
Scotts Valley Water District Potential Energy Savings

September 2017



ENGIE Services U.S. by the Numbers

34 Offices

across the U.S.

Over 51,000

projects to date

1,100+

professionals employed

3 Million

tons of GHG emissions reduced

\$2.7 Billion

in energy and operational savings for customers

200 MW

customer-sited solar in operation and construction

Antelope Valley-East Kern Water Agency, CA

PROJECT HIGHLIGHTS

- Will reduce electricity spending by 66 percent
- Offsets impact of utility rate changes
- Offsets carbon emissions equivalent to removing 1,958 cars from highways annually

\$81MM
in net savings over the
program life

Will install 5.5 MW of solar
PV

Variable frequency drives for
pump motors

Indoor/outdoor LED lighting
retrofits

HVAC modernizations



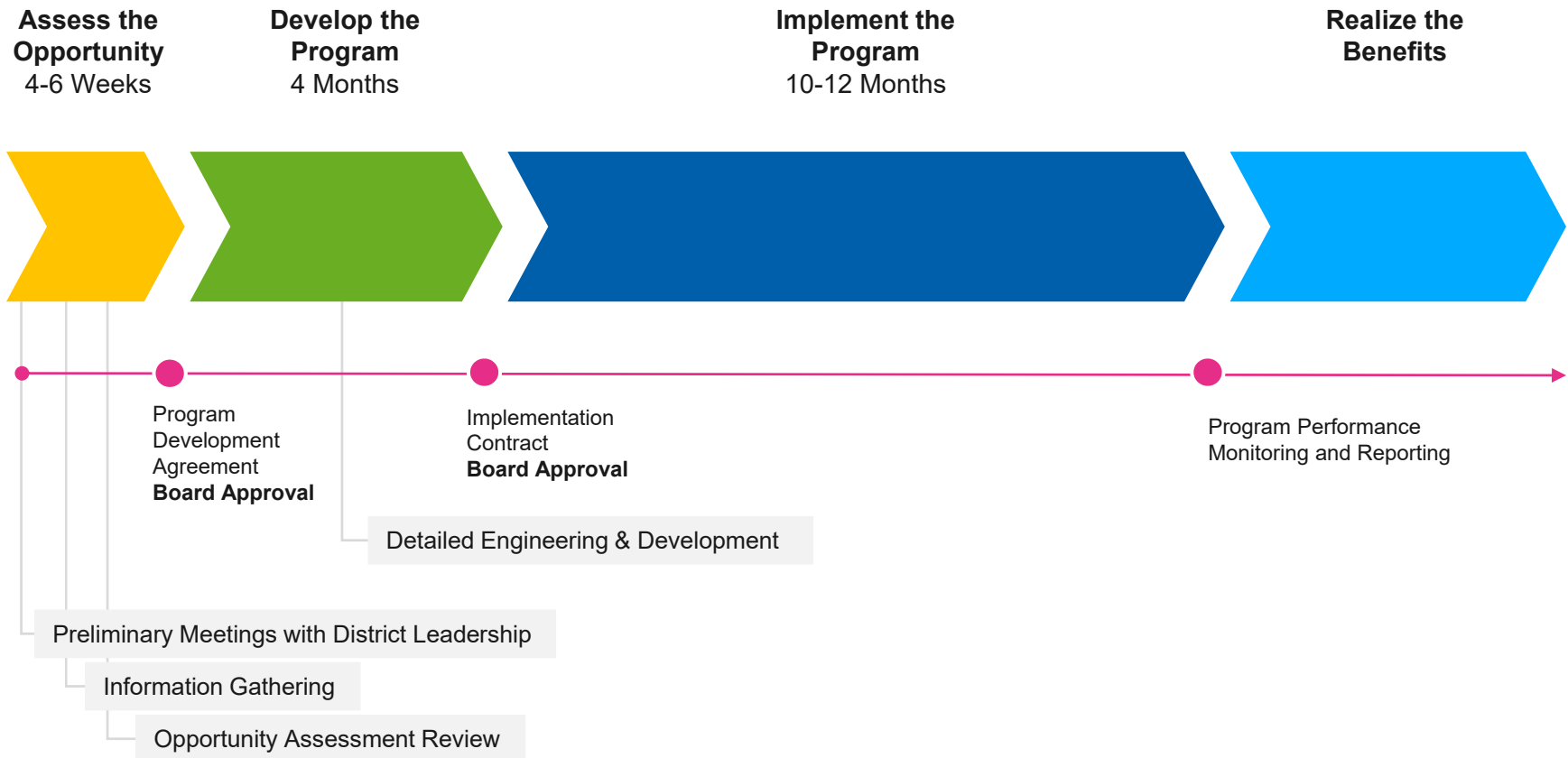
Potential Energy Savings

Building Name	Address	SA_ID	Meter Number	Rate	kWh/(Yr)	\$(/yr)	Solar @ Location	Solar Receiver	LED Lighting	Pump Efficiency	Water Storage	Energy Storage
Orchard Run Pump	Orchard Run	4522606764	1010019020	E19S	1,091,597	\$174,057	X	X			X	X
#11 Water Supply Pump	229 Mount Hermon Rd	4522606020	1003659762	E19S	382,010	\$64,027		X		X		
Water Supply Pump	Scotts Valley Drive Cross	4522606905	1009920110	E19S	248,973	\$42,737		X		X		
