1. DATE ISSUED MM/DD/YYYY 1a. SUPERSEDES AWARD NOTICE dated except that any additions or restrictions previously imposed 01/18/2022 remain in effect unless specifically rescinded 2. CFDA NO. 15.658 - Natural Resource Damage Assessment and Restoration 3. ASSISTANCE TYPE Cooperative Agreement 4. GRANT NO. F22AC00490-00 5. TYPE OF AWARD Other Originating MCA # 4a. FAIN F22AC00490 5a. ACTION TYPE New 6. PROJECT PERIOD MM/DD/YYYY MM/DD/YYYY From 01/01/2022 Through 12/31/2032

Through

NOTICE OF AWARD



AUTHORIZATION (Legislation/Regulations)

Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C §9601 et seq.)

8. TITLE OF PROJECT (OR PROGRAM)

From

7. BUDGET PERIOD

Fort Pickens Road- Pensacola Beach Wildlife Lighting Retrofits Project

MM/DD/YYYY

01/01/2022

		ı				
9a. GRANTEE NAME AND ADDRESS		9b. GRANTE	E PROJECT DIRECTOR			
Escambia, County of		Saman	tha Bolduc			
221 Palafox PI STE 200		_	afox PI Ste 200			
Pensacola, FL 32502-5835			ola, FL 32502-5835			
		Phone:	850-595-3460			
10a. GRANTEE AUTHORIZING OFFICIAL		10b. FEDERA	AL PROJECT OFFICER			
Mr. Taylor Kirschenfeld		Mary F	Fleck			
221 PALAFOX PLACE		341 No	rth Greeno Road			
Natural Resources Management Department		Fairhop	e, AL 36532			
PENSACOLA, FL 32502-5833		Phone:	2562831164			
DI 050 505 1000						
	ALL AMOUNTS ARE S	SHOWN IN US	D			
11. APPROVED BUDGET (Excludes Direct Assistance)		12. AWARD C				
I Financial Assistance from the Federal Awarding Agency Only		a. Amount of	Federal Financial Assistance (from	, ψ		462,000.00
II Total project costs including grant funds and all other financial part	ticipation II		ligated Balance From Prior Budget I	•		0.00
a. Salaries and Wages\$	0.00		ulative Prior Award(s) This Budget P			0.00
b. Fringe Benefits\$	0.00	d. AMOUNT	OF FINANCIAL ASSISTANCE THIS	S ACTION \$		462,000.00
b. Fringe Benefits\$		13. Total Fede	eral Funds Awarded to Date for Pr	oject Period \$		462,000.00
c. Total Personnel Costs\$	0.00		ENDED FUTURE SUPPORT			
d. Equipment\$	0.00	(Subject to the	e availability of funds and satisfactor	y progress of the p	roject):	
e. Supplies\$	0.00	YEAR	TOTAL DIRECT COSTS	YEAR		L DIRECT COSTS
f. Travel\$	0.00	î	\$	d. 5	\$	
			\$	e. 6	\$	
g. Construction\$	0.00	c. 4	\$	f. 7	\$	
h. Other\$	0.00	15. PROGRAM II ALTERNATIVES:	NCOME SHALL BE USED IN ACCORD WITH (ONE OF THE FOLLOWIN	IG	
i. Contractual\$	420,000.00	b. /	DEDUCTION ADDITIONAL COSTS			b
j. TOTAL DIRECT COSTS	\$ 420,000.00	d. (MATCHING DTHER RESEARCH (Add / Deduct Option) DTHER (See REMARKS)			
k. INDIRECT COSTS	\$ 42,000.00					
		ON THE ABOVE T	IS BASED ON AN APPLICATION SUBMITTE ITLED PROJECT AND IS SUBJECT TO THE TE CE IN THE FOLLOWING:			
I. TOTAL APPROVED BUDGET	\$ 462,000.00	a. 1	The grant program legislation			
		C.	The grant program regulations. This award notice including terms and conditions	, if any, noted below unde	er REMARKS.	
m. Federal Share \$	462,000.00	d. F	ederal administrative requirements, cost princip	les and audit requiremen	ts applicable to	•
n. Non-Federal Share \$	0.00	prevail. Accepta	e are conflicting or otherwise inconsistent p nce of the grant terms and conditions is act e grant payment system.	chowledged by the gran	t grant, the ab ntee when fun	ds are drawn or otherwise

MM/DD/YYYY

12/31/2032

GRANTS MANAGEMENT OFFICIAL:

James Carithers, GRANTS MANAGEMENT SPECIALIST 5275 LEESBURG PIKE, MS:WSFR FALLS CHURCH, VA 22041

REMARKS (Other Terms and Conditions Attached -

Phone: 703-358-2550

17. VE	ENDOR CODE	0070173838	18a. UEI	18b. DUNS	075079673	19. CONG. DIST. 01
LINE#	FINANCIAL ACCT	AMT OF FIN ASST	START DATE	END DATE	TAS ACCT	PO LINE DESCRIPTION
1	0051018096-00010	\$462,000.00	01/01/2022	12/31/2032	5198	Fort Pickens Road Lighting Retrofit

O No)

Yes

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GRANT NO. F22AC00490-00

Federal Financial Report	Cycle	1	
Reporting Period Start Date	Reporting Period End Date	Reporting Type	Reporting Period Due Date
01/01/2022	03/31/2022	Quarterly	06/29/2022
04/01/2022	06/30/2022	Quarterly	09/28/2022
07/01/2022	09/30/2022	Quarterly	12/29/2022
10/01/2022	12/31/2022	Quarterly	03/31/2023
01/01/2023	03/31/2023	Quarterly	06/29/2023
04/01/2023	06/30/2023	Quarterly	09/28/2023
07/01/2023	09/30/2023	Quarterly	12/29/2023
10/01/2023	12/31/2023	Quarterly	03/30/2024
01/01/2024	03/31/2024	Quarterly	06/29/2024
04/01/2024	06/30/2024	Quarterly	09/28/2024
07/01/2024	09/30/2024	Quarterly	12/29/2024
10/01/2024	12/31/2024	Quarterly	03/31/2025
01/01/2025	03/31/2025	Quarterly	06/29/2025
04/01/2025	06/30/2025	Quarterly	09/28/2025
07/01/2025	09/30/2025	Quarterly	12/29/2025
10/01/2025	12/31/2025	Quarterly	03/31/2026
01/01/2026	03/31/2026	Quarterly	06/29/2026
04/01/2026	06/30/2026	Quarterly	09/28/2026
07/01/2026	09/30/2026	Quarterly	12/29/2026
10/01/2026	12/31/2026	Quarterly	03/31/2027
01/01/2027	03/31/2027	Quarterly	06/29/2027
04/01/2027	06/30/2027	Quarterly	09/28/2027
07/01/2027	09/30/2027	Quarterly	12/29/2027
10/01/2027	12/31/2027	Quarterly	03/30/2028
01/01/2028	03/31/2028	Quarterly	06/29/2028
04/01/2028	06/30/2028	Quarterly	09/28/2028
07/01/2028	09/30/2028	Quarterly	12/29/2028
10/01/2028	12/31/2028	Quarterly	03/31/2029
01/01/2029	03/31/2029	Quarterly	06/29/2029
04/01/2029	06/30/2029	Quarterly	09/28/2029
07/01/2029	09/30/2029	Quarterly	12/29/2029
10/01/2029	12/31/2029	Quarterly	03/31/2030
01/01/2030	03/31/2030	Quarterly	06/29/2030
04/01/2030	06/30/2030	Quarterly	09/28/2030
07/01/2030	09/30/2030	Quarterly	12/29/2030
10/01/2030	12/31/2030	Quarterly	03/31/2031
01/01/2031	03/31/2031	Quarterly	06/29/2031
04/01/2031	06/30/2031	Quarterly	09/28/2031
07/01/2031	09/30/2031	Quarterly	12/29/2031
10/01/2031	12/31/2031	Quarterly	03/30/2032

