

Timeline of Recent Research and Restoration Events

December 12: Glenn Coldren attended ANRAC.

December 17: Kathryn Tiling compiled the final report and invoice submitted for SFWMD License Plate Grant.

December 18: Glenn Coldren performed an initial site visit for a homeowner looking to add a living shoreline to their property in Sewall's Point.

January 2: Samantha Smith began her new position as a full-time Research Associate. Samantha Smith led a shell bagging with 16 volunteers creating 437 bags of shell.

January 3: Alex Goldin's first day at FOS as a part-time Shell Recycler.

January 8: Samantha Smith held a citizen science training session for 6 volunteers for microplastic identification as part of our microplastic grant.

January 7: Glenn Coldren submitted a Letter of Intent to Impact 100 Martin Grant Committee.

January 9: Electrical install completed in the new research lab.

January 10: Insulation installed in the new research lab. Glenn Coldren had a follow up living shoreline meeting with a potential new homeowner and Meg Whitmer to coordinate a hybrid Living Shoreline. Kathryn Tiling added a new Water Quality Tester to the program.

January 14: Research met with FWC and Martin County to discuss water quality sampling in the Jensen Beach Impoundment.

January 15: Glenn Coldren performed an initial site visit for a homeowner looking to add a living shoreline in Jensen Beach.

January 17: Kathryn Tiling prepped and submitted two grants to IRL NEP for the oyster program (PI – Coldren) and seagrass program (PI-Tiling). Kathryn Tiling is also a co-PI on a seagrass genetic study on a submission from Laura Reynolds of UF.

January 20: Kathryn Tiling gave seagrass talk to the beach cleanup group as part of Seagrass Month. Samantha Smith led a CORE module creation event with 10 volunteers from Publix who made 90 oyster COREs.

Seagrass Nursery Expansion Update

The main seagrass exhibit nursery is up and running. Seagrass from the experimental nursery was transferred into the main nursery at the beginning of September. These trays are now viewable by the public. Work to be completed includes lining and plumbing the shoreline tanks and reinforcing the tables in the experimental nursery.

Research Lab Replacement Update

The new research lab building was installed on December 5th. Electrical and Insulation are complete. Drywall, Phone line, AC, Flooring, and Covered outdoor work area are scheduled to be completed by mid-February.

Externally Funded Projects - Awarded and Active

| Proj. # | Status | Project Title | Funding Type | Source | Lead Institution | Funding Amount to FOS | Fiscal Year | Income Type | Expected Income Year and Month |
|--------------------|---|---|-------------------|--------------------------------|-------------------------------------|-----------------------|-------------|-------------------------------|--------------------------------|
| 4 | In Progress | Seagrass nursery expansion | Donations | Oceans Alive Cash Call | FOS Primary | \$72,000 | 2018-2020 | Ocean's Alive Cash Call | Already Received |
| Staff | PI: Tiling; Support Staff: Coldren | | | | | | | | |
| Description | Supports expanding the seagrass nursery system with an anticipated increase from 6 to 50 seagrass tanks and 9 large-scale shoreline vegetation tanks. Funds are for supplies for expansion. | | | | | | | | |
| Progress | Main nursery is up and running. Work is planned for the shoreline tanks. Anticipated Completion by March 2020 | | | | | | | | |
| 5 | Complete - Awaiting Payment | Sewall's Point Living Shoreline | Donation | Private | FOS Primary | \$5,600 | 2019 | One Time Payment @ Completion | February 2020 |
| Notes | PI: Coldren | | | | | | | | |
| Description | Supports creating a living shoreline (oysters and shoreline plants) at private shoreline in the St. Lucie Estuary. Funds are for personnel time for surveys, permitting and construction. | | | | | | | | |
| Progress | Completed, payment needs followed up on. | | | | | | | | |
| 6 | Complete - Awaiting Payment | Mapping of oyster reefs in St. Lucie River | Govt. contract | SFWMD to Johnson Engineering | Subcontract for Johnson Engineering | \$6,214 | 2019 | One Time Payment @ Completion | February 2020 |
| Staff | PI: Coldren | | | | | | | | |
| Description | Subcontract with Johnson Engineering to perform ground truthing oyster surveys. Funds are for personnel time. | | | | | | | | |
| Progress | Complete - Invoice was submitted | | | | | | | | |
| 7 | In Progress | Assessing the effects of restored oyster reefs and seagrasses on shoreline stabilization. | Competitive Grant | IRL NEP Small Grants | FOS Primary | \$4,812 | 2019 & 2020 | One Time Payment @ Completion | May 2020 |
| Staff | PI: Coldren; Support Staff: Tiling | | | | | | | | |
| Description | Supports purchasing supplies for sediment elevation studies on oysters and seagrasses. | | | | | | | | |
| Progress | SET material ordered; anticipated installation end of February. | | | | | | | | |
| 8 | Complete - Awaiting Payment | New planting methods to enhance the resiliency of Living Shorelines | Competitive Grant | IRL License Plate Grant; SFWMD | FOS Primary | \$16,273 | 2019 | One Time Payment @ Completion | January 2020 |
| Staff | PI: Coldren | | | | | | | | |
| Description | Supports oysters and shoreline plant restoration in the IRL. Restoration efforts are testing new styles of reef and their effectiveness. | | | | | | | | |
| Progress | Complete - Invoice was submitted | | | | | | | | |

