TogetherGreen Application

BACKGROUND INFORMATION

Project Title:

Climate Adaptation Planting: Restoration at the Policy Level

Total Request:

\$28,250.00

Contact Information:

Elizabeth Ignaffo, President

Name of Organization (this should be an Audubon group or its partner if the partner is leading the project; if you do not have an Audubon partner please contact Flo Miller 802-505-0839 at <u>fmiller@audubon.org</u>):

Florida Keys Audubon Society

Address, City, State, ZIP Code:

P.O. Box 1573, Key West, FL 33041-1573

Project Leader:

Alison Higgins

Project Leader Phone Number (format: xxx-xxx-xxxx): 305-809-3726

Project Leader E-mail:

ahiggins@keywestcity.com

Organizational Background (200 words = 200):

Please provide a short description of your organization, including number of staff, mission, strategic goals, annual budget, and organizational experience implementing similar projects. This will help reviewers assess your capacity to undertake the proposed project.

The mission of the Florida Keys Audubon Society (FKAS) is to promote an appreciation, conservation, and restoration of ecosystems, including native flora and fauna focusing on birds and other wildlife through education, participation, stewardship, and advocacy.

FKAS is comprised of a small group of volunteers in Key West. Chapter goals include coordinating monthly presentations by researchers, leading bird walks, and encouraging residents to plant fruit bearing shrubs important to migratory birds. We are very interested in the Conservation Planning structure to help us determine strategic goals for the future.

FKAS raises \$8,000 annually through the Birdathon fundraiser and interest earned on investments; spends \$3,000 on scheduled meetings and events; and donates \$5,000 to wildlife research and conservation programs.

One of our board members was named an Environmental Hero by the National Oceanic and Atmospheric Administration in recognition of her extensive environmental volunteer work. Other projects include the design, fundraising, creation, maintenance and monitoring of a large fresh water pond. In collaboration with other groups, we have held community workdays to plant migratory bird forage landscaping for the White-

crowned Pigeon Preserve.

Living as the proverbial canary in the coal mine, FKAS desires to become more effective in conserving local ecosystems.

PROJECT INFORMATION

• **Project Summary**: What are you trying to achieve and how do you intend to achieve those results? Keep this brief and very high level – imagine a paragraph on the TogetherGreen website describing your project to members of the public. (150 words = 149)

Like many coastal areas, the Florida Keys are highly vulnerable to sea level rise. As a major flyway for neotropical migratory birds, the long term health of our trees is crucial, and in need of climate adaptation strategies. If a tree planted tomorrow is expected to live at least 50 years, we should be siting that plant in an area suitable for it at year 50.

Using current sea level rise projections, local governments and shareholders will draft innovative Comprehensive Plan and Land Development Regulations language, to ensure we are putting the right plant in the right place. The Florida Keys will become a pioneer in this subject area and our project will be an important template, replicable for coastal communities nationwide.

On the ground action via plantings on public conservation lands and private properties, coupled with a water conservation project will save water, reduce greenhouse gasses and educate tourists.

Describe your project in more detail, using the Conservation Planning Guide (see Innovation Grants website) to address each element listed below. Choose the series of questions in the guide that relates to your project goal(s) – water quality, water quantity, energy reduction, habitat restoration, or habit protection. For example, if your goal is to improve water quality, answer the questions posed in that section of the guide, and so on. If you have more than one goal, refer to all relevant sections of the guide, and combine your answers in the appropriate sections below.

• **Target(s)** (150 words)

The Florida Keys is home to two Important Bird Areas and hosts 7 of Audubon's WatchList Red List species (3 that breed here) and 29 Yellow List species (6 that breed here). An additional 42 birds (13 that breed here) are listed as Species of Greatest Conservation Need in Florida's State Wildlife Action Plan (WAP).

