

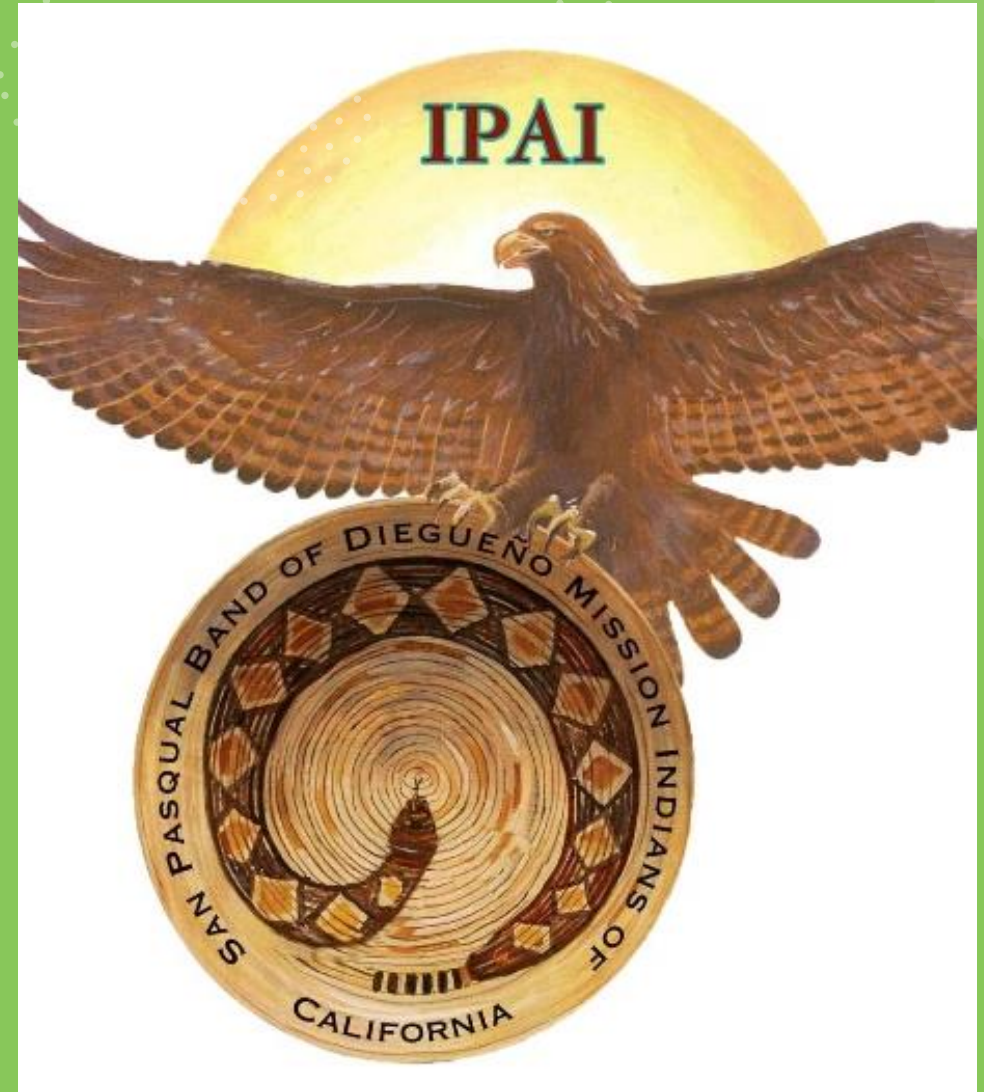
San Pasqual Band of Mission Indians Community Solar Project