| Externally Funded Projects - Awarded and Active | | | | | | | | | |
|---|--|--|-------------------|--------------------------|---------------------|-----------------------|-------------|-------------------------------|--------------------------------|
| Proj. # | Status | Project Title | Funding Type | Source | Lead Institution | Funding Amount to FOS | Fiscal Year | Income Type | Expected Income Year and Month |
| 9 | In Progress | Immersing CORE (Community Oyster Restoration Enhancement) Modules Into Restoration and Education | Competitive Grant | IRL NEP Small Grants | FOS Primary | \$2,440 | 2019 & 2020 | One Time Payment @ Completion | May 2020 |
| Staff | PI: Coldren | | | | | | | | |
| Description | Supports supplies to test out a patented alternative to oyster bags called COREs. This includes a strong outreach component with modules being built with FOS and visiting camps over summer 2019. | | | | | | | | |
| Progress | All 500 COREs have been made. 100 have been deployed. Deployment scheduled for Jan. 28th, 2020. | | | | | | | | |
| 10 | In Progress | Microplastics, Oysters and the Indian River Lagoon | Competitive Grant | IRL NEP | Subcontract for UCF | \$14,998 | 2019 & 2020 | One Time Payment @ Completion | October 2020 |
| Staff | PI: Coldren; Support Staff: Smith | | | | | | | | |
| Description | Supports testing for the presence of microplastics throughout the Indian River Lagoon (IRL). FOS is responsible for sampling, filtering, and counting 10 sites in the southern IRL. | | | | | | | | |
| Progress | Regular sampling continues through February. Volunteer ID training and processing samples has begun. | | | | | | | | |
| 11 | In Progress | Lululemon | Donation | Lululemon | FOS Primary | \$3,000 | 2019 & 2020 | One Time Payment @ Initiation | Already Received |
| Staff | PI: Coldren | | | | | | | | |
| Description | Funds received supported oyster bagging, mangrove planting and oyster deployment. | | | | | | | | |
| Progress | Events completed. Funds used to support FLOOR as needed in FY 19 and FY 20. | | | | | | | | |
| 12 | In Progress | Research Lab Replacement Trailer | Donations | Private | FOS Primary | \$40,000 | 2019 & 2020 | One Time Payments via Donors | Already Received |
| Staff | PI: Coldren; Support Staff: Tiling | | | | | | | | |
| Description | Funds replacement of research lab trailer. | | | | | | | | |
| Progress | Shed installed. Electrical and insulation complete. Waiting on Phone and Drywall - which are scheduled. | | | | | | | | |
| 13 | In Progress | Living Shorelines to Save Our Waters | Competitive Grant | Impact 100 Martin County | FOS Primary | \$25,000 | 2019 & 2020 | One Time Payment @ Initiation | Already Received |
| Staff | PI: Coldren | | | | | | | | |
| Description | Supports the oyster shell recycling program and one FLOORED trip. For the shell recycling program this includes personnel and supplies. | | | | | | | | |
| Progress | 5 restaurants have been added to FLOOR; collections are underway. Reef construction planned for spring 2020. | | | | | | | | |

Externally Funded Projects - Awarded and Active

| Proj. # | Status | Project Title | Funding Type | Source | Lead Institution | Funding Amount to FOS | Fiscal Year | Income Type | Expected Income Month |
|--------------------|---|---|----------------------------|-----------------------------|---|-----------------------|-------------|-------------------------------|-----------------------|
| 14 | Waiting on contracts | Samsons Island Submerged Lands Restoration (SISLR) | Competitive Grant | IRL NEP | Subcontract for City of Satellite Beach | 11310 (TBF) | 20-21 | One Time Payment @ Completion | October 2020 |
| