San Diego Tribal Collaborative CPRG Implementation Work Plan

The San Diego Tribal Collaborative (SDTC) is a consortium of four Tribal governments in San Diego County, California that are coordinating efforts through the Climate Pollution Reduction Grant (CPRG) program. The four partner Tribes in the SDTC are: Pala Band of Mission Indians (SDTC Lead Organization), Jamul Indian Village of California, Viejas Band of Kumeyaay Indians, and La Posta Band of Mission Indians. Greenhouse gas (GHG) emissions reduction measures were identified and prioritized by each Tribe in the SDTC Priority Climate Action Plan (PCAP). In determining these measures, the Tribes considered CPRG program alignment, existing or planned projects, funding and cost considerations, time constraints for implementation, and needs of the Tribal communities.

Section 1: Overall Project Summary and Approach

1. Pala Tribal Electric Vehicle (EV) Program

A. Description of GHG Reduction Measures

The Pala Band of Mission Indians proposes to develop a Tribal EV Adoption Program to encourage the Tribal community to switch to EVs. This priority GHG reduction measure is included in the SDTC PCAP as the *Pala Priority Measure #1*. This will be accomplished by funding staff time to incentivize the purchase of electric vehicles within the community, performing outreach, and identifying additional funding sources for the purchase of EVs. This measure supports the goals of the CPRG program by reducing emissions on the Reservation by 770 MTCO2e per year with the assumption that 30% of residents switch to EV.

Task 1 – Initial Planning: Initial planning will focus on job recruitment and hiring for a dedicated Program Manager who will oversee planning and implementation of the program.

Task 2 – Program Design: The EV Adoption Program will likely focus on two core areas: 1) Tribal community outreach and education; and 2) coordination and facilitation of rebate programs. Coordination will be done by the Tribal Program Manager with federal, state, and local agencies, to identify rebate programs and other incentives that would encourage EV adoption among the Tribal community. Goals will also be set to measure success of community participation in the program.

Task 3 – Program Implementation: Program implementation includes community outreach and education. Community outreach will consist of: 1) information gathering (i.e., surveys/questionnaires); 2) program promotion through the Pala Environmental Department website, newsletters, social media, and other outreach channels; and 3) participant registration into the EV Adoption program. Once a Tribal community member is registered, the staff person will assist the participant with vehicle trade-ins, identification of available EVs for purchase, and identification and enrollment of EV subsidy and rebate programs.

Task 4 – Grant Reporting & Admin: After each year, the Program Manager will review participation rates, outreach and engagement strategies, and other measurements of success. An adaptive management strategy will be implemented to continually improve adoption of EVs in the Tribal community.

B. Demonstration of Funding Need

The Pala EV Adoption Program is requesting CPRG funding to support staffing and program development. The Tribe has not been able to identify other funding to support this program. While there are EV rebates and other incentives available to encourage EV purchases, there is a lack of community awareness on where to find and how to access these incentives. Funding through CPRG will be leveraged to allow the Tribal community to access tax incentives, rebates, and low-interest loans that otherwise would not be obtained.

C. Transformative Impact

This prioritized GHG reduction measure is designed to be scalable within the Pala Tribal community and replicable across other Tribal nations. The goal of the EV adoption program is to foster the Tribe's switch from gas powered vehicles to EVs. As the program develops, more Tribal vehicles (community and government fleet) will be electric. This program can also work in tandem with the GHG emissions reduction measure of Pala EV Charging Station Installations. Having additional Level-2 and Level-3 EV chargers on the Reservation can help incentivize the community's adoption of EVs. Another core component of the program is the development of educational and outreach materials. These efforts can help scale the number of EVs in the Tribal community, and be shared with other Tribes so they can replicate the program and increase the number of EVs in their communities.

2. Pala EV Charging Station Installation

A. Description of GHG Reduction Measures

The Pala EV Charging Station Installation will install up to ten (10) Level-3 chargers (i.e. DC Fast Chargers, "DCFC") between the Pala Administrative Building, and Fleet Department and up to 20 Level-2 chargers in high-use areas of the Reservation. This measure is included in the SDTC PCAP as *Pala Priority Measure #2*. This measure was selected as a priority to meet the increasing demand and needs of its workers, residents, and visitors. Expanding the EV charging infrastructure on the Pala Reservation meets the CPRG program goals through reduced fuel consumption and incentivizing shifts from gasoline and diesel-powered vehicles to EVs. This will increase community benefits and achieve significant cumulative GHG reductions (estimated 3,719 MTCO2e reduced per year) once fully developed.

Task 1 – Initial Planning & Procurement: Initial planning will include site identification of the chargers and procurement for engineering. For engineering and installation activities, contractor selection will follow the Tribe's internal procurement policies, and may involve solicitation through a request for proposal or other form of competitive procurement.

Task 2 – Site Assessment: A site assessment will be conducted to evaluate proposed charger locations that include the Pala Casino Spa Resort, Pala Administrative Center, and Fleet Department. At this time, it is anticipated that transformers will be needed to support DCFCs. If transformers or other significant electrical upgrades are not needed, excess grant funds will be used for other eligible activities including but not limited to installing additional chargers on the Pala Reservation.

Task 3 – Engineering Designs & Approvals: Based on information collected from the site assessment and coordination with the utility company (SDG&E), engineering designs (including calculations, specifications, and drawings) will be developed for the electrical systems at each charging station

location. Design submittal guidelines will be developed during the procurement phase and may involve coordination with SDG&E.

Task 4 – Material Acquisition, Installation, & Maintenance: After the engineering designs are 100% finalized and approved, the installation activities will commence. A contractor will be selected, materials will be sourced, and installation will be conducted. Staff will track project progress, inspections, and approvals. Construction activities may also include trenching or boring, in which case a Cultural Monitor will be present. Maintenance will be conducted for the chargers throughout the grant period of performance (and through the lifespan of the chargers; anticipated to be 10-years). Assumptions include anticipating repair or replacement of Electric Vehicle Supply Equipment (EVSE) components, as needed; replacement of charge cords; and service cooling systems and filters for DCFC's.

Task 5 – Grant Reporting & Admin: The program director will be responsible for all accounting and administrative tasks. The director will also properly document project activities, contracts, and financial transactions.

B. Demonstration of Funding Need

The Pala Tribe received funding through rebates from the California Energy Commission to support the installation of 36 Level-2 chargers located at the Pala Casino Spa Resort. This included $465,000 from the CALeVIP program, while $140,000 has been requested, but not yet awarded, for the Communities in Charge program. Funding is being requested from CPRG for new installation of chargers, and is needed due to the high upfront costs, particularly for the DCFC EVSE design and installation. Any rebates and tax incentives may be used to support the installation of additional chargers on the Pala Reservation.

C. Transformative Impact

The expansion of EV charging stations on the Pala Reservation can lead to significant additional GHG emission reductions by improving accessibility of chargers for Tribal members and visitors. Developing the infrastructure to support EVSE can allow for scalability of adding future EV chargers in various locations of the Reservation. This could reduce range anxiety for people considering purchasing EVs since there will be more opportunities to charge the vehicles. This project could showcase EV infrastructure on Tribal lands that could be replicated in Southern California and other parts of the country. The Pala Tribe is involved in multiple Tribal working groups including the Western Regional Air Partnership (over 30 other Tribes) and the National Tribal Air Association (40 tribes in EPA Region 9) and regularly host and attend national conferences where they share best practices, lessons learned, and how to replicate projects on Tribal lands.

