PROJECT TITLE: SUSTAINABLE POWER ARRAY FOR RENEWABLE KILOWATTS (SPARK) PROJECT

United States Bureau of Reclamation

WaterSMART Water and Energy Efficiency Grant Application

Fiscal Year 2025 Funding Group I

Submitted: February 22, 2024

Prepared by:
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1. EXECUTIVE SUMMARY

Date: February 22, 2024

Applicant: The applicant is the Ventura River Water District (VRWD, District), a public community water system located in unincorporated Ventura County, California.

Category of Applicant: A

Project Length: 12 months

Estimated Completion Date: March 2026

Located in a Federal Facility: No

The Ventura River Water District (VRWD) located in Ojai, California, proposes to install solar panel arrays rated to a combined 265 kilowatts at two of the District's pumping stations to generate renewable, sustainable solar energy capable of meeting the bulk of VRWD's energy demands. Installation of the *Sustainable Power Array for Renewable Kilowatts Project* (SPARK) is expected to reduce energy consumption by 685,023 kWh annually, which translates into a reduction in carbon dioxide equivalent (CO2) emissions of 12,308 tons over the 25-year lifespan of the solar panels. The solar panels will be used in conjunction with the District's existing Tesla storage batteries so that most of the District's power needs can be met through a microgrid system.

2. PROJECT LOCATION & BACKGROUND

Ventura River Water District's (VRWD) is located in Ventura County, approximately 80 miles northwest of Los Angeles, 30 miles east of Santa Barbara, and 13 miles north of Ventura (Figure 1). VRWD's service area is bounded by the Topatopa and Santa Ynez Mountains to the north, and Sulphur Mountain and the lower Black Mountain to the south. The Topatopa and Sulphur mountains are part of the Transverse Ranges system. VRWD's service area overlies the Ventura River Valley – Upper Ventura River groundwater basin (Basin Number 4-003.01) and is part of the Ventura River Watershed.

VRWD is a water producer and retailer for the unincorporated communities of Live Oak Acres, Oak View, Mira Monte, and the eastern portion of Casitas Springs and a small portion of the City of Ojai. The District currently serves a population of approximately 6,100 residents through 2,196 service connections. VRWD potable drinking water for domestic water service, and fire service from groundwater and surface water sources.

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The District operates six water wells drilled 115–450 feet deep into the Upper Ventura River Sub-Basin aquifer. Two booster stations pump water from the wells up to tanks that provide storage for fire emergencies and daily customer usage.

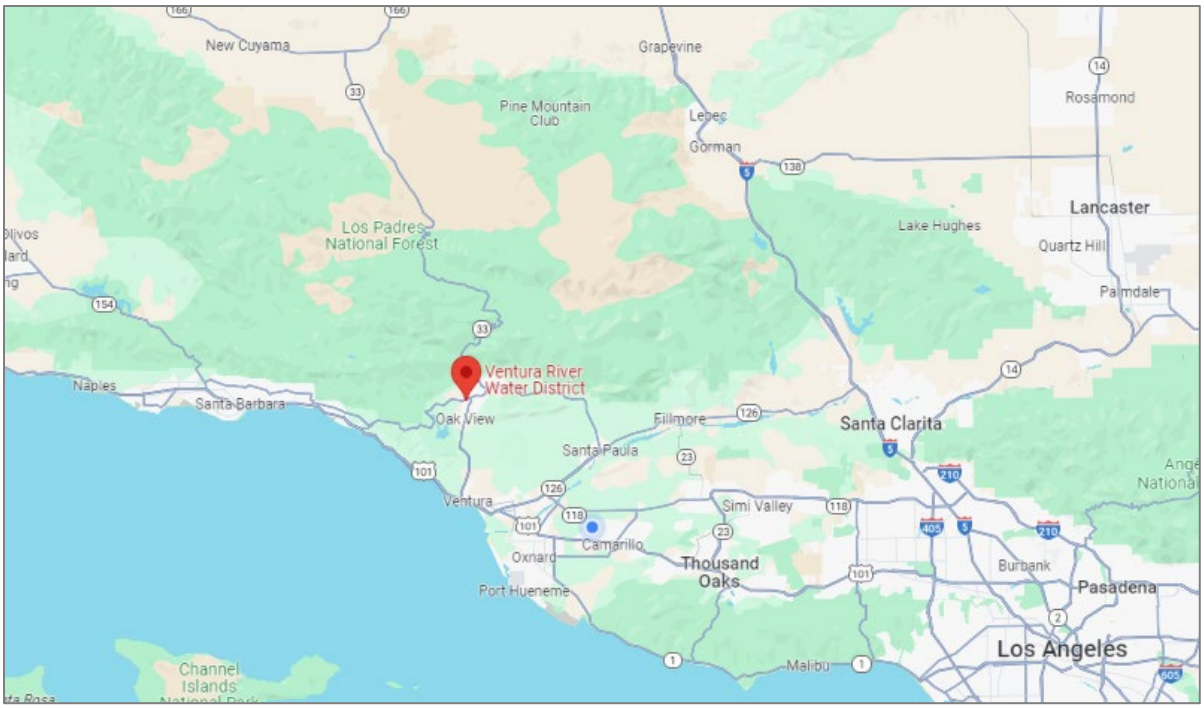


Figure 1: Ventura River Water District Location

3. PROJECT DESCRIPTION

VRWD proposes to install solar facilities at two of the District's pump stations to generate renewable energy and increase its energy efficiency in water management and reduce its carbon footprint. The solar facility locations are:

1. Baldwin Pump Station (409 Old Baldwin Road, Ojai, CA 93023) at the District's headquarters, and.
2. Parker Pump Station (575 Highland Drive, Ojai, CA 93023).

The electric utility supplier in the region is Southern California Edison (Edison). In April 2021, the District installed Tesla Battery Powerpack systems at the Baldwin Pump Station (210-kilowatt (kW)) and at the Parker Pump Station (174 kW) to enable the District to shift electric loads away from peak hours, reducing demands on the Edison system. The solar facilities will be integrated with the existing Tesla battery Powerpack systems to further reduce demands on the Edison system at critical times, especially during the Edison peak hours between 4:00 p.m. and 9:00 p.m.

After solar panels are installed, the District plans to utilize the Tesla batteries in conjunction with the solar panels to store and utilize solar power with the goal of that most the District's power needs will be met by the solar and battery system.

Background

The District contracted Phoenix Civil Engineering to provide civil engineering consulting services for the design and analysis of the District's facilities at Baldwin and Parker Pump Stations. In addition to the installation of solar facilities (and not part of this solicitation package), both sites will be undergoing upgrades and replacements of pumps, tanks, and electrical components to increase energy efficiency.

Phoenix Civil Engineering subcontracted with Ventura Energy to conduct the site analyses specifically related to adding solar-generating capacity in coordination with the Tesla battery energy storage to create a microgrid capable of running the District's facilities during a power outage.

The Baldwin Site is a long and narrow 4-acre property bordering a neighborhood on one side and a protected creek bed on the other. The site contains the Baldwin Pump Station (serving Zone 1 customers), five groundwater wells, three booster pumps, two storage tanks and associated water mains, and the District's office (Figure 2). The Baldwin Pump Station has a 1,044-kilowatt-hour (kWh) Tesla battery with a rated capacity of 210 kW.

The Parker site is on a 9-acre parcel and includes the Parker Pump Station (serving Zone 5 customers), three booster pumps, and one storage tank (Figure 2). The Parker Pump Station has a 696 kWh Tesla battery with a rated capacity of 174 kW.

A separate and related project will replace the booster pumps at both the Baldwin and Parker sites to further increase energy efficiency.

Baldwin Site: The existing pumps and motors (two active, one standby) would be replaced with new motors and VFDs within the existing pump station building. The intent is that the existing Tesla storage batteries and the proposed solar energy facility would be able to start and run the new Baldwin pumps to help reduce the District's utility costs.

Parker Site: The three booster pumps at the Parker site are proposed to be replaced with VFDs to be connected to the existing pump motors adjacent to the existing Parker tank. Through the addition of the VFDs, the District would be able to operate the pumps at different flow rates based on demands in the system. A portion of the electricity produced by the proposed photovoltaic solar panel array would power these pumps.

Planned layouts of proposed solar panel locations can be seen in Figures 3 and 4.

