POTENTIAL DEEPWATER HORIZON OIL SPILL RESTORATION PROJECTS:
PROVIDING INFORMATION TO ASSIST WITH PROJECT ASSESSMENT

To help you propose projects to the State of Florida's Department of Environmental Protection (DEP), we developed this project submission form. You are not required to complete this form to submit a project. However, completion of the form will help DEP gather the information required to completely and accurately evaluate a project against the selection and evaluation criteria. Where appropriate in the form, please provide references to any additional supporting information.

Project Name: *(Include project number from DEP's existing list of submitted projects, if applicable.)*

Marine Turtle Protection in Bay County, FL (Proposal B-20)

Contact Information:

Kennard Watson, Turtle Watch Director, pcbturtle@yahoo.com, (850) 238-9895

Location for Project Implementation: *(For example, city and county, GIS coordinates if known.)*

The project is located in Bay County and will focus on 17.6 miles of Gulf beach between St. Andrews State Park and Camp Helen State Park. This urban beach supports nesting by threatened loggerhead turtles (*Caretta caretta*), endangered green turtles (*Chelonia mydas*), and endangered leatherback turtles (*Dermochelys coriacea*). Since 1991, the Turtle Watch program of the St. Andrew Bay Resource Management Association has protected sea turtles on this beach under State Permit No. 038.

Brief Project Narrative: *(Describe what the project will do.)*

The project will educate the public about sea turtles and improve sea turtle nesting habitat by reducing harmful effects of artificial lighting within the project area. The lighting improvements will consist of two parts, residential and street lighting, identified as the most important contributors to loggerhead hatchling disorientation incidents during the 2013 nesting season (Attachment 1, Figure 6). The project also will educate beachfront property owners, tourists, and local agencies about the need to protect sea turtles. Panama City Beach is a major summer tourist destination and provides an ideal location to educate large numbers of people from all walks of life. Outreach will include television announcements and educational literature distributed to beachfront developments.

Estimated Project Costs: *(Describe the costs of the project, including any assumptions for contingency and ongoing operations and maintenance. Identify other available funding sources such as matching funds, in kind contributions or state or federal dollars. If possible, attach a schedule of anticipated costs, by year, over the anticipated project life.)*

Total project cost of $100,000 will be distributed between street lighting, residential lighting, and educational outreach. The street lighting conversion is the highest priority and most expensive of the three efforts. We are budgeting $60,000 for up to three demonstration projects, depending on the number, cost, and types of lights to be converted. State and federal wildlife agencies will meet with the Gulf Power Company to discuss candidate light fixtures and implementation approaches. The project will be performed in the summer of 2014 or as soon as the funds and agreements are in place. The remaining $40,000 will be will be divided between educational and residential lighting projects, which will be performed over a 2-year period starting from the date of the grant award.

Anticipated Project Outcome with Respect to Screening Criteria

S1. Technically and administratively feasible: *(Briefly describe the critical technologies involved and any relevant past experience with similar projects.)*

Street lighting. Three candidate sites within the project area have been identified at Bid-a-Wee Beach, Laguna Beach, and Sunnyside Beach. Street lights in these areas have contributed to hatchling disorientation incidents for several years. All will be converted if sufficient funds are available, with Bid-a-Wee Beach as the highest priority. Turtle Watch documented street lights in this area contributing to hatchling disorientation incidents at 7 loggerhead nests during 2002-2013. Also, an endangered green turtle nest laid at Bid-a-Wee in 2013 had to be protected with a restraining cage due to concerns from nearby street lights. Fixture selection will be made in consultation with Gulf Power and wildlife agencies responsible for sea turtle management. In 1993, Gulf Power placed shields on street lights at Sunnyside Beach in western Bay County to prevent light spillover onto the beach where loggerhead nests were located. This effort was performed at the request of Turtle Watch and the U.S. Fish and Wildlife Service. While successful, it did not lead to expanded use of turtle-friendly street lights by Gulf Power. Coastal street lighting remains a serious threat to turtles in this area (Attachment 1). The intent of the proposed effort is twofold: to improve nesting habitat impacted by the oil spill and provide a template for future projects by selecting a light fixture agreeable to all parties and demonstrating its effectiveness. The selected fixture must balance the competing needs of providing sufficient roadway illumination for vehicle safety and pedestrian security while preventing light spillover onto the nesting beach.