3. Pala Energy Audits & Retrofits

A. Description of GHG Reduction Measures

Energy audits and retrofits for Tribal homes and facilities are proposed to reduce the electricity and heating demands for residential, administrative, and commercial buildings. This measure is included in the SDTC PCAP as the *Pala Priority Measure #3*. This measure meets the goals of the CPRG program by

reducing GHG emissions by 430 MTCO2e per year through reduced energy consumption, while achieving community benefits in a disadvantaged community.

Task 1 – Project Initiation: A Program Coordinator will oversee the development and implementation of the Pala Energy Audits & Retrofit Program. Professional energy auditors or certified energy assessors will be procured and contracted at the onset of the project. Audits would test energy efficiencies for each building and identify improvement needs for up to 50 Tribal homes and 15 Tribal facilities on the Reservation.

Task 2 – Program Design: A webpage on the PED website will be developed that includes information on the program and allows interested Tribal member homeowners sign up for the program. This process would allow interested homeowners to schedule an audit of their home and determine eligibility (i.e. enrolled Tribal member, homeowner, etc.). Outreach materials would be developed and circulated to encourage program participation. Depending on the funding available for retrofits, the Tribe can offer a tiered program to manage costs and retrofit types (i.e., Tier 1 – systematic upgrades such as HVAC, heat pump; Tier 2 – Energy loss prevention such as triple pane windows, fiberglass doors, weather stripping; Tier 3 – Appliance-based such as Energy Star-rated appliances). For Tribal facilities, staff would coordinate with the facility manager(s) to schedule energy audits and discuss eligible retrofits and/or upgrades. All retrofits will be customized and unique to each Tribal home and facility.

Task 3 – Implementation Phase: Energy audits will be conducted and may include blower doors, infrared cameras, furnace efficiency meters, surface thermometers, gas leak and carbon monoxide detectors, moisture meters, and non-toxic smoke pens. The auditor may also analyze past utility bills to look for trends in energy usage. Following the initial audits, the energy auditor will provide a report that details the energy inefficiencies in the Tribal home/facility. The report will also include an action plan that details the replacements or upgrades needed to reduce energy use while increasing comfortability.

The Program Coordinator will approve the purchase of any materials and equipment necessary for the installations. Materials purchased may include but are not limited to: air-source heat pumps, double-paned windows, electric appliances, and tankless water heaters. The Program Coordinator will then work with the contractor(s) and oversee the installations of the retrofits

Follow-up energy audits will be conducted to ensure the retrofits are working properly and making the Tribal home/facility more energy-efficient. Maintenance activities will be planned and scheduled by the Program Coordinator if repairs or replacements (via warranties) are needed during the grant period.

Task 4 – Grant Reporting & Admin: Metrics for tracking performance will include annual energy saved per Tribal home/facility and changes to electricity bills. To assess program performance, staff would develop and send out satisfaction surveys to inform how effective the retrofits were at improving home comfortability for Tribal members. An administrative staff person will keep a detailed record of program enrollment and how grant funds were used and dispersed for the various retrofits and upgrades provided to each Tribal home/facility. This tracking will also include associated material and labor costs for the program.

B. Demonstration of Funding Need

This Priority GHG Emissions Reduction Measure is currently unfunded. Funds are needed to support hiring of program staff, purchasing of materials, and contracting for energy audits and retrofits. Rebates or other incentives acquired through this program will be used to increase the number of homes audited and retrofitted, and (or) install additional building improvements to enhance the GHG emissions reductions. The CPRG funding used for the Pala Energy Audit & Retrofit Program can help leverage other funding (e.g., Housing and Urban Development (HUD) Health Homes and Weatherization Program) and provide even more energy savings in Tribal homes and facilities.

C. Transformative Impact

The Pala Energy Audits & Retrofits program is both scalable and replicable. Once the program is set up, the Tribe can more easily expand enrollment and spread information on retrofit incentives and benefits. Improving energy efficiency for buildings (especially homes) can be challenging to abate. Homeowners may not have the capacity and financial resources to implement energy audits, source energy efficient building materials, and hire contractors for retrofitting their homes. Having a centralized program that can provide energy audits and educate the community on the benefits of implementing retrofits will accelerate the adoption of this GHG emission reduction measure across the community and reduce the barriers that many disadvantaged communities face. Pala Environmental Department's (PED's) leadership and membership in other regional and national Tribal forums will allow the replication of similar programs on other Tribal lands. The Viejas Band of Kumeyaay Indians (SDTC Tribal consortium member) has also prioritized a similar program for Energy Audits & Retrofits. This replicability will allow Pala and Viejas to share lessons learned, best practices, and improve efficiencies for implementing this emissions reduction measure.

4. Pala Community Compost Program

A. Description of GHG Reduction Measures

The goal of this measure is to reduce GHG emissions from solid waste generation within the boundaries of the Pala Reservation. This will be achieved through the collection and composting of food scraps by diverting food waste from landfills and instead using it to create valuable compost to amend soil and aid in community gardening, further sequestering atmospheric carbon. This project is included in the SDTC PCAP as *Pala Priority Measure #4.* This measure meets the goals of the CPRG program by developing high-quality compost that is beneficial for local agriculture and community gardening projects, while reducing GHG emissions by an estimated 495 MTCO2e per year once fully operational.

Task 1 – Project Initiation: Job recruitment will be performed to hire a Program Manager who will oversee the compost program. Outreach will also be conducted to hire an additional 2 (two) program staff

Task 2 – Program Design: A centralized location of the compost pile is anticipated to be at or near the Pala Community Garden. The compost pile will likely be free standing for flexibility and ease of use. A detailed plan will be developed for monitoring the metrics of success of the program such as volunteers involved, community members served, food scraps diverted from landfills, and greenhouse gas emissions reduced. This plan will serve as a framework for collecting and analyzing data throughout the project lifecycle. A communication plan will be developed to outline communication methods, such as text

messaging, for tasks such as locating food scrap receptacles, providing composting guidelines, updating schedules, and informing participants of their contributions or upcoming events. An **o**perations plan will be developed to document the approach, equipment, materials, and staffing, needs.
Task 3 – Program Development: Materials, supplies, and equipment will be purchased based on the operations plan. Composting equipment that will be purchased may include food scrap collection receptacles (bins/buckets), composting tools such as shovels, wheelbarrows, and scales, personal protective equipment (PPE) and sanitary supplies such as soap, scrubbers, rubber gloves/boots, safety goggles for construction, construction equipment such as wood, chicken wire, screws, nails, staple gun, wire cutters, drill/driver, and saw. A mini front loader or excavator will be purchased for mixing compost. Installation and construction of compost piles, equipment storage, and drop off bins will be completed. This will likely include a dedicated area for the primary compost pile, a tool shed to host applicable materials and tools, and a food scrap drop-off bin that can be accessed by community members. Signage will be used to instruct the public where to drop off their food scraps.

Task 4 – Ongoing Operations: Communication between participating households and their assigned program pickup staff will be established. Buckets or bins will be supplied to participating households to dispose of their food waste in. Program staff would also be responsible for maintaining the compost pile and transporting compost to the Pala Community Gardens and Tribal plant nursery.

Task 5 – Grant Reporting & Admin: The program manager will be responsible for all accounting and administrative tasks, tracking performance metrics, communicating with funding sources and stakeholders, and supplying necessary progress reports for grant reporting.