Tribal DOE Conference | November 13, 2023

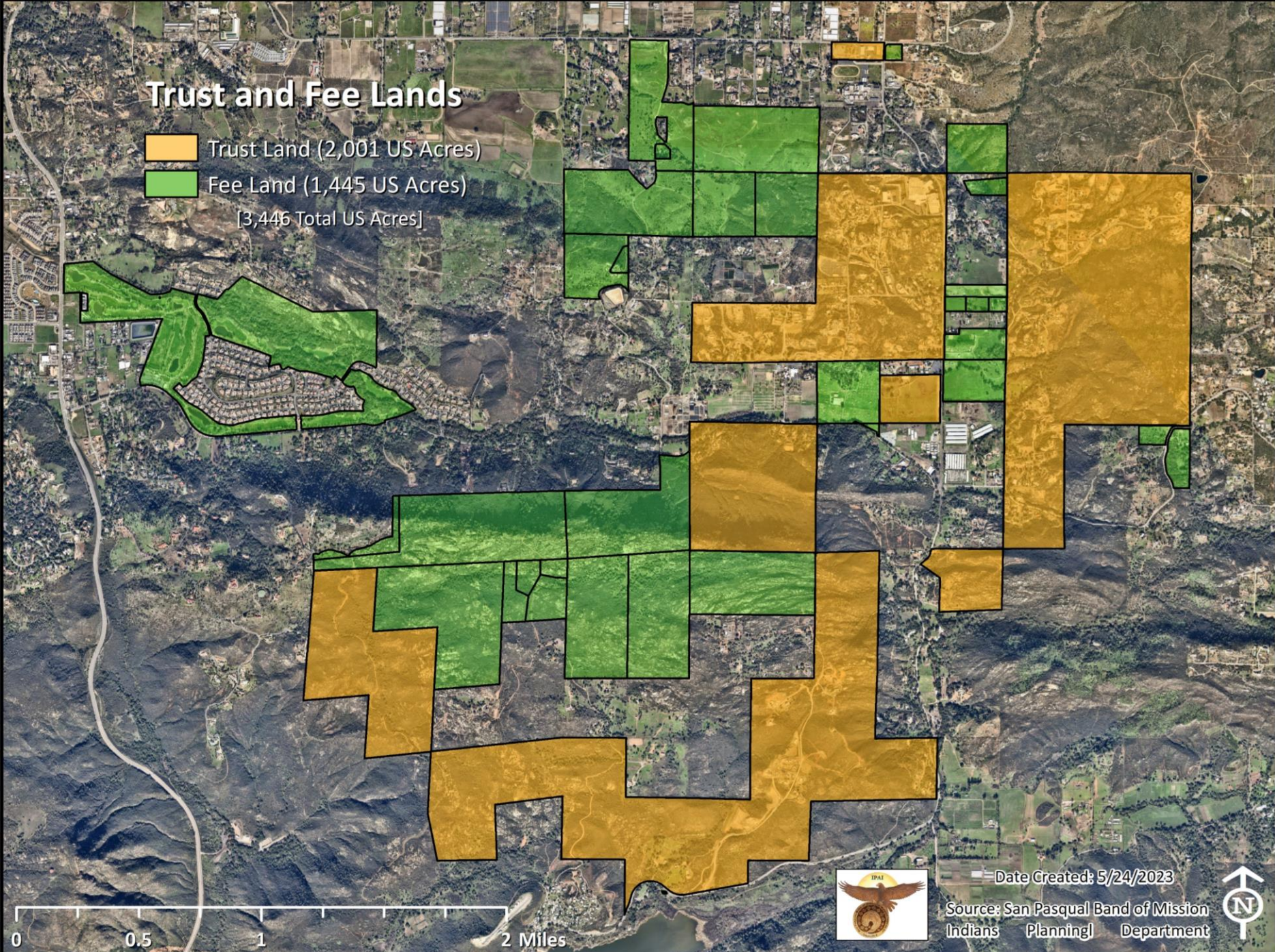
San Pasqual General Information

- Reservation was established in 1910
- The Reservation encompasses approximately 3,446 acres
- 152 enrolled tribal members and over 1,400 lineal descendants
- Reservation population is 2,100
- 450 homes on the reservation
- 96 EV Charging Stations
- 108 homes have solar
 - 60 GRID
 - 23 DOE Tribal Energy Grant (2016)
 - 25 private solar companies



Trust and Fee Lands

-  Trust Land (2,001 US Acres)
-  Fee Land (1,445 US Acres)
- [3,446 Total US Acres]



