



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.
- If you have multiple projects – please submit one Form for each project.
- When you have completed the form hit the submit button in the upper right hand corner. Once your Form is successfully submitted, you will receive a confirmation email from the Florida Department of Environmental Protection.
- Submit all back-up maps, information, etc. to Restoration.Projects@dep.state.fl.us
- To submit updated information, please fill out this form and update fields as needed
- * Indicates required fields

New Project

Update to Previous Submittal

Project #

***Project Name**

Contact Information

*** Full Name**

Phone Number

*** Email**

Organization Name

Additional name(s), phone number(s), email address(s), and organization name(s) and/or project partners

***Project Location**

Include a map, if possible, and the city, county, longitude/latitude decimal degrees if known, and parcel # if applicable.

***Watershed(s)**

Select all that apply. A map of corresponding Florida watersheds is provided to assist in accurate placement of the project. If the project pertains to off shore or open ocean efforts, select Open Ocean. [Florida Watersheds Map](#)

All FL Coastal Watersheds	Lake Worth Lagoon-Palm Beach Coast	Suwannee
All FL Gulf Coast Watersheds	Lower St. Johns	Tampa Bay
All FL Watersheds	Middle St. Johns	Tampa Bay Tributaries
Apalachicola-Chipola	Nassau-St. Marys	Upper East Coast
Caloosahatchee	Ochlockonee-St. Marks	Upper St. Johns
Charlotte Harbor	Ocklawaha	Withlacoochee
Choctawhatchee-St. Andrew	Open Ocean	
Everglades	Pensacola	
Everglades West Coast	Perdido	
Fisheating Creek	Sarasota Bay-Peace-Myakka	
Florida Keys	Southeast Coast-Biscayne Bay	
Indian River Lagoon	Springs Coast	
Kissimmee River	St. Lucie-Loxahatchee	
Lake Okeechobee		

***Project Description**

Describe all aspects of the project.

***Project Category**

Although projects may identify under multiple categories, please place your project in the best fit category. A document of category definitions and examples is provided. [Category Definitions](#)

***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.

***Total Estimated Project Cost** \$

***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]. Put NA if not applicable.

Technical Feasibility

Describe the technologies involved and any relevant past experience or proven success with similar projects.

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.

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].

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. If these are too large to attach here, please email them to Restoration.Projects@dep.state.fl.us.

COST APPENDIX SHEET

Cost Item

Cost Estimate

Planning

Contracts	
Feasibility	
Engineering, Design, Land Rights & Bid Prep	
Restoration Plan	
Site Visits & Cost of Site Selection	
Administration, Overhead and Indirect	
Other	
Planning Subtotal:	

Construction

Contracts	
Administration & Mobilization/Demobilization	
Other	
Construction Subtotal:	

Monitoring

Contracts	
Data Collection	
Monitoring Administration	
Other	
Monitoring Subtotal:	