These species utilize different habitats in the Keys from our Pine Rocklands and Beach/Surf Zone (both within the top eight WAP priority habitats), as well as Tropical Hardwood Hammocks, Maritime Hammock, Buttonwood Forest, and Mangroves. The White-crowned Pigeon (a keystone species), spreads a wide variety of tropical seeds across its' Central America and Caribbean range. The Least tern, Roseate Tern, and Wilson's Plover utilize the open beach zones where surf meets uplands, whereas the Mangrove Cuckoo and Antillean Nighthawk need mangroves and semi open areas, respectively. All of these species breed locally.

• Need (150 words)

The Keys tidal gauge has documented steady sea level rise for 100 years. As part of the Southeast Florida Regional Climate Change Compact, the counties of Monroe, Miami-Dade, Broward and Palm Beach adopted shared adaptation planning horizons of 9-24" by 2060. The Keys are particularly vulnerable as we do not have a retreat option for adaptation and can only make our islands as resilient as possible. Past droughts and hurricane storm surges have had major impacts on our upland habitats and the forage

Past droughts and hurricane storm surges have had major impacts on our upland habitats and the forage available for our migratory birds. Documented research on the White crowned pigeon has shown that upland forage in even our most urbanized areas is key for the nesting success for this imperiled bird. Current

Comprehensive Plan and Land Development Regulations language at the City and County level, while encouraging native plant use, does not address suitability of planting sites as it relates to sea level rise. (148)

• Threat(s) (200 words)

According to The Nature Conservancy's Conservation Action Planning for the Florida Keys, direct threats to our conservation targets include:

* Natural System Modifications: Most beaches are full of tourists and raked daily, making them unacceptable to most beach nesters. Mosquito ditches and canals channel freshwater away from wetlands. Incompatible fire use has left many of our pine rocklands overgrown. Upland development wiped out much of the tropical hardwood hammock on certain islands.

* Invasive non-native species: While current invaders already have a toehold in our natural areas, the lack of preventative controls leaves our habitats susceptible to new invaders.

* Residential and commercial development: The Florida Keys became a Florida "Area of Critical State Concern" because of rampant development and habitat loss in the 1980's.

* Climate change and severe weather: Our most critical threats are storms and flooding, exasperated by temperature extremes and droughts, leading to accelerated habitat shifting and alteration, driven by the global key factors of greenhouse gasses.

While we cannot hold back the ocean, there are many things we can do to adapt to climate change threats, such as making our habitats and community more resilient through smarter planning, increased conservation of resources, and tourist involvement. 200

Objectives (250 words)

- Formal statements of the outcomes that you believe are necessary to attain your goals.
- Results oriented, measurable, time limited, specific and practical....

By the end of the grant year, our objectives are to increase Keys climate change adaptation & mitigation actions by:

1) Increasing resiliency of the Florida Keys habitats and communities.

- Incorporate sea level rise planning into planting plans Keyswide;
- Increase long term forage for tropical migrating birds by planting 1,500 Keys Energy Services trees and 400 public lands trees along the Florida Keys flyway;
- Increase knowledge of adaptation strategies via outreach to~2,500 residents and students through volunteer workdays, native tree giveaways, and presentations.
- Build relationships and collaborate with at least 12 federal, state and local government partners and NGOs for stronger, lasting results;
- Decrease annual utility costs by 10% by decreasing potable water use at local wildlife/conservation organization facility.
- Provide positive media coverage (newspaper, radio and television) of climate change solutions.

2) Reducing greenhouse gasses by planting trees and conserving water.

- Decrease potable water use by 10% at local wildlife/conservation organization facility.
- Show progress on at least three elements of the City and County's greenhouse gas reduction plans.

3) Providing learning opportunities for other coastal communities

- Provide template for climate change adaptation planning for other areas.
- Document tourist experience in pledging and maintaining behavior changes.
- Provide successes and lessons learned reports for all three components of this project.

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• Audience (250 words)

Note: One of the goals of the Innovation Grants program is to reach new and/or under-represented audiences. For the purposes of this program, we are defining under-represented participants as those who have traditionally not been a part of the conservation movement and who have not had opportunities to connect with nature or take part in conservation actions. Under-represented audiences include people of color and low-income families, as well as those environmental stakeholders who have not considered themselves part of the conservation movement.)