0 0.5 1 2 Miles



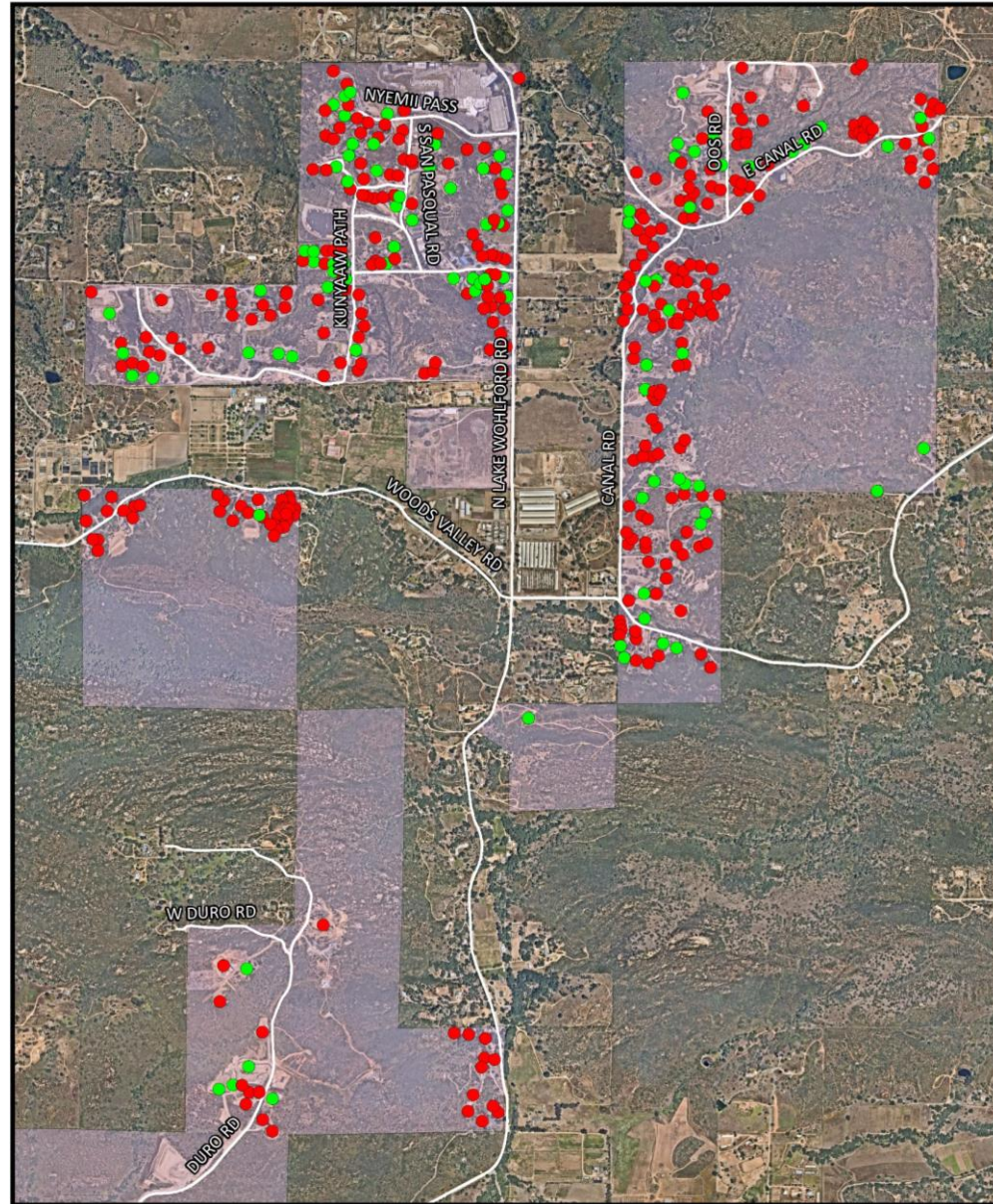
Date Created: 5/24/2023
Source: San Pasqual Band of Mission
Indians Planning Department



San Pasqual Solar Homes

Installed Solar on Built Residential Addresses

Source: San Pasqual Band of Mission
Indians Planning Department
Date Created: 7/19/2023



- Installed Solar (93/415)
- No Solar (322/415)

- Street
- Trust Land



Initial Project Goals

Install a 223kW solar community scale energy generating system for residential homes on the San Pasqual Reservation

Originally 2 elevated carport PV systems located at the San Pasqual Community Park
→ Ground mount system due to material and project cost increases

Reduce the monthly San Diego Gas & Electric (SDGE) electric bill cost burden of 80 residential homes and 1 government building/account

Distribute 90% to 95% of benefits to residential subscribers and 10% to 5% to the government building/account

Planning to reduce monthly electrical bills by 50%



Currently have 55 residents completed through the onboarding process



RFP drafted and distributed, winning vendor selected and contract signed



Subscription based model: residents pay a \$25 monthly subscription fee to help pay for all O&M



Worked with SDGE to identify the 55 subscriber accounts to pass on the monthly savings

Project Accomplishments

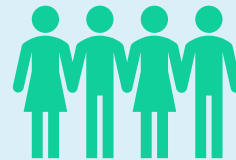
Subscriber Prospecting and Framework Governance: Community Engagement