Project Cost

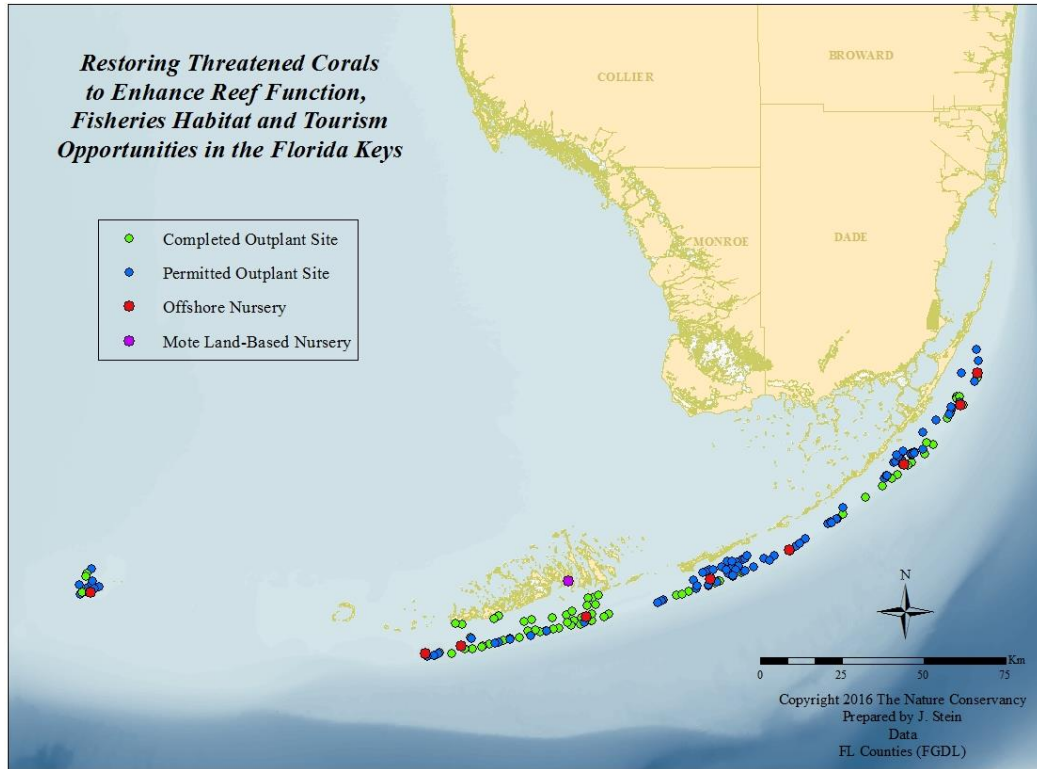
Contracts	
Subtotal:	
Contingency (<i>traditionally calculated at 10% of the subtotal</i>)	
