Deepwater Horizon Natural Resource Damage Assessment Trustee Council

Improving Habitat Injured by Spill Response: Restoring the Night Sky

General Project Description

This project would improve the quality of nesting beach habitat by addressing artificial lighting, a pervasive negative impact to nesting loggerhead sea turtle females and hatchlings on Gulf beaches. Sites in Baldwin County, Alabama, and along public conservation lands and nesting beaches in Escambia, Santa Rosa, Okaloosa, Walton, Bay, Gulf, and Franklin counties in Florida are included in this project proposal (map on reverse side).

The project involves multiple components:

- For each conservation site identified, assessments would be conducted of existing lights visible from the beaches on project areas as well as adjacent properties prior to lighting retrofits;
- Coordination with site managers on development of plans to eliminate, retrofit, or replace existing light fixtures on the property or to otherwise decrease the amount of light reaching the loggerhead sea turtle nesting beach;
- Retrofitting streetlights and parking lot lights;
- Increased efforts by local governments to ensure compliance with local lighting ordinances; and
- A public awareness campaign including educational materials and revision of the FWC Lighting Technical Manual to include Best Available Technology.

Impacts of light pollution controls: Before and after.

Resource Benefits and Relationship to Injury

Response activities to the *Deepwater Horizon* oil spill, such as heavy equipment operation and lighting the beaches at night, caused significant disturbance to nesting habitat for loggerhead sea turtles. Artificial lights along beaches deter sea turtles from using the area and modify essential behaviors, including migration to and from the beach and successful nesting. In order to compensate for the disturbance caused by response, the goal of this project is to restore beach nesting habitat for sea turtles by replacing harmful artificial lighting.

Methods and Results of Offsets Elimination

For the purposes of negotiations of Offsets with BP in accordance with the Framework Agreement, the Trustees used Habitat Equivalency Analysis (HEA) to estimate Offsets provided by this project. Offsets reflect units of discounted service acre years (DSAYs) of nesting habitat for nesting loggerhead sea turtles, and will be applied against response injury to nesting habitat for loggerhead sea turtles along the Florida and Alabama coast injured by the Spill response as determined by the Trustees' injury assessment.

In determining DSAYs for this project, the Trustees considered a number of factors, including, but not limited to, the relative habitat benefits provided by reducing artificial lighting on loggerhead nesting beaches, the anticipated performance of the lights over time, and the potential number of acres of loggerhead nesting habitat that would be improved by the project.

Total estimated offsets is 1084 DSAYs:

- 1053 DSAYs of sea turtle nesting habitat in Florida; and
- 31 DSAYs of sea turtle nesting habitat in Alabama.

Estimated Cost

The total estimated cost of this four-year project is $4,321,165.

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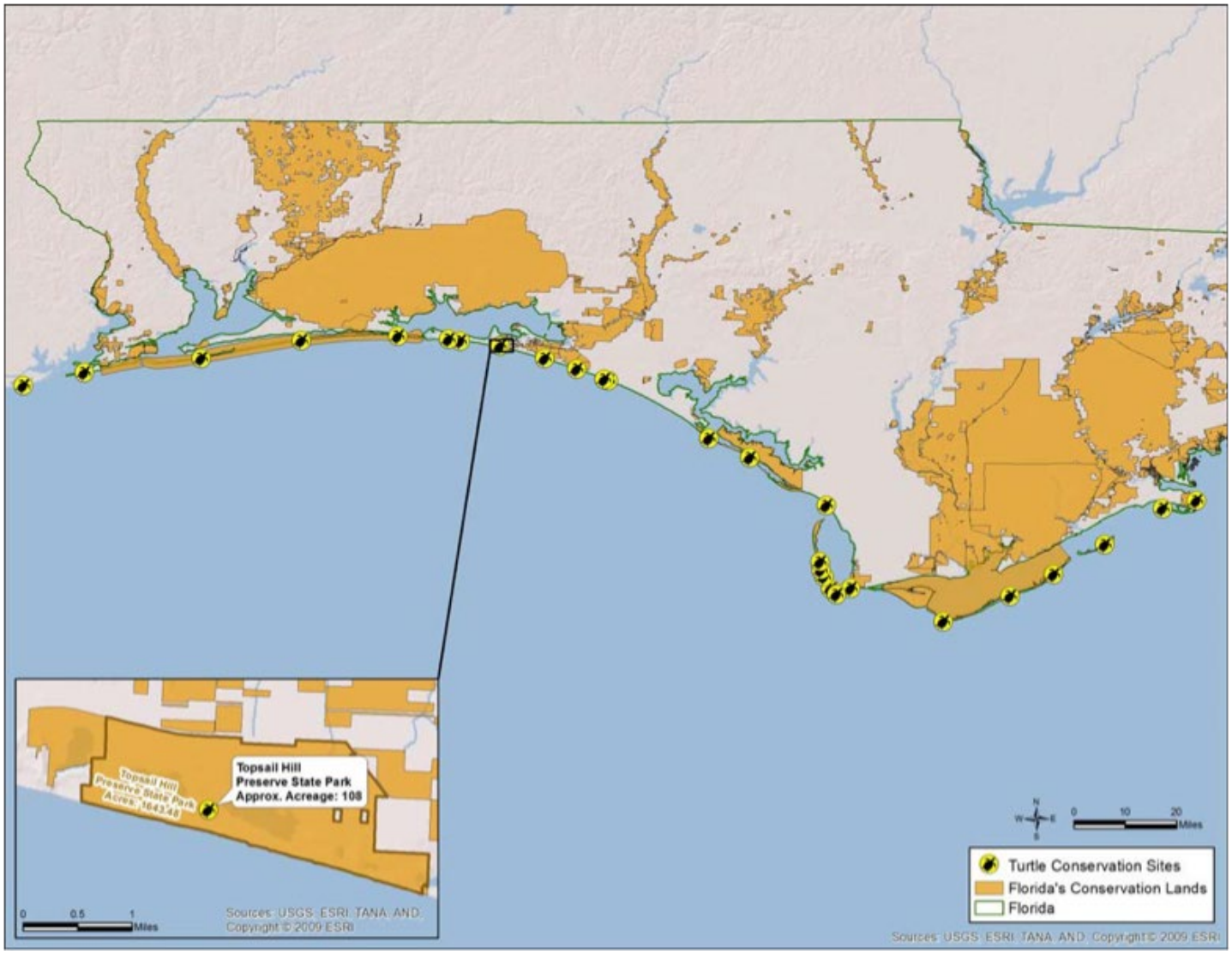

Improving habitat injured by spill response: Restoring the Night Sky project locations.