Component One (Habitat Planning) has the largest audience: everyone in the Florida Keys. Potential changes to the Comprehensive Plan will affect all properties and therefore all residents, of all incomes, from all ethnicities. The process of creating and approving the language of this straightforward step towards climate adaptation planning will garner a greater understanding by local government and community leaders of the importance of adaptation planning across all sectors.

Component Two (Habitat Planting) will also reach a wide variety of audiences. The tree giveaway, sponsored by Keys Energy Services attracts the whole community. Community planting workdays on public lands will involve school children and our public housing residents (primarily people of color). Project presentations given throughout the community will seek out civic and business groups, helping local leaders realize the importance of climate adaptation planning across all sectors. Although the threat of sea level rise is a difficult one to broach sometimes, all residents in the Keys can relate to the salt water damage of Hurricane Georges in 2005.

Component Three (Water Conservation) will reach the Keys largest audience: our tourists. While we have found that most of our tourists are well educated, many do not understand the link between their homes and ours. As part of the City of Key Wests' Climate Action Plan, changing the awareness and behavior of our tourists while they are visiting and well after they have left is a critically important intervention opportunity. The Florida Keys Wildlife Center is well visited site in a high tourist area. (249 words)

• Activities (300 words)

Component One: Habitat Planning

- Summer 2012: Host 3-5 Workshops for Terrestrial Habitat Climate Adaptation Plan (Habitat Plan) and Best Management Plan (BMP) language for Comprehensive Plans and Land Development Regulations (LDRs)
- Summer 2012: Draft and share Habitat Plan, BMP language for Comprehensive Plans and LDRs.
- Fall 2012: Complete and Approve Habitat Plan, BMP language for Comprehensive Plans and LDRs through appropriate channels.
- Fall 2012: Write and share Component One report summarizing successes and lessons learned.

Component Two: Habitat Planting

- Winter 2012: Collaborate with Keys Energy Services to include more forage trees for migratory birds at tree giveaway event.
- Spring 2013: Train Master Gardener volunteers in climate adaptation messaging for giveaway event.
- Spring 2013: Give away approximately 1500 trees to the public for private planting.
- Spring 2013: Determine public lands tree order by priority lands, readiness of receiver site, and elevation.
- Summer 2013: Plant half the public lands trees by subcontractor.
- Summer 2013: Plant other half of public lands trees by holding 3-5 community planting workdays Keyswide.
- Summer 2013: Write and share Component Two report summarizing successes, lessons learned, and estimated greenhouse gasses mitigated.

Component Three: Water Conservation

- Summer 2012: Finalize design of appropriate size/placement of cistern and salt water well for current and future needs.
- Fall/Winter 2012: Install, utilize and track performance of cistern and salt water well.
- Spring 2013: Design and lead green tourism display, survey, and pledge drive.
- Summer 2013: Follow up with green tourism surveys and pledges.
- Summer 2013: Write and share Component Three report summarizing successes, lessons learned, and estimated greenhouse gasses mitigated.

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• Indicators of Success (150 words)

- Implemented Habitat Plan, BMP language for Comprehensive Plans and LDRs adopted.
- Number of stakeholders involved in creating Habitat Plan, BMP language for Comprehensive Plans and LDRs.
- Increased number and percentage of migratory forage trees given away by Keys Energy Services.
- First ever topographically prioritized public lands plantings of 400 trees by the City, the County, USFWS, and other public lands partners.
- Increased forage trees in Keys Flyway.
- Decreased potable water use by local conservation nonprofit facility.
- Decreased greenhouse gas emissions
- Increased visibility of successful climate change mitigation and adaptation actions.
- Increased conservation actions by visiting tourists
- Number of public involved at presentations, volunteer planting days, tree giveaways, etc.

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You will not need the Conservation Planning Guide to answer the following questions:

Project Evaluation

How will you monitor your indicators of success to ensure that you are on track? (300 words)

Work with project team to set, revisit and maintain realistic timelines and deadlines for all components of project, including regularly scheduled documentation of all of the below:

* Stakeholders/public involvement (for entire project): Via sign in sheets and photos from meetings, presentations, tree giveaways, planting workdays, etc.