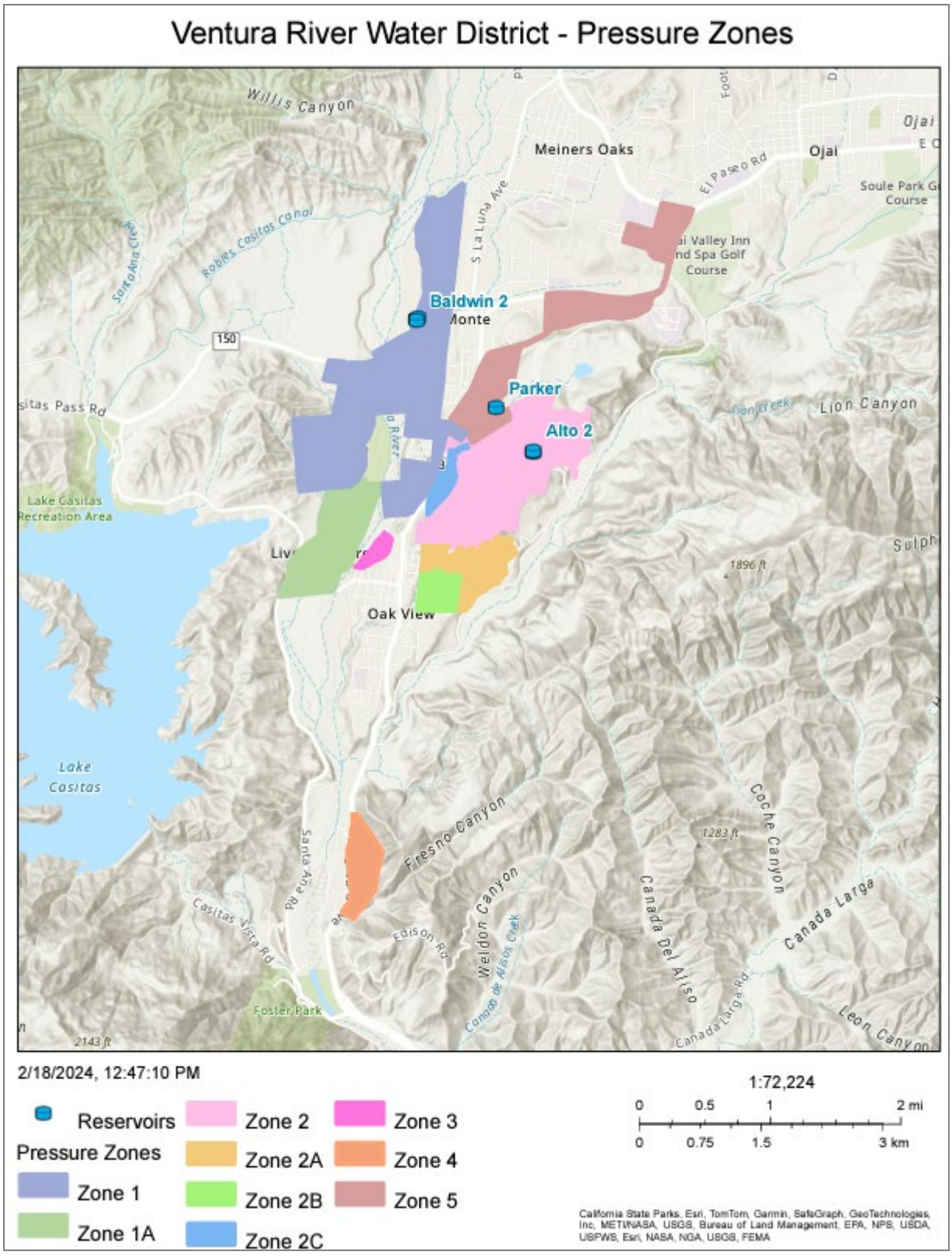


Figure 2: VRWD Pressure Zones

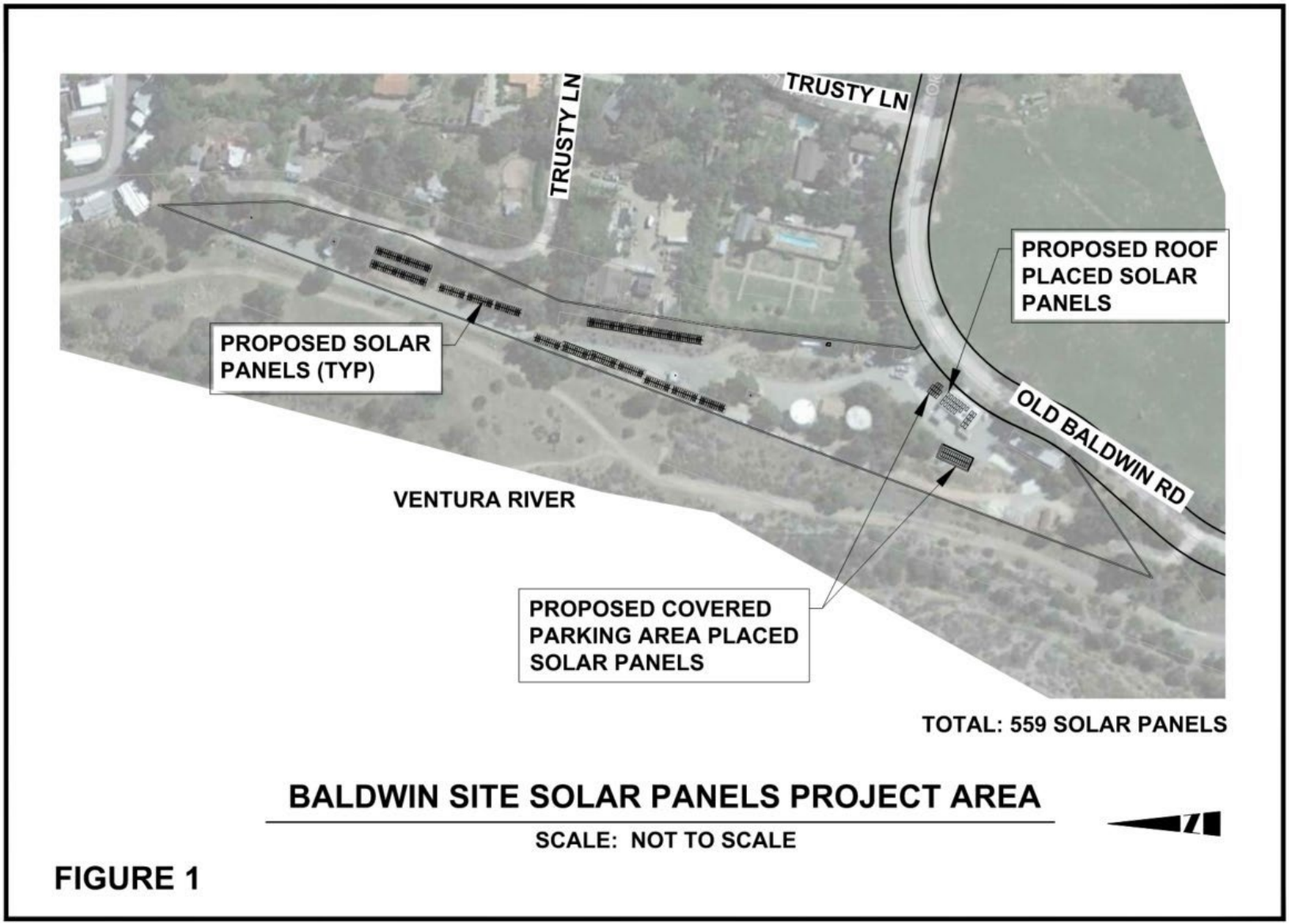


Figure 3: Baldwin Site - Proposed Solar Panel Locations

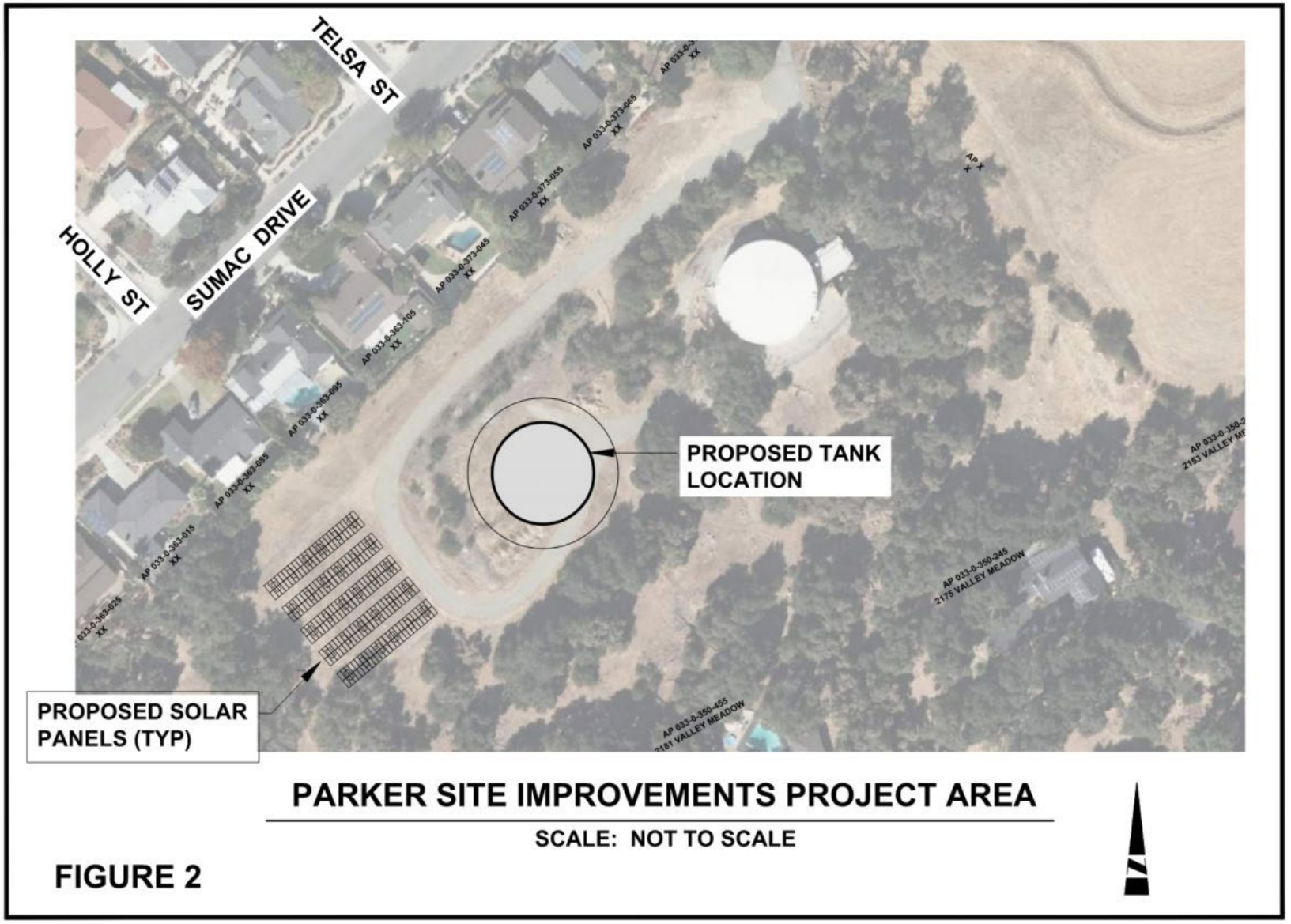


Figure 4: Proposed Parker Site Solar Panel Locations

Solar Generation

Based on Average Day Demand (ADD) for water, low winter versus high summer use, and capital costs, the ideal sizing includes a 265.5 kW solar system at the Baldwin Pump Station and 148 kW solar system at the Parker Pump Station.

The solar generation portion of the project includes the ballasted ground mount system, racking, solar modules, inverters, and a microgrid controller. For the racking system, the manufacturer SolarFlex Rack has been identified as the most cost effective. Based on limited available space at the Baldwin site, a higher efficiency module was selected for both sites to provide the best combination of energy production, warranty, and cost.

In lieu of using a large central inverter cabinet, string inverters were selected for their cost effective and flexible design capabilities. With the dispersed layout of modules across the Baldwin site, this is particularly useful. SMA Solar was identified as the manufacturer with extensive experience and warranty, although similar tier string inverters would be acceptable, particularly those more cost effective.

The Tesla batteries are controlled by Tesla's Energy Management System, commonly known as Opticaster. It is likely that the Tesla microgrid control module will be selected due to cost optimization and ease of integration with the existing battery system. The selected control module is expected to provide real-time control of paralleled grid-forming sources and variable renewable generation, as well as intelligent load and solar forecasting. This should provide the capability to optimize performance and economics.

In addition to the solar installation, a separate and related project includes booster station upgrades and a supervisory control and data acquisition (SCADA) system upgrade to increase energy efficiency. These upgrades will be District funded and are not part of this grant application.