B. Demonstration of Funding Need

This measure is in need of EPA CPRG implementation funding. $40,010 of funding through EPA GAP was secured for a curbside organics pickup program. Other funding sources have been explored but there are limited funding opportunities that specifically fund compost programs, and many will only fund them on a smaller scale. The program will have a goal of identifying additional funding opportunities, such as grants, which will support its operations after the CPRG grant period closes.

C. Transformative Impact

This program has potential to be a model for other Tribes. Having compost generated on site and available to community members will reduce the community bringing in other materials, including outside compost and other planting materials, which can lead to reducing emissions from transportation and upstream production. It can also help support Tribal nurseries that can use compost to grow native plants used for landscape restoration projects that also sequester GHGs.

5. Jamul EV Charging Station Installation

A. Description of GHG Reduction Measures

Expansion of EV charging infrastructure on the Jamul Indian Village of California (JIVoC) Reservation is proposed to meet the increasing demand of its visitors. The Tribe currently has eight (8) Level-2 chargers located at the Jamul Casino. Milestones include installing an additional 10 Level-2 chargers for Jamul

Casino Hotel when it opens in 2025. The expansion of the EV charging infrastructure on the Reservation aims to reduce fuel consumption and encourage the shift from gasoline and diesel-powered vehicles to EVs. With the addition of 10 EV chargers, this measure promotes the use of cleaner transportation options, while potentially reducing emissions by 232.5 MTCO2e per year. This GHG emissions reduction measure was prioritized in the SDTC PCAP as *JIVoC Priority Measure #1*

Task 1 – Project Initiation: Procurement for the contractor installing the electric vehicle supply equipment (EVSE) will commence following the initial meeting. For installation activities, contractor selection will follow the Tribe's internal procurement policies, and may involve solicitation through a request for proposal or other form of competitive procurement. Information will be developed, including potential locations of the EV chargers, electrical panel locations, and panel capacity for dedicated circuits.

Task 2 – Contractor Coordination & Electrical Infrastructure: Construction of the Jamul Casino Hotel will include a parking garage, and is currently underway. Coordination with the EVSE contractor and contractors for the Jamul Casino Hotel will be performed to facilitate infrastructure needs for the Level-2 chargers. Rough-in electrical will be performed by the EVSE contractor (or other licensed electrician) to connect the electrical panel(s) to future charging station locations during construction of the parking lot.

Task 3 – Material Acquisition, Installation, & Maintenance: After the parking lot construction is completed, materials will be sourced based on specifications contained in the electrical designs, grant guidelines, and other regulatory requirements (e.g., Build America, Buy America, ENERGY STAR certification, and Nationally Recognized Testing Laboratory (NRTL) program for ESVE testing and certification). Installation will be conducted with oversight from the JIVoC. Other materials related to the chargers may include lighting, signage, and Point-of-Sale (POS) billing components. Maintenance will be conducted for the chargers throughout the grant period of performance (and through the lifespan of the chargers; anticipated to be 10-years). This is anticipated to include but not limited to: repair or replacement of EVSE components, as needed.

Task 4 – Grant Reporting & Admin: The program director will be responsible for all accounting and administrative tasks. The director will also properly document project activities, contracts, and financial transactions.

B. Demonstration of Funding Need

Funding is being requested from CPRG for new installation of chargers and EVSE components. No other funding for this emissions reduction measure has been secured or applied for by JIVoC. Any rebates and tax incentives may be used to support the installation of additional chargers on the Jamul Reservation.

C. Transformative Impact

The scalability, replicability, and market transformation of the Jamul EV Charging Station Installation is similar to the Pala EV Charging Station Installation project (Section 1.2.C). JIVoC is also involved in multiple Tribal working groups including the Western Regional Air Partnership (over 30 other Tribes) and the National Tribal Air Association (40 tribes in EPA Region 9) where it can share the successes of its charging station infrastructure.

6. Jamul Casino Microgrid

A. Description of GHG Reduction Measures

The Jamul Casino Microgrid will install solar panels and large backup batteries that can deliver stored power during on-peak hours. This priority measure was included in the SDTC PCAP as *JIVoC Priority Measure #2.* This was selected because it offers resilience to power outages by supplying locally generated electricity. If the casino roof and approximately 80% of the land parcel is installed with solar panels, the Tribe stands to reduce electricity related emissions by 2,485 MTCO2e per year.

Task 1 – Initial Planning and Procurement -The goals of this task are to perform initial planning and procurement for the project. Initial planning includes finalizing the project design plans, specifications, and requirements for the proposed technology systems; performing community engagement; and considering potential project tax-equity financing. Procurement processes include developing solicitations, obtaining proposals, selecting contractors, and finalizing contracts to provide project equipment, services, and financing.

Task 2 – Design, Engineering, and Approvals - The goals of this task are to complete the engineering designs and obtain approvals enabling construction to proceed. Design goals include completing system design and engineering documents for the project and preparing a construction and installation plan. Approvals include completing applicable due diligence and permitting processes, completing San Diego Gas and Electric (SDG&E) interconnection applications, completing required interconnection studies, and finalizing a utility interconnection application for the project.

Task 3 – Installation, Commissioning, and Deployment -The goals of this task are to complete project installation and commissioning. Task efforts include issuing the notice to proceed with project construction; coordinating procurement and delivery of equipment and supplies; completing project construction and installation; and developing communication and control protocols for system integration. The task also will include commissioning and interconnecting the project to the utility distribution system.

Task 4 – Operations, Testing, and Monitoring - The goals of this task are to train operations staff, complete the first full year of project operations, and to collect and report information about system performance. Data will be collected from monitoring systems during live operation of the commissioned project, and through performance testing. The team will analyze and report Year 1 system Operation and Maintenance (O&M), test procedures and performance results on metrics defined for the project.

Task 5 – Grant Reporting & Admin – (See xx for description of activities).

B. Demonstration of Funding Need

The total budget for the Jamul Casino Microgrid is $14,768,606. No funding has been secured for this GHG emissions reduction measure, and there are no outstanding grant applications. The SDTC is requesting $7,768,606 of CPRG funding for Jamul Casino Microgrid, and the JIVoC intends to apply for grant funding through the Department of Energy Office of Indian Energy for the remaining budget amounts.

C. Transformative Impact

The Jamul Casino Microgrid has potential to be pioneering, scalable, and replicable. Having battery backup on site will reduce the need for large diesel generators during power outages, which are becoming more frequent due to climate change, wildfire events, and extreme heat. Increasing the abundance of microgrids can inevitably reduce the need for power transmission lines that often contribute to wildfires. There are opportunities to have other localized microgrids for different facilities on the Jamul Reservation. Strengthening energy independence on the Jamul Reservation will showcase to other Tribes the economic, environmental, and health benefits of microgrids and encourage their adoption whether at large or small scale. The Jamul Casino Microgrid would also provide power for EV charging stations that encourage the adoption of EVs and reduce GHG emissions from transportation.

7. Viejas Energy Audits & Retrofits

The Viejas Energy Audits & Retrofits program is structured similarly to the Pala Energy Audits & Retrofits program (Section 1.3.A), and is included in the SDTC PCAP as a priority GHG emissions reduction measure as *Viejas Priority Measure #*1. The Viejas Energy Audits & Retrofits program aims to improve the energy efficiency of up to 200 homes on the Reservation, which would reduce emissions by 538 MTCO2e per year and achieve community benefits for this disadvantaged community.

Refer to Section 1.3.A and 1.3.C for descriptions of program structure and transformative impact. The Viejas Energy Audits & Retrofits program is unfunded and would leverage funding and utilize rebates and other incentives as described in Section 1.3.B.