* Habitat Plan, BMP language for Comprehensive Plans and LDRs: Meeting minutes, draft plan, comments received final plan, Comprehensive plan process and changes, Land Development Regulation process and changes. Resultant actions from final adopted language, if timeline allows.

* Increased number and percentage of migratory forage trees given away by Keys Energy Services: Lists of past and present numbers and species of trees given away by Keys Energy Services.

* First ever topographically prioritized public lands plantings of 400 trees by the City, the County, USFWS, and other public lands partners: Applications, including maps from public lands partners for trees for

proposed plantings. Pictures and reports from winning public lands partners documenting trees planted.

* Increased forage trees in Keys Flyway: Total count of migratory forage trees distributed.

* Decreased potable water use by local nonprofit: Before and after water and sewer bills.

* Increased visibility of successful climate change mitigation and adaptation actions: Copies of press releases sent, as well as final press results. Total number of public reached.

* Increased conservation actions by visiting tourists: Before and after surveys of pledged behavior changes and actual conservation actions.

* Decreased greenhouse gas emissions: Utilize Clean Air and Climate Protection software by ICLEI (Local Governments for Sustainability) to determine final greenhouse gas numbers. 260

Project Location

You will be asked to check all that apply: Rural / Suburban / Urban

Innovation and Strategic Impact (200 words):

Note: In the Innovation Grants program, we are defining innovation as a new or better idea, practice, product, process, or strategy that adds value to conservation and more effectively achieves the conservation goals of this program. Innovation can include creative methods for planning and implementing programs; the application of new technologies or ideas for improving current technologies; creative ways of engaging new audiences; and new ways to evaluate success.

Explain the ways in which your project is innovative and how it will have strategic impact on the field of conservation. What will the impact be beyond your community and this project? Will the results yield new thinking in how we grapple with an issue or expand our reach and impact?

As far as we have been able to ascertain, this level of habitat adaptation planning has yet to be implemented on both local government and regional levels. Many of the sustainability and/or environmental coordinators we spoke to in researching this project expressed great interest in our Habitat Plan and BMP language for Comprehensive Plans and LDRs.

We also believe that for coastal communities who have yet to consider any type of climate adaptation planning, our Habitat Plan will be a very straightforward and understandable solution that will provide a foot in the door to planning for other sectors such as transportation, agriculture, forestry, land use and infrastructure, ocean and coastal resources, public health and water.

Component Three (Water Conservation), may yield some interesting new insights. The Keys population has been shrinking (~24,650) while its tourism visitation has been steadily growing (2.6 Million visitors a year). While enjoying our many attractions, these tourists become some of the biggest users of our water, energy, transportation infrastructure and solid waste capacity. This small research pilot for green behavior change will greatly help us and many other communities trying to go green within a tourism based economy. 193

Risks and Challenges (250 words)

Describe any risks or challenges you will face in achieving your goals, and outline your strategies for overcoming the challenges. Be honest! It will help your project!

The Florida Keys is already a very tightly regulated area with over 60% of total land area owned by government, and vocal minorities are always present to decry more regulation. However, there is much support and significant data to move forward on smart planning for the resiliency of our habitats and imperiled species. Many people remember the plant loss after the storm surges of Hurricane Wilma and see the logic of planning your plantings. We plan to be very proactive with communicating those logical solutions to this very recent experience in order to win theoretical approval long before the final language is adopted.

In the end, our resiliency efforts will only last so long. The Keys will go under and our on-the-ground efforts will be null and void. However, we do believe that our greatest and most utilitarian purpose as the

canary in the coal mine is to pilot new mitigation and adaptation approaches and share them with our wider global community. As a story telling spot, our visitorship of 3 million people a year provides extreme outreach opportunities. As an island community, our relationship with the larger and more mountainous Caribbean nations will hold even more importance to migratory birds as the Floridian peninsula shrinks. We intend to use this experience to continue to grow our learning network.

Project Team, Qualifications, and Roles (250 words)

Describe relevant experience and education of the project team. Describe team members' roles in implementing the project. Describe experience on past projects that have resulted in measurable conservation results.

Although our current Audubon membership is small, our project team has great reach and potential.

Board President Elizabeth Ignaffo is a bird lover by heart, but an engineer by trade and qualified to design and implement our Component Three water conservation project. Also on the team is Board member Mark Hedden, a key organizer during FKAS' past community planting workdays.

The City of Key West is our project lead, and hosts two members of our project team:

Alison Higgins is the City's Sustainability Coordinator, and will lead the Component One workshops for the Habitat Plan, Comprehensive Plan and LDRs. As a past land steward of The Nature Conservancy, she will also provide guidance on Component Two planting plans. Alison also has experience in Community Based Social marketing (as part of her thesis work), and will help design the green tourism surveys. Lastly, as Alison is in charge of documenting the community's greenhouse gas emissions, she will provide the documentation for our project.

Paul Williams is the City's Urban Forester, in charge of landscaping plans and updating the City's Comp Plan from the tree side of things. He will be intimately involved in both Component One and Component Two of this project.

Brought on for their technical expertise, other Key Stakeholders include:

- Chris Bergh, Marine Resilience Director, The Nature Conservancy
- Kim Gabel, Horticultural Agent, Monroe County Extension Service
- Michael Roberts, Senior Administrator of Environmental Resources, Monroe County
- Jerry Lorenz, Director of Research, Audubon of Florida
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Sustainability/Replicability (250 words)

Describe how this project will be sustained beyond the grant period including additional funding, staff resources, or partnerships. Or, if this is designed to be a one-year project, does it provide a replicable model that might be used in other communities or by other organizations?

Although the action items of this project are designed to be completed within the one year timeframe, the lasting impacts of the Habitat Plan, Comprehensive Plan, LDR language, newly planted trees and daily water savings will last into the future without any additional support. This is also what makes this project such a great replicable model for other coastal communities.

Outside of the local government policies set, we also believe that the collaborative process will ensure that state and federal restoration efforts will also follow suit on future plantings.

The Green Tourism study pilot at the Key West Wildlife Center will be just one in a long line of attempts to solve the green behaviors puzzle through Community Based Social Marketing. The City of Key West will continue to search for grants and be ready to act when an opportunity arises.

Finally, it is our hope that the relationships that Audubon engenders during this process will help us and our stakeholders with future collaborations and projects. There are still many more steps between here and true sustainability.

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PARTNER ORGANIZATION(S)

You will be asked to upload information about each of your partner organizations. Describe the role(s) and degree of participation of each partner. Describe the partner's qualifications to perform the intended role and how each will add value to the project. Reviewers are looking for evidence that your partnerships will help both you and your partners achieve something you couldn't achieve alone.

Partner's Role and Qualifications: (250 words)

City of Key West Alison Higgins Planning Department PO Box 1409 Key West, FL 33041 305-809-3726 ahiggins@keywestcity.com

The City of Key West signed on to the Mayors Climate Protection Act in 2007 and began its greenhouse gas emissions baseline in 2008. The adoption of a Climate Action Plan in 2009 resulted in a new position, that of Sustainability Coordinator to help the entire island reduce its carbon footprint by 15% by the end of 2015. The Planning Department is currently updating the City's Comprehensive Plan and will follow up with updates to the Land Development Regulations within the year.

As mentioned in the Project Team section, the City is our project lead and will take the lead on the Habitat Plan, Comprehensive Plan, LDRs and greenhouse gas data collection, as well as provide guidance for the public lands plantings and the green tourism surveys. The engineering department will assist on calculations for the water conservation project. This grant collaboration helps them meet many of the goals set forth in their Climate Action Plan. The City Manager and Board of Commissioners fully support this project.