Site Conditions

The engineering team performed several site visits to determine how conditions will affect installation of the solar panels. Geotechnical investigations have also been conducted at both sites.

The Baldwin site's proximity to the Ventura River and historical use for deposition of construction spoils result in a rocky, poorly compacted subgrade. Due to this condition, it is recommended that an at-grade concrete ballast block system be used for the footings/support system of the solar panels (Figure 5).

<u>Baldwin Site</u>

The Baldwin site is mostly sloped and will require grading to install the ballasted ground mount systems. A benched configuration would be used to keep the solar panels located away from neighboring properties and minimize conflicts with the existing access road and buried water lines.

With the space limitations at the Baldwin site, solar panels are also planned for the roofs of the office and two new covered parking structures for equipment and employee parking. At this time, roof panels are included in the cost assumptions and energy analysis; however, costs will be monitored during the bid process as roof panels tend to be more expensive compared to the ballasted ground mounted panels.

Parker Site

While soil conditions are not as rocky at the Parker site and either a ballasted ground mount system or pile driven system could be used, it is expected to be more economical to use the same system at both sites.

The Parker site will require some grading to accommodate the solar panels (which may also be recessed to avoid visual impacts to surrounding properties) but has a gradual slope and will better accommodate solar panel installation. Both sites will require some tree removals as part of the solar panel work.

Figure 6 shows typical cross sections for both sites and demonstrates how the sites will be graded to minimize visual impacts to neighboring homes.

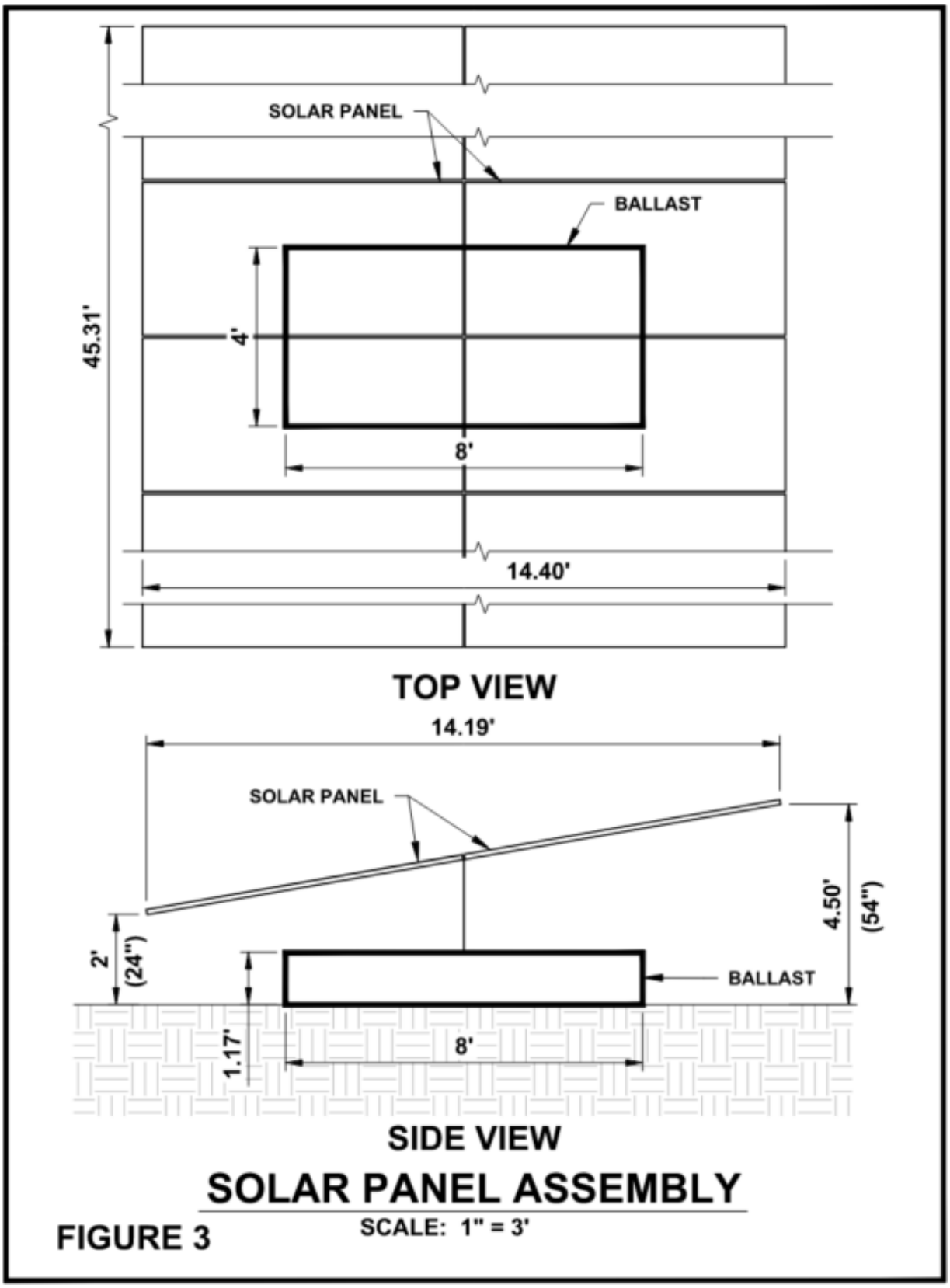


Figure 5: Baldwin Site Footing/Support for Solar Panels

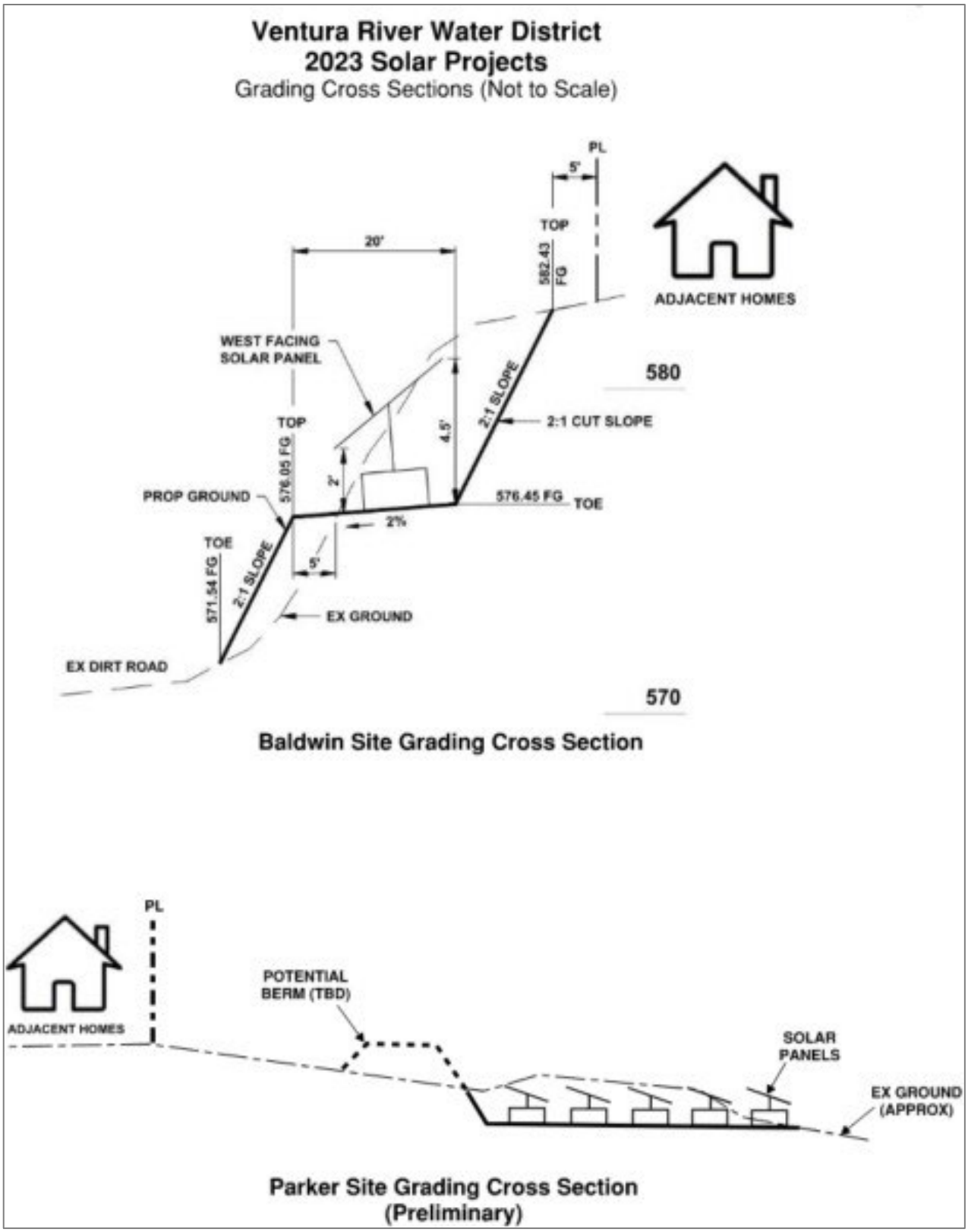


Figure 6: Grading Cross-Sections of Baldwin and Parker

4. EVALUATION CRITERIA

5.1 CRITERION A: QUANTIFIABLE WATER SAVINGS

While not part of this project, VRWD is actively replacing its manual read meters with advanced metering infrastructure (AMI) meters that allow individual users to track their water consumption and receive leak alerts. Approximately 60% of the District has AMI meters. Additionally, VRWD implemented outdoor water budgets for all customers in 2018. Since then, overall water use has decreased by more than 40% as customers have adapted to using less water (Figure 7).

