

FLORIDA GULF OF MEXICO RESTORATION

PROJECT SUBMITTAL FORM

Form Purpose and Instructions:

- To assist the project proposal and review process, please complete this Submittal Form. Completion of the Form will contribute to the appropriate information being completely and accurately submitted for each project.
- Take as much space as needed for each question, but please keep responses as focused as possible. It may assist you to review all the questions before addressing any one question.
- Please submit one Form per project, if you have multiple projects - please submit one Form for each project.
- Please submit completed Forms to Restoration.Projects@dep.state.fl.us. Once your Form is successfully submitted, you will receive a confirmation email from the Florida Department of Environmental Protection.

Project Name:

Contact Information *(Include at least one name, phone number, email address, and organization name if applicable):*

Project Location *(Include a map, if possible, and the city, county, longitude/latitude, and watershed):*

Project Description *(Describe all aspects of the project):*

Estimated Project Costs *(Describe the estimated costs of the project, including any assumptions for contingency and ongoing operations/maintenance. Identify other secured funding sources such as matching funds, in-kind contributions or state/federal dollars. In addition, if possible, complete and submit the Cost Appendix Sheet associated with this Form):*

Other Funding *(Indicate if the project is submitted for any potential funding or if it may be used to leverage additional funding, if so please describe the funding source [e.g. State/Federal Grants]):*

Technical Feasibility *(Describe the technologies involved and any relevant past experience or proven success with similar projects):*

Environmental Benefits *(Describe the nature, magnitude, and timing of any environmental benefits attributable to the project. If possible, describe potential environmental performance measures [e.g. pollutant reduction]. Please address any potential environmental impacts associated with implementing or maintaining the project [e.g. loss of a habitat or conversion of habitat from one type to another during implementation]):*

Economic and Social Benefits *(Describe the economic and social benefits including those related to the project's improved ecosystem services and any estimates on jobs created or preserved):*

Community Resilience *(Describe if the project assists Florida's ability to anticipate, withstand, or recover from hazards or threats [e.g. hurricane preparedness, establishing living shorelines]):*

Conflicts or Complements to Existing Efforts *(Describe any ongoing activities in the project implementation area, if the project is part of another plan, and why the project does or does not interfere with that work. Please consider how the project may complement existing local, regional, and state efforts/plans/objectives):*

Complies with Federal, State, Local, and Tribal Laws/Regulations *(Describe any concerns or potential conflicts):*

Readiness for Implementation *(Describe if the project has had any design or permitting work started or completed [attach permits or design work]. Please address any issues that may delay start or finish of the project):*

Public Acceptance *(Describe any known or potential public approval or opposition to the project):*