Second Partner's Role and Qualifications: (250 words)

Keys Energy Services Julio Barroso 1001 James Street PO Box 6100 Key West, FL 33040 305-295-1000 Julio.Barroso@KeysEnergy.com

Keys Energy Services provides electricity for 28,000 customers in the lower keys. Long a green advocate, the utility has led green pledge drives, given away thousands of dollars in energy efficiency rebates, provided

free home energy surveys, provided renewable energy net metering, installed both solar and wind power arrays, and last but not least, given over 36,000 free native trees to the community. They have tremendous outreach capabilities, as they provide in-bill conservation messaging to their customers.

Keys Energy Services will be the lead on the tree giveaway, and an active participant in the Habitat Plan and Comprehensive Plan process, which will give them a unique opportunity to weigh in on the right plant, right place discussion. They are happy to find yet another aspect of green in their annual tree giveaway.

3rd Partner's Role and Qualifications: (250 words)

University of Florida / Monroe County Extension Services Kim Gabel 1100 Simonton Street #2-260 Key West, FL 33040 305-292-4501 Gabel-Kim@monroecounty-fl.gov

The University of Florida/County Extension program has always provided solid research and information to the public. From tried and true Master Gardener program to the new Sustainable Living department, Extension agents make themselves available to help residents, businesses and policy makers. At the local level, our Extension Director heads up the Monroe County Climate Advisory Board, tasked with writing the County's Climate Action Plan. Their Families & Consumer Sciences agent helped the County with its greenhouse gas emissions data collecting and delivers presentations on going green. Their Environmental Horticultural agent not only teaches local Master Gardeners, but also delivers rainbarrel and composting workshops.

The Extension Service will be the educational lead on the tree giveaway, as well helping spread word of the rest of the project via their monthly eNewsletter and radio spots. They are excited to yet again be on the cutting edge of a new project.

4th Partner's Role and Qualifications: (250 words)

Monroe County Michael Roberts 2798 Overseas Highway Marathon, FL 33050 305-289-2502 Roberts-Michael@MonroeCounty-FL.Gov

Monroe County signed on to the Mayors Climate Protection Act in 2007 and began its government operations greenhouse gas emissions baseline in 2008. It created a Green Initiatives Task Force in 2008, which morphed into the Climate Change Advisory Committee in 2011. As one of the first local government collaborations in decades, the County teamed up with three of its municipalities to apply and win an Energy Efficiency and Conservation Block grant. The County hired its Sustainability Coordinator in 2011 and is currently working on its Climate Action Plan.

The County will be active participants in the Habitat Plan, Comprehensive Plan and LDRs. The Growth Management department is currently updating the County's Comprehensive Plan and will follow up with updates to the Land Development Regulations. The County Administrator and Board of County Commissioners fully support this project.

5th Partner's Role and Qualifications: (250 words)

Florida Keys National Wildlife Refuges Tom Wilmers 28950 Watson Blvd Big Pine Key, FL 33043 305-872-2230 Thomas_wilmers@fws.gov

As a subset of the U.S. Fish and Wildlife Service, the Florida Keys National Wildlife Refuge is tasked with looking after endangered animals, habitats and specifically migratory birds. They manage two Important Bird Areas (Key West National Wildlife Refuge and Great White Heron National Wildlife Refuge), and were active collaborators on the White Crown Pigeon Preserve in 2005, but have no jurisdiction on the island of Key West nor many islands to its east. Their research has documented the importance of migratory foraging trees in Key West's urban areas and they have begun an educational campaign to encourage people to plant forage trees.

They will provide technical assistance for the Habitat Plan, Comprehensive Plan and LDRs, as well as key guidance in the public conservation lands planting process.

6th Partner's Role and Qualifications: (250 words)

Audubon of Florida Jerry Lorenz, Ph.D. Tavernier Science Center 115 Indian Mound Trail Tavernier, FL 33070 305-852-5318

Audubon of Florida not only looks after the health of Florida's bird populations, but also serves to "conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity". Although most of their work is in the Florida Bay, the Tavernier Science Center is a longtime collaborator with the Florida Keys National Wildlife Refuges, participating in both Reddish Egret and White-crown Pigeon studies in the backcounty islands of the Key West and Great White Heron National Wildlife Refuges.

