. LLC	The project is proposing to install a Low Energy Precision Application (LEPA) Pivot irrigation system and remove six quarter mile wheel lines. The LEPA Pivot irrigation system would include five span towers and corner arm to improve water and energy efficiency for alfalfa. In addition, the project proposes to install the FieldNet Advisor, an integrated remote irrigation monitoring and control systems, on the pivot; a Wild Eye, a soil moisture monitoring system; and a variable frequency drive (VFD) motor to the 50 HP booster pump to lower energy use and update the 75 HP lift pump to improve efficiency from 60% to 87%.	\$100,000.00	\$42,827.53	Siskiyou
Schultz Ranch, Inc	The project proposes to install soil moisture sensors and a weather station capable of calculating evapotranspiration to inform irrigation scheduling.	\$42,563.70	\$5,400.00	Fresno



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Senior Canyon Ranch	This project proposes to implement ground moisture sensors and automated controls.	\$68,200.00	\$30,000.00	Ventura
Sequoia Ag Services LLC	The proposed project involves making improvements to the existing microsprinkler irrigation systems on four ranches. Soil moisture monitoring and pump automation are proposed. A monitoring and scheduling software is proposed that will incorporate local CIMIS data and real time field data to precisely time and execute irrigations.	\$45,000.00	\$20,300.88	Tulare
Serine " Cannonau Vineyards	The purpose of this project is to install a 13.6 kW solar photovoltaic system to power the existing 10 HP electric submersible pump and 5 HP electric booster pump. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meter and well level sensor will also be implemented.	\$79,238.32	\$0.00	San Luis Obispo
Seth Rossow Farms	This project proposes to convert surface sprinkler hand move irrigation to sub-surface drip irrigation and integrate soil management practices, such as winter cover cropping and compost application. If the project is selected for funding, an application for an irrigation automation system will be done through NRCS.	\$100,000.00	\$35,125.05	Merced
Shane Burkhardt Farms	The project proposes to install a 80.1 kW solar photovoltaic system. A weather station capable of calculating evapotranspiration and soil moisture probes will be installed to inform irrigation scheduling. The pump station will be upgraded with Seametrics magnetic flow meters to record water application to the fields, along with variable frequency drives, a 50 HP booster pump, and remote flow, pressure monitoring with alerts. The project also includes the installation of electric timers that will be used to automatically turn off the irrigation booster pumps and fertilizer pumps after an irrigation event has occurred for the selected amount of time.	\$100,000.00	\$152,960.00	Fresno
Shun Heung Kwong Nursery	This project proposes to replace existing well pump old leaky irrigation pipe (main line and laterals and associated valves). Sprinkler heads will be replaced to improve distribution uniformity and a flow meter and tensiometers will be installed.	\$53,648.60	\$4,350.00	Santa Clara
Sik Kwan Kwong Nursery	This project proposes to replace existing 15 HP booster pump with a new 15 HP booster pump to reduce energy use. The project will also replace old leaky irrigation lines and associated valves to decrease friction loss, save energy and water. The project will also replace old sprinkler nozzles with new nozzles to improve distribution uniformity. This project proposes to install a flow meter and soil moisture sensors to aid in irrigation scheduling.	\$15,677.74	\$3,550.00	Santa Clara
Sill Properties Inc	This project proposes to install new Seametrics flow meters, convert from flood to drip line irrigation, and convert from a diesel engine to an electric engine with VFD.	\$100,000.00	\$184,761.00	Kern
Soil Moisture Sensor Project	This project proposes to install soil moisture sensing technology.	\$19,559.42	\$100.00	Stanislaus
Sol Valley Inc	This project proposes to install a 7 kW solar system and soil moisture monitoring system.	\$39,700.00	\$39,700.00	San Diego
Somis Pacific - Las Posas Orchards	This project proposes to replace two booster pumps and add VFDs to two wells.	\$99,998.56	\$31,850.00	Ventura