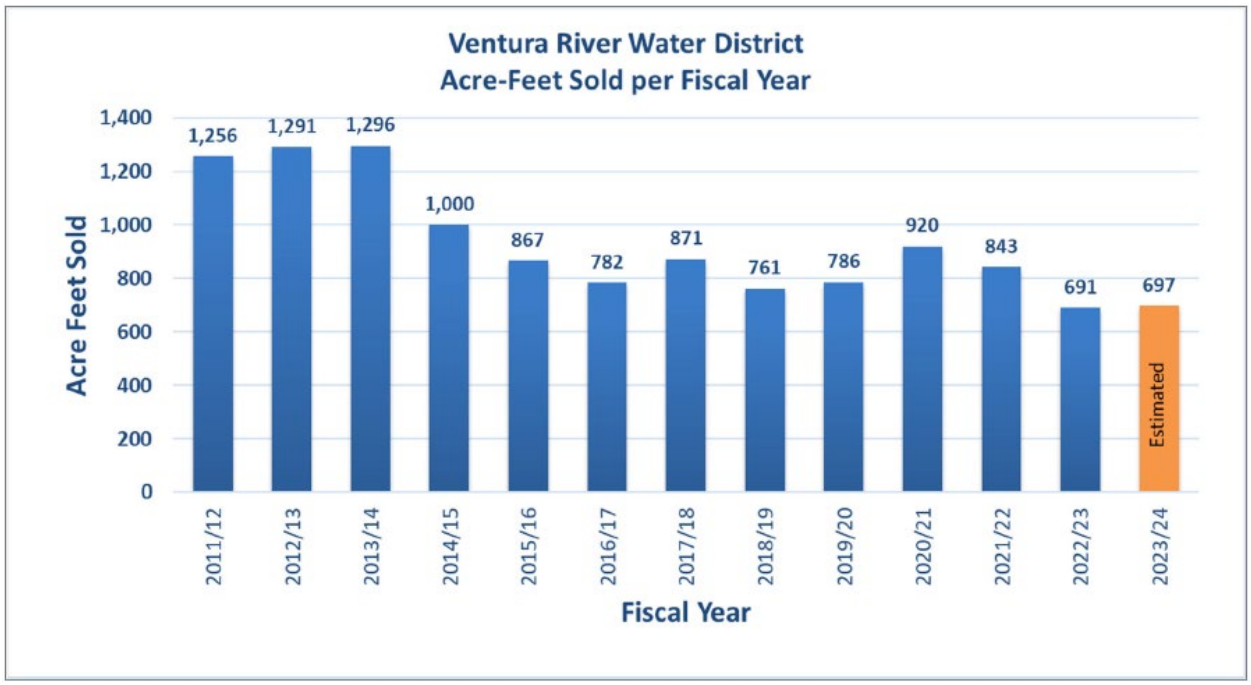


Figure 7: Acre-Feet of Water Sold by Fiscal Year.

5.2 CRITERION B: RENEWABLE ENERGY

Subcriterion B.1 – Implementing Renewable Energy Projects Related to Water Management and Delivery

The proposed solar generation systems are rated for a capacity of 265.5 kW at the Baldwin Pump Station and 148 kW at the Parker Pump Station, for a total of 413.5 kW. The annual amount of solar energy generated will be up to 685,023 kWh per year.

The SPARK project is anticipated to offset the impacts of climate change by reducing greenhouse gas emissions. Based on a 25-year lifespan of the solar panels, with efficiencies starting at 98% and dropping down to 86% in year 25 (per manufacturer warranty), this translates to a reduction in carbon dioxide equivalent (CO_2) emissions of **12,308 tons over 25 years**. Assuming the solar panel efficiency drops to 80%, the CO_2 reduction is **11,907 tons over 25 years**. **In year 1, the estimated reduction in CO_2 is 524 tons**. These estimates are based on the U.S. Environmental Protection Agency's Greenhouse Gas Equivalencies Calculator.

The solar energy generated will be used to power the bulk of VRWD's energy demands by utilizing solar energy in combination with Tesla battery storage and a new SCADA[1] system to optimize pumping by selecting the appropriate pump and gallon-per-minute flow rate. VRWD has approved Interconnection Agreements for the Baldwin and Parker facilities for the Net Energy Meter (NEM) 2.0 Schedule.

The District has seen significant increases in energy bill costs in the past 12 months. Before April 2022, the District was paying $0.139/kWh on average which has risen to $0.233/kWh, for a total increase of 67%. Most of the increase in rate is due to an Edison rate case that went into effect in April 2022. In addition to higher rates, the region is in a high fire zone and experienced significant power outages in the Thomas Fire of 2017. The solar project will further reduce energy bills, significantly reduce the District's carbon footprint, and improve its resilience and ability to maintain a stable water supply during extended power outages.

Alternatives Analyses and Sizing Selection

An alternatives analysis was performed to determine the optimal size of solar generation at each of the sites. The base case (current situation) of the analysis is described below. Note that the two Edison meters at the Baldwin Pump Station are expected to be combined as a part of the solar project.

Table 1 shows actual energy demand for the 2023 calendar year. The District has improved its battery operations at the Baldwin Pump Station by opting out of a winter rate plan program that charged batteries before a storm (and set a new peak period in

[1] New SCADA is not part of this grant application and will be 100% funded by the District.

January/February 2022). The District also plans to install an additional pump at the Parker Pump Station. The expected energy usage for January to December with the new infrastructure is shown in the middle column; this estimate uses the water demand from the last year, which was low due to mandatory 30% cutbacks related to the drought.

ADD and Maximum Day Demand (MDD) are commonly used in water supply planning. The project is sized for the ADD/MDD and the corresponding energy needs are shown in the last column.

Table 1: Energy Usage Analysis

Station/Meter	**Actual Energy Demand January to December 2023 (kWh)**	**Annual Base Case Energy Demand with Improved Battery Operations Plus Additional Parker Pump (kWh)**	**Annual Energy Demand for 2010 ADD (kWh)**
Baldwin Pump Station	581,873	**538,187**	
Baldwin Office	36,044	**36,044**	
Total Baldwin	617,917	**574,231**	**726,255***
Parker Pump Station	199,819	**257,341**	**368,815**

**Assumes nighttime operation of batteries.*

The analysis modeled the District's energy usage both with and without the existing Tesla batteries. The batteries reduce the District's overall peak demand from Edison. An example of this is shown in Figures 8 and 9. Figure 8 models energy usage without the batteries (total energy needs). On Figure 9, the resulting energy draw from Edison is shown in pink and displays how instead of hitting a peak event at 179 kW on June 29, 2021, the battery constrained a peak event from occurring, limiting the peak that Edison registered to 127 kW.