Audubon of Florida will provide technical assistance for the Habitat Plan, Comprehensive Plan and LDRs, as well as key guidance in the public conservation lands planting process. They are excited for this project because the Keys are a major bottleneck for the migratory corridor along the eastern seaboard of North America and large numbers of birds of prey and songbirds migrate though the keys twice each year.

7th Partner's Role and Qualifications: (250 words)

Key West Wildlife Center Tom Sweet PO Box 2297 Key West, FL 33045 305-292-1008 keywestwildlifecenter@hotmail.com The Key West Wildlife Center rehabilitates and releases approximately 700 birds each year. They also take a proactive approach to protecting birds, recently adding fencing to an elementary school roof to keep recently hatched baby Least terns from falling off. Their rehab facility is free to the public, and relies mostly on donations from visitors.

The Wildlife Center will provide input on the design of the cistern/salt water well as well as collaborate on the green tourism surveys and provide updates via their facebook page. They and their feathered friends will be the primary beneficiaries of Component Three, a project they could never afford on their own.

(Copy and paste boxes for additional partners if necessary.)

You will also be asked to provide contact details for each partner, including:

Letter(s) of Support

You will be asked to upload short letters of support from (each of) your primary partner(s). In their letter of support, partners should explain why they are supporting the project and how they will take part in it. (As a rough guide, if a partner is involved in more than 30% of the project in terms of time or money, it should be considered a primary partner. We will expect at least one primary partner and a letter of support from them.)

BUDGET

Provide a justification for your costs (500 words). Your justification should include three elements:

1. Reason why each expense is needed

2. How you calculated each expense (e.g., # of trips to project site at \$xxx per trip)

3. A summary of any matching funds you secured to support your project, and/or a description of in-kind support for your project.

• Remember to include justification for all categories, including staff salaries, consultant and/or subcontractor fees (subcontractor fees include financial allocations to partner organizations), materials and supplies, training, marketing and promotion, equipment, travel, and any other direct costs.

* *Personnel*: All listed partners will provide an estimated 40 hours of staff time to participate during Components One and Two. Project Lead Alison Higgins will provide an additional 80 hours to administer Component one, as well as assist and provide project management for Components Two and Three. Horticultural Agent Kim Gabel will also provide an additional 200 hours of education and outreach programs stemming from all components.

* *Volunteers*: (at \$18.20/hour) FKAS has no staff, so our time will be tracked in volunteer hours. This includes our Presidents project oversight (20 hours), with other leadership volunteers hosting volunteer workdays (30 hours).

- Master Gardeners will also provide an estimated 100 volunteer hours.
- Planting Workday volunteers from the community will also provide an estimated 135 hours.
- Consultant: No consultant fees will be charged or matched for this project.
- Subcontractor:
 - Installation of Cistern System (\$10,000): 10,000 gallon cistern at building costs of approximately \$1/gallon, based on three local examples.
 - Installation of Salt Water Well (\$5,000): Excavation (\$3000) and Pump (\$2000), based on one local example.
 - Site prep (\$2,000): Hole drilling in caprock for community planting workdays (200 holes at \$10/hole), based on long history of restoration experience.

- Installation (\$3,000): Hole drilling in caprock and planting of ½ of public lands trees (200 trees at \$15 per tree), based on long history of restoration experience.
- Green Tourism Study (\$4,000): Design, signage, initial survey, follow up survey, and report, based on current Climate Marketing contract for residents and businesses.
- Materials & Supplies:
 - Adaptation Plan Meetings (\$250): Handouts, supplies, snacks, final printing.
 - Volunteer Planting Workdays (\$500): Tools, snacks, water, etc for 3-5 workdays.
 - Equipment

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- Trees for Public Lands (\$3,500): 400 native plants, sized 3-5 gallons at approximately \$7/plant.
- Trees for Keys Energy giveaway (\$10,500): 1,500 native plants, sized 3-5 gallons at approximately \$7/plant.

Travel: No travel will be charged or matched for this project.