Community energy survey and applications drafted, released, and responses from Tribal Citizens received



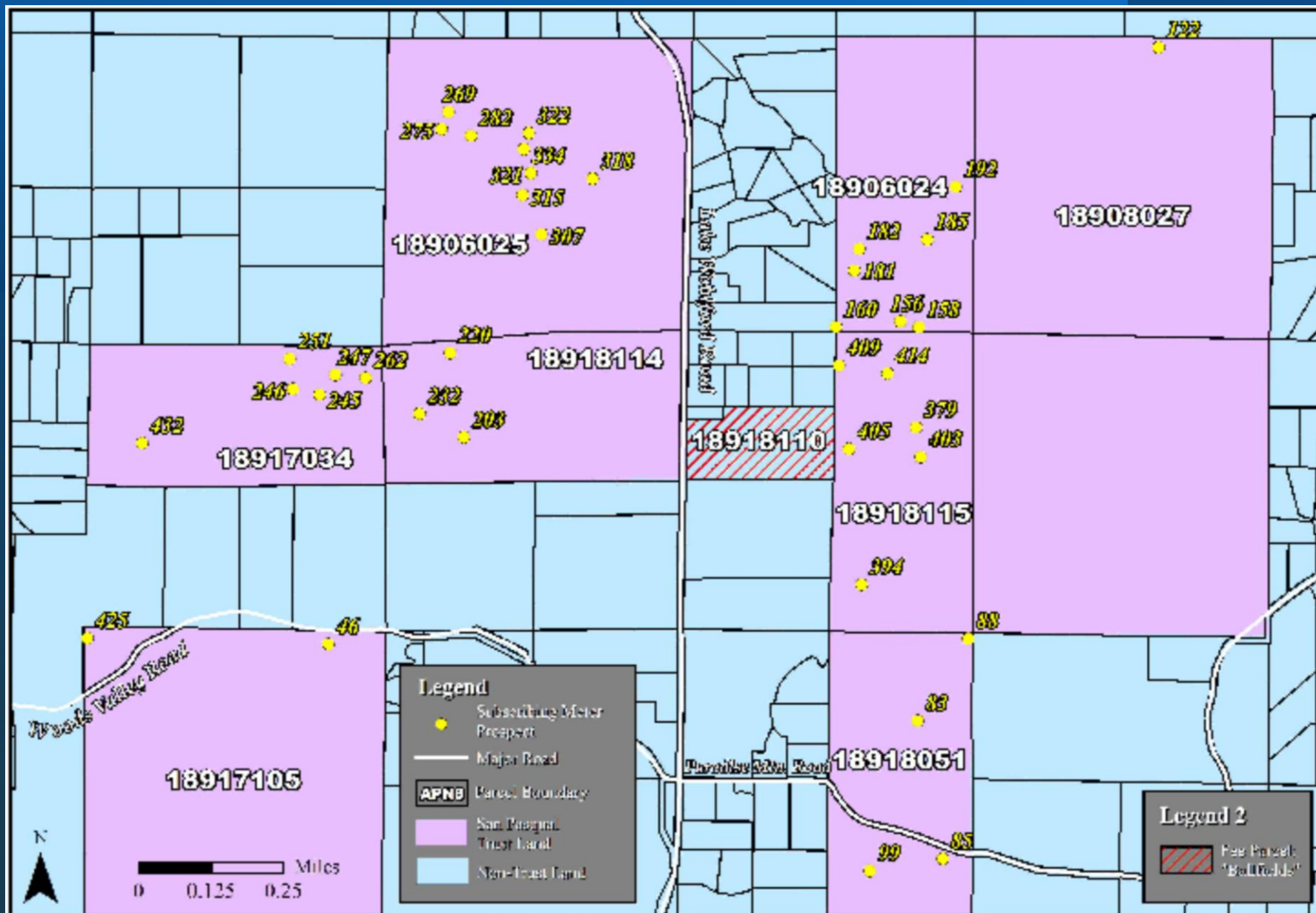
Individual household energy use data collected + Residential financial modeling



Community outreach meetings to educate successful



Dual Tribal Government water and electric management structure designed



Tribal Community Solar Residential Survey

Source: San Pasqual Band of Mission
Indians Planning Department
Date Created: 7/21/2026



Subscriber
On-boarding,
Governance,
and
Contractual:
Asset
Management

Community response and on-boarding for SPBMI Residents and utility data

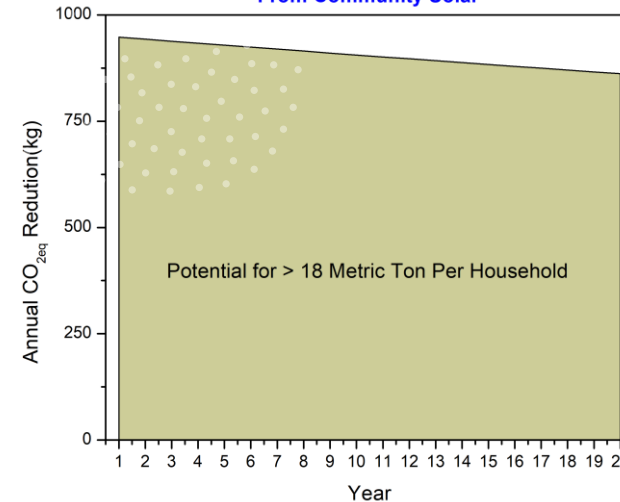
Contractual templates drafted (Residential Subscribers)

Utility billing software selected: Muni – Link

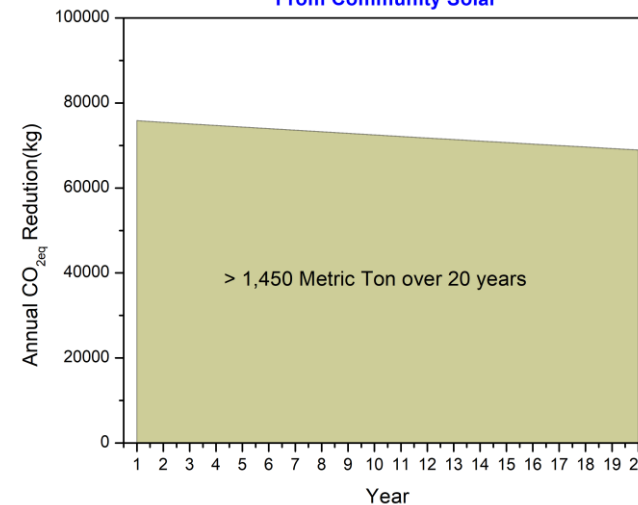
San Pasqual Community Benefits

- Cost
 - \$350-\$550 annual savings per household
 - 25% reduction in energy cost for San Pasqual targeted water utility meters
 - O&M partially self supported via subscription fees
- Climate
 - The full subscribing residential households have the potential to reduce Tribal CO₂ emissions by almost 1,500 metric tons over a 20-year period
 - Each subscribing household may reduce emissions from energy use by an average of 900 kg annually
 - Each Subscribing household may reduce emissions from energy use by as much as 18 metric tons over a 20-year period.

Emissions Reduction Per Household in San Pasqual Residential Energy From Community Solar



Total Emissions Reduction in San Pasqual Residential Energy From Community Solar



Site Selection
and
Permitting:
Utility
Engagement

Asset site approved

Point of Interconnection
approved by SDG&E

Interconnection application
submitted to SDG&E

SDG&E engineering invoiced
and paid

- 🏠 Energy Assessment Surveyed Households
- 🟪 SanPasqual Indian Reservation
- 🟩 SanPasqual Fee Owned Properties
- 🟨 SanPasqual Community Multi-Purpose Area



Covid – 19 Impacts and Economic Impact

Government priorities shifted to community health and safety: No in person community meetings until spring 2021

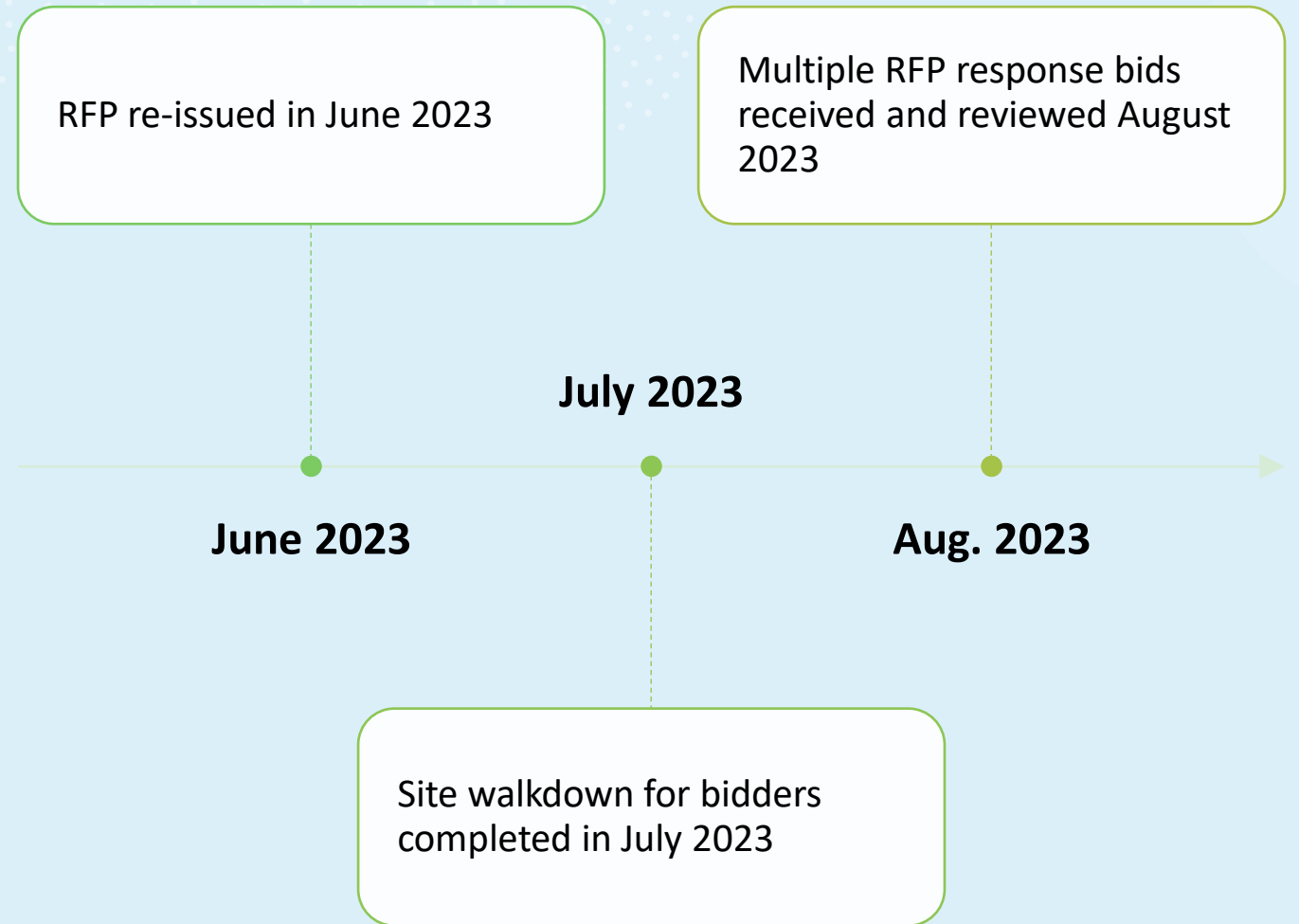
Significant Impacts on Community engagement: Number of necessary community engagements more than doubled, energy data gathering slowed significantly, Tribal citizens' lives impacted with Covid

Utility/RFP/EPC/Third-party engagement delayed significantly

Supply chain and utility delays amplified

Inflation and cost of materials increasing beyond original budget (FY20 --- FY22) : Steel, aluminum, panels, and labor have all increased

Engineering
Design and GC
NTP
Authorization:
Asset
Construction



San Pasqual Community Solar

- Current Status
 - New Ground Mount Array
 - Relocated to South Parcel
 - Project original size maintained
 - Vendor selection conditions removed by grantor and New RFP awarded.
 - New ground mount system in design process
 - Residential subscriber acquisition reinitiated and capped at 50 max from original 80
 - Tribal Water Utility Meters will now receive benefits
 - Benefits modeling under new design and subscribers in progress



San Pasqual Community Solar Project Challenges

Revised Project Timeline																	
2021	2022				2023				2024				2025				2026
Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Original: Execute and Construct				COVID and Financial impacts: Approx. 11 months project pause + Grantor reevaluation + financial impact delays									Year 01 Monitoring & Reporting				

- COVID and the global economic downturn impacts
 - Significant Project Cost increased = 20+%
 - Relocate project site
 - Multiple RFP release to cut costs
 - Re-engineering requirement
 - Possible Long lead material delays
 - Residential subscriber reduction + Tribal Government water meter receiving benefits
 - Increased Subscriber acquisition efforts
 - Additional data acquisition and modeling requirements
 - Utility program eligibility reevaluation and delays
 - Project deployment delay

Q&A

John Flores

Environmental Director

760 – 310 – 6697

johnf@sanpasqualtribe.org