TOTAL:	

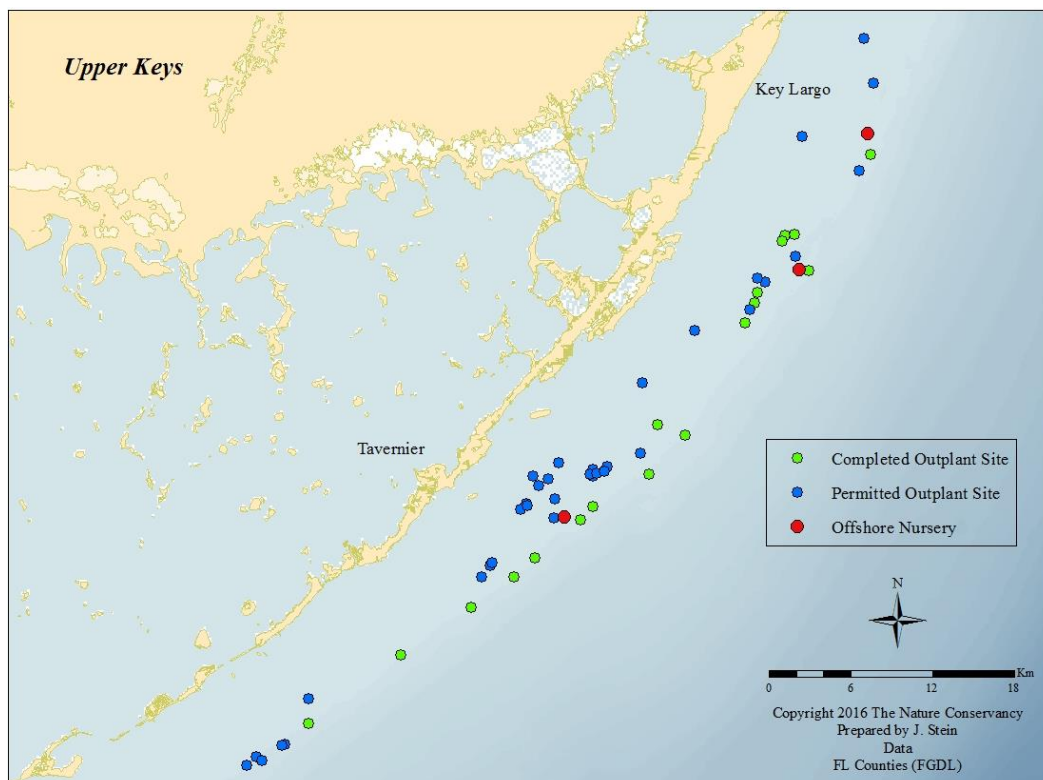
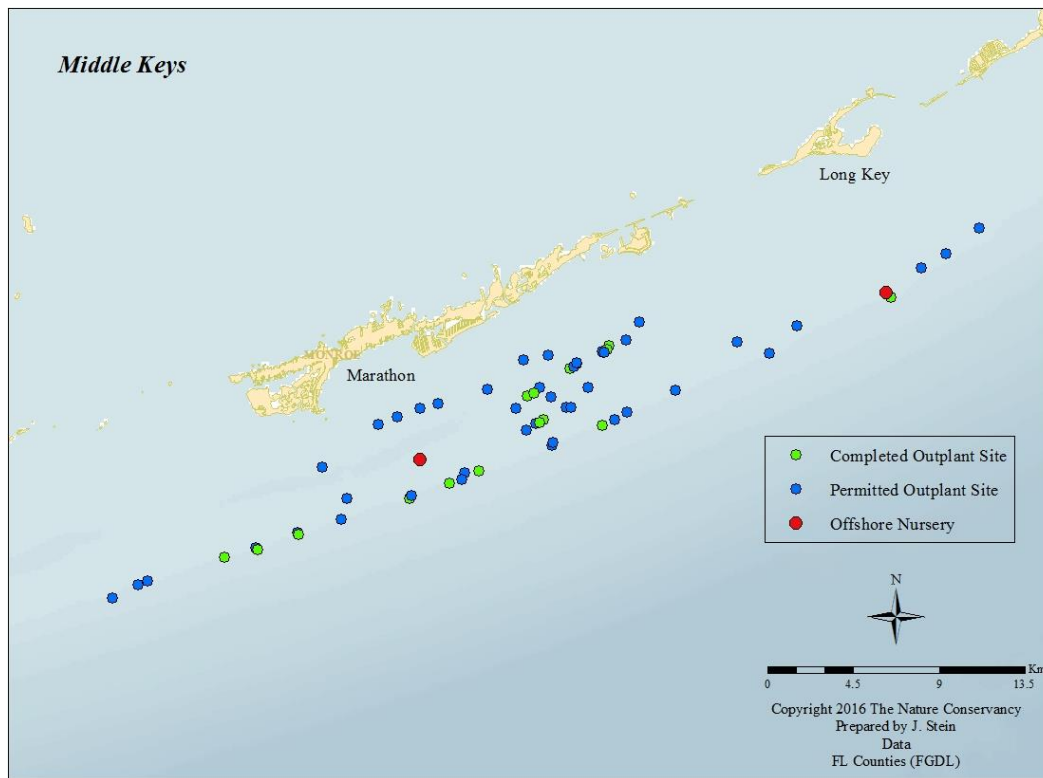
Estimated Costs by Year