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Sonia Mora	The project proposes to set the operating condition of the pump to match the requirements of a drip irrigation system. This system will use the existing 15 HP submersible electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values. Solar panels will be installed as well to help offset the electricity used throughout the growing season.	\$58,827.66	\$15,331.75	Fresno
Sonoma Vineyard Company, Inc., dba Merry Edwards Winery	The project proposes to replace drip irrigation lines, install a weather station, Variable Frequency Drive, and new 10 HP pump.	\$30,274.08	\$1,500.00	Sonoma
Sousa Orchards	This project proposes to upgrade the filtration system and install solar panels to power the pump, as well as install soil moisture sensors and a weather station, a flow meter, and VFD on the pump.	\$100,000.00	\$9,953.78	Glenn
Southam Joint Venture	This project proposes to add soil moisture stations in the field to monitor irrigation efficiency. The project also proposes to monitor pump efficiency by adding a flow meter to the discharge, and pressure sensors before and after the filters. Sensors would be connected to a telemetry network for monitoring. The agricultural operation intends to add automation to improve irrigation efficiency.	\$42,743.00	\$17,705.49	Colusa
Southam Orchards, LLC	The project proposes to install a new 15.33 kW solar array to participate in PG&E's net metering program (NEM). The project also intends to add soil moisture stations, a flow meter, and pressure sensors connected to a telemetry network, and evapotranspiration station. The project intends to add automation as well.	\$58,506.00	\$33,284.78	Glenn
Souza Brothers Dairy	This project proposes installing a new 75 HP electric pump, along with a larger pipe, to increase water flow and decrease pumping times. Additionally, a new variable frequency drive will be added to increase energy efficiency, as well as adding one more sand media filter tank to the current filtration system to account for additional flow rate. A flow meter and soil moisture sensors are proposed in this project to improve efficiency of irrigation. Finally, a solar array of 30 kW is proposed.	\$100,000.00	\$49,117.61	Merced
Springfield Ranch	This project proposes to add a 31 kW solar array, flow meter, and soil moisture sensor.	\$68,100.00	\$27,900.00	Fresno
Steinbeck Vineyards #1 LLC	This project proposes installing soil moisture probes, a weather station capable of calculating evapotranspiration, and well system monitoring. The well pumping station will be converted from natural gas to electricity, retrofitted with a new premium efficient motor and Variable Frequency Drive. All pumps will get automation for pump control and new digital flow meters.	\$99,755.71	\$21,020.85	San Luis Obispo
Steinbeck Vineyards #2 LLC	This project proposes installing soil moisture probes and a weather station capable of calculating evapotranspiration and well system monitoring. Both pumping stations will be converted from natural gas to electric power, retrofitted with Variable Frequency Drives and automation for pump control.	\$99,884.09	\$105,482.86	San Luis Obispo

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Stephanie Shakofsky	The purpose of this project is to install a 5.0 kW solar photovoltaic system to power the existing 3 HP electric submersible pump and a 1 HP electric booster pump. In addition, weather and soil moisture sensors, volumetric management with the proposed digital flow meter and well level sensor will also be implemented.	\$44,358.75	\$0.00	San Luis Obispo
Stephen Latasa	The purpose of this project is to install a 20.9 kW direct current solar photovoltaic system to power the existing 150 HP electric turbine pump. In addition, weather and soil moisture sensors, and volumetric management with the proposed digital flow meters will also be implemented.	\$98,541.08	\$0.00	Monterey
Steve Fukagawa	This proposed project includes installing a dual line drip irrigation system. A 15 HP pump will be replaced with a new highly efficient 15 HP pump with a Variable Frequency Drive. A solar system is proposed to reduce electricity used from the utility. A flow meter and in-field moisture monitors will be installed. Flow and moisture components will be remotely monitored and controlled. The monitoring and scheduling software will incorporate local CIMIS data and real time field data to precisely time and execute irrigations.	\$85,413.69	\$34,279.77	Kings
Steven Giesbrecht	This project proposes the conversion of a diesel powered pump to electric and installation of solid set sprinklers.	\$100,000.00	\$140,470.57	Glenn