City Well	70 El Pueblo Rd	4522606535	1009538358	E19S	244,260	\$44,812		X		X		
Water Dept Office	311 Sucinto Dr	4522606875	5000034193	A10SX	107,853	\$22,655		X		X		
Booster Pump	2 Civic Center Dr	4522606620	1009552267	A1X	49,684	\$10,897	X	X	X			
5001 Scotts Valley rd	2 Silverwood Dr	4522606679	1009551633	A1X	35,562	\$7,760		X		X		
570 Bethany Dr	5001 Scotts Valley rd	4850123767	1008833250	A1	24,249	\$5,900		X				
Booster Station	570 Bethany Dr	4522606742	1009548212	A1X	23,420	\$5,257		X				
Pump	NX to 372 Hacienda Dr	4522606220	100955030	A1X	20,689	\$4,608		X		X		
Water Booster Pump	345 Sand Hill Rd	4522606789	1009520352	A1X	12,310	\$2,903				X		
6030 Scotts Valley Dr	3001 Granite Creek Rd	4522606085	1007176517	A1	10,212	\$2,270				X		
Pump	6030 Scotts Valley Dr	4522606403	1009549777	A1X	6,843	\$1,613						
Shed	Crescent Dr	4522606217	1009998112	A6	5,926	\$1,540				X		
Pumping Station #9	Mac Dorsa Dr	4522606882	1008726919	A1X	2,438	\$640						
Sequoia Tank	Kings Village Rd	4522606235	5000033616	A1X	872	\$424				X		
Maint Shed	1600 Green Hills Rd	4522606296	1009552492	A1X	666	\$379					X	
Water Booster Pumping	Tabor Dr end of...	4522606855	1008726697	A1X	269	\$177						
	317 Southwood Dr	4522606665	1008726818	A1X	0	\$120				X		
Total					2,267,833	\$392,783.31						