Residential lighting. Light fixtures and bulbs will be purchased for distribution to beachfront property owners in the project area. We will work with local code enforcement officers to identify appropriate fixtures and coordinate the selection of properties. The City of Panama City Beach distributed fixtures and bulbs during implementation of the lighting ordinance. According to the code enforcement office, the effort improved compliance and cooperation between the City and affected property owners.

Education. Panama City Beach is one of the most popular tourist destinations on the Gulf coast, attracting several million visitors annually. Furthermore, the summer tourist season coincides with the sea turtle nesting season, so the educational opportunities are significant. We will utilize lessons learned from a 2004 grant awarded by the Sea Turtle Conservancy (STC) from Sea Turtle License Plate Funds ($11,455). This effort created educational handouts for distribution to homes and businesses, educational signs at walkways accessing the beach, and a video for local television with information on the lighting ordinance. We currently have a small grant from the STC ($2,327) to purchase light switch stickers for use in beachfront buildings and a fiberglass loggerhead model for educational activities. This grant will be completed in April 2014.

S2. Provides environmental benefits: *(Briefly describe the nature, magnitude, and timing of any environmental benefits attributable to the project and any potential environmental costs associated with implementing or maintaining the project, e.g., loss of a habitat or conversion of habitat from one type to another during implementation.)*

Sea turtle nesting habitat in Bay County will be improved by reducing artificial lighting of Gulf beaches through demonstration projects to improve street lighting, distribution of turtle-friendly lights for residential development, and educational efforts in the local media. Street lights and residential lights are the two most serious threats to hatchling turtles on Panama City Beach, based on reports submitted by Turtle Watch to the Florida Fish and Wildlife Conservation Commission (FWC) during the 2013 nesting season (Attachment 1, Figure 6).

Activities will commence during the 2014 summer nesting season, or as soon as funds are available.

S3. Does not conflict with any ongoing or planned response or remediation work: *(Briefly describe ongoing response activities in the project implementation area, if any, and why the project does or does not interfere with that work.)*

No activities are occurring in the project area that would interfere with the proposed work.

S4. Complies with applicable and relevant federal, state, local, and tribal laws and regulations: *(No information is needed for this screening criteria.)*

Anticipated Project Outcome with Respect to Evaluation Criteria

E1. Will restore, rehabilitate, or replace a natural resource or service[1] believed/demonstrated to have been injured as a result of the Deepwater Horizon oil spill or associated response activities: *(Briefly describe the nature of any relationship between the new/improved resources or services and those adversely impacted by the oil spill.)*

The project area supports nesting by threatened loggerhead turtles, endangered green turtles, and endangered leatherback turtles. During the 2010 oil spill disaster, tar balls washed onto Panama City Beach, and crews worked day and night to clean the beaches. Of the 16 loggerhead nests laid within the project area during the spill, 10 were moved to the Kennedy Space Center to prevent the hatchlings from entering oiled waters. The fate of these hatchlings released onto Atlantic beaches is unknown. Nesting turtles also were disturbed by the cleanup activities in 2010. Crews on the beach at night encountered at least two nesting loggerheads.

This area impacted by the oil spill is the focus of the proposed effort to reduce beachfront lighting and enhance public awareness of sea turtles. Reduced beachfront lighting will improve hatchling survival by decreasing disorientation incidents and help rebuild sea turtle populations on our local beaches.

[1] In this form, "Services" (or "natural resource services") refers to the functions performed by a natural resource for the benefit of another natural resource and/or the public. Services can be "ecological services" – physical, chemical or biological functions that one natural resource provides for another (such as provision of food) – or "human services" – the use of natural resources used by humans that provide value to the public (such as hunting and fishing).

E2. Is located in, or nearby, resources or services injured by the deepwater horizon spill: *(Briefly describe where the project would be implemented with respect to past/ongoing remediation work.)*

The project is located in Bay County on 17.6 miles of Gulf beach between St. Andrews State Park and Camp Helen State Park. This entire area was impacted by the oil spill, as noted above.