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GRANT NO. F22A	AC00490-00

01/01/2032	03/31/2032	Quarterly	06/29/2032
04/01/2032	06/30/2032	Quarterly	09/28/2032
07/01/2032	09/30/2032	Quarterly	12/29/2032
10/01/2032	12/31/2032	Final	04/30/2033

Performance Progress Re	port Cycle		
Reporting Period Start Date	Reporting Period End Date	Reporting Type	Reporting Period Due Date
01/01/2022	03/31/2022	Quarterly	06/29/2022
04/01/2022	06/30/2022	Quarterly	09/28/2022
07/01/2022	09/30/2022	Quarterly	12/29/2022
10/01/2022	12/31/2022	Quarterly	03/31/2023
01/01/2023	03/31/2023	Quarterly	06/29/2023
04/01/2023	06/30/2023	Quarterly	09/28/2023
07/01/2023	09/30/2023	Quarterly	12/29/2023
10/01/2023	12/31/2023	Quarterly	03/30/2024
01/01/2024	03/31/2024	Quarterly	06/29/2024
04/01/2024	06/30/2024	Quarterly	09/28/2024
07/01/2024	09/30/2024	Quarterly	12/29/2024
10/01/2024	12/31/2024	Quarterly	03/31/2025
01/01/2025	03/31/2025	Quarterly	06/29/2025
04/01/2025	06/30/2025	Quarterly	09/28/2025
07/01/2025	09/30/2025	Quarterly	12/29/2025
10/01/2025	12/31/2025	Quarterly	03/31/2026
01/01/2026	03/31/2026	Quarterly	06/29/2026
04/01/2026	06/30/2026	Quarterly	09/28/2026
07/01/2026	09/30/2026	Quarterly	12/29/2026
10/01/2026	12/31/2026	Quarterly	03/31/2027
01/01/2027	03/31/2027	Quarterly	06/29/2027
04/01/2027	06/30/2027	Quarterly	09/28/2027
07/01/2027	09/30/2027	Quarterly	12/29/2027
10/01/2027	12/31/2027	Quarterly	03/30/2028
01/01/2028	03/31/2028	Quarterly	06/29/2028
04/01/2028	06/30/2028	Quarterly	09/28/2028
07/01/2028	09/30/2028	Quarterly	12/29/2028
10/01/2028	12/31/2028	Quarterly	03/31/2029
01/01/2029	03/31/2029	Quarterly	06/29/2029
04/01/2029	06/30/2029	Quarterly	09/28/2029
07/01/2029	09/30/2029	Quarterly	12/29/2029
10/01/2029	12/31/2029	Quarterly	03/31/2030
01/01/2030	03/31/2030	Quarterly	06/29/2030
04/01/2030	06/30/2030	Quarterly	09/28/2030
07/01/2030	09/30/2030	Quarterly	12/29/2030

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GRANT NO. F22A	F22AC00490-00	

10/01/2030	12/31/2030	Quarterly	03/31/2031
01/01/2031	03/31/2031	Quarterly	06/29/2031
04/01/2031	06/30/2031	Quarterly	09/28/2031
07/01/2031	09/30/2031	Quarterly	12/29/2031
10/01/2031	12/31/2031	Quarterly	03/30/2032
01/01/2032	03/31/2032	Quarterly	06/29/2032
04/01/2032	06/30/2032	Quarterly	09/28/2032
07/01/2032	09/30/2032	Quarterly	12/29/2032
10/01/2032	12/31/2032	Final	04/30/2033

Terms and Conditions

1. <u>U.S. Fish and Wildlife General Award Terms and Conditions</u> (see link https://www.fws.gov/grants/atc.html)

2. Mandatory Disclosures

Conflicts of interest: Per 2 CFR §1402.112, non-Federal entities and their employees must take appropriate steps to avoid conflicts of interest in their responsibilities under or with respect to Federal financial assistance agreements. In the procurement of supplies, equipment, construction, and services by recipients and by subrecipients, the conflict of interest provisions in 2 CFR §200.318 apply. Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the DOI awarding agency or pass-through entity in accordance with 2 CFR §200.112. Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The recipient is responsible for notifying the Service Project Officer identified in their notice of award in writing of any conflicts of interest that may arise during the life of the award, including those that reported by subrecipients. The Service will examine each conflict of interest disclosure to determine whether a significant potential conflict exists and, if it does, work with the applicant or recipient to develop an appropriate resolution. Failure to resolve conflicts of interest in a manner that satisfies the government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies for noncompliance described in 2 CFR §200.339, including suspension or debarment (see also 2 CFR Part 180).

Lobbying: The recipient must not use any federally appropriated funds (annually appropriated or continuing appropriations) or matching funds under a Federal award to pay any person for lobbying in connection with the award. Lobbying is influencing or attempting to influence an officer or employee of any U.S. agency, a Member of the U.S. Congress, an officer or employee of the U.S. Congress, or an employee of a Member of the U.S. Congress connection with the award. The recipient must complete and submit the SF-LLL, "Disclosure of Lobbying Activities" form to the Service Project Officer identified in their notice of award if the Federal share of their award is more than \$100,000 and the recipient has made or has agreed to make any payment using non-appropriated funds for lobbying in connection with the application or award. See 43 CFR, Subpart 18.100 for more information on when additional submission of this form is required.

Other Mandatory Disclosures: Recipients and subrecipients must disclose, in a timely manner, in writing to the Service Project Officer identified in their notice of award or pass-through entity all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Non-Federal entities that receive a Federal award including the term and condition outlined in 2 CFR 200, Appendix XII—Award Term and Condition for Recipient Integrity and Performance Matters are required to report certain civil, criminal, or administrative proceedings to SAM. Failure to make required disclosures can result in any of the remedies for noncompliance described in 2 CFR \$200.339, including suspension or debarment.

SCOPE OF WORK

1. Project Description

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The Service hereby incorporates the recipient's application submitted to and approved by the Service into these award terms and conditions.

The following exhibits are incorporated by reference into this Agreement:

- 1. Exhibit A: Project Description
- 2. Exhibit B: Project Narrative
- 3. Exhibit C: Monitoring and Adaptive Management Plan
- 4. Exhibit D: Project Budget

This project would be implemented by the DOI FL TIG Trustee, in coordination with Escambia County and Gulf Power. This project would enhance sea turtle nesting beach habitat quality in Escambia County and GulS- managed lands by replacing and upgrading streetlights along Fort Pickens Road. The directionality function and long-wavelength color of amber light-emitting diode (LED) lighting upgrades reduce light trespass and sea turtle nesting disorientation on beaches. This project is adjacent and complimentary to the DWH NRDA Improving Habitat Injured by Spill Response: Restoring the Night Sky project that retrofitted Casino Beach parking lot lighting on Pensacola Beach and arterial roads on State Hwy 399 east of Casino Beach. These upgrades benefitted sea turtle nesting habitat in the Santa Rosa Island Unit of GUIS. This project would benefit the nesting beaches in the Fort Pickens Unit of GUIS. Specifically, the project would:

- Remove approximately 170 dual-headed, low-pressure sodium fixtures and 89 light poles along 2 miles of Fort Pickens Road west of Casino Beach to the GUIS boundary; and,
- Install 89 new, upgraded light poles with 170 or more new FWC-certified wildlife-friendly amber LED fixtures. The new poles and light fixtures would be installed directly adjacent to existing poles using existing power.