Storm Farming Company	This project proposes to install a 36.96 kW solar array, a weather station with soil moisture sensors, new evapotranspiration-based irrigation scheduling with integration of the CIMIS system, and a new flow meter.	\$55,647.20	\$7,422.75	Butte
Sunridge Nurseries Inc.	This project proposes installing soil moisture sensors and a weather station capable of calculating evapotranspiration and well system monitoring will be installed to inform irrigation scheduling. The pumping station will be retrofitted with automation for pump control. Old damaged, plugged drip tubing and pressure compensating emitters will be replaced with new hardware.	\$83,852.68	\$0.00	Kern
Surinderpal Khosa	Project plans to use the existing 100 HP turbine electric pump. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values. Solar panels will be installed to help offset the electricity used throughout the growing season.	\$100,000.00	\$126,313.01	Fresno
Surjit Rahul	This project proposes to add soil moisture stations, flow meters, and pressure sensors before and after the filters, connected to CIMIS and, telemetry network. The project also proposes to install a solar array to the pumps to power it along with proposed VFDs.	\$100,000.00	\$55,863.64	Sutter
Sycamore Marsh Farm	This project proposes to install two solar arrays plus 16 tensiometers and a new water meter.	\$100,000.00	\$42,264.30	Colusa
T & C Vineyards	The proposed project consists of upgrading a 25 HP well pump to a higher efficiency 30 HP pump, installing a 15 HP ditch pump to begin using surface water through the drip system, and adding a 27 kW solar photovoltaic system. Water savings will be achieved with the addition of soil moisture monitoring and advanced water management practices.	\$100,000.00	\$18,336.09	Fresno

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Tahmazian Farming, LP	This project proposes replacing antiquated flow meters with new flow meters. The plan also includes installing soil moisture monitors, sand media filters, a state-of-the-art Wildeye brand weather station with telemetry, and a 20 HP lift pump.	\$41,821.66	\$15,132.35	Tulare
Tahmazian Farming, LP2	The project proposes to replace antiquated flow meters with new flow meters, as well as adding sand media filters and moisture sensors. The ranch also plans on installing a 15 HP lift pump to increase access to surface water and reduce dependence on ground water. Additionally, a real-time irrigation water management level 3 irrigation monitoring system, a weather station (Wildeye) that features irrigation scheduling software will be installed.	\$34,255.69	\$15,132.35	Tulare
Terkildsen Ranch, LLC	This project proposes to reduce water consumption through the installation of a weather station, soil moisture probes, and the installation of a 47 kW solar system to power the existing electric irrigation pump. The weather, soil moisture, and disease modeling station will measure five parameters: air temperature, wind, humidity, leaf wetness and solar radiation. Evapotranspiration (ET) data along with soil moisture probe information will be combined to fine tune irrigation frequency and duration resulting in water as well as energy savings. Pre-project irrigation is scheduled using field observation of tree hydration levels, post-project stem water potential measured via pressure bomb readings, combined with soil moisture probe and ET data will be used.	\$88,570.21	\$6,328.20	Colusa
Terra Cultura	This project will install a Direct Solar booster pump and accompanying photovoltaic direct solar grid and piping to bring water to two 5,000 gallon water tanks, where it will be later gravity fed down to a drip irrigation system. Flow meters, soil moisture sensors, and smart irrigation zone controllers will be installed, as well as a 550 gallon capacity rooftop rainwater catchment system. The project will replace a grid-tied electric booster pump with a Sunpump SCB 22-165-120BL Direct Solar (DC) booster pump with a Variable Frequency Drive. This project will replace a hand-moved sprinkler irrigation system with a new drip irrigation system. Soil moisture sensors, flow meters, and smart irrigation controllers will be installed in each zone to maximize water scheduling and application efficiency.	\$9,565.42	\$20,340.00	San Benito