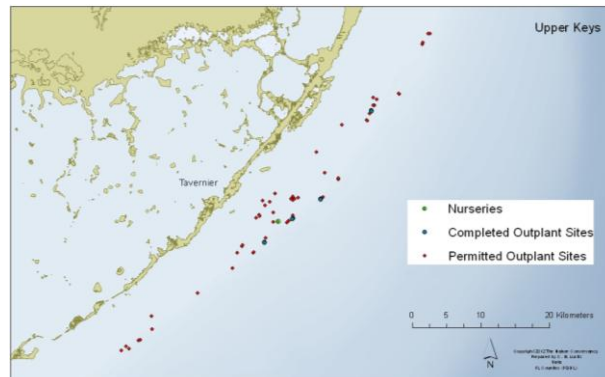
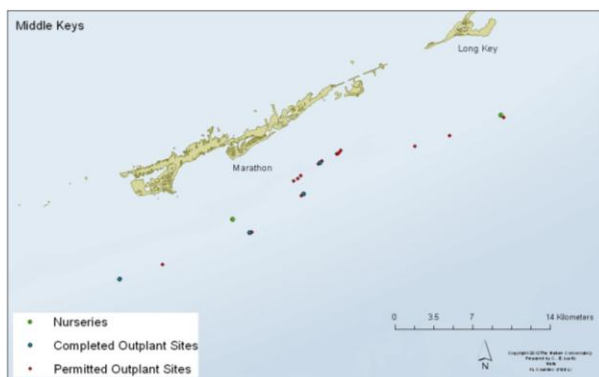
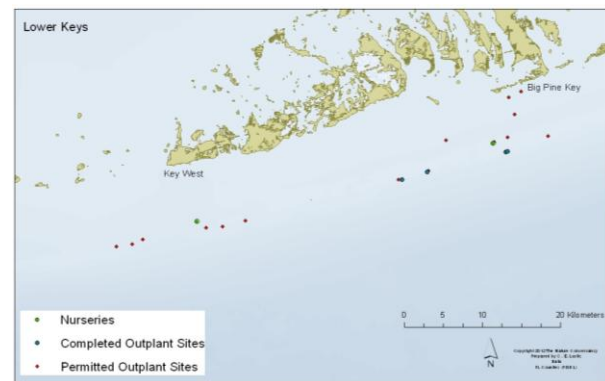
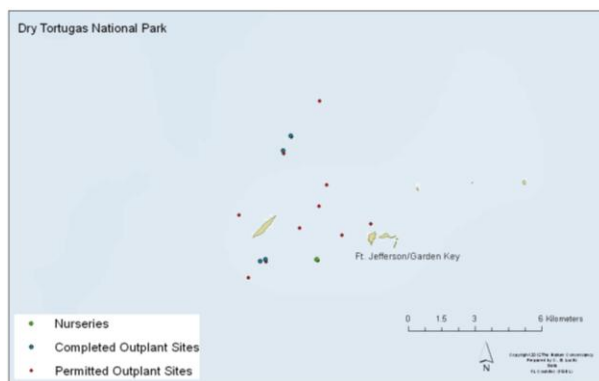
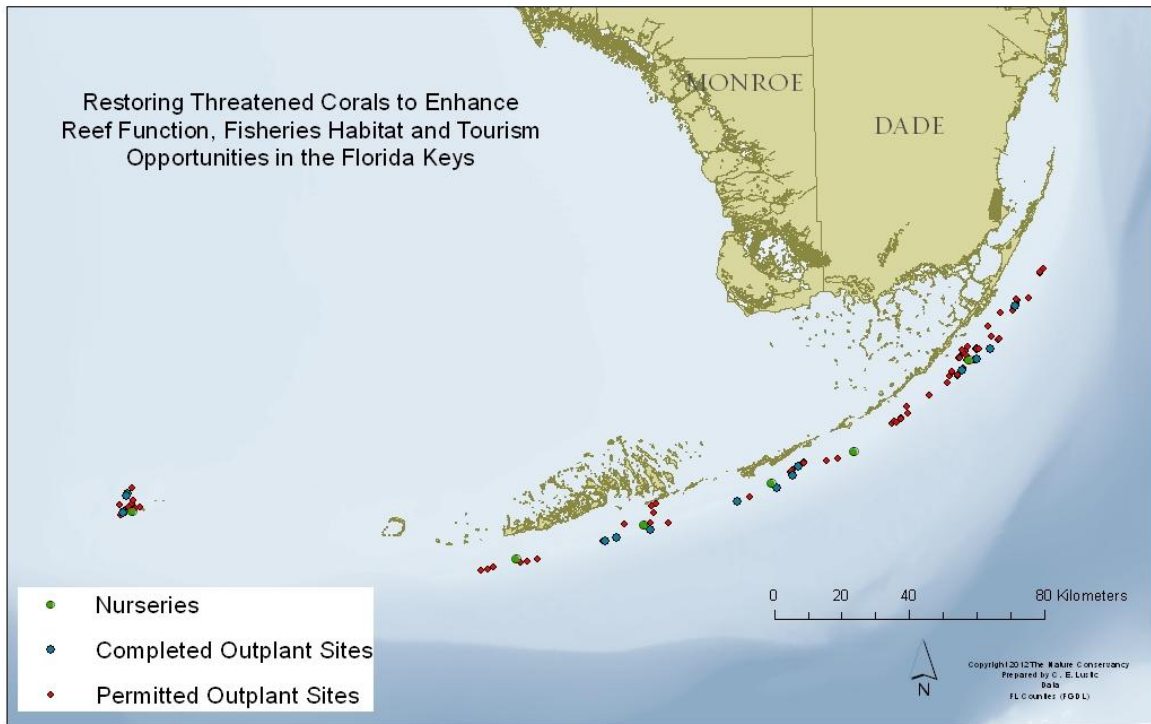
Additional Information you wish to provide *(Please include any maps, designs, drawings, photos, or background resources that may assist in completely and accurately understanding the project):*

Cost Appendix Sheet	
Cost Item	Cost Estimate
Planning	
Planning Subtotal:	
Construction	
Construction Subtotal:	
Monitoring	
Monitoring Subtotal:	
Project Cost	
Subtotal:	
TOTAL:	

Estimated Costs by Year	
Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	

Appendix

Project Location: Coral nurseries and outplant sites are located in state and federal waters of the Upper, Middle, and Lower Keys and within Dry Tortugas National Park, as shown below:



Project Description

Table 1. Nursery inventories as of June 2014.