8. Viejas Reservation Recycling Education and Incentive Program

A. Description of GHG Reduction Measures

The Viejas Reservation Recycling Education and Incentive Program would enhance the sustainability of waste management practices and reduce GHG emissions by diverting recyclable waste from landfills. With full community participation and effective recycling of materials, the measure meets the goals of the CPRG program through reducing the amount of waste sent to landfills by up to 939 short tons per year. This would, in turn, cut the associated GHG emissions of methane by approximately 290 MTCO2e per year. This Priority GHG emissions reduction measure is included in the SDTC PCAP as the *Viejas Priority Measure #2.*

Task 1 – Program Planning: Job recruitment will be conducted to hire new or assign current Tribal staff for approximately one half (0.5) full time equivalent (FTE) employee. An assessment of current recycling infrastructure and practices within the community will be conducted. Information gathered through communication with community members and the transfer station will be included into a strategic plan that outlines program objectives, target audiences, and methods of implementation.

Task 2 – Community Events: Community events will be held to raise awareness of recycling and could include educational workshops and seminars featuring guest speakers, interactive activities, and demonstrations on proper recycling techniques. Free recycling bins with a logo sticker for the program will be distributed to attending Tribal members, along with an educational pamphlet with a guide to identifying and sorting recycling.

Task 3 – Infrastructure Enhancement at Transfer Station: Additional recycling receptacles will be placed at the Viejas transfer station. Collaboration with local authorities and waste management agencies will be performed. Dedicated receptacles for aluminum cans, plastic bottles, and glass bottles will be installed to streamline the recycling process. Clear signage and labeling will be placed in various locations to facilitate sorting of recyclables.

Task 4 – Incentive Programs: Incentive programs will be introduced to residents through the community recycling events and via social media or newsletter communication. The incentive program will be designed to reward residents for proper recycling practices at the local transfer station. The system may include coupons or gift cards earned by demonstrating consistent and accurate recycling habits.

Task 5 – Monitoring and Evaluation: A framework for monitoring and evaluating program effectiveness will be implemented to track key performance indicators. Data will be collected on recycling rates, participation levels, and resident feedback to measure the impact of the program and identify areas for improvement. Findings from these studies will be used to refine program strategies and allocate resources efficiently.

Task 6 – Collaboration and Partnerships: Communication and outreach to local businesses, community organizations, schools, and government agencies will be conducted to forge partnerships that extend program reach and resources. It will be essential to engage community stakeholders in program planning and implementation to foster ownership and support. Once these partnerships are established, these networks will be leveraged to promote the program activities and engage residents effectively.

A. Demonstration of Funding Need

The Viejas Reservation Recycling Education and Incentive Program is unfunded, and no grant applications have been submitted for this emissions reduction measure. Funding for this program is needed to provide staffing, acquire materials, produce signage, and develop incentive programs to facilitate recycling and improved waste management.

B. Transformative Impact

This measure has the potential to create transformative opportunities and impacts through developing a program that will enhance the sustainability of waste management practices and reduce GHG emissions. Implementing this program will increase community change and education within a hard to abate sector. This measure will foster stewardship and can be scaled and expanded if successful, which can result in a recycling service. The Viejas Tribe can demonstrate how this program could be implemented on other Tribal lands throughout California.

9. Viejas Solarize Tribal Homes & Implement Net Metering Policy

A. Description of GHG Reduction Measures

This GHG reduction measure aims to provide fully funded installations of solar panel systems with net metering capabilities for 200 homes on the Reservation. Given current energy demand, it is estimated that each home would have to install 201 square feet, or approximately 12 solar panels (17.5 sq ft each),

to offset all electricity emissions from the residential sector. This equates to a reduction of 397 MTCO2e per year. The SDTC PCAP identified this priority GHG emissions reduction measure as *Viejas Priority Measure #3.* This measure supports to goals of the CPRG program through pursuing innovative policies and programs, reducing GHG emissions, and increasing community benefits.

Task 1 – Project Initiation: The Tribe will procure services from solar installation companies in accordance with its procurement policies. This will likely include solicitation of bids to review the best options for solar installations and developing a plan for solarizing up to 200 Tribal homes and select Tribal facilities on the Viejas Reservation. Considerations for contractor selection would include design, pricing, and financing information (if applicable), as well as storage options and site improvements.

Task 2 – Planning Phase: The Tribe will hire (or assign) a dedicated staff member to plan and implement the program. A webpage on the Viejas Resource Management Department website would be developed that includes information on the program and allows interested Tribal member homeowners to sign up for the program. Once a homeowner (or facility) is verified for eligibility, installation companies will perform site visits to evaluate the homes/facilities and create a system design based on roof type, roof angle, and shading. The contractor will evaluate the electrical status and ensure everything is compatible with the incoming solar installations. Site design documents will be developed for each home that will be fitted with a solar panel system.

Task 3 – Implementation Phase: Once the solar installation plan is approved, contractor will obtain the materials and equipment necessary to install solar panels on up to 200 Tribal homes. The two primary components of a solar panel system are the solar panels themselves and the inverters that convert energy from the panel into usable electricity for the home. For net metering, the Tribe and SDG&E will need to approve the system, before a home can switch over to the solar panel system with connection to the grid. After getting approval or Permission to Operate (PTO), the solar panel systems can be turned on and begin producing energy for the Tribal homes.

Task 4 – Grant Reporting & Admin: A part-time administrative staff will keep a detailed record of the solarization program and how grant funds are used and dispersed for the solar panel installations on each Tribal home. This tracking will also include associated material and labor costs for the program.

B. Demonstration of Funding Need

This GHG emissions reduction measure is currently unfunded, and CPRG funds are needed to support staffing for program development and contracting for solar design and installations on Tribal homes. If CPRG funds are not awarded, it will fall on homeowners to identify contractors, purchase equipment, and coordinate with the Tribe and SDG&E. These barriers are prohibitive and would result in a lack of reduction in GHG emissions. If CPRG funding is awarded for this GHG emissions reduction measure, rebates would go back into the program to fund additional solar installations and (or) upgrades for future Tribal housing even after the CPRG grant program has concluded.

C. Transformative Impact

This measure develops a replicable and scalable program to increase the deployment of existing GHG emission reduction technologies through the installation of solar panel systems. This program can also

provide financial benefits to Tribal community members so they can save on energy bills. This would result in community transformations that accelerate the market adoption of solar panels on Tribal housing. Electricity consumption at residential levels is hard to abate considering the financial barriers and effort needed to implement solarization by the homeowner. The development of a program that significantly reduces these barriers will allow Viejas to scale the GHG reductions for this sector.

10. La Posta Implementation of Erosion Controls for Wetland Restoration

A. Description of GHG Reduction Measures

The La Posta Band of Mission Indians is proposing to work with California Department of Transportation (CalTrans) and the Bureau of Reclamation (BOR) to install erosion controls at I-8 freeway culverts and drainage sites where the freeway intersects the Reservation and perform restoration downstream on the Reservation. The BOR has completed 30% plans for mitigation of erosion caused by I-80 drainage. Funding will be used for consultation with CalTrans and BOR to ensure they move forward and implement the erosion control measures, as well as additional surveys, erosion controls downstream on the Reservation, and restoration to repair the damage to vegetation and wetlands on the Reservation. This GHG emissions reduction measure was identified in the SDTC PCAP as *La Posta Priority Measure #1.*

Task 1 – Project Initiation: Consultants and contractors will be hired to help manage and execute elements of the project. The Tribe's procurement policies will be followed, and requests for qualifications and quotes from consultants and contractors will be issued. Evaluation criteria will be used to make final selections based on qualifications, experience, and cost.