Preliminary Economics

Year	Solar Electricity Produced (kWh)	Solar Avoided Electric Rate (\$/kWh)	Projected Solar Savings	Solar O&M and M&V Costs	Net Solar Savings	Estimated Lease Payment	Net Program Benefit	Cumulative Program Benefit
1	1,200,000	\$0.145	\$174,000	\$32,000	\$142,000	\$101,627	\$40,373	\$40,373
2	1,194,000	\$0.152	\$180,921	\$32,960	\$147,961	\$107,588	\$40,373	\$80,746
3	1,188,030	\$0.158	\$188,117	\$33,949	\$154,168	\$113,795	\$40,373	\$121,119
4	1,182,090	\$0.165	\$195,599	\$34,967	\$160,632	\$120,259	\$40,373	\$161,492
5	1,176,179	\$0.173	\$203,379	\$36,016	\$167,363	\$126,990	\$40,373	\$201,865
6	1,170,299	\$0.181	\$211,469	\$37,097	\$174,372	\$133,999	\$40,373	\$242,238
7	1,164,447	\$0.189	\$219,880	\$38,210	\$181,670	\$141,297	\$40,373	\$282,611
8	1,158,625	\$0.197	\$228,626	\$39,356	\$189,270	\$148,897	\$40,373	\$322,984
9	1,152,832	\$0.206	\$237,719	\$40,537	\$197,183	\$156,809	\$40,373	\$363,358
10	1,147,067	\$0.215	\$247,174	\$41,753	\$205,422	\$165,049	\$40,373	\$403,731
11	1,141,332	\$0.225	\$257,006	\$43,005	\$214,000	\$173,627	\$40,373	\$444,104
12	1,135,625	\$0.235	\$267,228	\$44,295	\$222,933	\$182,560	\$40,373	\$484,477
13	1,129,947	\$0.246	\$277,857	\$45,624	\$232,233	\$191,860	\$40,373	\$524,850
14	1,124,298	\$0.257	\$288,909	\$46,993	\$241,916	\$201,543	\$40,373	\$565,223
15	1,118,676	\$0.269	\$300,400	\$48,403	\$251,997	\$211,624	\$40,373	\$605,596
16	1,113,083	\$0.281	\$312,349	\$49,855	\$262,494	\$222,121	\$40,373	\$645,969
17	1,107,517	\$0.293	\$324,772	\$51,351	\$273,422	\$233,049	\$40,373	\$686,342
18	1,101,980	\$0.306	\$337,690	\$52,891	\$284,799	\$244,000	\$40,373	\$726,715
19	1,096,470	\$0.320	\$351,122	\$54,478	\$296,644	\$255,000	\$40,373	\$767,088
20	1,090,988	\$0.335	\$365,088	\$56,112	\$308,976	\$266,000	\$40,373	\$807,461
21	1,085,533	\$0.350	\$379,609	\$57,796	\$321,814	\$277,000	\$40,373	\$847,834
22	1,080,105	\$0.365	\$394,708	\$59,529	\$335,179	\$288,000	\$40,373	\$888,207
23	1,074,704	\$0.382	\$410,408	\$61,315	\$349,092	\$299,000	\$40,373	\$928,580
24	1,069,331	\$0.399	\$426,732	\$63,155	\$363,577	\$310,000	\$40,373	\$968,953
25	1,063,984	\$0.417	\$443,705	\$65,049	\$378,655	\$321,000	\$40,373	\$1,009,326
Total	28,267,142		\$7,224,467		\$6,057,771			
						Outlay	\$0	
						Net Benefit	\$3,325,078	

Partnership Timeline



Our Northern California Customers

Cities

- City of Benicia
- City of Concord
- City of Dublin
- City of Fremont
- City of Gonzales
- City of Grass Valley
- City of Greenfield
- City of King City
- City of Livermore
- City of Millbrae
- City of Patterson
- City of Richmond
- City of Saint Helena
- City of Salinas
- City of San Jose
- City of Union City
- City of Waterford
- City of Yuba City

Counties

- Alameda County (Santa Rita Jail)
- Madera County
- Merced County
- Sacramento County
- Santa Clara County
- Solano County
- Sutter County
- Yuba County

Higher Education

- Butte Community College District
- California State University, East Bay
- California State University, Fresno
- California State University, Sonoma
- Chabot-Las Positas Community College District
- Contra Costa County Community College District

- Foothill-DeAnza Community College District
- Hartnell College
- Los Rios Community College District
- Peralta Community College District
- San Mateo County Community College District
- Solano Community College
- St. Mary's College
- State Center Community College District
- University of California, Davis
- University of California, San Francisco

K-12

- Amador County Unified School District
- Berryessa Union School District
- East Side Union High School District
- Escalon Unified School District
- Franklin-McKinley School District
- Gonzales Unified School District
- Jefferson Elementary School District
- Live Oak School District
- Milpitas Unified School District
- Monterey County Office of Education
- Morgan Hill Unified School District
- Oak Grove School District
- Oakland Unified School District
- Salinas City Elementary School District
- San Jose Unified School District
- San Lorenzo Unified School District
- Santa Cruz County Office of Education
- Soledad Unified School District
- South San Francisco Unified School District
- Washington Unified School District

Special Districts

- Cosumnes Community Services District
- Contra Costa County Fire Protection District
- Monterey Regional Airport