The goal of this project is to enhance beach and dune habitat on federal lands by reducing light pollution from adjacent roads. Anthropogenic light sources along beaches and coasts can have negative impacts on the nocturnal behaviors of both nesting sea turtles and hatchlings (Witherington & Martin 2003). Lighting can affect nest site selection, disorient nesting turtles returning to the sea, and interfere with the ability of hatchlings to find the ocean. Turtle-friendly lighting projects reduce light pollution, thereby reducing hatchling disorientation and increasing the number of hatchlings reaching the water. Reducing beachfront lighting is consistent with sea turtle recovery plans as light pollution has been identified as one of the most significant threats to recovery of loggerheads (NMFS and USFWS 2008). Lighting management is also a high-priority conservation action needed for green turtle recovery (NMFS and USFWS 1991; from PDARP/PEIS D.4.3). Target sea turtle species include loggerhead, green, Kemp's ridley, and leatherback. Additionally, new LED fixtures would increase energy efficiency and pedestrian safety along the Fort Pickens Road multi-use path.

Authority for Cooperative Agreement (Agreement)

The FWS enters into this Agreement in accordance with the legal authorities provided to it by the Oil Pollution Act of 1990 (OPA), 33 U.S.C. 2701 et seq.; the Clean Water Act (CWA), 33 U.S.C. 1251 et seq.; and any other applicable laws or authorities. The FWS is a member of the Florida Trustee Implementation Group (TIG), which is responsible for restoring natural resources and services within the greater Gulf of Mexico restoration areas that were injured by the April 20, 2010 Deepwater Horizon oil spill and associated spill response efforts. TIG consists of four federal agencies: U.S. Department of Commerce, represented by the National Oceanic and Atmospheric Administration; U.S. Department of the Interior, represented by the U.S. Fish and Wildlife Service, the National Park Service, and the Bureau of Land Management; U.S. Department of Agriculture; and U.S. Environmental Protection Agency.

Escambia County is a local government agency. The mission of Escambia County government is to provide efficient, responsive services that enhance our quality of life, meet common needs and promote a safe and healthy community. The Natural Resources Management Department provides a diverse array of vital environmental and natural resources programs in support of this

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mission.

The Parties to this Agreement are authorized to enter into this Agreement.

This Agreement sets forth the terms and conditions upon which the Parties agree to enhance sea turtle nesting beach habitat quality in Escambia County and Gulf Islands National Seashore (GUIS) managed lands by replacing and upgrading streetlights along Fort Pickens Road in Escambia County, Florida as outlined in the project description (Exhibit A) within the *Deepwater Horizon Oil Spill Florida Trustee Implementation Group Final Restoration Plan and Environmental Assessment: Habitat Projects on Federally managed Lands; Sea Turtles; Marine Mammals; Birds; And Provide and Enhance Recreational Opportunities.* A subsequent Project Narrative (Exhibit B) was developed to detail project specifics as they relate to this Agreement.

Period of Agreement

This Agreement will remain in effect until the completion of the period of performance for the associated financial award, which will last approximately 10 years from 01/01/2022- 12/31/2032, unless extended, modified, or terminated by written agreement of the Parties or terminated pursuant to Section on Defaults and Remedies.

AWARD CONDITIONS

1. Recipient Responsibilities

- 1. Recipient confirms that it will work with FWS to enhance beach and dune habitat on federal lands by reducing light pollution from adjacent roads, as described within the Project Description and Project Narrative (Exhibits A and B).
 - Recipient will work with FWS to develop a lighting plan that helps to reduce beachfront lighting along Fort Pickens Road in Escambia County, Florida.
 - Recipient will complete photometric surveys and nighttime visual surveys prior to replacement of light poles and fixtures
 in accordance with the project's Monitoring and Adaptive Management plan (Exhibit C) and in coordination with the
 FWS. Recipient will provide the results of these surveys to the FWS upon completion.
 - Recipient will complete photometric surveys and nighttime visual surveys after replacement of light poles and fixtures in
 accordance with the project's Monitoring and Adaptive Management plan (Exhibit C) and in coordination with the FWS.
 Recipient will provide the results of these surveys to the FWS upon completion.
- 2. In accordance with the lighting plan developed with the FWS, recipient will remove approximately 170 dual-headed, low-pressure sodium fixtures and 89 light poles along 2 miles of Fort Pickens Road in Escambia County, Florida west of Casino Beach up to the GUIS boundary (Exhibit A).
- 3. In accordance with the lighting plan developed with the FWS, recipient will install 89 new, upgraded light poles with 170 or more new FWX-certified wildlife-friendly amber LED fixtures. The new poles and light fixtures would be installed directly adjacent to existing poles using existing power.
- 4. Recipient will perform routine fixture and pole maintenance for a period of at least five years after installation of new light poles and fixtures, as described in the project description and subsequent project narrative (Exhibit B).

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5. Recipient will coordinate with FWS to review and evaluate the results of photometric surveys and nighttime visual surveys after replace of light poles and fixtures in an effort to identify need for future lighting projects.

FWS Involvement

- 1. FWS confirms that it will work with the Recipient to enhance beach and dune habitat on federal lands by reducing light pollution from adjacent roads as described within the Project Description and Project Narrative (Exhibits A and B).
 - FWS will work with Recipient to develop a lighting plan that helps to reduce beachfront lighting along Fort Pickens Road in Escambia County, Florida.
 - FWS will review photometric surveys and nighttime visual surveys completed by Recipient prior to replacement of light
 poles and fixtures and provide comments to the Recipient prior to continuation of work.
 - FWS will review photometric surveys and nighttime visual surveys completed by Recipient after replacement of light
 poles and fixtures to determine project effectiveness and to identify any necessary corrective actions.
- 2. FWS confirms that it will work with the Recipient to review and evaluate the results of photometric surveys and nighttime visual surveys after replace of light poles and fixtures in an effort to identify need for future lighting projects.

Funding and Payment Disbursements

- 1. As stated in the Deepwater Horizon Oil Spill Florida Trustee Implementation Group Final Restoration Plan and Environmental Assessment: Habitat Projects on Federally managed Lands; Sea Turtles; Marine Mammals; Birds; And Provide and Enhance Recreational Opportunities and in the subsequent funding resolution, Resolution #FL-2021-015: Resolution of the Restoration in the Florida Trustee Implementation Group for Allocation of Funds to the Final Restoration Plan 2 Projects: Egmont Key Vegetation Management and Dune Retention; Perdido Key Sediment Placement; Pensacola Beach Fort Pickens Road Wildlife Lighting Retrofits; and St. Vincent National Wildlife Refuge Access and Recreational Improvements through Acquisition at Indian Pass the overall budget for this project is \$540,000. The overall budget includes the following cost categories, as detailed in the Project Budget (Exhibit D): labor and benefits, contracts, FWS indirect support, and DOI indirect support.
- 2. As described in the Project Budget (Exhibit D), funding under this Agreement includes the contracts cost category and may not exceed \$462,000.
- 3. Recipient agrees to return, refund, or repay FWS if FWS determines an overpayment to Recipient exists or determines funds were not used in strict accordance with the terms of this Agreement. Within thirty (30) days after FWS request in writing the return of an identified sum, Recipient shall return, refund, or repay the identified sum if the matter has not been resolved to FWS satisfaction

Indirect Costs 10% De Minimis

Recipient has elected to charge the de minimis indirect cost rate of 10% of Modified Total Direct Costs as defined in 2 CFR 200.1. Recipient must use this methodology consistently for all Federal awards until such time as the Recipient negotiates a different rate with their cognizant agency for indirect costs. Recipient must notify the Service in writing if during this award period the Recipient establishes a rate that changes the methodology to be used to charge indirect costs to this award. Additional Federal funds may not be available to support an unexpected increase in indirect costs and any such changes are subject to Service review, negotiation, and prior approval.

Records Management

1. Recipient shall maintain all books, records, documents, papers, and other evidence related to project implementation, including financial records, monitoring reports, and project performance information, in accordance with generally accepted business and accounting practices, consistently applied. Recipient shall also maintain the financial data used in the preparation of or support for

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any cost (direct and indirect) information or analysis for the Agreement or for any negotiated subcontract. Recipient shall also maintain a copy of any cost information or analysis submitted to FWS.