Thackeray Livestock	This project proposes to replace the existing pump with a 50 HP high-efficiency pump with a Variable Frequency Drive. A solar offset will be added and the installation of soil moisture sensors in three locations and a newly configured mainline design.	\$100,000.00	\$15,780.00	Siskiyou
The Ostrom Orchard	The project proposes to install soil moisture sensors throughout the orchard, installing pressure compensating drip emitters, and installing a variable frequency drive on the 40 HP electric pump.	\$24,159.85	\$9,600.00	Ventura
The Specialty Crop Company	The goal of this project is to install a 150 HP VFD, flow meter, and make repairs to a current 150 HP well. The project proposes to install a 75 HP VFD, flow meter, and repairs on an existing 75 HP shop well. Retrofitting the pump/bowl will improve overall pump efficiency levels.	\$84,000.04	\$19,736.40	Madera
The Yolo Land Trust	This project proposes to convert existing diesel engine to an electric pump with a VFD. The project also proposes to install a VFD at the slant pump along with a Harris Siphon Breaker, a mainline to improve irrigation efficiency, soil moisture monitoring stations, well monitoring stations, and a weather station.	\$94,359.39	\$0.00	Yolo

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Tiffany Del Don	The proposed SWEEP project includes the installation of a 35.8 AC rated solar system to offset the current and future electrical usage of an existing 50 HP irrigation booster pump, the installation of a 50 HP variable frequency drive, the installation of a premium efficient electric motor on an existing centrifugal booster pump, the installation of two Sentek soil moisture probes with remote access to help schedule irrigations, 2 inline pressure sensors with remote access to verify irrigation events occurred at the correct time and duration, 1 Davis field weather station with remote access to determine field weather conditions, a Seametrics magnetic flowmeter to record the amount of water applied to the field, and an automation system to turn on and off the irrigation booster pump and change irrigation sets based on the weekly irrigation schedule entered into the controller.	\$100,000.00	\$58,231.00	Fresno
Tim Jones	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 15 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$94,982.45	\$5,736.00	Fresno
Timothy P McGowan	This project proposes to install a VFD.	\$54,738.23	\$0.00	Butte
TK FARMING, LLC	The proposed project includes installing a high efficiency close coupled turbine pump to allow ditch water to be used for irrigation and installing soil moisture probes to aid in irrigation scheduling. It is proposed that a highly efficient 15 HP pump be installed to utilize ditch water on the existing micro sprinkler system, eliminating the need to use ground water in the peak irrigation season. A failing screen filter will be replaced with a sand media filter and flow meter will be installed. A VFD will be installed to control the new 15 HP pump.	\$40,025.02	\$0.00	Fresno
Tom Flux	This project aims to replace a 30 HP turbine pump with a 20 HP turbine pump, including a flow meter with an internal datalogger, and 4 irrometer watermark monitor with 16 soil moisture sensors. The project also plans on replacing wheel style irrigation lines with a new efficient center pivot system.	\$98,774.20	\$18,100.00	Lassen
Tretheway Property	This project proposes to install a grower-owned turnout of the district pipeline with a new flow meter, a two-way Remote Telemetry Unit at the turnout, a soil moisture station, a weather station to assist in real time evaluation of environmental conditions, a sand media filter with an automatic back flush system, and a solar electric system to run a new 5 HP centrifugal booster pump.	\$90,171.13	\$7,850.00	San Joaquin

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Tria Vang	The project proposes to install a drip irrigation system and to set the operating condition of the pump to match the requirements of a drip irrigation system. The proposed system includes a buried PVC manifold from the pump connection to several valves corresponding to irrigation sets. Layflat sub-mains will be connected at the valves. T-tape drip lines will be directly attached to the layflat hose. Drip lines will either be on the soil surface or buried 2-3 inches beneath the soil surface on vegetable beds. This system will use the existing 10 HP electric pump, which will be either retrofitted or replaced to increase efficiency and provide greater pressure for the drip irrigation system. The water source is groundwater from a single well on the property. Soil moisture sensors will be used to determine irrigation scheduling, and the flow meter will be used to estimate the amount of water applied and compare it to known values.	\$100,000.00	\$10,681.94	Fresno