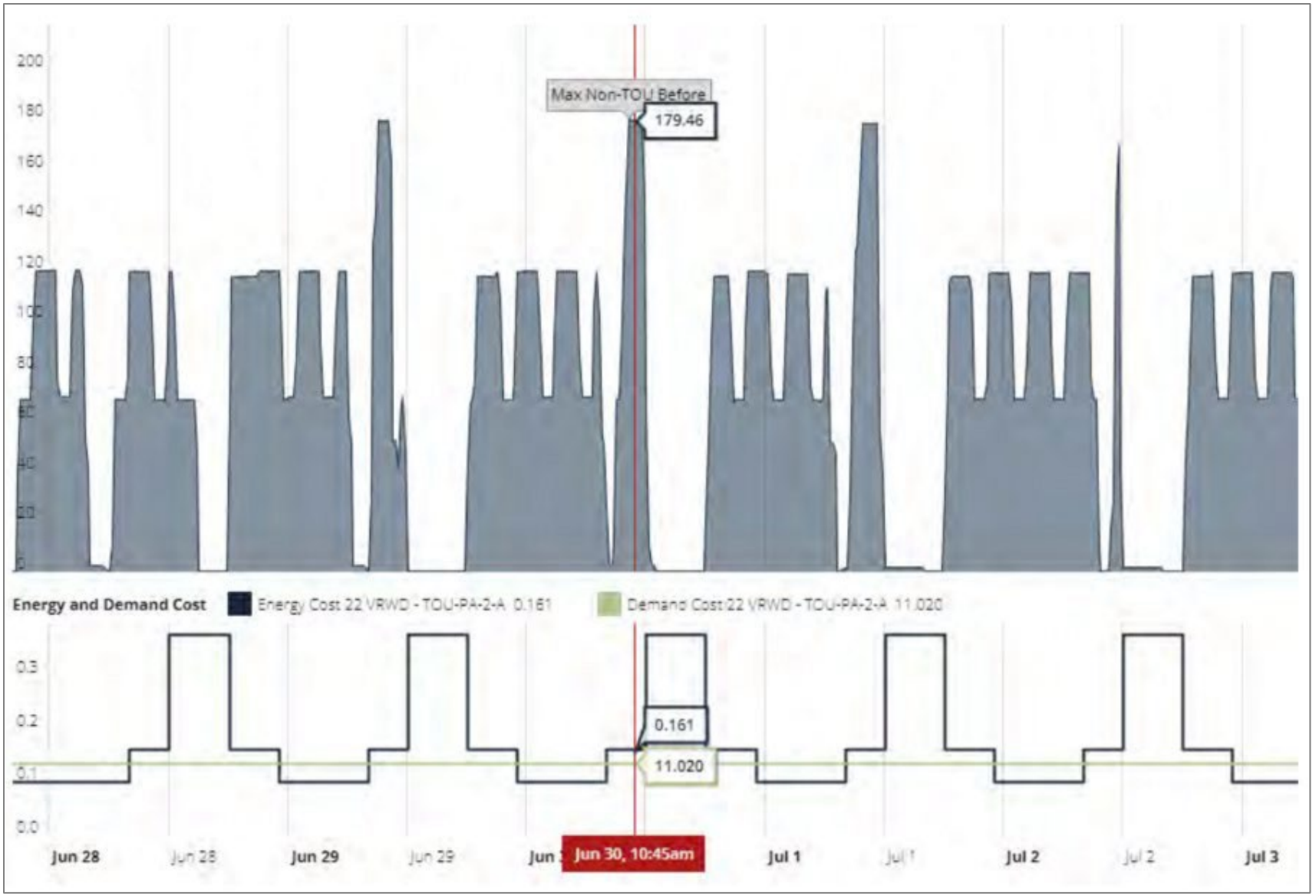


Figure 8: Baldwin Pump Station Energy Usage Profile, Battery Effect Removed

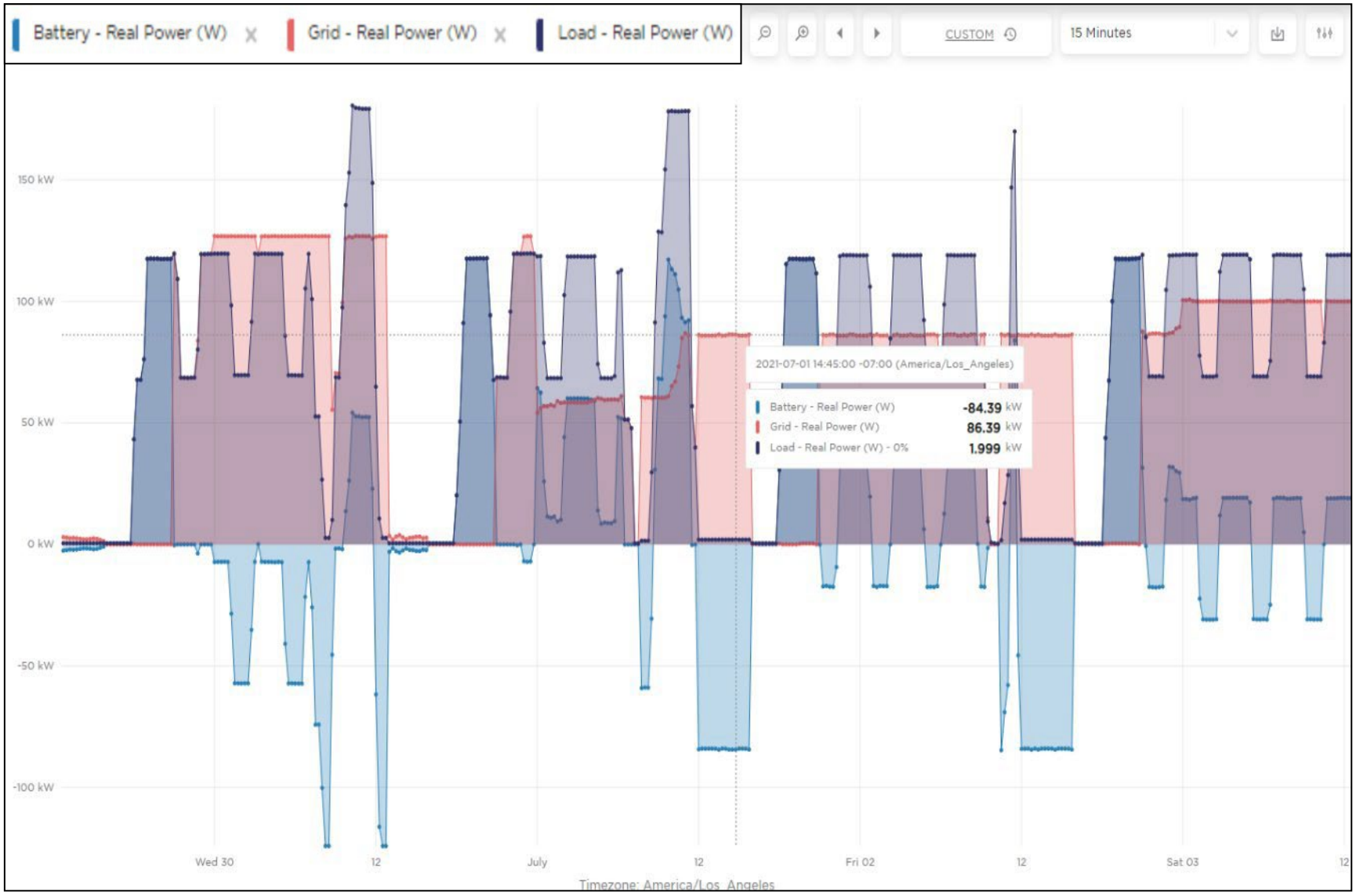


Figure 9: Baldwin Pump Energy Usage Profile, with Tesla Batteries

In determining the appropriate size for a solar installation, the analyses also considered capital cost, site size limitations, water demand and associated pumping schedules and related energy needs, energy usage for day vs. night pumping, and energy cost savings. Additional information on assumptions include the following:

- **ADD and MDD.** These figures were derived from the most recent hydraulic assessment/water master plan from 2010. While water usage per household in 2010 was higher than current usage, using an estimated ADD prior to the drought provides a conservative estimate of how water demand might rebound after the drought.
- The ADD and MDD were used to develop pumping schedules for both stations. The Parker pumping schedule included the need to fill a proposed new storage tank (the tank is not included in this grant request).
- **Four rate structure options.** These included the current rate and grandfathered time-of-use periods (expiring in 2028), the Renewable Energy System Generation Bill-Credit Transfer with grandfathered time of use, a higher rate/lower demand charge, and a lower rate/higher demand charge structure.

Analysis showed that, to minimize the District's energy cost, the optimal pumping schedule at nighttime, and therefore, it is recommended that the District use a nighttime pumping and EV charging schedule. By including a microgrid controller to optimize the utilization of solar energy and battery energy to serve site loads, the District can choose to adjust the pumping schedule to maximize energy consumption within the solar production window when grid power is unavailable.

To offset 100% of the Baldwin energy consumption, a solar system rated to 445 kW would be required; however, based on the space and grading constraints at the site, **a system size of 265.5 kW is proposed.**

To offset 100% of the Parker energy consumption, a solar system rated to 184 kW would be required. However, based on the site layout and balancing cost-effectiveness, **a system size of 148 kW is proposed**. The key issue with cost-effectiveness was that less power is required in the winter months. Sizing the facility for summer loads was not deemed fiscally prudent.

The proposed 265.5 kW solar system at the Baldwin Pump Station and 148 kW solar system at the Parker Pump Station working in tandem with each energy storage system on site resulted in energy savings of 685,023 kWh per year (Table 2).

Table 2: Annual Energy Usage at Pump Stations

Pump Station	Energy Usage without Solar, with Tesla (kWh)	Energy Usage with Solar (kWh)	Energy Savings (kWh)
Baldwin	726,255	294,512	431,743
Parker	368,815	115,535	253,280
Total	**1,095,070**	**410,047**	**685,023**

Solar Power Generation

The estimated electricity generated by solar panels is affected by three main factors: (1) panel material, (2) environment/siting, and (3) installation.

The proposed panels for this project are the Q.PEAK DUO XL-G10.2, which are considered durable and high performance with a module efficiency of 21.6%, extreme weather rating and 25-year linear performance warranty, meaning an 86% relative efficiency at 25 years.

The second factor, environmental/siting, is based on the specific geographic location, the average irradiance conditions, and hours of sunlight during the day. Finally, the installation factor relates to positioning the panels to capture the most sunlight, avoiding shade, and keeping the panels clean.

Using site factors related to position and location of the panels, the electricity generation was calculated for both pumping facilities and summarized in Tables 3 and 4. Parker is slightly more efficient due to more favorable angles of the solar panels, which will face south. Due to the terrain constraints, the Baldwin panels will be facing more toward the west.

Table 3: Baldwin Solar Energy Generation

Baldwin Site	**Winter**	**Spring**	**Summer**	**Fall**
Average production hours per day per season (hrs.)	5.5	7.5	8.75	7.75
Average electricity generation per day (kWh)	881.03	1,201.40	1,401.63	1,241.45
Day per season	90	92	92	91
Total electricity generation per season (kWh)	79,292.38	110,528.77	128,950.23	112,971.62
Total electricity generation per year (kWh)	431,743			

Table 4: Parker Solar Energy Generation

Parker Site	**Winter**	**Spring**	**Summer**	**Fall**
Average production hours per season (hrs.)	5.5	7.5	8.75	7.75
Average electricity generation per day (kWh)	516.85	704.80	822.26	728.29
Day per season	90	92	92	91
Total electricity generation per season (kWh)	46,516.5	64,841.18	75,648.05	66,274.27
Total electricity generation per year (kWh)	253,280			

5.3 CRITERION C – OTHER PROJECT BENEFITS

The Ojai Valley has recently been subjected to severe drought conditions, characterized by below average precipitation, diminished surface water flows, and lowered groundwater levels. These conditions have placed a significant strain on local water resources, necessitating the implementation of stringent water conservation measures and an increased focus on sustainable water management practices.

The District must survive on the water that the Ventura River Watershed, which includes Lake Casitas provides for both people and the environment. The Upper Ventura River Groundwater Basin provides the District with sufficient water to survive a 2-year drought before the District must begin using Lake Casitas water to meet customer needs.

Lake Casitas provides the surface water supply for the entire Ojai Valley. While many small local water suppliers rely on groundwater, the lake supplements groundwater supply during high demand and when wells are non-operational, particularly in summer months. Many residents in the valley rely on Lake Casitas water year-round and/or every summer.

Fortunately, the District obtains most of its water from the Upper Ventura River Groundwater Basin. While a few of its customers are served year-round from surface water from Lake Casitas, most are served by groundwater. The basin depletes in the summer months but recharges quickly during the winter rainy season, when there is sufficient rain.

The entire Ojai Valley and the District's service area are in a High Fire Threat Zone. The project will reduce reliance on fossil fuels for electricity generation, thereby decreasing greenhouse gas emissions and contributing to cleaner air quality. The integration with Tesla PowerPack batteries enables the storage of excess solar energy ensuring a stable and reliable supply of power when sunlight is not available, extended power outages, and particularly during fire events.

Project SPARK will provide VRWD with a renewable energy source that will reduce reliance on fossil fuels for electricity generation thereby decreasing greenhouse gas emissions and contributing to cleaner air quality. The shift from fossil fuel-based electricity to renewable solar power will have a direct impact on reducing air pollution. By eliminating the need for electricity generated from coal natural gas or oil, project SPARK significantly cuts greenhouse gas emissions, and this transition aids in combating climate change contributing to a healthier environment for local community.

Lastly, the availability of stored solar energy provides water managers with greater flexibility in operating water pumping and distribution systems. With the Tesla PowerPack batteries, the energy required for water pumping can be drawn during times of low demand or production from the solar array design its peak optimizing energy use and reducing costs this flexibility is particularly valuable during drought conditions for every drop of water saved is crucial.

5.4 CRITERION D – DISADVANTAGED COMMUNITIES

Casitas Springs is a small, unincorporated community in Ventura County, located about 5 miles north of the City of San Buenaventura (Ventura) and 1.2 miles east of Lake Casitas. The community is identified by the California Department of Water Resources as an economically disadvantaged community using the definition specified under the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) Economically Distressed Area Instructions.

Casitas Springs is served by three different water agencies: VRWD, Casitas Municipal Water District, and Casitas Mutual Water Company (Casitas Mutual). The VRWD serves about 127 customers (connections) in the eastern portion of the community—124 residential customers, one mobile home park, and two commercial customers and is in the process of consolidating with Casitas Mutual, a process in which Casitas Mutual will dissolve as a water company. After consolidation is complete, VRWD will acquire 78 more customers in the Casitas Springs area.

VRWD is the only source of fire suppression in the community; the other agencies do not have fire hydrants in Casitas Springs. Project SPARK will allow VRWD to improve its ability to maintain a stable water supply for domestic and fire suppression during extended power outages.