- 2. Recipient understands that acceptance of funds under this Agreement acts as acceptance of the authority of FWS (as well as any successor) or the equivalent federal agency to conduct an audit or investigation in connection with those funds. Recipient further agrees to fully cooperate with FWS auditing offices (as well as any successor), or equivalent federal agency in the conduct of the audit or investigation, including providing all records requested. Recipient understands that FWS periodically audits projects such as the one covered by this Agreement. Recipient shall ensure that this clause concerning the audit of funds accepted under this Agreement is included in any subcontract it awards.
- 3. Recipient shall maintain such records and be subject to these audit requirements during the performance under this Agreement for a period of three (3) years after FWS provides written approval of the Parcel Acquisition Report. However, if Recipient is aware of any litigation, claim, negotiation, audit, cost recovery or other action, including actions concerning costs of items to which an audit exception has been taken, relating to the project that started before the expiration of the three (3)-year record retention period, Recipient shall maintain such records and be subject to such audit requirements until completion of the action or resolution of all issues which arise from any litigation, claim, negotiation, audit, cost recovery or other action, or until the end of the three (3) -year record retention period, whichever is later. The entities designated in Section V.D.1 will have access to records at any reasonable time for as long as the records are maintained by Recipient. Recipient agrees to transfer records in its custody to FWS upon their request. This Paragraph survives termination of this Agreement.
- 4. Recipient shall place Sections V.D.1 through V.D.3 in all subcontract agreements.
- 5. Failure of Recipient or subcontractor to comply in a timely manner with all records management and reporting requirements of this Agreement may, at FWS's sole discretion, result in a withholding of funds under this Agreement.

Financial Management

- 1. Recipient shall have a financial management or accounting system which accounts for costs in accordance with generally accepted accounting standards and principles. Recipient shall include a progressive summarized financial accounting section in all reports submitted under this Agreement. Recipient shall allow FWS review of the adequacy of the financial management system. The system shall do the following:
 - Provide for the identification and segregation of Property costs between the budget categories;
 - Maintain records which adequately identify the source and application of funds provided under this Agreement. Such
 records must contain information pertaining to awards and authorizations, obligations, unobligated balances, assets,
 liabilities, outlays or expenditures, and income;
 - Provide internal control by maintaining effective control and accountability for all cash, real and personal property and
 other assets paid for under this Agreement. All such property acquired with project funds must be adequately safeguarded
 and used solely for authorized purposes;
 - Provide budget control by comparing outlays and expenditures with budgeted amounts for the money provided by FWS.
 Financial information must be related to performance or productivity data;
 - Support accounting records with source documentation, including cancelled checks, paid invoices, payrolls, time and attendance records, and subcontract documents;
 - Permit the tracing of funds to a level of expenditures adequate to establish that such funds have not been used in violation
 of this Agreement or applicable statutes; and
 - · Permit preparation of reports required by this Agreement.

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Subcontractors

- 1. Recipient may subcontract all or any portion of the duties required under this Agreement. For purposes of this Agreement, subcontracts include subawards issued by Recipient to nonprofits and academic institutions for Recipient's work pursuant to this Agreement.
- 2. Recipient shall be responsible for all acts and omissions of all subcontractors performing or furnishing any portion of the work pursuant to this Agreement under a direct or indirect contract with Recipient to the extent provided under applicable laws and regulations. Nothing in this Agreement shall create for the benefit of any such subcontractor any contractual relationship between FWS and any such subcontractor, nor shall it create any obligation on the part of FWS to pay or to see to the payment of any moneys due to any such subcontractor. Recipient shall not allow any contracts to be cost plus a percentage of cost or other percentage of cost type contracts.
- 3. Recipient shall be solely responsible for scheduling and coordinating the work of subcontractors performing or furnishing any portion of the work pursuant to this Agreement under a direct or indirect contract with Recipient. Recipient shall require all subcontractors performing or furnishing any portion of the work hereunder who desire to communicate with FWS to communicate through Recipient with FWS.
- 4. All work performed for Recipient by a subcontractor shall be pursuant to an appropriate written contract between Recipient and the subcontractor which is not inconsistent with the terms and conditions of this Agreement. Each subcontractor shall be provided a copy of this Agreement prior to initiating any portion of the work required hereunder.

Publications, News Releases, and Other Public Announcements

1. All reports, news releases, other publicity, and other materials prepared for publication pursuant to or as a result of this Agreement shall acknowledge the funding support from TIG. Any public or intergovernmental reports, documents, videos, or other materials produced as a result of this Agreement shall contain the logos of DOI, NOAA, USDA, and EPA, on the front cover or title page of such documents or other materials. Public reports or other publications, news releases, and other publicity issued by Recipient shall be submitted to FWS for approval prior to release.

Rights in Data and Other Materials

- 1. The Parties expressly agree that any data collected as a result of this Agreement shall be jointly owned by the Parties. All Parties shall have complete and unlimited access to all such data. Further, any data or other material developed under this Agreement shall be subject to any applicable federal and state laws governing access to and availability of public records. The Parties may convey ownership rights in collected data to subcontractors and recipients of subawards, with the approval of all Parties.
- 2. Number 1 above applies to all subcontractors of Recipient and Recipient shall act to ensure all subcontractors used for this project are advised of the rights in data and other materials described herein and that the subcontractors are prohibited from asserting any rights at common law or in equity or otherwise seeking to establish any claim to statutory copyright in any data, material or information developed under this Agreement.
- 3. Recipient shall place Number 1 above in all subcontractor agreements and define Parties as Recipient and FWS.

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GRANT NO. F22A	C00490-00

Defaults and Remedies

- 1. Recipient shall be considered in default under this Agreement if any one or more of the following events occur, provided that Recipient has received written notice of such potential default from FWS and has failed to cure the potential default within thirty (30) days from the date of said notice. If Recipient has begun a good faith effort to cure the potential default within the thirty (30)-day period, Recipient may be allowed additional time, if deemed reasonable by FWS in its sole discretion, as needed to cure the potential default.
- 2. FWS will, in its sole discretion, determine if an Event of Potential Default exists. Each of the following shall constitute an Event of Potential Default under this Agreement:
 - · If Recipient fails to comply with any term or provision contained in this Agreement.
 - If Recipient makes an assignment for the benefit of creditors or takes any similar action for the protection or benefit of creditors.
 - If at any time Recipient knowingly, negligently, or intentionally makes any representation to FWS which is incorrect in any material respect.
 - If Recipient knowingly, negligently, or intentionally submits any request for payment to FWS which is incorrect in any
 material respect.
 - If Recipient knowingly, negligently, or intentionally submits any report or certification to FWS related to the project which is incorrect in any material respect.
- 3. Upon the occurrence of any such Event of Potential Default and failure of Recipient to cure such potential default as provided above, FWS may declare Recipient in default in writing and may, as appropriate, withhold payments to Recipient or require Recipient to refund any payments received prior or subsequent to the event of default. In addition, FWS may terminate this Agreement and avail themselves of any appropriate legal remedies.
- 4. A waiver of any Event of Potential Default shall not be considered a waiver of any other or subsequent Event of Potential Default, and any delay or omission in the exercise or enforcement of the rights and powers of FWS shall not be construed as a waiver of any such rights or powers.

Work Contingent on Receipt of Funds

1. The Parties agree that if FWS fails or refuses to provide funding, either FWS or Recipient may terminate this Agreement; provided, however, that in such event, Recipient shall continue to be obligated hereunder for FWS approval of a final financial accounting of all project monies received by Recipient. If the release of funds by FWS is delayed, the Parties agree that timelines and work schedules may be adjusted as necessary.