Task 2 – Planning Phase: Bureau of Reclamation (BOR) will be consulted to discuss finalizing plans for the erosion controls. Once plans are finalized, CalTrans will be coordinated with on next steps and timeline. An associated risk is the possibility that CalTrans is unable to complete the construction. To ensure this measure is not affected by this risk, discussions will include using other contractors and what approvals are needed. Areas eroded and degraded by the I-8 freeway runoff will be targeted for surveys. The objective of this task is to collect data that will contribute to the restoration plan, and serve as baseline data that can be used for monitoring restoration success, wildlife, and habitat. The document will include planting, irrigation, and maintenance plans to guide implementation. Final approval from Tribal Council will be required before plans are implemented.

Task 3 – Implementation Phase: On-Reservation erosion control and restoration may include strategies identified by the BOR plans. Rock riprap will likely be used in areas to dissipate water and slow water velocity. These erosion controls would be placed further downstream onto the Reservation to help restore eroded areas and protect restoration areas. If prescribed in the restoration plan, native hydroseed mix will be acquired from a local seed provider. This mix will be determined through the revegetation planning process. The restoration plan will specify a list of materials to be used for site preparation, planting, and maintenance activities. The area will be monitored over the initial 8 weeks after planting to evaluate watering demands.

Task 4 – Maintenance: Monitoring will be completed to document weed infiltration, soil moisture, and plant survival. This will inform the watering and weeding frequency and supplemental planting activities. Monitoring activities will include GPS and tabular data collection that will be downloaded and available

to the project team. After this initial period, watering will be done during the first summer after planting and weed control will be conducted, on an up to quarterly basis, over the three years following planting activities. Based on monitoring data on plant survival one-year after planting, trees and other vegetation will be replanted, as needed, throughout the project area. Supplemental planting activities will coincide with the beginning of the rainy season (October – December) to give the plants the best chance for survival.

Task 5 – Grant Reporting & Admin: Ongoing grant reporting will be completed as required by the grant program to track expenditures, and progress towards project goals and metrics.

B. Demonstration of Funding Need

$8,302,633 is needed to implement the *La Posta Erosion Controls for Wetland Restoration*. This is leveraging $181,000 in funding for 90% engineering plans that was awarded through the BOR Technical Assistance Grant for Wetlands Reclamation and Water Quality Enhancement Program. The La Posta Tribe applied for funding through the Environmental Justice Government-to-Government grant that was rejected in 2023. In February 2024, the Tribe applied for $400,000 through the BOR Native American Affairs Technical Assistance to Tribes program and is awaiting the decision on funding award. There are several other grants the Tribe has identified and is pursuing, including $1,000,000 through the Native American Affairs: Emergency Drought Relief for Tribes in April 2024. Other potential grants include the BOR for WaterSMART Planning and Project Design and WaterSMART Small-Scale Water Efficiency Projects.

C. Transformative Impact

This priority GHG emissions reduction measure involves wetland restoration and revegetation that will sequester carbon and provide many co-benefits to the Tribe. These include increasing restoring habitat and protecting culturally important plants and animals. This project will work in conjunction with other Tribes in the SDTC tribal consortium through utilization of compost and plants from tribal nurseries. This can serve as a model GHG reduction measure that can be replicated by other Tribes, scaling the amount of carbon sequestered.

11. La Posta Solarize Tribal Homes & Facilities

This GHG emissions reduction measure will fully fund installations of solar panels for 13 homes and select Tribal facilities on the La Posta Reservation. The scope and assumptions are similar to the **Viejas** Solarize Tribal Homes & Implement Net Metering Policy (Section 1.9). It is estimated that a reduction of 26 MTCO2e per year would be achieved if solar panels were installed on all 13 homes to fully offset their electricity consumption. Tribal facilities would have to install a total of 6,276 square feet, or 359 solar panels, to offset all electricity emissions from the commercial sector, which equates to a reduction of 62 MTCO2e per year. This priority GHG emissions reduction measure was identified in the SDTC PCAP as *La Posta Priority Measure #3.*

Refer to Section 1.9.A and 1.9.C for descriptions of program structure and transformative impact. The La Posta Solarize Tribal Homes & Facilities is unfunded and would leverage funding and utilize rebates and

other incentives as described in Section 1.9.B. The La Posta Tribe applied as part of a Tribal consortium to the U.S. EPA Solar for All program and is awaiting the decision on funding award.

Section 2: Impact of GHG Reduction Measures

A. Magnitude of GHG Reductions from 2025 through 2030
B. Magnitude of GHG Reductions from 2025 through 2050

This section provides information on the priority GHG emissions reduction measures identified by each Tribe along with a quantified estimate of the GHG reductions that would be achieved if implemented. The following information is provided for each reduction measure: estimate of the quantifiable GHG emissions reductions annually, for the period of 2025 through 2030, and for the period of 2025 through 2050. Additionally, the cost effectiveness of the GHG reductions anticipated from the measures is also included. All estimates of quantifiable GHG emissions reductions are rounded to the nearest metric ton of carbon dioxide equivalent. Refer to the Technical Appendix for an explanation of how these GHG reduction measures were quantified and the assumptions used.

Priority GHG Reduction Measure	MTCO2e reduced per year	MTCO2e reduced by 2030	MTCO2e reduced by 2050
Pala Tribal EV Adoption Program	770	3,850	19,250
Pala EV Charging Station Installation	3,719	18,595	92,975
Pala Energy Audits and Retrofits	430	2,150	10,750
Pala Community Compost Program	495	2,475	12,375
Jamul EV Charging Station Installation	232.5	1,162.5	5,812.5
Jamul Casino Microgrid	2,485	12,425	62,125
Viejas Energy Audits & Retrofits	538*	2,690	13,450
Viejas Establish Recycling Program	290	1,450	7,250
Viejas Solarize Tribal Homes & Implement Net Metering Policy	397	1,985	9,925
La Posta Erosion Controls & Wetland Restoration	9.6	48	240
La Posta Solarize Tribal Homes & Facilities	88	440	2,200
Total	**9,089.1**	**45,445.5**	**227,227.5**

**** This value differs from that on the associated PCAP. Since the submission of the PCAP, the Viejas Tribe has opted to revise this GHG reduction measure to include the installation/retrofitting of air-source heat pumps, tankless water heaters, electric cooking appliances…etc. in order to nullify residential propane use completely. Refer to technical appendix for GHG reduction estimate methodology.***

To assess the durability of the proposed GHG reduction measures, it is crucial to explore the long-term sustainability of the emissions reduction each of them offers. Each proposed measure should establish a lasting solution that yields permanent and ongoing reductions in GHG emissions. Initiatives like installing solar-powered microgrids (Jamul Casino Microgrid) and installing rooftop solar (La Posta Solarize Tribal Homes & Facilities; Viejas Solarize Tribal Homes & Implement Net Metering Policy) for homes not only provide immediate emissions reductions but also establish a renewable energy infrastructure capable

of consistently producing clean energy over time. Implementing the Pala Community Compost Program or Viejas Recycling Program fosters sustainable waste management practices that can make a long-lasting impact on the community as a whole, ensuring continued emissions reductions in the future. Providing an EV adoption program (Pala EV Adoption Program) and installing EV charging stations at the Pala and Jamul Reservations are two projects that lay the groundwork for a transition to electric vehicles, sustaining a decrease in emissions by promoting the adoption of clean transportation alternatives. Properly implemented restoration projects (La Posta Erosion Controls & Wetland Restoration) contribute to resilient ecosystems that can stand the test of time and sequester an increasing amount of carbon as the years go on. Energy efficiency audits and retrofits on Tribal homes and facilities (Pala Energy Audits & Retrofits; Viejas Energy Audits & Retrofits) ensure long-term energy savings and emission reductions by addressing energy waste and inefficiency, laying the foundation for sustainable energy consumption practices in the future, and demonstrating the economic and ecological benefits of energy efficiency. Through the comprehensive implementation of these measures, a holistic and enduring approach to reducing GHG emissions can be established, ensuring that implemented solutions remain in place and continue to deliver permanent emissions reductions for years to come.

