



PPBEP 2021-2022 Community Grant Recommended Projects

Project Name	Applicant	Requested	Proposed Award
Perdido Key Coastal Demonstration Garden	Escambia County Natural Resources	\$10,450	\$10,450
<p>Summary: Escambia County proposes using \$10,450 in funds to install a coastal landscaping demonstration garden adjacent the Perdido Key Community Center. The Perdido Key Area Chamber of Commerce, supported by Escambia County, is currently working to turn this under-utilized green space adjacent to the building into a small park with amenities for pedestrians and cyclists traveling along the future Perdido Key Multi Use Path. An EnergiPlant solar windmill was installed onsite in Summer 2021 in support of this project. The future “Preservation Park” will feature ADA-accessible benches and tables, a water bottle refill station, a bike repair station, and educational signage about threatened and endangered species in the area. The demonstration garden would replace and revamp the current landscaping and provide visitors and residents examples of landscaping techniques with native plants. Native landscaping is required for properties who received authorization through the County’s Perdido Key Habitat Conservation Plan (HCP), with plant species designed to benefit native wildlife on the Key, including the critically endangered Perdido Key Beach Mouse.</p>			

Project Name	Applicant	Requested	Proposed Award
Estuary Exhibit	Pensacola MESS Hall	\$11,627	\$11,627
<p>Summary: The Pensacola MESS Hall Estuary Exhibit will engage visitors in hands on discovery about the science and social issues surrounding our local watershed. The activities will invite active, prolonged engagement that encourages learners to ask their own questions and make their own discoveries. It will also include signage aimed primarily at adult learners that emphasizes important issues in our local environment. The exhibits will focus on life on land, life in water, and our changing earth, from erosion to sea level rise. As always at the MESS Hall, the activities will incorporate math, engineering, and science, as well as connect with other fields like economics and ethics. In addition to the built exhibits, we will hold monthly special programs. These will include facilitated hands-on activities. We will invite local experts to share their knowledge at these programs. The exhibit will reach a broad audience. The general visitors to the MESS Hall, who will all have an opportunity to explore the exhibit and will attend the special programs, include families with elementary age children. Additionally, a large portion of visitors are from out of town. Learners on field trips will also enjoy the exhibit, and free trips will target underserved students. An interactive adult forum on sea level rise will engage adults in critical thinking about prioritizing community resilience.</p>			



Project Name	Applicant	Requested	Proposed Award
Historical Ecology of Pensacola and Perdido Bays: Using the Past to Protect the Future of Our Bays	University of West Florida	\$43,461	\$43,461
<p>Summary: Historical ecology is an interdisciplinary field focused on the interaction between society and the environment and the consequences of those interactions on the landscape and resources. Applied historical ecology uses historical knowledge and applies it to ecosystem management (e.g., habitat restoration targets). This historical ecology project will address the following questions: What was the historical coverage of wetlands, oysters, and other key habitats in the Pensacola and Perdido Bay systems? How have those habitat distributions changed over time? Is there historical documentation of oysters in Perdido Bay? Was the distribution of seagrass within the system similar to where it's found today, or has that changed over time? How has urban development altered hydrology and habitat change? Historical records will be sourced from local historical societies, private collections, and other archives. Using documents, narrative accounts, maps, and photos we will piece together the historical extent of key habitats during different time periods to document a timeline of changes. We will digitize maps and photos, georeference them, classify habitats, and calculate coverage and percent change over time. To increase community awareness of the importance of our estuaries to shaping our local history, we will host a public lecture series and UWF seminar, create educational videos about the public lecture series, and create interactive ArcGIS StoryMaps. By integrating stories using historical ecology we will engage diverse community members in these conversations and demonstrate the role that they can play in shaping the future sustainability of the Pensacola and Perdido Bay systems.</p>			

Project Name	Applicant	Requested	Proposed Award
Fish communities on remnant and restored oyster reefs of East and Escambia Bays: a baseline for assessing restoration success	University of South Alabama	\$46,703.80	\$22,850
<p>Summary: Healthy oyster reefs provide a variety of ecosystem services that benefit coastal communities and beyond. They support oyster fisheries, improve water quality, and provide important habitat for a diversity of species, including many fisheries species of great social and economic importance. Significant oyster restoration projects continue in the Pensacola Bay system, and the enhancement of fish habitat is a key goal of many projects. However, sampling fish communities on oyster reefs is challenging. This project will use underwater video to describe the fish communities on remnant and restored oyster reefs in East and Escambia Bays. By describing and comparing the fish communities among oyster reefs with different restoration status, depth, substrate type, and location within the bays, we can identify the drivers of variation in fish community composition among reefs and across the bays. Evaluating the success of existing restoration projects at enhancing fish habitat is a critical component of guiding future restoration efforts that wish to maximize fish habitat</p>			



benefits, and returns on restoration investment. The findings will also provide a baseline from which to monitor fish communities in the bays into the future. Understanding the current fish communities and their responses to restoration efforts will help maximize the health of the Bay's ecosystems, and fishing opportunities for coastal communities around Pensacola Bay.