Counterparts

1. This Agreement may be executed in one or more counterparts, all of which shall be considered an original.

PAYMENTS

1. Domestic Recipients Enrolled in Treasury's ASAP System

The recipient will request payments under this award in the <u>U.S. Treasury's Automated Standard Application for Payment (ASAP)</u> system. When requesting payment in ASAP, your Payment Requestor will be required to enter an Account ID. The number assigned to this award is the partial Account ID in ASAP. When entering the Account ID in ASAP, the Payment Requestor should enter the award number identified in the notice of award, followed by a percent sign (%). Refer to the

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ASAP.gov Help menu for detailed instructions on requesting payments in ASAP.

REPORT

1. Interim Financial Reports

The recipient is required to submit interim financial reports on a quarterly basis directly in GrantSolutions. The recipient must follow the financial reporting period end dates and due dates provided in GrantSolutions. The interim reporting due dates are available by signing in to GrantSolutions and selecting the menu for Reports>Federal Financial Report. The GrantSolutions financial report data entry fields are the same as those on the SF-425, "Federal Financial Report" form. See also our instructional video on "Completing the Federal Financial Report (SF-425)".

2. Interim Performance Reports

The recipient is required to submit interim performance reports on a quarterly basis directly in GrantSolutions. The recipient must follow the performance reporting period end dates and due dates provided in GrantSolutions. The interim reporting due dates are available by signing in to GrantSolutions and selecting the menu for Reports>FPR.

3. Final Reports

The recipient must liquidate all obligations incurred under the award and submit a *final* financial report in GrantSolutions no later than 120 calendar days after the award period of performance end date. The GrantSolutions financial report data entry fields are the same as those on the SF-425, "Federal Financial Report" form. See also our instructional video on "Completing the Federal Financial Report (SF-425)".

The recipient must submit a *final* performance report no later than 120 calendar days after the award period of performance end date. Performance reports must contain: 1) a comparison of actual accomplishments with the goals and objectives of the award as detailed in the approved scope of work; 2) a description of reasons why established goals were not met, if appropriate; and 3) any other pertinent information relevant to the project results. Please include the Service award number on all reports.

The recipient must follow the final Federal Financial Report and the final Performance Report reporting period end dates and due dates provided in GrantSolutions. The final reporting due dates are available by signing in to GrantSolutions and selecting the menu for Reports>Federal Financial Report or Reports>FPR.

4. Reporting Due Date Extensions

Reporting due dates may be extended for an award upon request to the Service Project Officer identified in the notice of award. The request should be sent by selecting the award in GrantSolutions and selecting send message. The message must include the type of report to be extended, the requested revised due date, and a justification for the extension. The Service may approve an additional extension if justified by a catastrophe that significantly impairs the award Recipient's operations. The recipient must submit reporting due date extension requests through GrantSolutions to the Service Project Officer identified in their notice of award before the original due date. The Service Project Officer will respond to the recipient after approval or denial of the extension request.

5. Significant Developments Reports

See 2 CFR §200.328(d). Events may occur between the scheduled performance reporting dates that have significant impact upon

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the supported activity. In such cases, recipients are required to notify the Service in writing as soon as the recipient becomes aware of any problems, delays, or adverse conditions that will materially impair the ability to meet the objective of the Federal award. This disclosure must include a statement of any corrective action(s) taken or contemplated, and any assistance needed to resolve the situation. The recipient should also notify the Service in writing of any favorable developments that enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

6. Post Award Requirements

Recipient shall provide FWS with a closeout report after all activities and expenditures have been accomplished for the Project. The report shall include a description and any documentation of the completed activities as-built or implemented and the final cost documentation for the Project. Upon request, Recipient shall provide the FWS with additional information and supporting documents to complete the closeout report.

SPECIAL TERMS AND REQUIREMENTS

1. Environmental Compliance Reviews

No work, as described under Project Description-Recipient Responsibilities numbers 2-4, shall begin until all environmental compliance has been completed, specifically requirements under the National Historic Preservation Act.

As a condition of award, the Recipient and their sub-recipient(s) and contractor(s) must not begin any potentially impactful work related to this award until the Service has notified you in writing that such work can begin. Recipients and sub-recipients of Federal grants and cooperative agreement awards must comply with the requirements of the National Environmental Policy Act (NEPA), Section 7 of Endangered Species Act (ESA), and Section 106 of the National Historic Preservation Act (NHPA).

STAFF CONTACTS

1. Mary Susan Fleck

U.S. Fish and Wildlife Service

Deepwater Horizon Gulf Restoration Office

341 North Greeno Road

Fairhope, Alabama 36532

Phone: 251-517-8003

Email: mary_pruitt@fws.gov

AWARD ATTACHMENTS

Escambia, County of F22AC00490-00

1. Exhibits A through D

EXHIBIT A

PROJECT DESCRIPTION FOR FORT PICKENS ROAD PROJECT

SOURCE: Deepwater Horizon Oil Spill Florida Trustee Implementation Group Final Restoration Plan and Environmental Assessment: Habitat Projects on Federally managed Lands; Sea Turtles; Marine Mammals; Birds; And Provide and Enhance Recreational Opportunities

Restoration Approach

Restore and enhance dunes and beaches (PDARP/PEIS Section 5.5.3.2)

Restoration Technique

Enhance dunes and beach habitat through replacing light fixtures

Project Location

Fort Pickens Road, Pensacola Beach, Escambia County (Figure 2-5)

Project Summary

This project would be implemented by the DOI FL TIG Trustee, in coordination with Escambia County and Gulf Power. This project would enhance sea turtle nesting beach habitat quality in Escambia County and GUIS-managed lands by replacing and upgrading streetlights along Fort Pickens Road. The directionality function and long-wavelength color of amber light-emitting diode (LED) lighting upgrades reduce light trespass and sea turtle nesting disorientation on beaches. This project is adjacent and complimentary to the DWH NRDA Improving Habitat Injured by Spill Response: Restoring the Night Sky project that retrofitted Casino Beach parking lot lighting on Pensacola Beach and arterial roads on State Hwy 399 east of Casino Beach. These upgrades benefitted sea turtle nesting habitat in the Santa Rosa Island Unit of GUIS. This project would benefit the nesting beaches in the Fort Pickens Unit of GUIS.

Specifically, the project would:

- Remove approximately 170 dual-headed, low-pressure sodium fixtures and 89 light poles along 2 miles of Fort Pickens Road west of Casino Beach to the GUIS boundary; and,
- Install 89 new, upgraded light poles with 170 or more new FWC-certified wildlife-friendly amber LED fixtures. The new poles and light fixtures would be installed directly adjacent to existing poles using existing power.

The goal of this project is to enhance beach and dune habitat on federal lands by reducing light pollution from adjacent roads. Anthropogenic light sources along beaches and coasts can have negative impacts on the nocturnal behaviors of both nesting sea turtles and hatchlings (Witherington & Martin 2003). Lighting can affect nest site selection, disorient nesting turtles returning to the sea, and interfere with the ability of hatchlings to find the ocean. Turtle-friendly lighting projects reduce light pollution, thereby reducing hatchling disorientationand increasing the number of hatchlings reaching the water. Reducing beachfront lighting is consistent with sea turtle recovery plans as light pollution has been identified as one of the most significant threats to recovery of loggerheads (NMFS and USFWS 2008). Lighting management is also a high-priority conservation action needed for green turtle recovery (NMFS and USFWS 1991; from PDARP/PEIS D.4.3). Target sea turtle species include loggerhead, green, Kemp's ridley, and leatherback. Additionally, new LED fixtures would increase energy efficiency and pedestrian safety along the Fort Pickens Road multi-use path.

General Project Activities and Implementation Timing

Project activities include implementation (construction, non-construction, and O&M) and monitoring.

The project should be completed in approximately 3 years. Implementation activities would occur in Year 1 and would be executed by Gulf Power (NextEra) staff. Post-implementation monitoring would occur in Years 2-3. The project would be implemented outside of sea turtle and beach-nesting bird season to prevent take of protected species.