C. Cost Effectiveness of GHG Reductions

The cost effective for the GHG reductions were developed and included in the table. The quantified emissions reductions for all measures were added together to conduct the total calculation. The total cost effectiveness of funding the GHG reductions is estimated to be $935 per MTCO2e by 2030 and $187 per MTCO2e by 2050.

Priority GHG Reduction Measure	$/MTCO2e by 2030	$/MTCO2e by 2050
Pala Tribal EV Adoption Program	$189	$38
Pala EV Charging Station Installation	$172	$34
Pala Energy Audits and Retrofits	$1,697	$339
Pala Community Compost Program	$706	$141
Jamul EV Charging Station Installation	$277	$55
Jamul Casino Microgrid	$625	$125
Viejas Energy Audits & Retrofits	$4,117	$823
Viejas Establish Recycling Program	$161	$32
Viejas Solarize Tribal Homes & Implement Net Metering Policy	$2,740	$548
La Posta Erosion Controls & Wetland Restoration	$172,972	$34,594
La Posta Solarize Tribal Homes & Facilities	$3,976	$795

Section 3: Environmental Results – Outputs, Outcomes, and Performance Measures

1. Pala Tribal Electric Vehicle (EV) Program

A. Expected Outputs and Outcomes

Expected outputs: hire program staff, develop education and outreach materials, promote community participation, assist in EV acquisition for all participating Tribal members. Expected outcomes: increase Tribal workforce development, increase knowledge of benefits of EVs, increase adoption of EVs, reduce GHG emissions by 3,850 MTCO2e by 2030 and 19,250 MTCO2e, reduce CAPs and HAPs on the reservation in disadvantaged communities (carbon monoxide, nitrogen oxides, and VOCs from fossil fuel combustion and evaporation).

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include number of community members contacted, number of community members participating, number of community members that have purchased EVs, GHG emissions reduced.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: Pala Environmental Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Initial Planning: meetings and staff hiring (months 1-3 of grant period)
Task 2 – Program Design: produce informational materials (months 2-5 of grant period)
Task 3 – Program implementation: perform community outreach (month 6 to end of grant period)
Task 4 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

2. Pala EV Charging Station Installation

A. Expected Outputs and Outcomes

Expected outputs: completed site assessment(s) for charger locations, 10 Level-3 chargers and 20 Level-2 chargers installed. Expected outcomes: expand EV charging infrastructure, reduce GHG emissions by 18,595 MTCO2e by 2030 and 92,975 MTCO2e by 2050, reduce CAPs and HAPs on the reservation in disadvantaged communities (carbon monoxide, nitrogen oxides, and VOCs from fossil fuel combustion and evaporation).

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include number of EV chargers installed per year, EVs charged per year, and total electricity used at charging stations per year.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: Pala Environmental Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Planning & Procurement: meetings (months 1-3 of grant period)
Task 2 – Site Assessment(s): conduct site assessments as needed (months 3-10 of grant period)
Task 3 – Engineering Designs & Approvals: system design at sites (months 10-20 of grant period)
Task 4 – Installation & Maintenance: Install 10 Lvl-3 and 20 Lvl-2 chargers (months 20-60 of grant period)
Task 5 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

3. Pala Energy Audits & Retrofits

A. Expected Outputs and Outcomes

Expected outputs: webpage, outreach materials, audits of 50 Tribal homes and 15 Tribal facilities, and retrofits installed. Expected outcomes: increased community participation, increased education and awareness, increased energy efficiency, lower energy demand and bills for residence in disadvantaged community, reduce GHG emissions by 2,475 MTCO2e by 2030 and by 12,375 MTCO2e by 2050, reduce CAPs (carbon monoxide, nitrogen oxides from LPG combustion) and formaldehyde emissions on the reservation, in disadvantaged communities, from switching LPG heating to heat pumps.

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include number of heat pumps installed, energy savings per home, and Tribal members satisfaction.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: Pala Environmental Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Project Initiation: develop service agreement (months 1-6 of grant period)
Task 2 – Program Design: produce outreach materials (months 6-10 of grant period)
Task 3 – Implementation Phase: audits, purchasing, installation, follow-ups (months 10 onward)
Task 4 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

4. Pala Community Compost Program

A. Expected Outputs and Outcomes

Expected outputs: hired program staff, promotion of partnerships and community involvement, developed program for collection and composting of food waste. Expected outcomes: increased workforce development, increased community awareness and education, decreased GHG emissions by 2,475 MTCO2e by 2030 and 12,375 MTCO2e by 2050, reduce CAPs (VOCs, ammonia, nitrogen oxides from landfill emissions and reduced fertilizer use/production).

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include food waste diverted from landfills and number of participants.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: Pala Environmental Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Project Initiation: hire program manager (months 1-3 of grant period)
Task 2 – Program Design: develop plan for monitoring, communication, and operations (months 3-8)
Task 3 – Implementation Phase: purchasing, staff hires, site prep, outreach (months 8-15 of grant period)
Task 4 – Ongoing Operations: events, collection, composting, data collection (months 16-60)
Task 5 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

5. Jamul EV Charging Station Installation

A. Expected Outputs and Outcomes

Expected outputs: hired program staff, 10 Level-2 chargers installed. Expected outcomes: increased workforce development, expand EV charging infrastructure, reduce GHG emissions by 1,162.5 MTCO2e

by 2030 and 5,812.5 MTCO2e by 2050, reduce CAPs and HAPs on the reservation (carbon monoxide, nitrogen oxides, and VOCs from fossil fuel combustion and evaporation).

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include number of EV chargers installed per year, and EV miles charged per year.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: JIVoC Environmental Protection Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Project Initiation: meetings and planning (months 1-3 of grant period)
Task 2 – Contractor Coordination & Electrical Infrastructure: determine infrastructure needs for Lvl-2 chargers (months 3-7 of grant period)
Task 3 – Material Acquisition, Installation, Maintenance (months 7-20 of grant period)
Task 4 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

6. Jamul Casino Microgrid

A. Expected Outputs and Outcomes

Expected outputs: hired program staff, installed solar panels, deployed microgrid. Expected outcomes: increased staff capacity for implementation, decreased electricity costs, reduce GHG emissions by 12,425 MTCO2e by 2030 and 62,125 MTCO2e by 2050.