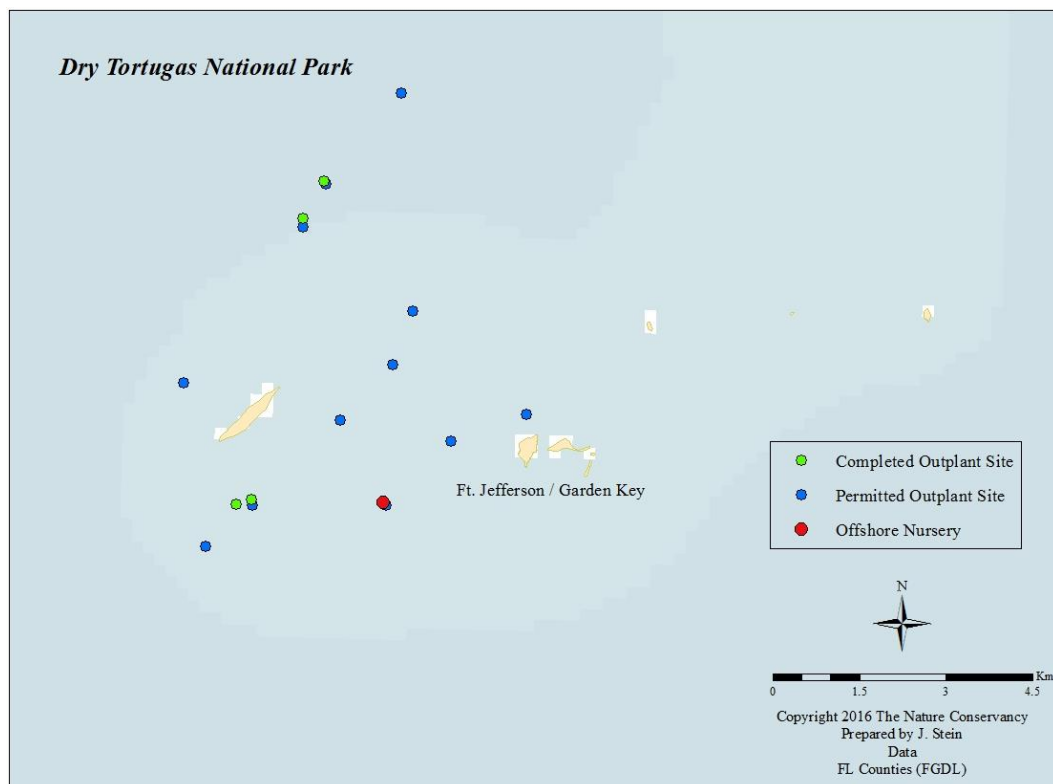
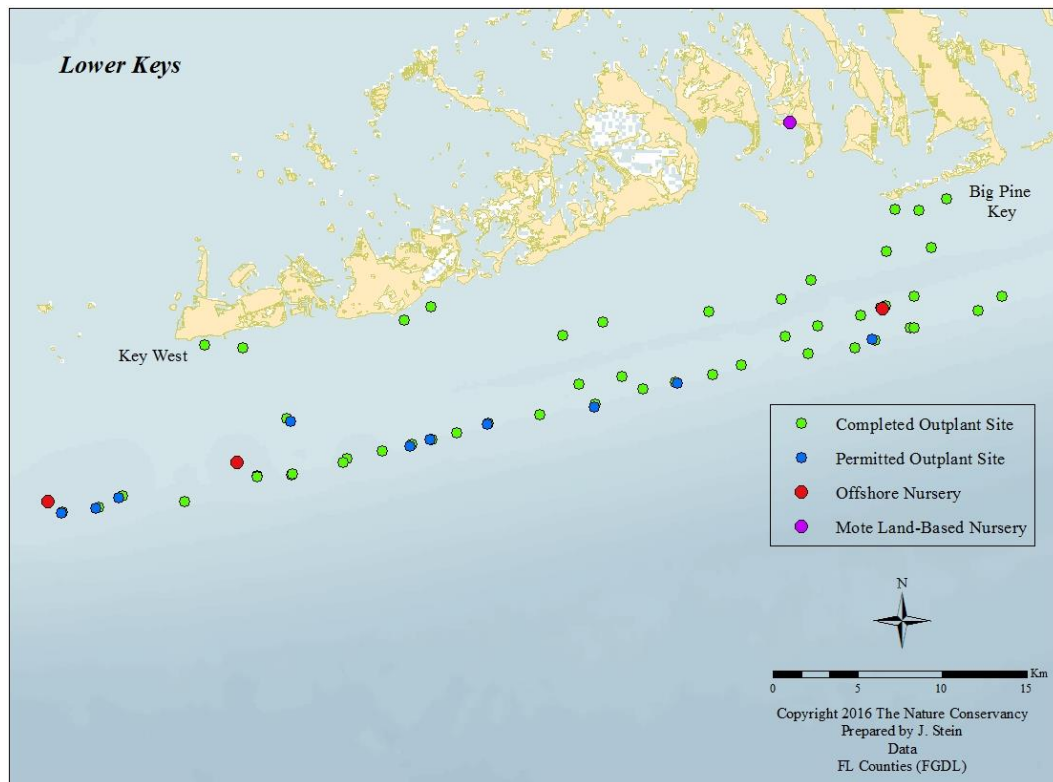
Year 1	
Year 2	
Year 3	
Year 4	
Year 5	
Year 6	