Maintenance

Short-term maintenance activities would include inspection and maintenance of retrofits. Routine fixture and pole maintenance would be conducted by Gulf Power (NextEra). Five years of maintenance costs are included in budget.

Project Monitoring

Project monitoring details can be found in the project's MAM plan located in Exhibit B.

Costs

The total estimated project costs are \$540,000 which includes costs for implementation, monitoring, oversight, and contingency. The project costs include \$462,000 for the execution of a cooperative agreement with Escambia County

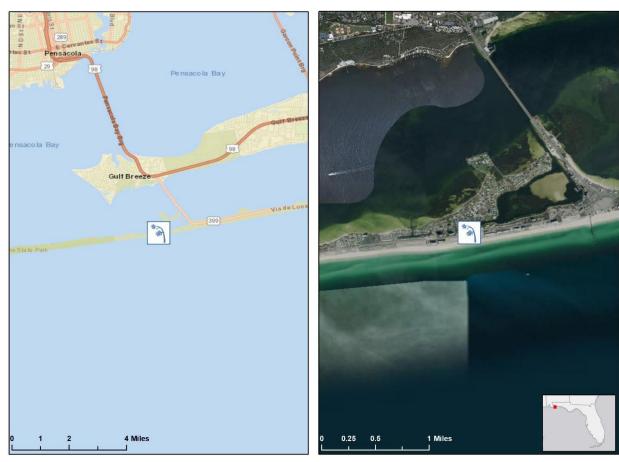


Figure 2-5 FM4, Pensacola Beach Fort Pickens Road Wildlife Lighting Retrofits (preferred): General Project Location

EXHIBIT B

PROJECT NARRATIVE FOR FORT PICKENS ROAD PROJECT

SOURCE: As submitted by Escambia County as part of their cooperative agreement application package.

Fort Pickens Road- Pensacola Beach Wildlife Lighting Retrofits

1.0 Proposal Information Page						
Applicant Information: Escambia County	Total Project Cost: \$462,000					
Board of County Commissioners	Place of Performance:					
DUNS Number : 0750796730000	Fort Pickens Road, Pensacola Beach Escambia County, FL					
J. Taylor "Chips" Kirschenfeld						
Natural Resources Management Director						
Escambia County BOCC						
221 Palafox Place Pensacola FL 32502	Project Period:					
(850) 595-4988; jtkirsche@myescambia.com	Jan 1, 2022-Jan 1, 2032					
Project Narrative						

Statement of Need

Escambia County, in partnership with Gulf Power (NextEra Energy), will retrofit 170 pole-mounted roadway lighting fixtures on Pensacola Beach along Fort Pickens Road to reduce beach-front lighting on nesting beaches. The previously certified dual-head low pressure sodium (LPS) fixtures will be replaced by a single true-amber light emitting diode (LED) fixture, improving efficiency and lowering maintenance costs. Fixture height will be also be lowered from 25 feet to 16 feet, utilizing new concrete poles.

This project will improve quality of nesting habitat and reduce the likelihood of disorientation and false crawls along County-owned beaches in Escambia County, Florida and support the County's Barrier Island Lighting Ordinance. This project further complements past Escambia County retrofit projects to protect and restore sea turtle nesting habitat, including the Casino Beach parking lot and pavilion (2015), Perdido Key condominiums retrofit to protect nesting habitat within Perdido Key State Park (2016), and the Pensacola Beach single family homes & InnisFree Hotels project (2018). All three projects were previously funded through the Natural Resources Damage Assessment funding.

This restoration approach is consistent with NRDA's Programmatic Restoration Plan Section 5.D.4.3 - Enhance Sea Turtle Hatchling Productivity and Restore and Conserve Nesting Beach Habitat, specifically by reducing beachfront lighting on nesting beaches. This approach is also consistent with the Strategic Framework for Sea Turtle Restoration Activities Module 4 - Approach 3 - Technique 2 - Reduce beachfront lighting by implementing programs and coordinating with local municipalities to minimize artificial lighting visible from the nesting beach.

Project Goals and Objectives

Goal 1: Improve quality of nesting beaches within Escambia County and nearby Gulf Islands National Seashore- Fort Pickens Unit by reducing artificial light levels adjacent to nesting habitat.

Objective 1: Remove existing 170 LPS fixture and 89 25-foot concrete poles and replace with 89 true amber LED fixtures mounted at 16-feet above the roadway surface on new concrete poles.

Goal 2: Reduce likelihood of disorientation and false crawl events on county beaches and nearby Gulf Islands National Seashore Fort Pickens Unit

Objective 2: In coordination with Florida Fish & Wildlife Conservation Commission (FWC) and DOI-US Fish & Wildlife Service (USFWS) monitor marine turtle nesting activity within project area to document false crawl and disorientations events before and after project implementation.

Project Activities, Methods & Timetables

Activity 1: Installation of new poles and fixtures

Once awarded, Escambia County staff will coordinate with Gulf Power (NextEra) to begin installation of new concrete poles and fixtures and disabling/removal of existing fixtures. All work will be performed outside of the marine turtle nesting season (May 1-October 31) and done during the daylight hours. All lights are located with the north county right-of-way of Fort Pickens Road, with significant distance between the project site and nesting beach. The project will start at the western boundary, nearest to Gulf Islands National Seashore and work east to avoid disturbances to critical nesting shorebird habitat located within Gulf Islands National Seashore. No additional environmental impacts are expected to occur. Installation activities are expected to take approximately 90 days.

Activity 2: Removal of existing concrete poles

When feasible, Escambia County will contract removal of the existing concrete poles, to be started once installation of the new poles/fixtures is underway. Removal activities will not impact the installation or operation of the new fixtures. All work will be performed outside of the marine turtle nesting season (May 1-October 1) and done during the daylight hours. All lights are located north of Fort Pickens Road and within the county right-of-way, with significant distance between the project site and nesting beach. The project will start at the western boundary, nearest to Gulf Islands National Seashore and work east to avoid disturbances to critical nesting shorebird habitat located within Gulf Islands National Seashore. No additional environmental impacts are expected to occur.

Removal activities are expected to take approximately 90 days.

Activity 3: Post-implementation monitoring

Once all new poles and fixtures are installed, Gulf Power staff will perform a second photometric analysis to document "after" light conditions. This will assist Escambia County, FWC and FWS staff is monitoring the project contribution to reduction of false crawl and disorientation events. Marine turtle nesting activity is currently monitored by Escambia County Marine Resources division under MTP #032A. Data will be transmitted to FWC and FWS per FWC's guidelines. Post implementation monitoring is expected to occur five years after installation.

Activity 4: Operation and Maintenance

Per Escambia County's contract with Gulf Power, Escambia County will lease poles and fixtures from Gulf Power. Gulf Power in turn will provide all maintenance, including repair and replacement of poles and fixtures. Funding is included to cover this lease agreement for a period of approximately ten years.

Project Timetable:																		
Activity	Q1	Ye Q2	ar 1 Q3		Q1	Yea Q2	ar 2 Q3		Q1	Yea Q2	ar 3 Q3		ar 4 Q3 (Q1	ar 5 Q3			·10
Installation of new poles and fixtures																		
Removal of existing concrete poles																		
Post- implementation monitoring																		
Operation and Maintenance																		

Stakeholder Coordination/Involvement

Fort Pickens Road was identified as a priority retrofit area through communications with FWC and county staff, due to its proximity to nesting beaches on public lands and age/style of existing fixtures. Gulf Power agreed to take on the project installation and long-term maintenance as part of their regular activities within Escambia County. This project will increase uniformity through Pensacola Beach, including the style of wildlife-friendly fixtures used and the maintenance activities as covered by Gulf Power staff. Data collected before, during and after the project will be disseminated to relevant stakeholders, including FWC, USFWS, the Santa Rosa island Authority and, where applicable, the general public as part of Escambia County's sea turtle education and outreach efforts.