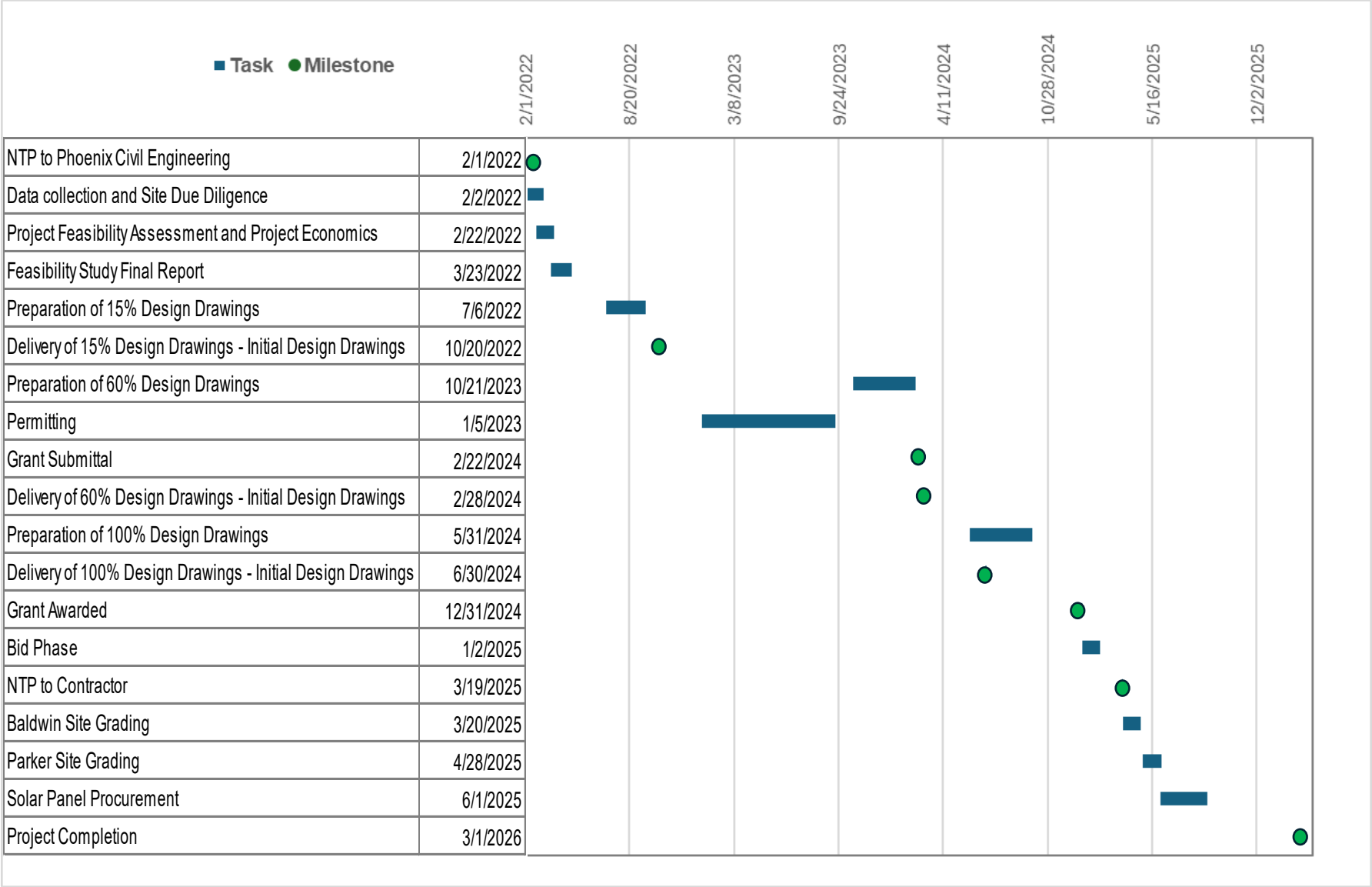
5.5 CRITERION E – COMPLEMENTING ON-FARM IRRIGATION

Not Applicable. Project SPARK does not complement on-farm irrigation.

5.6 CRITERION F – READINESS TO PROCEED

Engineering design work is at 30% completion and 100% design drawings will be complete by May of 2024. This will be paid for by the District and be completed ahead of the grant funding date.

VRWD also has approved Interconnection Agreements (approved on February 17, 2023) for both the Baldwin and Parker facilities for the Net Energy Metering (NEM) 2.0 schedule. This will allow the facility to add additional energy into Edison’s energy grid. The electric meters at both facilities have also been retrofitted in anticipation of solar panel installation. Figure 10 shows the estimated project schedule, duration of proposed work, including major tasks and milestones.



NTP to Phoenix Civil Engineering	2/1/2022
Data collection and Site Due Diligence	2/2/2022
Project Feasibility Assessment and Project Economics	2/22/2022
Feasibility Study Final Report	3/23/2022
Preparation of 15% Design Drawings	7/6/2022
Delivery of 15% Design Drawings - Initial Design Drawings	10/20/2022
Preparation of 60% Design Drawings	10/21/2023
Permitting	1/5/2023
Grant Submittal	2/22/2024
Delivery of 60% Design Drawings - Initial Design Drawings	2/28/2024
Preparation of 100% Design Drawings	5/31/2024
Delivery of 100% Design Drawings - Initial Design Drawings	6/30/2024
Grant Awarded	12/31/2024
Bid Phase	1/2/2025
NTP to Contractor	3/19/2025
Baldwin Site Grading	3/20/2025
Parker Site Grading	4/28/2025
Solar Panel Procurement	6/1/2025
Project Completion	3/1/2026

Figure 10: Schedule and Milestones

Background

VRWD contracted with Phoenix Civil Engineering in February 2022 to determine the feasibility of adding solar power generation, EV charging stations, and microgrid capabilities to VRWD's facilities at the Baldwin Pump Station and the Parker Pump Station. Phoenix Civil Engineering hired Ventura Energy to assist with the solar analysis.

This study consisted of five phases, all of which are completed. The five phases are as follows:

Phase 1: Data Collection and Site Due Diligence

- Existing facilities' loads and Edison costs
- Existing facilities' loads and Edison costs without existing batteries
- New facilities' loads and Edison costs with existing batteries

Phase 2: Project Feasibility Assessment and Project Economics

- New facility loads and Edison costs without existing battery
- New facility loads with Edison costs proposed PV, proposed EV charging stations, and existing batteries
- Microgrid analysis
- Cost feasibility of proposed PV generating facilities
- Grant or third-party financing of proposed PV generating facilities

Phase 3: Feasibility Study Final Report

Phase 4: Preparation of Design Drawings

Phase 5: Delivery of 15% Design Drawings – Initial Design Drawings

The District can be ready to advertise for bids immediately after award notification, provided a funding agreement is in place. The solar project will only take one year to procure and install.

5.7 CRITERION G – COLLABORATION

Local agencies are constantly working together to discuss small and large tactics to achieve the objective of increased resilience to drought and climate change. Water demand reduction is an obvious tool in the tool chest.

Meiner's Oaks Water District (MOWD) is a retail water provider and is located adjacent to VRWD. is included in Section 13. VRWD and MOWD work closely together to put forth a coordinated message to our respective customers. As noted in the attached letter, MOWD supports the project because they understand the importance of investing in renewable energy for the long-term sustainability and resilience of our water supply.

The District would be the first water district in the Ojai Valley to add solar and will share its experience with other agencies. This will help normalize the practice and thereby provide support to other utilities and agencies that are considering solar.

5.8 EVALUATION CRITERIA H – NEXUS TO RECLAMATION

The SPARK Project is not connected to any Reclamation project or activity.

5. PERFORMANCE MEASURES

Solar generation performance will be based on the following performance measures:

- The total cost of the elements included in the budget will be compared against the budgeted costs.
- Performance testing of the pumps to ensure they meet design specifications.
- Performance testing of the solar panels to ensure they meet design specifications and manufacturer performance guarantees that can be measured in the first week after installation, the first month after installation, and the first quarter after installation. This will include energy production (kWh) and peak capacity (kW).
- CO_2 emission reduction will be measured based on energy production.
- Solar panels produce less energy in winter. If installation is completed outside of summer months, the actual capacity will need to be adjusted by an environmental factor to account for the season. The contractor's contract will be required to specify the seasonal variation so that the performance testing is accurate.
- Photographs of the completed project.

6. BUDGET NARRATIVE

VRWD is NOT requesting funding for personnel, fringe benefits, or travel expenses. The project has been underway since February of 2022 and engineering design plans are at 30%. VRWD has been funding the engineering design, geotechnical report, and engineering feasibility study for the project so that the project will proceed expeditiously should the grant be awarded. VRWD cost share is anticipated to be 70% of the remaining project costs. The District will advertise for bids to construct this project.

Summaries of the funding sources and total project cost are provided in Tables 5 and 6. The District is not requesting any in-kind/indirect cost credits. All cost matching will be from District funds.

Table 5: Summary of Non-Federal and Federal Funding Sources

Funding Sources	**Amount**
Non-Federal Entities	
Ventura River Water District	$ 1,185,000
Non-Federal Subtotal	$ 1,185,000
Requested Reclamation Funding	**$ 500,000**

Table 6: Total Project Cost

Source	**Amount**
Cost to be reimbursed with the requested Federal funding	$ 500,000
Cost to be paid by the applicant	$ 1,185,000
Value of third-party contributions	0
Total Project Cost	**$1,685,000**

A detailed budget is provided in Table 7. The budget numbers below do not include costs for engineering design, geotechnical studies, and the Engineering Feasibility Study.

Table 7: Total Project Cost and Cost-Share

SECTION B - BUDGET CATEGORIES & COST SHARE

	Object Class Category	Cost ($)	District Share ($)	Grant Share ($)	District Share (%)	Grant Share (%)
a.	Personnel	$ -	$ -	$ -	0	0
b.	Fringe Benefits	$ -	$ -	$ -	0	0
c.	Travel	$ -	$ -	$ -	0	0
d.	Equipment	$ 1,214,000	$ 714,000	$ 500,000	59%	41%
e.	Supplies	$ -	$ -	$ -	0	0
f.	Contractual	$ -	$ -	$ -	0	0
g.	Construction	$ 471,000	$ 471,000	$ -	100%	0%
h.	Other Direct Costs	$ -	$ -	$ -	0	0
i.	**Total Direct Costs**	**$ 1,685,000**	**$ 1,185,000**	**$ 500,000**	**70%**	**30%**
j.	Indirect Costs	$ -	$ -	$ -	0	0
k.	**TOTALS**	**$ 1,685,000**	**$ 1,185,000**	**$ 500,000**	**70%**	**30%**

EQUIPMENT

The SPARK project includes installation of approximately 871 solar panels at two of the District's facilities (312 at Parker and 559 at Baldwin) and associated ballast footings and rooftop installations. The estimated electricity generated by solar panels is affected mainly by the panel material, environment/siting, and installation. The proposed panels for this project are the Q.PEAK DUO XL-G10.2, which are considered durable and high performance with a module efficiency of 21.6%, extreme weather rating and 25-year linear performance warranty, meaning an 86% relative efficiency at 25 years. The $1,214,000 estimated cost is based on the published price of this solar panel and estimated costs to install on ballast footings.