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 - Tavernier	Coral Restoration Foundation	167	30,000
Upper Keys – Elbow	Coral Restoration Foundation	23	2,000
Upper Keys – Carysfort	Coral Restoration Foundation	45	2,500
Middle Keys - Marathon	Florida Fish and Wildlife Conservation Commission	31	1,305
Middle Keys – Long Key	Florida Fish and Wildlife Conservation Commission	20	1,175
Lower Keys in-water	Mote Marine Lab	85	10,000
Lower Keys land-based	Mote Marine Lab	N/A	20,000
Key West – Sand Key	Mote Marine Lab	Just permitted	Just permitted
Key West	Coral Restoration Foundation	20	1,500
Dry Tortugas	TNC – Florida Keys Office	15	950

Technical Feasibility

Acropora coral restoration. The project's primary 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. Each outplanting site directly enhances live coral cover, three dimensional structure, fisheries habitat and tourism value.

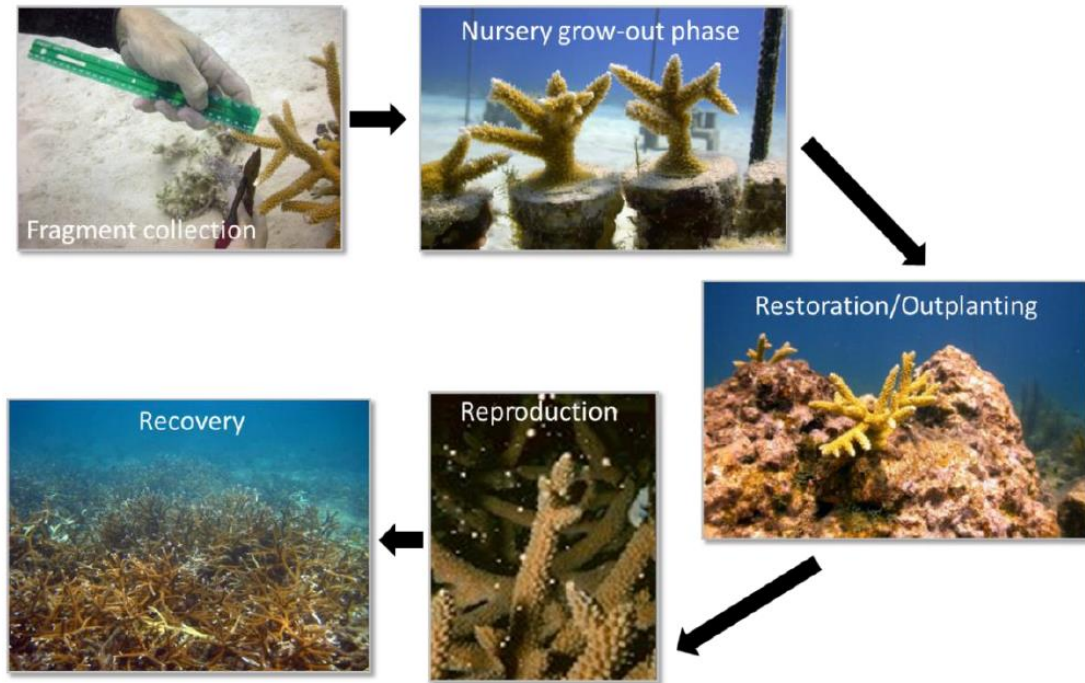


Figure 1. Theory of change behind restoration work: by outplanting genotypically diverse colonies, we increase the likelihood of successful sexual reproduction and aid in the re-seeding of surrounding reefs.