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include number of solar panels installed and annual electricity cost savings.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: JIVoC Environmental Protection Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Project Planning and Procurement: planning, community engagement, financing, procurement (months 1-7 of grant period)
Task 2 – Design, Engineering & Approvals: complete design & approval (months 7-20 of grant period)
Task 3 – Installation, commissioning, develop control protocols (months 20-30 of grant period)
Task 4 – Operations, testing, monitoring, staff training, data collection (months 30-42 of grant period)
Task 5 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

7. Viejas Energy Audits & Retrofits

A. Expected Outputs and Outcomes

Expected outputs: 50 LPG heaters replaced in Tribal homes, developed outreach materials, audits conducted for 200 Tribal homes and 15 Tribal facilities. Expected outcomes: increased community participation, increased education and awareness, increased energy efficiency, lower energy demand and bills for residence in disadvantaged community, reduce GHG emissions by 2,690 MTCO2e by 2030 and by 13,450 MTCO2e by 2050, reduce CAPs (carbon monoxide, nitrogen oxides from LPG combustion) and formaldehyde emissions on the reservation, in disadvantaged communities, from switching LPG heating to heat pumps.

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include number of homes retrofitted with triple-pane windows per year, average annual energy savings per home, and Tribal member satisfaction.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: Viejas Environmental Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Project Initiation: meetings (months 1-3 of grant period)
Task 2 – Program Design: develop webpage and outreach materials (months 4-8 of grant period)
Task 3 – Implementation Phase: auditing, planning, purchasing, installing (months 9-20 of grant period)
Task 4 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

8. Viejas Reservation Recycling Education and Incentive Program

A. Expected Outputs and Outcomes

Expected outputs: hired program staff, community events hosted, improved recycling infrastructure, incentive programs introduced, partnerships and community involvement fostered. Expected outcomes: increased staff capacity, increased awareness of the benefits of recycling, increased infrastructure capacity, increased community engagement, reduce GHG emissions by 1,450 MTCO2e by 2030 and by 7,250 MTCO2e by 2050.

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include amount of waste diverted from landfills, GHG emissions avoided, and Tribal member satisfaction.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: Viejas Environmental Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Project Planning: meetings (months 1-3 of grant period)
Task 2 – Community Events: outreach, planning event hosting (months 4-10 of grant period)
Task 3 – Infrastructure Enhancement: additional receptacles at transfer station (months 4-15)
Task 4 – Incentive Programs: develop and introduce recycling incentives (months 5-60 of grant period)
Task 5 – Monitoring and Evaluation: plan and implement framework (months 12-69 of grant period)
Task 7 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

9. Viejas Solarize Tribal Homes & Implement Net Metering Policy

A. Expected Outputs and Outcomes

Expected outputs: hired program staff, 200 homes equipped with solar PV. Expected outcomes: increased workforce development, reduce GHG emissions by 1,985 MTCO2e by 2030 and by 9,925 MTCO2e by 2050.

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include number of homes equipped with solar PV, GHG emissions avoided, and energy savings.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: Viejas Environmental Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Project Initiation: meetings, service procurement (months 1-5 of grant period)
Task 2 – Planning Phase: staff hires, site visit(s), site design, approvals (months 5-20 of grant period)
Task 3 – Implementation Phase: installation, implement net metering (months 20-60 of grant period)
Task 4 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

10. La Posta Implement Erosion Controls for Wetland Restoration

A. Expected Outputs and Outcomes

Expected outputs: restoration plan created including objectives and future conditions, deployment of erosion mitigation and controls, number of native plants planted, acres restored. Expected outcomes: sedimentation source and erosion mitigation, GHG sequestered by 48 MTCO2e by 2030 and 240 MTCO2e by 2050, reduced CAP (nitrogen oxides, PM2.5 and PM10) on the reservation and in disadvantaged communities.

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include flow rate, sedimentation monitoring, and native species health and abundance.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: La Posta Environmental Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Project Initiation: meetings, service procurement (months 1-5 of grant period)
Task 2 – Planning Phase: survey planning, surveys, restoration plan (months 6-15 of grant period)
Task 3 – Implementation Phase: materials purchasing, site prep, weeding, planting (months 15-60)
Task 4 – Maintenance: plan/perform monitoring, data collection, maintenance (months 15-60)
Task 5 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

11. La Posta Solarize Tribal Homes & Facilities

A. Expected Outputs and Outcomes

Expected outputs: hire program staff, solar installation plan, solar panels installed on 13 residential homes and 4 commercial buildings. Expected outcomes: work force development, identified needs for solar panels, reduced energy bills for disadvantaged communities, reduced GHG emissions by 440 MTCO2e by 2030 and 2,200 MTCO2e by 2050.

B. Performance Measures and Plan

Measuring performance will include quarterly performance reviews to review project timeline, milestones, and acquired data. Data collected may include energy savings and profits from net metering.

C. Authorities, Implementation Timeline, and Milestones

Implementing Agency: La Posta Environmental Department
Milestone for Obtaining Implementing Authority: Tribal Council Approval
Task 1 – Project Initiation: meetings, contract development (months 1-6 of grant period)
Task 2 – Planning Phase: engineer site visits, designs, approvals (months 6-15 of grant period)
Task 3 – Implementation Phase: install and inspect solar panels, apply net metering (months 15-60)
Task 4 – Grant Reporting & Admin: Quarterly and final reports (entire grant period)

Section 4: Low-Income and Disadvantaged Communities

A. Community Benefits

The SDTC is a Tribal consortium of federally recognized Tribes in San Diego County, California. All of the GHG emission reduction measures are located within Tribal lands, which meet the definition of disadvantaged communities for the purposes of the CPRG grant program. The GHG emissions reduction measures prioritized by the SDTC directly benefits the Tribal communities where they are being implemented, and results in benefits to the Tribal economies, community health, and workforce development.

The Pala EV Adoption Program will help the Tribal community switch to EVs, which also will reduce localized air pollution from the transportation sector. The Pala compost program can provide stewardship and support the community gardens and cultivation of native plants in the Tribal nursery. EV charging installations at the Pala and Jamul Reservations can subsidize charging for the Tribal communities. Energy audits and retrofits for Tribal homeowners on the Viejas and Pala Reservations can help lower electricity costs, improve indoor air quality and protect vulnerable populations from climate change risks of wildfire and extreme heat. The Jamul Casino Microgrid reduces the need for onsite diesel generators and localized air pollution while ensuring energy resiliency for the Tribe. The Viejas recycling program helps with waste management for residents of a disadvantaged community. The Viejas and La Posta Solar Energy Program can reduce energy costs for the Tribal community and improve energy security for the residents. The La Posta Erosion Controls and Restoration measure will protect culturally important plant and animal species while sequestering GHG emissions. This project aims to work in conjunction with the SDTC composting program and Tribal nursery propagation of native plants and can serve as a model for other Tribes.

Benefits to the different communities will continue to be assessed, quantified, and reported throughout the grant period by keeping track of performance measures and hiring Tribal staff to ensure successful implementation. Continued inventories collected through the development of the SDTC Comprehensive Climate Action Plan (CCAP) will provide additional data on emissions, including criteria air pollutants (CAP) and hazardous air pollutants (HAP). The Pala Band of Mission Indians is a national leader in Tribal air quality monitoring, including the active role with the Institute for Tribal Environmental Professionals that provides technical support and capacity building to Tribal governments for air quality monitoring activities. The Pala Environmental Department (PED) manages an air monitoring station and community air monitoring network where it monitors CAP throughout the Reservation. Monitoring data can be used to track localized changes in emissions from pre-and post-implementation of emission reduction measures.

B. Community Engagement

Each member of the SDTC represents a disadvantaged community and every prioritized emissions reduction measure is located on Tribal lands. The prioritized emissions reduction measures form a strategic plan to reduce GHG emissions and have direct benefits to the Tribal community. Meaningful engagement with these communities has been continuous through the development of Tribal vulnerability assessments, adaptation plans, and development of the SDTC PCAP. These include the development of surveys, workshops, community meetings, working groups and other collaborative

engagement. This information helped the SDTC understand the concerns, needs, and priorities of their communities, and shaped the identification of GHG reduction measures contained in the PCAP.