VRWD also evaluated the project under a Power Purchase Agreement (PPA) in which panels would be owned by a third party and found that once civil and structural costs are factored in, the PPA option would not generate a positive cash flow over a 25-year period (Table 8). A detailed summary of the solar equipment costs is shown in Table 9.

Table 8: Cash Purchase vs. Power Purchase Agreement

Table 1 – Preliminary Cost Analysis (Solar Only)		
Description	**Cash Purchase**	**Power Purchase Agreement (Assuming 3.5% Escalation)**
Construction Costs	$1,214,000	$0
Ongoing Maintenance Costs	$8,000 - $17,000 per year	$0
PPA Payments	$0	$101,000 - $186,000 per year
Electrical Bill Savings	$110,000 - $184,000 per year	$110,000 - $184,000 per year
Total Cash Savings (25-yr)	**$2,071,000**	**$110,000**

Table 9: Solar Project Procurement

	Baldwin	**Parker**	**Total**
Engineering	15,000	15,000	30,000
Procurement	406,000	262,000	668,000
Construction	192,000	139,000	331,000
Transportation, Storage, and Fees	5,000	3,000	8,000
Contingency	105,000	72,000	177,000
Total Installation Cost	**723,000**	**491,000**	**1,214,000**

CONSTRUCTION

VRWD will pay for 100% of the grading at both sites and the carport parking structures at the Baldwin site that will support solar panels. The parking structures are necessary due to space limitations. VRWD does not own the necessary equipment, expertise or manpower that will be required for this project. Both sites will require grading to prepare for solar panel installation. The estimated construction cost of $471,000 is for grading work to prepare two sites for solar panel installation.

The Baldwin site is mostly sloped and will require grading to install ballasted ground mount systems. A benched configuration is proposed to recess the solar panels away from neighboring properties and minimize conflicts with the existing access road and subsurface water mains. Due to space limitations at the Baldwin site, solar panels are also planned for the roofs of the office and two new covered carport parking structures. Roof panels are included in the cost assumptions and energy analysis.

The Parker site will also require grading to accommodate the solar panels and will likely be recessed to avoid visual impacts to the surrounding property owners. The construction cost estimates are based on the engineer's probable cost opinion (Engineering Solar Report, Phoenix Civil Engineering) and shown in Table 10.

Table 10: Total Project Cost and Cost-Share

	Cost ($)	District Share ($)	Grant Share ($)	District Share (%)	Grant Share (%)
Baldwin Site – Grading and Parking Structures	$336,500	$336,500	—	100%	0%
Parker Site – Grading	$134,500	$134,500	—	100%	0%
Solar Generation Procurement	$1,214,000	$714,000	$500,000	59%	41%
Total	**$1,685,000**	**$1,185,000**	**$500,000**	**70%**	**30%**

7. ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

- **Will the proposed project impact the surrounding environment? Please briefly describe all earth- disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.**

  - The project includes typical earthwork. Dust mitigation will be required. Working hours will be limited to 7:00 a.m. until 5:00 p.m. The work areas are already in disturbed areas used by the District with normal day-to-day operations.

- **Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?**

  - **Botanical Resources.**

    Baldwin Site. A botanical survey was conducted at the Baldwin site on September 8, 2022, which included the entire 4.21 acre site and adjacent areas. A total of 36 plant species were observed, including 21 native species (58 percent). Twelve species listed as invasive by the California Invasive Plant Council were observed, including one species rated as highly invasive (red brome), six species rated as moderately invasive, and five species considered to have limited invasiveness.

- Parker Site**.** A botanical survey was conducted at the Parker site on September 15, 2022, which included the proposed tank construction earthwork footprint, construction staging and laydown areas, new pump station site and the solar panel layout area. A total of 63 plant species were observed, including 26 native species (41 percent). This species list includes those plant species observed by Padre Associates biologists during a survey conducted for the District's pipeline replacement project at the site in 2012. Eighteen species listed as invasive by the California Invasive Plant Council were observed, including two species rated as highly invasive (freeway iceplant and salt-cedar), eight species rated as moderately invasive, and eight species considered to have limited invasiveness.

- **Vegetation.**

  Baldwin Site. This site is highly disturbed due to the presence of existing facilities (tanks, pumps, wells, standby generator, etc.) and ongoing maintenance activities. Coast live oak trees (Quercus agrifolia) surround the existing tanks, are located adjacent to the District's office and along much of the eastern property boundary. In addition, two coast live oak trees are located adjacent to the proposed standby generator sound wall site. The understory of these oak trees is virtually absent, due to ongoing maintenance or fuel modification activities. However, non-native weedy species occur under some of the oak trees along the eastern property boundary.

  The proposed solar panels would be in fuel modification areas, which are periodically treated with herbicide and occasionally cleared using string trimmers. Dominant plant species observed within the proposed solar panel layout areas were summer mustard (Hirschfeldia incana) and horehound (Marrubium vulgare).

  Parker Site. Vegetation of this site is composed of coast live oak woodland surrounding disturbed areas associated with existing District operations at the site. The understory of the coast live oak woodland is mostly sparse, but some areas support annual grasses and chickweed (Stellaria media), green-bark ceanothus (Ceanothus spinosus), with scattered laurel sumac (Malosma laurina), Peruvian pepper tree (Schinus molle), Brazilian pepper tree (Schinus terebinthifolius), holly-leaved cherry (Prunus ilicifolia), toyon (Heteromeles arbutifolia), laurel sumac and lemonade berry (Rhus integrifolia).

  The proposed solar facility site is periodically cleared using string trimmers for fire prevention purposes, and supports only scattered tarplant (Holocarpha heermannii), vinegar weed (Trichostemma lanceolatum), red-

stem filaree (Erodium cicutarium) and annual buckwheat (Eriogonum gracile).

- **Wildlife Resources.**

  Baldwin Site. A wildlife survey was conducted of the entire site on September 8, 2022. Wildlife observed were western fence lizard, turkey vulture, California quail, American crow, western scrub jay, California towhee, spotted towhee, black phoebe, mourning dove, Eurasian collared dove, northern mockingbird, acorn woodpecker, oak titmouse, coyote, Audubon's cottontail, California ground squirrel and black-tailed deer.

  Parker Site. A wildlife survey was conducted of the entire site on September 15, 2022. Wildlife observed were western fence lizard, California quail, American crow, western scrub jay, bushtit, house finch, black phoebe, mourning dove, Eurasian collared dove, acorn woodpecker, Nuttall's woodpecker, lesser goldfinch, northern mockingbird, Anna's hummingbird, oak titmouse, pocket gopher, coyote, brush rabbit, California ground squirrel and big-eared woodrat. Cooper's hawk was observed perched on a power pole at the Parker site during noise measurements on September 21, 2022.

- **Impact Analysis**

  Plants. Based on literature review and botanical surveys of the Project component sites, there are no special-status plant species that would be affected by the proposed Project, therefore, implementation of the project is considered a less than significant impact.

  Vegetation.

  Baldwin & Parker Sites. Proposed facilities would be located in previously disturbed areas and would not result in the removal of native vegetation. Oak woodland near the tanks and flood protection site would be preserved. Minor grading for the proposed solar panel arrays would disturb about 0.3 acres of weedy fuel modification areas. The solar panels would be mounted on ballast blocks with most of the area remaining unsurfaced; therefore, these areas would continue to support weedy maintained vegetation following solar panel installation.

  Federally Threatened or Endangered Species

  The Ventura River is inhabited by several special status species including ESA- listed and CESA- candidate steelhead (Oncorhynchus mykiss), ESA-listed and SSC California red-legged frog (Rana draytonii), SSC arroyo chub (Gila orcuttii), and SSC western pond turtle (Emys marmorata). Entry of these materials into the water system could result in degradation of on-

site and downstream water quality in the Ventura River. The proposed solar panel improvements would not affect the volume, rate or quality of stormwater run-off from the Baldwin site or otherwise adversely affect aquatic habitat in the Ventura River.

- **Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?" If so, please describe and estimate any impacts the proposed project may have.**
  - There are no wetlands.

- **When was the water delivery system constructed?**
  - Primarily 1940s to 1990s.
- **Will the proposed project result in any modification of or effects to individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.**
  - No modifications.
- **Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.**
  - None.
- **Are there any known archeological sites in the proposed project area?**
  - The Parker site is located within the ethnographic territory of the Chumash, who inhabited the Coast Ranges between San Simeon and Malibu (Kroeber, 1925). The Chumash have been divided into several geographic groups, each associated with a distinct language dialect (Hoover, 1986). The Chumash living in Ventura County formed the Ventureño dialect group of the Chumash language family. This group was named for their association with the Spanish Mission San Buenaventura, founded in 1782.
  - **Tribal Consultation**

    VRWD's consultant emailed a request for a Sacred Lands File search to the Native American Heritage Commission (NAHC) on August 26, 2022, to request information about sacred or traditional cultural properties that may be located within the project site. A search of the Sacred Lands File housed

at the NAHC did indicate the presence of Native American cultural resources and recommended contacting the Barbareño/Ventureño Band of Mission Indians for further information.

On June 1, 2023, VRWD's consultant sent letters via certified mail to the list of nine tribes provided by the NAHC; they were asked to provide pertinent information or to express any concerns they may have about the project. Below is a Native American Consultation Phone Log.