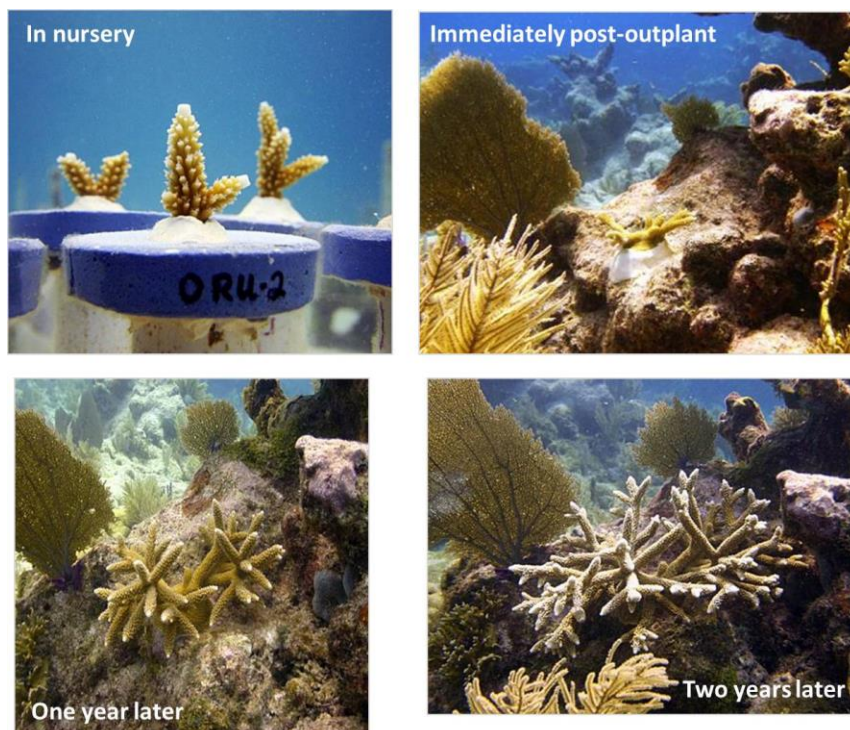


Figure 2. Example of successful outplanting in the Lower Keys region.

Boulder coral restoration. The goals of the boulder coral restoration are the same but the techniques are a little different. The stock for propagation is already housed in Mote's nurseries and new colonies are created both by asexual reproduction or fragmentation, and by settling out sexual recruits that are collected during the spawning season. A set of microfragmented colonies of the same genetic type are then placed close enough together to fuse back into a larger fragment that is then outplanted to dead coral heads.

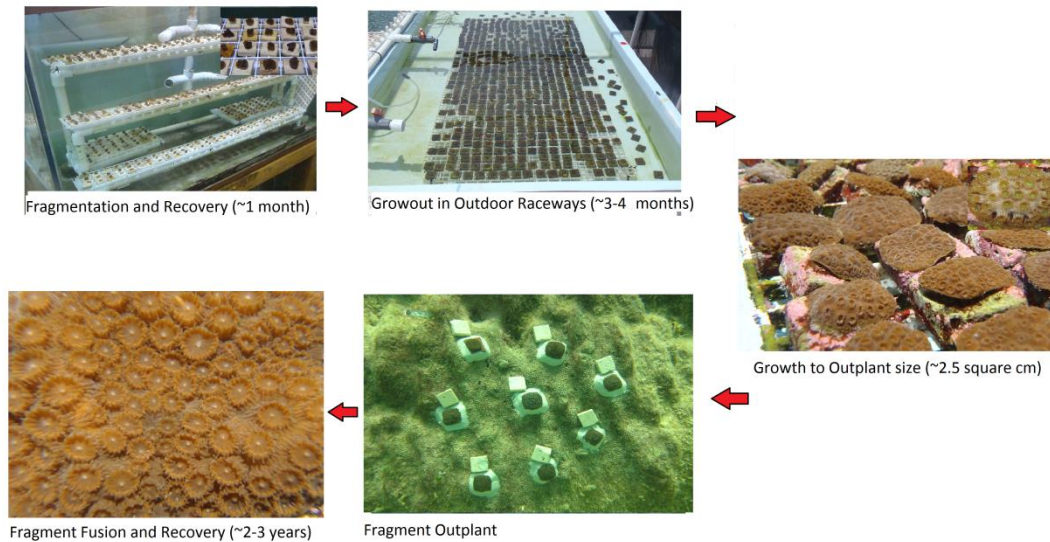


Figure 3. Boulder coral recovery and restoration approach.