Project Monitoring & Evaluation

Project monitoring will follow the protocols as outlined in the Monitoring and Adaptive Management plan for this project.

Description of Entities Undertaking Project

US Department of the Interior; Fish & Wildlife Service (DOI): The Department of the Interior, through the US Fish and Wildlife Service will be the implementing agency, in coordination with Escambia County and Gulf Power (NextEra). DOI will oversee the administration of the award and project monitoring and evaluation.

Project Coordinator: Susan Fleck; mary fleck@fws.gov;

Escambia County Board of County Commissioners, Natural Resources Management Department: The Natural Resources Management Department provides a diverse array of vital environmental and natural resources programs in support of Escambia County's mission to enhance quality of life, meet common needs and promote a safe and healthy community. Natural Resources staff will be responsible for project management, including management of subcontractors, and reporting of project activities to US Fish and Wildlife Service.

Project Coordinator: Samantha Bolduc; smbolduc@myescambia.com; (850) 595-3460

Gulf Power (NextEra Energy): Power Company is an energy provider and subsidiary of NextEra Energy, Inc, who work in coordination with Escambia County, the Santa Rosa Island Authority, and other public entities to install and maintain energy utilities. Gulf Power (NextEra) will be the primary contractor,

responsible for the installation and long-term maintenance of the new lighting fixtures along Fort PickensRoad. Project Coordinator: Christina Hawkins; christina.hawkins@nexteraenergy.com; (850)-444-6658

Sustainability

Replacement of the existing pole and fixtures will update previous lighting technology to the best currently available. By retrofitting the current dual-headed LPS fixture to a single led, it will enable Gulf Power and other entities to continuously update and maintain as newer, more efficient fixtures become available. Fixtures.

Map of Project Area:

Fort Pickens Road Wildlife Lighting Retrofits



Project Site



Project Vicinity





Current pole-mounted fixtures, looking east along Ft Pickens Rd.

EXHIBIT C

MONITORING AND ADAPATIVE MANAGEMENT PLAN FOR FORT PICKENS ROAD PROJECT SOURCE: Deepwater Horizon Oil Spill Florida Trustee Implementation Group Final Restoration Plan and Environmental Assessment: Habitat Projects on Federally managed Lands; Sea Turtles; Marine Mammals; Birds; And Provide and Enhance Recreational Opportunities

Prepared by: U.S. Department of the Interior (DOI)Draft

Version Date: 1/7/2021

1 Introduction

This project monitoring and adaptive management (MAM) plan identifies the monitoring needed to evaluate progress toward meeting project objectives and to support any necessary adaptive management of the restoration project. Where applicable, it identifies key sources of uncertainty and incorporates monitoring data and decision points that address these uncertainties. As not all projects would have the same sources and degree of uncertainty, this project-specific MAM plan is scaled according to level of uncertainty, scope, scale, and Restoration Type associated with this project. This MAM plan is a living document and may be updated as needed to reflect changing conditionsand/or new information. Any future revisions to this document would be made publicly available through the Trustee Council Restoration Portal (www.diver.orr.noaa.gov/web/guest/home) and accessible through the *Deepwater Horizon* (DWH) Natural Resource Damage Assessment (NRDA) Trustees website (www.restoration.noaa.gov/dwh/storymap/).

Project Overview

This project is being implemented as restoration for the DWH oil spill NRDA, consistent with the Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS).

- Programmatic Goal: Restore and Conserve Habitat
- Restoration Type: Habitat Projects on Federally Managed Lands
- Restoration Approach: Restore and enhance dunes and beaches
- Restoration Technique: Enhance dune and beach habitat through replacing light fixtures
- TIG: Florida Trustee Implementation Group (FL TIG)
- Restoration Plan: Restoration Plan #2

This restoration project is being implemented within the Gulf Islands National Seashore (GUIS), Florida district, Fort Pickens area. The project includes restoration actions to enhance beach and dune habitat at GUIS by replacing light fixtures along Fort Pickens Road that cause light pollution and disorientation of wildlife.

Anthropogenic light sources along beaches and coasts can have negative impacts on the nocturnal behaviors of both nesting sea turtles and hatchlings. Lighting can affect nest site selection, can disorient nesting turtles returning to the sea, and can interfere with the ability of hatchlings to find the ocean. The emergence from the nest and crawl to the sea is one of the most vulnerable periods of a sea turtle's life. Hatchlings disoriented by artificial light may become dehydrated and are more exposed to ghost crabs, birds, and other predators.

Turtle-friendly lighting projects reduce light pollution, thereby reducing disorientation and increasing the number of hatchlings reaching the sea. Reducing beachfront lighting is consistent with turtle recovery plans; light pollution has been identified as one of the most significant threats to recovery of

loggerheads. Lighting management is also a high-priority conservation action needed for green turtle (*Chelonia mydas*) recovery.

This project would reduce sea turtle nesting disorientation and enhance nesting beach habitat quality in Escambia County and GUIS-managed lands by retrofitting streetlights along Fort Pickens Road with new wildlife-friendly amber light-emitting diode (LED) fixtures. These beaches provide nesting habitat for sea turtle species, including loggerhead (*Caretta caretta*), green, Kemp's ridley (*Lepidochelys kempii*), and leatherback (*Dermochelys coriacea*), and other beach-dwelling species. The intention of the new lighting is to reduce sea turtle disorientations along the project beaches as a result of light pollution, as well as increase energy efficiency and pedestrian safety along the Fort Pickens Road multi-use path.

This project is complimentary to the DWH NRDA *Improving Habitat Injured by Spill Response: Restoring the Night Sky* project that retrofitted Casino Beach parking lot on Pensacola Beach and arterial roads on State Hwy 399 east of Casino Beach. These retrofits benefitted sea turtle nesting habitat in the Santa Rosa Island Unit of GUIS. This project would benefit the nesting beaches in the Fort Pickens Unit of GUIS. The implementing agency is the DOI, in coordination with Escambia County and Gulf Power.

Restoration Type Goals and Project Restoration Objectives

The overall goals for this Restoration Type relevant to this project, as identified in the PDARP/PEIS, are:

- Restore federally managed habitats that were affected by the oil spill and response actions through an integrated portfolio of restoration approaches across a variety of habitats.
- Restore for injuries to federally managed lands by targeting restoration on federal lands where the injuries occurred, while considering approaches that provide resiliency and sustainability.
- Ensure consistency with land management plans for each designated federal land and its purpose by identifying actions that account for the ecological needs of these habitats.

The project restoration objectives are:

Reduce light pollution and enhance the beach and dune habitat in sea turtle nesting areas
within the project area by removing approximately 170 sodium light fixtures along 2 miles of
road and installing 170+ new Florida Fish and Wildlife Conservation Commission (FWC)-certified
wildlife-friendly amber LED fixtures.

Performance criteria would be used to determine restoration success or the need for corrective action in accordance with 15 Code of Federal Regulations 990.55(b)(1)(vii)). Specific, measurable performance criteria are defined, as applicable, for monitoring parameters associated with each of the restoration objectives in Section 3.0.

Potential Sources of Uncertainty

Potential uncertainties that may affect the success of this project are described below.

Table 1-1 Potential Uncertainties

Uncertainty	Summary of Resolution Strategy
LED fixtures do not eliminate disorientation as expected.	Compare photometrics after installation of LED fixtures with results from other similar projects that have been successful. Conduct a nighttime survey to determine whether any light or glow is visible directly or indirectly from the beach. Consider alternative fixtures for replacement.
Catastrophic weather affects nest success.	Storms and related surge can inundate and erode nests, causing partial or complete failure unrelated to disorientation.

Conceptual Model, Anticipated Outcomes and Future Activities

The conceptual model, described below, forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities and the desired project outcomes. The proposed restoration activities would provide benefits to sea turtles at GUIS by reducing light pollution through light retrofits along Fort Pickens Road.