GHG emissions reduction measures include specific outreach activities to Tribal communities. Programs that promote EV adoption, energy audits and retrofits, solarization, and compost are all focused on community engagement and participation. Outreach methods include leveraging existing channels the SDTC Tribes utilize to engage their communities, such as Tribal forums, Elders councils, Tribal environmental department websites, social media, newsletters, workshops, community events, and existing relationships with Tribal community members. Education and outreach to these disadvantaged community members will encourage adoption of GHG reductions using new technologies and best practices.. For each GHG emissions reduction measure, the respective Tribal Council of the SDTC Tribal consortium will act as the implementing authority for all measures to ensure early and consistent inclusion throughout the development and implementation process.

Section 5: Job Quality

The CPRG emissions reduction measures will directly generate high quality jobs through the creation of jobs within the respective Tribal governments. Throughout these projects, contractors will be hired to work on different aspects that the Tribes do not have the capacity to do themselves, which will further advance the creation of jobs and a highly skilled workforce. The jobs that these projects will create support “high road” labor practices by building the skills of these staff members and workers and advancing equity and partnerships.

For the Pala Tribe, these emissions reduction measures will lead to the creation and (or) staffing of 4.3 FTEs over the grant period. This includes 6% of time for the Environmental Director to manage individual projects (not including time for overseeing the CPRG implementation grant and subawards). Program Managers will be hired for both the Pala Tribal EV Adoption Program and the Pala Community Compost Program. Additional jobs will be created (or staff assigned) for the Compost Program, Energy Audits & Retrofits, and EV Charging Installations. Approximately 21% of Pala Administrative staff time is anticipated for accounting, reporting and other administrative tasks. Contractual services needed for technical expertise include licensed engineers, electricians, energy auditors, and various specialized contractors.

CPRG funding will be used to support the oversight from the JIVoC Environmental Director (6% of time over five-years) and CFO (5% of time over 5-years) for important infrastructure projects. Other funding will be dedicated to support contractual services for highly specialized jobs in engineering, renewable energy, and electrical system installations for both the EV charger installation and Jamul Casino Microgrid.

For the Viejas Tribe, approximately 4.5 FTE’s will be directly created through new hires or assigned roles to implement the Viejas priority emissions reduction measures. This includes hiring or assigning 50% of time for a Program Manager for the Energy Audits and Retrofits and 64% of time (to another staff person) for the Viejas Solarize Tribal Homes and Implement Net Metering Project. Another two staff are anticipated to be hired for the Energy Audits and Retrofits program, with an additional half-time person for the Viejas Recycling program and 66% of an FTE for the Viejas Solarization Program. The Viejas Administrative Assistant is allocated 19% of their time to work CPRG accounting, reporting and other

administrative tasks. Contractual services needed for technical expertise include licensed engineers, electricians, energy auditors, and various specialized contractors.

CPRG implementation funding will be used to support the La Posta Environmental Director and Specialist for their work on the Solarize Tribal Homes and Facilities Project and the Implementation of Erosion Controls for Wetland Restoration. This includes 50% of time for the Environmental Director and 45% of time for the Specialist. Other high quality jobs are funded through these projects including construction of erosion controls, restoration planning, design, and installation, and electricians and solar installation contractors.

Section 6: Programmatic Capability and Past Performance

A. Past Performance

Pala Community Air Monitoring and Emissions Reduction Plan - CARB AB617

- Project Description: The overall goal of this project is to reduce exposure in the Pala Tribal community by identifying, evaluating, and ultimately reducing air pollution and exposure to harmful pollutants.

Pala Tribal Community Air Monitoring Collaborative Project – USEPA Air Quality Grant

- Project Description: This goal of this project is to leverage and enhance the Pala tribal community air monitoring network to continuously detect levels of PM 2.5, PM 10, ozone, and nitrogen dioxide throughout the Pala Reservation. PED will partner with neighboring tribes to share best practices and lessons learned in developing a tribal community-scale air monitoring network.
- The applicant was able to successfully manage the listed agreements by documenting progress and expenditures and providing a tracking mechanism of budget spending and task completion to be reported on through administrative reports.

Pala Wildlife Management Plan – USFWS Tribal Wildlife Grant

- Project Description: This project involves collecting critical information on riparian habitat and oak wildland health to identify ways to restore the landscapes and protect wildlife on the Reservation. This will inform a Tribal Wildlife Management Plan and specific restoration opportunities that support wildlife habitat and gathering on the Reservation.

Pala Community Microgrids Project – DOE Energy Technology Deployment on Tribal Lands

- Project Description: The Pala Community Microgrids Project will install approximately 1,070 kilowatts (kW) of solar photovoltaic (PV) systems and 10 kW/26 kilowatt-hours (kWh) of battery energy storage systems (BESS) to provide autonomous operations of multiple essential tribal facilities during emergency situations for tribal community resilience.
- DOE Grant Number: DE-IE0000147

Pala Long Range Transportation Plan and Roads Update – Caltrans Sustainable Transportation Planning Grant

- Project Description: This project will take the outdated 1996 plan and create a current, usable document that will also be officially approved by the Tribe and the Bureau of Indian Affairs (BIA). This plan will be comprehensive; it will incorporate existing planning documents while prioritizing fundable, specific projects.

B. Reporting Requirements

PED has successfully met the reporting, deliverable, and technical report requirements for every grant it has administered since the department's inception over 20 years ago. Reports have always been delivered timely, and although some grants have occasionally required a no-cost extension to complete the grant workplan, PED has never failed to successfully complete and close out any grant.

- Pala Community Air Monitoring and Emissions Reduction Plan - CARB AB617
    - Six biannual grant reports
- Pala Tribal Community Air Monitoring Collaborative Project - USEPA Air Quality Grant
    - Quarterly reports and a final report
- Pala Wildlife Management Plan – USFWS Tribal Wildlife Grant
    - Interim reports
- Pala Community Microgrids Project – DOE Energy Technology Deployment on Tribal Lands
    - Quarterly reports and a final report
- Pala Long Range Transportation Plan and Roads Update – Caltrans Sustainable Transportation Planning Grant
    - Quarterly reports

C. Staff Expertise

PED Director Shasta Gaughen, PhD, has been overseeing the department since 2010 and is highly skilled in every aspect of grant oversight, management, and reporting. Darold Wallick, PED Air Quality Specialist, has worked for the department since 2014 and is recognized in his field amongst his peers for his expertise with air quality monitoring equipment. The Pala Tribe and PED lead and participate on many committees and advisory groups for environmental issues including climate change adaptation, air quality monitoring, and energy resiliency. This leadership will allow the SDTC emissions reduction measures to be effectively implemented and transformative across other Tribal governments. This will be achieved through shared knowledge of lessons learned and best practices within the coalitions and partnerships, including following.

- National Tribal Air Association
- Tribal Energy and Climate Collaborative through California Strategic Growth Council
- Tribal Climate and Health Adaptation Summit
- Projecting Tribal Knowledge Summit
- Climate Kids collaborative partnership with local Tribal Nations
- Co-hosted the 2022 Southwestern Tribal Climate Change Summit
- Climate Science Alliance

- National Association of Tribal Historic Preservation Officers
- Native American Environmental Protection Coalition
- Institute of Tribal Environmental Professionals' Climate Advisory Group
- Upper San Luis Rey Resource Conservation District