E3. Is ready for implementation, e.g., design, permitting, and necessary impacts assessments have been completed: *(Briefly describe where in the permitting process the project stands along with an estimated date of when the project can be implemented if it is not currently ready.)*

There are no permitting issues that would obstruct the proposed activities. We have received our 2014 Marine Turtle Permit (MTP-14-038) from FWC, and we are working with state, federal, and local officials to identify lighting projects for the 2014 summer nesting season. Regarding the street lighting project, we are working with Lisa Lehnhoff of the Panama City Field Office of the U.S. Fish and Wildlife Service (FWS) and Kelly Roberts of FWC, Imperiled Species Management Section in Tallahassee. FWS and FWC will help Turtle Watch coordinate with Gulf Power and local officials. Ms. Lehnhoff has been in touch with the FWS field office in Fairhope, Alabama. They are working with Gulf Power to install shielded pole lights using an amber light-emitting diode (LED) at a coastal parking area in Santa Rosa Beach, Florida. Attachment 2 shows pictures of the fixture, which has been certified by FWC for use on sea turtle nesting beaches. We will use this fixture as a candidate for our project. We contacted Jeannie Krohn, President of the Bid-a-Wee Park Incorporated, which represents the property owners. She has no objection to the proposed project and supports efforts to reduce impact of street lights on sea turtles.

Regarding the residential lighting project, we are working with James Tindle of the Panama City Beach Code Enforcement Office.

E4. Is cost effective: *(Briefly describe why you think the project is cost effective. Discuss whether this project is more cost effective than alternative projects which would provide similar resource or service benefits.)*

Street lighting is governed by a sole source, Gulf Power, which precludes competing estimates. We will work with Gulf Power and wildlife agencies to select cost-effective fixtures.

E5. Has a high potential for long-term success as demonstrated by incorporating established/reliable methods and technologies: *(Briefly describe if/how critical methods and technologies that will be used to implement the project could be considered reliable or proven.)*

We will utilize proven technologies to reduce harmful effects of artificial lights on sea turtles. These include shields to prevent light-spillover onto the beach and light sources with long wave lengths to minimize disturbance to sea turtles. Street lights have been identified as a major source of disorientation for loggerhead hatchlings on Panama City Beach (Attachment 1, Figure 6).

We hope to show improvements this summer if the lighting project can be implemented before sea turtle nests begin to hatch in July 2014. Otherwise, the benefits will be demonstrated during the 2015 nesting season or when funding becomes available.

E6. Is likely to provide benefits rapidly following implementation: *(Briefly describe the anticipated change in benefits anticipated over time.)*

The project will demonstrate benefits rapidly following implementation, as discussed above.

E7. Has a high likelihood of public acceptance: *(Briefly describe evidence to support the given answer based on surveys or results and assessments from past projects. Known or likely opposition to a project should be recognized.)*

Since 1991, Turtle Watch has protected sea turtles on Panama City Beach, and we have gained broad public support during the past 24 years. Refer to our Facebook page for public feedback (search Panama City Beach Turtle Watch). Panama City Beach is a major tourist destination and an ideal place to educate a broad spectrum of the public to the plight of sea turtles.

We are aware of no active opposition to the proposed activities, but we are battling apathy. Environmental impacts from the oil spill are not well understood in our community, and memory of the 2010 disaster in the Gulf is fading. For example, the Bay County Commission recently created a RESTORE Advisory Committee consisting of nine members from the local business and educational sectors, but there are no assigned seats for ecological experts. This action reflects the belief that Bay County experienced no environmental damage from the spill other than minor impacts from tar balls washing ashore, neglecting the harm to local sea turtle populations due to cleanup activities and nests that were moved to the East coast during the spill.

WE WANT YOUR INPUT!

Submit this form via email to Jessica Kanes at Jessica.Kanes@dep.state.fl.us . If you have any questions or concerns about the process for submitting a project, please contact:

Jessica Kanes
Florida Department of Environmental Protection
Environmental Specialist I
(850) 670-7707
Jessica.Kanes@dep.state.fl.us
Apalachicola NERR/FDEP
108 Island Drive
Eastpoint, FL 32328

A current summary of projects is accessible through the Florida DEP's website at http://www.dep.state.fl.us/deepwaterhorizon/projects.htm (click on "*View the list of restoration project ideas*").