Table 1-2 Conceptual Model

Activity	Output	Short-term outcome	Long-term outcome
Replace approximately 170	New LED	Reduction in light reaching the	Reduction in light reaching the
sodium light fixtures along 2	fixtures	beach in an effort to reduce	beach in an effort to increase
miles of road with FWC-certified	installed.	disorientation of sea turtle	survivorship of sea turtles and
wildlife-friendly amber LED		females and hatchlings;	recruitment to breeding
fixtures using existing poles and		maintained or increased	population.
power infrastructure.		nesting.	

2 Adaptive Management

As noted above, there is some uncertainty related to whether disorientation of sea turtle females and hatchlings would be reduced following project implementation. To adaptively manage this project, and increase the likelihood of achieving the project objective, DOI project personnel would conduct targeted monitoring and use the monitoring data to refine future management actions.

3 Project Monitoring, Performance Criteria, and Potential Corrective Actions

The proposed monitoring plan for this restoration project was developed to evaluate project performance, key uncertainties, and potential corrective actions, if needed.

Information on each monitoring parameter is provided below, organized by objective or additional post-implementation monitoring. The list of corrective actions provided is not exhaustive; rather, it includes a list of potential actions to be considered if the project is not performing as expected once implemented. Other corrective actions may be identified post-implementation, as appropriate.

Table 3-1 Monitoring Parameters

Objective: Reduce light pollution and enhance the beach and dune habitat in sea turtle nesting areas within the project area by removing approximately 170 sodium light fixtures along 2 miles of road and installing 170+ new FWC-certified wildlife-friendly amber LED fixtures.

Performance Monitoring Parameter	Purpose	Method	Frequency,	Sample Size and Sites	Performance Criteria	Potential Corrective Action(s)
Number of sodium light fixtures replaced with LED fixtures	Monitor progress toward objective	Descriptive reporting with map and photos	Quarterly, Annually	N/A	Installation in accordance with contract	Review project expectations with staff or contractor
Photometrics and nighttime visual survey of lighting	Ensure that new LED fixtures perform as expected	Standard photometer, nighttime visual survey along beach	and once after	3 sites along affected area	intensity meet FWC standards after installation; nighttime visual	Compare with other similar projects that have been successful. Consider alternative fixtures for replacement

Additional Pre- and Post-Implementation Monitoring Collected Outside of Project Funds

Parameter	Purpose	Method	Timing, Frequency, Duration	Sample Size and Sites	Evaluation Criteria	Potential Corrective Action(s)
Percentage of sea turtles disoriented along project nesting beaches	Confirm effectiveness of lighting retrofits	Standard Index Nesting Beach Survey protocol from FWC throughout entire nesting season; includes female emergence and nest monitoring	Annual reporting as required by FWC; Surveys throughout each nesting season 1 year prior to replacement and then for 2 years following fixture replacement	All crawls, nesting attempts, and nests located in project nesting beaches each season	Decrease in percentage of femaleemergences and neststhat are affected by disorientation along project nesting beaches from season prior to replacement to 2 seasons after replacement	Compare photometrics after installation with other similar projects that have been successful. Consider alternative fixtures for replacement

4 Monitoring Schedule

The schedule for project performance monitoring is shown in Table 4-1 by monitoring parameter.

Table 4-1 Monitoring Schedule

Monitoring Parameters	iyear 1	Year 2 (As- built)	Year 3	Year 4
Number of sodium light fixtures replaced with LED fixtures		Х		
Photometrics	Х	X		
Percentage of sea turtles disoriented	Х	X	Х	Х

5 Evaluation

The FL TIG anticipates conducting an evaluation of the monitoring data collected (as described above) to help answer the following questions:

- Were the project restoration objectives achieved? If not, is there a reason why they were not met?
- Did the restoration project produce unanticipated effects?
- Were there unanticipated events unrelated to the restoration project that potentially affected the monitoring results (e.g., hurricanes)?
- Were any of the uncertainties identified prior to project implementation resolved?
- Were any new uncertainties identified?

6 Data Management

Data Description

Data collection would be compiled within 12 months after collection. To the extent practicable, all environmental and biological data generated during monitoring activities would be documented using standardized field datasheets. If standardized datasheets are unavailable or not readily amendable to record project-specific data, then project-specific datasheets would be drafted prior to conducting any project monitoring activities. Original hardcopy datasheets and notebooks and photographs would be retained by DOI.

Relevant project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into standard digital format. All field datasheets and notebook entries would be scanned to PDF files. Electronic data files should be named with the date on which the file was created and should include a ReadMe file that describes when the file was created and by whom, and any explanatory noteson the file contents. If a data file is revised, a new copy should be made and the original preserved. All data would have properly documented Federal Geographic Data Committee/International Organization for Standardization (FGDC/ISO) metadata, a data dictionary (defines codes and fields used in the dataset), and/or a Readme file as appropriate (e.g., how data was collected, quality assurance/quality control [QA/QC] procedures, other information about data such as meaning, relationships to other data, origin, usage, and format – can reference different documents).

Data Review and Clearance

Relevant project data that are handwritten on hardcopy datasheets or notebooks would be transcribed (entered) into standard digital format. After transcription of the data, the electronic data sheets would be verified against the original hardcopy datasheets and/or notebooks and would make any corrections to transcription errors as appropriate before data are used for any analyses or distributed outside of the

agency. Implementing Trustees would verify and validate MAM data and information and would ensure that all data are: i) entered or converted into agreed upon/commonly used digital format; ii) labeled with metadata following FGDC/ISO standards to the extent practicable and in accordance with DOI requirements.

After all identified errors are addressed, data are considered to be QA/QC'ed. The Implementing Trustee would give the other TIG members time to review the data before making such information publicly available (as described below).

Data Storage and Accessibility

Once all data has been QA/QC'ed it would be submitted to the Restoration Portal. Trustees would provide DWH NRDA MAM data and information to the Restoration Portal as soon as possible and no more than 1 year from when data are collected.

Data Sharing

Data would be made publicly available, in accordance with the Open, Public, Electronic and Necessary Government Data Act of 2019, through the DIVER Explorer Interface within 1 year of when the data collection occurred.

7 Reporting

All reporting would occur after field surveys are completed annually. This report would summarize the findings for the sampling period including all worksheets transferred into digital format and presented in tabular and graphical formats. The data should be summarized in such a way that it is meaningful to the reader. Additionally, an annual report would be completed that includes:

- Summary data –synthesized data for all efforts during the year.
- Graphics, if applicable, and associated interpretations of the data.
- Comparisons of pre- and post-project conditions, as applicable.
- Any uncertainties with management actions.
- Potential data collection issues.
- Reporting on general MAM activities in the DIVER Restoration Portal on an annual basis.
- Developing a Final MAM Report before a project is closed out.

8 Roles and Responsibilities

Data would be reviewed and submitted to the Restoration Portal by DOI U.S. Fish and Wildlife Service project personnel.

EXHIBIT D

PROJECT BUDGET FOR FORT PICKENS ROAD PROJECT

SOURCE: Cost Estimation Tool used by Fish and Wildlife Service



United States Fish and Wildlife Service

FL TIG RP#2 Fort Pickens Road Ligting Retrofits

Summary Report

Cost Category	Amount
Labor and Benefits	\$14,331
Travel	\$0
Contracts	\$462,000
Supplies and Equipment	\$0
Land and Structures	\$0
Vehicles	\$0
FWS Indirect Support	\$11,238
DOI Indirect Support	\$2,413
TOTAL PROJECT COSTS w/ inflation	\$489,982
Estimated Contingency Costs 10.00%	\$48,998
TOTAL PROJECT COST with Contingency	\$538,980

The project cost estimates contained in this report were developed using FWS staff expertise and the best cost assumption data available at the time of the estimate. Please contact the project manager listed below for questions about the estimate.