Contact Date	Name, Affiliation	Discussion
6/15/23; 6/16/23	Annette Ayala, Barbareño/Ventureño Band of Mission Indians	Ms. Letter left a voicemail and followed up with an email. Ms. Ayala responded with a request for a consultation meeting. Ms. Letter sent follow-up emails on 6/22/23, 6/27/23, and 7/13/23 to schedule a meeting. No response was received.
6/15/23	Dayna Barrios, Chairperson, Barbareño/Ventureño Band of Mission Indians	Ms. Letter left a voicemail for Ms. Barrios. Ms. Letter sent follow-up emails on 6/22/23, 6/27/23, and 7/13/23 to schedule a meeting. Ms. Barrios responded on 7/14/23 that she was no longer chairperson and recommended contacting Matthew Vestuto.
7/14/23	Matthew Vestuto, Chairperson, Barbareño/Ventureño Band of Mission Indians	Ms. Letter emailed a copy of the consultation letters and relevant maps and sent a follow-up email on 7/19/23. No response received.
6/13/23; 6/30/23	Wendy Teeter, Ph.D., Cultural Resources Archaeologist, Santa Ynez Band of Chumash Indians	The tribe sent a letter via email requesting a consultation meeting, which occurred on June 30, 2023. During the meeting, Dr. Teeter expressed concern about the Baldwin and Parker sites' proximity to known resources and recommended cultural resource monitoring during Project-related ground disturbance within these specific sites. Dr. Teeter also recommended that prior to ground disturbing activities, all construction personnel shall receive cultural resource awareness training, including a training video prepared by the tribe, that states that ground disturbance will be halted when cultural resources are encountered.
-	Kenneth Kahn, Chairperson, Santa Ynez Band of Chumash Indians	No phone call was made. Consultation with Wendy Teeter, Ph.D. is the official response for the Santa Ynez Band of Chumash Indians.
6/15/23	Mia Lopez, Chairperson, Coastal Band of the Chumash Nation	Ms. Lopez stated that she is no longer chairperson and recommended contacting Gabe Frausto.
6/15/23	Gabe Frausto, Chairperson, Coastal Band of the Chumash Nation	Ms. Letter left a voicemail for Mr. Frausto.
6/15/23	Julio Quair, Chairperson, Chumash Council of Bakersfield	Phone number disconnected.
6/15/23	Violet Walker, Chairperson, Northern Chumash Tribal Council	Ms. Letter left a voicemail for Ms. Walker.
6/15/23	Sandonne Goad, Chairperson, Gabrielino /Tongva Nation	Voicemail box was full, and no message could be left.
6/15/23	Charles Alvarez, Gabrielino-Tongva Tribe	Letter listed as undeliverable. Email sent 6/15/23. No phone number provided.
6/15/23	Anthony Morales, Chairperson, Gabrieleno/Tongva San Gabriel Band of Mission Indians	Ms. Letter left a voicemail for Mr. Morales.
-	San Luis Obispo County Chumash Council.	No phone number provided.

- **Mitigation Measures**

The following mitigation measures are consistent with the guidelines of the State Office of Historic Preservation and will be incorporated into the Project to prevent significant impacts, should resources be found during excavation. A Native American representative will be onsite for activities involving more than 6" depth of ground disturbance.

- A worker cultural resources sensitivity program shall be implemented prior to tank construction at the Parker site. Prior to any ground-disturbing activity, a qualified archeologist shall provide an initial sensitivity training session to all affected contractors, subcontractors, and other workers, with subsequent training sessions to accommodate new personnel becoming involved in tank construction. The sensitivity program shall address the cultural sensitivity of the Parker site and how to identify these types of resources, specific procedures to be followed in the event of an inadvertent discovery, and consequences in the event of non-compliance.
- Should any buried archaeological materials be uncovered during Project activities, such activities shall cease within 100 feet of the find. Prehistoric archaeological indicators include obsidian and chert flakes, chipped stone tools, bedrock outcrops and boulders with mortar cups, ground stone implements, locally darkened midden soils containing previously listed items plus fragments of bone and fire affected stones. Historic period site indicators may include fragments of glass, ceramic and metal objects, milled and split timber, building foundations, privy pits, wells and dumps, and old trails. All earth disturbing work within the vicinity of the find shall be temporarily suspended or redirected until the District has been notified and an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume.
- If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to the origin and deposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.

Implementation of the above mitigation measure is expected to reduce impacts to less than significant.

- **Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?**
  - No, the project areas are in high- to moderate-income areas.

- **Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?**
  - No.
- **Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.**
  - No.

8. REQUIRED PERMITS AND APPROVALS

VRWD has completed the necessary CEQA/NEPA documents (State Clearinghouse Number 2022120660) and has filed the Notice of Determination with the County of Ventura and the Environmental Document Filing Fee with the California Department of Fish and Game. Engineering plans are at 60% completion and bid document preparation is underway. Grading permits will need to be obtained after the project is bid for construction. As of February 17, 2023, VRWD has approved Interconnection Agreements for the Baldwin and Parker facilities for the Net Energy Meter (NEM) 2.0 Schedule. The deadline to bring a solar generation system online to lock in the NEM 2.0 rate is March of 2026. No other known permits are required.

9. OVERLAP OR DUPLICATION OF EFFORT STATEMENT

There is no overlap between the proposed project and any other proposals in terms of activities, costs, or commitment of key personnel. This proposal does not duplicate any other proposals that have been or will be submitted for funding support.

10. CONFLICT OF INTEREST DISCLOSURE STATEMENT

The District has no known actual or potential conflicts of interest with respect to this grant application or associated financial assistance agreements. The District will take the necessary measures to comply with the conflict-of-interest provisions in 2 CFR§200.318 and notify the Federal financial assistance department if any conflicts of interest arise.

11. UNIFORM AUDIT REPORTING STATEMENT

VRWD has never expended more than $750,000 in Federal award funds and is committed to submitting a Single Audit through the Federal Audit Clearinghouse as needed.

12. CERTIFICATION REGARDING LOBBYING

VRWD is not engaged in lobbying activities.

13. LETTERS OF SUPPORT

MEINERS OAKS WATER DISTRICT
(805) 646-2114
202 WEST EL ROBLAR DRIVE

Ventura River Water District, Sustainable Power Array for Renewable Kilowatts (SPARK) Project

To: Whom It May Concern

Meiners Oaks Water District (MOWD) supports the Ventura River Water District's (VRWD) application for a Bureau of Reclamation WaterSMART grant for the SPARK Project because it will help to address environmental, and energy issues within VRWD's service area.

MOWD is retail water supplier within the Ventura River watershed serving roughly 4500 people through 1286 service connections.

The SPARK Project proposed by VRWD is a forward-thinking initiative that aligns closely with the Bureau of Reclamation's mission to aid in the development of sustainable water and power solutions.

VRWD has developed a comprehensive plan to install solar panels that will significantly reduce their reliance on non-renewable energy sources. By offsetting approximately 70% of the District's energy needs, the SPARK Project not only demonstrates a commitment to environmental stewardship but also promises substantial cost savings that can be redirected to improve water services and infrastructure.

As neighboring water districts, we understand the importance of investing in renewable energy for the long-term sustainability and resilience of our water supply systems. The success of the SPARK Project will serve as an inspirational model for other districts in our region to follow suit.

MOWD stands in solidarity with the VRWD and eagerly anticipates the positive outcomes of the Spark Project.

Sincerely,

Justin Martinez

General Manager

Meiners Oaks Water District

202 W. El Roblar Drive, Ojai, California 93023
Tel: (805) 646-2114 Web: www.meinersoakswater.com

14. OFFICIAL RESOLUTION

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE VENTURA RIVER WATER DISTRICT

RESOLUTION 2024-367

RESOLUTION AUTHORIZING THE GENERAL MANAGER TO APPLY FOR A WATERSMART GRANT FOR THE SUSTAINABLE POWER ARRAY FOR RENEWABLE KILOWATTS (SPARK) PROJECT

WHEREAS, the Ventura River Water District (District) proposes to install a solar project that provides renewable energy to manage and deliver water that will result in quantifiable and sustained energy generation and savings, and

WHEREAS, the United States Bureau of Reclamation (USBR) is offering WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year 2024 and Fiscal Year 2025, to help water districts and other entities with projects that conserve water and promote use of clean, renewable energy, and

WHEREAS, the District has the legal authority and is authorized to enter into a funding agreement with the USBR; and

WHEREAS, the District identifies the need for implementing projects that will increase the use of renewable energy in managing and delivering water that result in quantifiable and sustained energy generation and/or savings; and

WHEREAS, the Board of Directors (Board) of the District recognizes the importance of securing additional funding through grant programs such as the WaterSMART Grants for the purpose of supporting the District's water management and conservation projects; and

WHEREAS, the Board acknowledges that the General Manager of the District is responsible for the day-to-day operations and management of the District, and is in an appropriate position to apply for, negotiate, and enter into agreements with the USBR;

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Ventura River Water District as follows:

1. The Board hereby verifies that the General Manager of the Ventura River Water District is hereby authorized to act on behalf of the District in applying for, accepting, and entering into WaterSMART Grants: Water and Energy Efficiency Grants agreements with the USBR.

2. The Board has reviewed the application prepared and submitted by the District staff for the WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year 2024 and Fiscal Year 2025, and fully supports the submission of the said application.

3. The Board commits to providing all necessary assistance and support to the General Manager in fulfilling the requirements of the grant application process and, upon award, pledges to work cooperatively with the USBR to meet all established deadlines and requirements for entering into a grant or cooperative agreement.

4. The Board authorizes the General Manager to execute all documents, including grant or cooperative agreements, and to take all actions necessary to secure WaterSMART Grants: Water and Energy Efficiency Grants funds and to implement and administer the projects for which the funds are awarded in accordance with the terms and conditions prescribed by the USBR.

5. The Ventura River Water District General Manager, or designee, is hereby authorized and directed to submit any required documents, invoices, and reports required to obtain grant funding.

BE IT FURTHER RESOLVED that this resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED this 21st day of February 2024.

CERTIFICATION I hereby certify that the foregoing Resolution was duly and regularly adopted by the Board of Directors of the Ventura River Water District at the meeting held on February 21, 2024, motion by Peggy Wiles and seconded by Laurel Lary, motion passed by the following vote:

Ayes: 4
Noes: 0
Abstain: 0
Absent: 1

Attest:

Bruce Kuebler, President

Alma Quezada, Secretary

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Noes: 0
Abstain: 0
Absent: 1

Attest:

Bruce Kuebler, President

Alma Quezada, Secretary

MEINERS OAKS WATER DISTRICT
VENTURA COUNTY SINCE 1949
(805) 646-2114
202 WEST EL ROBLAR DRIVE

2-20-2024

Ventura River Water District, Sustainable Power Array for Renewable Kilowatts (SPARK) Project

To: Whom It May Concern

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The SPARK Project proposed by VRWD is a forward-thinking initiative that aligns closely with the Bureau of Reclamation's mission to aid in the development of sustainable water and power solutions.

VRWD has developed a comprehensive plan to install solar panels that will significantly reduce their reliance on non-renewable energy sources. By offsetting approximately 70% of the District's energy needs, the SPARK Project not only demonstrates a commitment to environmental stewardship but also promises substantial cost savings that can be redirected to improve water services and infrastructure.

As neighboring water districts, we understand the importance of investing in renewable energy for the long-term sustainability and resilience of our water supply systems. The success of the SPARK Project will serve as an inspirational model for other districts in our region to follow suit.

MOWD stands in solidarity with the VRWD and eagerly anticipates the positive outcomes of the Spark Project.

Sincerely,

Justin Martinez

General Manager

Meiners Oaks Water District

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