Triple C Farms	This project proposes to replace an unlined canal with a PVC main, the 50 HP electric well with a new more efficient turbine and motor. In addition, the project intends to use drip tape to replace the current furrow irrigation practices and install a flow meter and site specific evapotranspiration components.	\$99,989.00	\$70,642.10	Sutter
Triple C Farms, LLC	The project proposes installing a 240 kW AC solar system that will produce enough electricity to offset the energy use of a 300 horsepower pump used for micro-irrigation. The project also proposes the installation of an advanced irrigation management system from EnviroMonitor that will integrate with existing flow meter on the pump. This system will allow the farm to use less water and energy by incorporating soil moisture sensors, flow meter, climate station, and data management software.	\$100,000.00	\$294,714.46	Stanislaus
United Growers Berry Farms, LLC	This project proposes to eliminate the use of the high-flow, high-pressure impact sprinklers and replace them with low-flow, low-pressure microsprinklers.	\$99,929.30	\$17,280.00	Ventura
Valley View Organicz	The objective of the project is to convert from 100% fossil fuel energy to 100% solar energy for irrigation of trees and vegetables. In addition, the project proposes the installation of Sentek Soil moisture sensors and Galcon remote valve automation with low pressure microsprinklers.	\$75,000.00	\$10,000.00	Placer
Van Groningen and Sons	This project proposes to add a VFD, replace an old 75 HP deep well with new 100 HP ditch pump, use Hortau soil moisture monitoring and irrigation scheduling, add a flow meter, install timers on irrigation system, pump and fertilizer injection technology. The project proposes to dig a reservoir to catch overflow via a small drainage pipe from the creek that run through the property.	\$93,647.00	\$0.00	San Joaquin
Vanoni Farms	This proposed project includes installing a new drip irrigation system, moisture sensors, an onsite weather station, and a variable frequency drive.	\$40,051.43	\$4,600.00	Ventura
Vernoga Family Trust	This project proposes to replace the current irrigation system with a new, low pressure drip system powered by a new pump and motor controlled with a new VFD, and soil moisture and ET monitoring stations.	\$94,526.35	\$14,728.04	Butte
Viguie Farming	This project proposes installing a variable frequency drive to power a new micro sprinkler irrigation system. Two orchard soil moisture stations and a flow meter will be installed.	\$99,720.41	\$13,100.00	Solano

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Villa Pacifica Ranch	The main components of this project include a 12.5 kW photovoltaic array. The project proposes installing a weather station and 5 soil moisture sensors. The project also plans to install an electronic flow meter to integrate into the weather station for real-time flow measurement and leak detection.	\$50,200.06	\$5,800.00	San Luis Obispo
Vino Farms Inc.	The project proposes five irrigation system upgrades including the installation of two variable frequency drives, nine remotely-accessed soil moisture probes, fifteen remotely-accessed pressure transducers at the pumps and in the field, flow-meter monitors at the pumps and remote valve control and irrigation controllers. Existing-flow meters, electrical valves, crop water-use modeling and weather stations will be integrated to precisely time and execute irrigation at the block level.	\$85,752.12	\$11,658.00	San Joaquin
Viriditas Farm	This project proposes to replace a 110 HP diesel well pump with a 25 HP electric well pump. The new electric pump will be installed with a VFD. The use of CIMIS reports on evapotranspiration will be referenced to inform and enhance irrigation scheduling to conserve water.	\$26,046.74	\$3,348.00	Yolo
Vizcarras Universities California Almonds	The project proposes to install a 28.52 kW solar system and a soil moisture sensor.	\$94,457.00	\$6,500.00	Madera