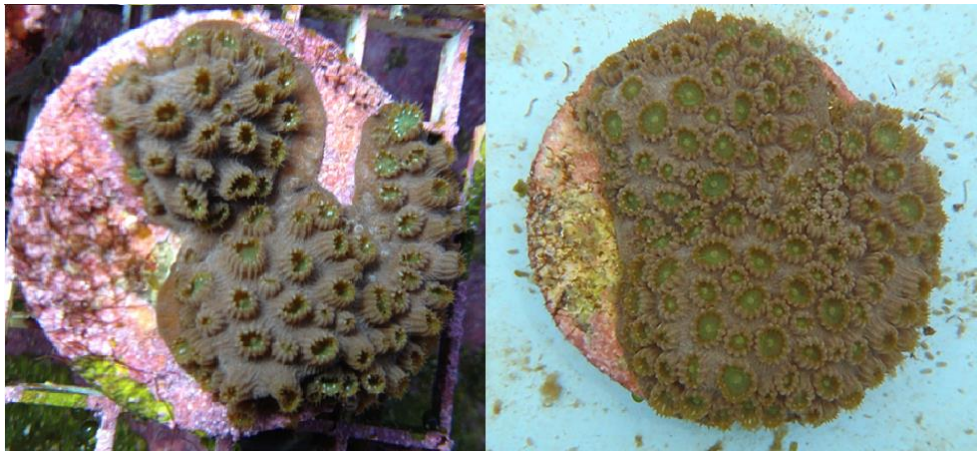


Figure 4. When two microfragments from the same broodstock colony come into contact, they merge together to more quickly resheet the colony.

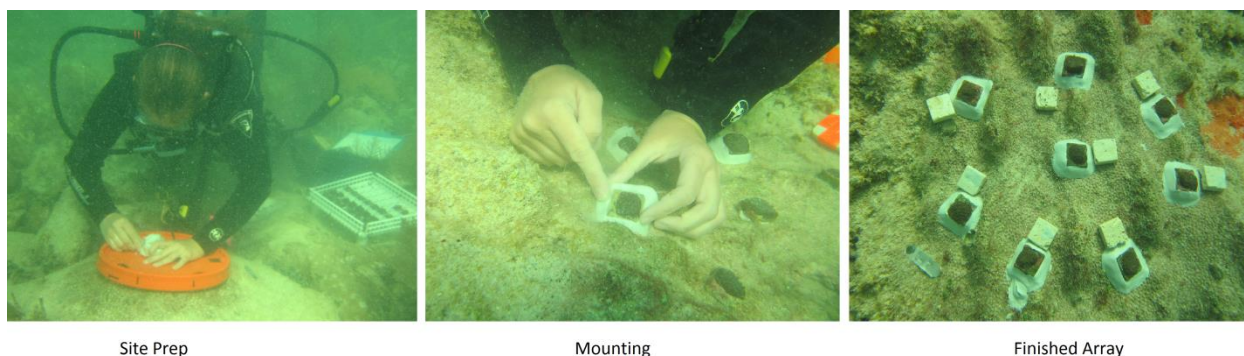


Figure 5. Depicted is the process of securing a coral array to a dead skeleton. Each site was cleaned and marked according to a 30cm template; fragments were then secured using epoxy and photographed to track growth and survival.

Readiness for Implementation

Table 2. List of permits.

Permitting Agency	Type of permit or approval	Applicant	Permit/Tracking #	Issuance Date	Expiration Date
National Marine Fisheries Service	Biological Opinion	Tom Moore, NOAA Restoration Center	F/SER/2011/05414	9/14/2011	N/A
Florida Keys National Marine Sanctuary	Permit to Further Natural Resource Value	Erich Bartels	FKNMS-2015-163	2/5/2016	2/4/2021
Florida Keys National Marine Sanctuary	Permit to Further Natural Resource Value	Dave Vauhgan	FKMNS-2016-121		
State of Florida Aquaculture Certificate		Dave Vauhgan	Aq 0654019		
Florida Keys National Marine Sanctuary	Permit to Further Natural Resource Value	Kerry Maxwell	FKNMS-2015-129	2/5/2016	2/4/2021
Florida Keys National Marine Sanctuary	Research Permit	Kerry Maxwell	FKNMS-2015-127-A1	2/10/2016	10/18/2017
Florida Keys National Marine Sanctuary	Permit to Further Natural Resource Value	Ken Nedimyer	FKNMS-2011-159-A4	4/4/2016	12/31/2018
Florida Fish and Wildlife Conservation Commission	Special Activity License	Erich Bartels	SAL-16-1724-SCRIP	02/05/2016	02/04/2017
Florida Fish and Wildlife Conservation Commission	Special Activity License	Ken Nedimyer	SAL-16-1725-SCRIP	3/11/2016	1/31/2017
Dry Tortugas National Park	Scientific Research and Collecting Permit	Caitlin Lustic	DRTO-2016-SCI-0013	12/16/2016	12/16/2017