Project Name	Applicant	Requested	Proposed Award
Citizen Science Water Quality and Habitat Monitoring Network: Community Deployment and Network Sustainability	Institute for Human and Machine Cognition	\$49,830	\$49,830

Summary: The project will seek to deploy and release to the community the previous citizen science pilot software platform/system. The pilot supports teaming citizens and their observations and ubiquitous phones for Pensacola water and habitat monitoring while providing novel approaches of reporting data to help form citizen connections, informing and education between citizens and the Bayou Texar and Pensacola Bay watershed. The deployment phase is the next step to implement a working software ecosystem for use by waterfront and adjacent property owners and also the general public at park access points. The citizens can support, over time, phone-based water spectral fingerprint image captures, complementary observational data, data visualizations, GIS, and the community resilience information system (web-based data portal, twitter based reporting and augmented waterside augmented reality utility). Additionally, collaboration tools will be added to the software to facilitate citizen teamwork. The project will also demonstrate as part of the citizen network, an autonomous adaptive sampling capability using an AUV from docks along the waterway that is triggered by the citizen and satellite derived data. The project will also devise a plan for expansion into another waterway (Bayou Chico) and devise a crowdsourcing model for Operation and Maintenance (O&M) Sustainability. The central goal remains to allow a watershed information and engagement system, generated by the people and stakeholders of the watershed.

STIPULATIONS: IHMC will clarify AUV details and long-term plan for maintain software, explore public locations for community input in addition to dock owners

Project Name	Applicant	Requested	Proposed Award
Santa Rosa County Watershed Awareness Signage and Stormwater Drain Marking Project	Santa Rosa County	\$17,421	\$ 16,573

Summary: Santa Rosa County proposes a watershed educational awareness program that builds upon 41 existing watershed boundary signs throughout the nine identified watersheds of the county. The signs were originally installed by a grant from the Bay Area Resource Council in 2008. The signs in their current condition are in need of being replaced due to their



**PENSACOLA
& PERDIDO BAYS
ESTUARY PROGRAM**

poor legible condition. In collaboration with the local citizen support group the Santa Rosa County Watershed Committee and the county GIS department has ground truthed all 42 watershed boundary signs. In addition to, the project proposes to place 225 identification medallions onto specific selected storm drains within each watershed indicating where they flow into local waterways. This provides watershed educational awareness to the public to take better care of its resources and help solve problems like: Dumping of household garbage, old appliances and yard waste into streams, improper use and disposal of chemicals and littering. This project will provide watershed educational awareness about how human activities affect our Pensacola Bay Watershed. Santa Rosa County has seen an increase of people moving into the area from outside locations, with the landscape changing drastically due to large housing and commercial developments. The project will design, purchase, replace and install all 41 watershed boundary signs; in addition to, design, purchase and place medallions on 225 selected storm drains within the nine identified watersheds in the county.

Project Name	Applicant	Requested	Proposed Award
EscaRosa OysterCorps	Franklin's Promise Coalition, Conservation Corps of the Forgotten and Emerald Coasts	\$49,999	\$49,999

Summary: The OysterCorps Project expands existing programs in Santa Rosa and Franklin, Gulf, and Bay Counties working to enhance and protect coastal resources in Pensacola and Perdido bays by meeting the priorities of improving water quality, habitat restoration, promoting community resilience, and building awareness of the watershed as outlined in the PPBEP Community Grant Program RFP. Specifically, the funds from this grant will serve to expand Franklin’s Promise Coalition’s (FPC) existing award with Santa Rosa County and expand oyster shell collection and restoration efforts by increasing shell collection and utilizing shell that has already been collected throughout the Pensacola and Perdido bays. Existing and future collection of shells and plants will be used in shoreline restoration projects in the Pensacola and Perdido Bay systems. This project will address the grant priorities of protecting and enhancing coastal resources and improving water quality by collecting/recycling oyster shell, growing marsh plants, implementing living shoreline and marsh restoration projects and by educating participants through hands-on work experience. Furthermore, the funds will provide needed labor force to aid in restoration efforts throughout the watersheds. Members will have the opportunity to participate in active restoration, project design, and material construction. Shell recycled during the first year of the Santa Rosa Oyster Shell Recycling program will be utilized to build reef structures (bags, mattresses, balls, etc.). Restored coastal habitat helps protect shorelines from erosion, creates habitat for sensitive species, and improves water quality.



Project Name	Applicant	Requested	Proposed Award
Fischer Landing Master Plan Study	Town of Century	\$45,210	\$45,210
<p>Summary: The Fischer Landing is a 5-acre park, located along the northern reaches of the Escambia River and is named for the Town of Century Councilman, Jerry Fischer, who worked diligently during and after his elected service to see the land acquired and funding secured for the boat ramp and park. This Pensacola and Perdido Bay Estuary Program (PPBEP) Community Grant Application is aimed at providing an update to the existing Fischer Landing Master Plan including an updated Master Site Plan, Management Plan, Educational Signage and Sedimentation Study. This project qualifies within a couple Community Grant categories, specifically Watershed Awareness (through the design and installation of educational signage about watersheds, floodplains, and natural habitats), Water Quality (through identifying potential on-site and off-site sources of sedimentation and accretion) and Research (through the inventory of on-site natural systems and development of site-specific management plans). It also provides a location for future citizen science by providing protocols for future resource monitoring and reporting. The Project will address multiple PPBEP Goals set out in the Comprehensive Conservation & Management Plan (CCMP) through:</p> <ul style="list-style-type: none">• Provide a framework to understand the sediment loading in the upper reaches of the Escambia River, (CCMP Goals 4.2 and 4.3) and• Provide improved habitat by reducing the presence of invasive species while updating knowledge of the presence of protected species. (CCMP Goal 5.3.6)			