Wagon Wheel Farms	The proposed project includes installing a highly efficient microsprinkler irrigation system. The 15 HP pump will be replaced with an efficient pump with a Variable Frequency Drive. A flow meter and in-field soil moisture monitors will be installed that will produce real time flow rate and soil moisture data.	\$100,000.00	\$34,374.64	Fresno
Wendy Chan Nursery	This project proposes to replace old 10 and 15 HP booster pumps with small and more efficient 5 and 7.5 HP booster pumps, add flow meter and soil moisture sensors, and replace four 82-gallon pressure tanks with new pressure tanks.	\$9,213.60	\$1,670.00	Santa Clara
West Coast Farms, LLC (Borello)	This project proposes to implement irrigation water management level 3 monitoring including soil moisture probes, flow meter, and water pressure sensors, as well as a solar system.	\$99,908.06	\$101,892.99	Santa Clara
Wild Oak Farms, Inc.	The proposed project involves making efficiency upgrades on three ranches. Soil moisture monitoring, flow meter monitoring, and pump and valve automation are proposed. A Variable Frequency Drive is also proposed on the grape vineyard. Flow and moisture components will be remotely monitored and controlled. The monitoring and scheduling software will incorporate local CIMIS data and real time field data to precisely time and execute irrigations.	\$100,000.00	\$40,136.53	Kings
Wildcat Farms, LLC	The project proposes to convert flood irrigation system to drip and be controlled by a combination of telemetry-based irrigation water management hardware and system automation. Four soil moisture monitoring sites, with 3-4 depths each at 1, 2, 3, and 4 ft deep will be located in the field to track water movement within the soil. The real time data of these monitoring sites will be accessible by telemetry to computer devices. A reservoir will be built to make use of off-peak hours during the irrigation run-times. Project includes automation of the irrigation system, including turning on and off pumps and valves, monitoring flow rates, reservoir levels and duration of irrigation. A new 40 HP booster will be installed at the reservoir to pressurize the system.	\$30,277.54	\$136,570.00	Tulare

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William and Audrey Churchill Trust	The project proposes a grower-owned turnout on the District pipeline with meter, a two-way Remote Telemetry Unit (RTU), irrigation water management with soil moisture sensors with data recorder, and the pipe, couplings, and valves needed to connect the turnout to the existing irrigation system. An electric 5 HP booster pump will also be installed.	\$65,778.48	\$3,350.00	San Joaquin
William Van Erickson (aka Van Erickson Ranches)	The project proposes to install a double line low pressure drip irrigation system and a high efficiency pump to replace an older inefficient pump.	\$100,000.00	\$27,859.69	Fresno
Willima Everett Cantrell II DBA: Bill Cantrell Farming	This project proposes to install a 54.1 kW solar system.	\$100,000.00	\$24,550.00	Merced
WINDSWEPT LAND, LLC	The project proposes to replace current flood irrigation with a solid set irrigation system. This project plan will be achieved by contracting to install 27 x 27 offset solid set irrigation and an electric 200 HP Ag Pump. The proposal includes utilizing the services of a professional water management schedule/system that includes moisture measuring with the use of Precision Irrigation Management reporting to schedule the exact amount of water need to replenish soil moisture to the desired level saving water and energy.	\$99,998.70	\$34,237.10	Sutter
Yip Hing Kwong	This project proposes to replace 2-inch galvanized mainline with a new 3-inch PVC mainline to reduce friction loss and improve distribution uniformity to the laterals. The project will also replace lateral lines with 1.25-inch PVC to improve distribution uniformity. The project will also replace old sprinkler heads with new high flow heads, a flow meter, and soil moisture sensors.	\$25,209.94	\$3,550.00	Santa Clara
Zhou Ping Cai	This project proposes to replace existing mainline pipe with larger diameter (6") pipe and replace existing lateral pipe (and associated valves) with 2" pipe to improve distribution uniformity. Project will also replace sprinkler heads to improve distribution uniformity and reduce both energy and water use. Project will include the installation of a flow meter to monitor water use and will utilize soil moisture monitoring to assist in irrigation scheduling. The well pump supplying irrigation water to the project is 30 HP and is electric.	\$28,207.78	\$2,700.00	Santa Clara