Region	Manager	# of genotypes	# of colonies
Upper Keys	Coral Restoration Foundation	100	21,806
Middle Keys	Florida Fish and Wildlife Conservation Commission	18	2,440
Lower Keys	Mote Marine Laboratory	48	7,946
Dry Tortugas	TNC – Florida Keys Office	12	1,200
TOTAL		178	33,392

Technical Feasibility

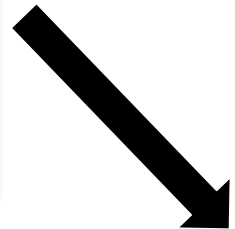
Technologies Involved. The project's restoration and recovery approach is to take small fragments of live tissue from healthy coral colonies of known genetic stock, grow them out in undersea nurseries over time to create multiple colonies of each genetic type, and then outplant genetically distinct individuals in proximity to one another so they spawn and help reseed surrounding reefs up to a kilometer away. Each outplanting site also directly enhances live coral cover, three dimensional structure, fisheries habitat and tourism value.



Fragment collection



Nursery grow-out



Restoration/Outplanting



Reproduction



Recovery

Nursery Types:

Block Nursery



Line Nursery



Tree Nursery



Outplanting Methods:

On a nail with epoxy at the base



Epoxied straight to the substrate

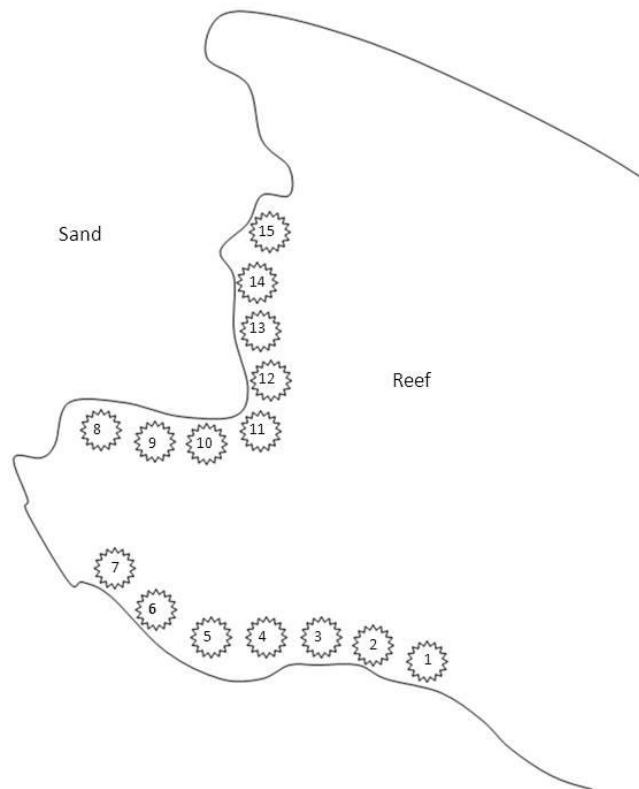


On a puck epoxied to the substrate

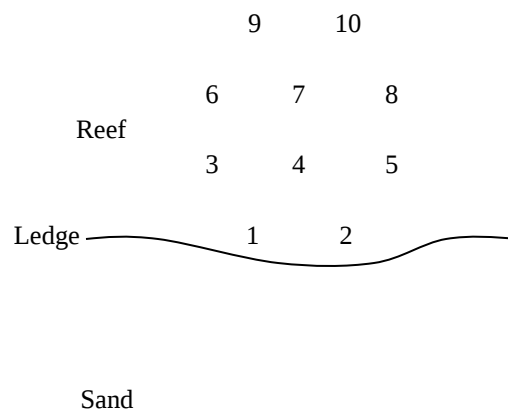


EXAMPLE of outplanting site design

Fifteen outplanting arrays situated along a reef edge.



Each array is comprised of 10 colonies arranged in a cluster, with one representative from each of 10 genotypes per array.



Readiness for Implementation

Table 2. List of permits.

Permitting Entity	Type of permit or approval	Applicant	Permit/ Tracking #	Issuance date	Expiration date	Notes
National Marine Fisheries Service	Biological Opinion	Caitlin Lustic, TNC/Tom Moore, NOAA Habitat Restoration Center	F/SER/2011/05414	9/14/2011	N/A	
FL Fish and Wildlife Conservation Commission	Special Activity License	Caitlin Lustic, TNC	SAL-11-1086A-SCRIP	3/13/2012	2/16/2013	New application in review
Florida Keys National Marine Sanctuary	Permit to Further Natural Resource Value of the Sanctuary	Caitlin Lustic, TNC	FKNMS-2011-150	3/26/2012	6/30/2013	
Dry Tortugas National Park	Scientific Research and Collecting Permit	Meaghan Johnson, TNC	DRTO-2012-SCI-0003	3/1/2013	3/1/2014	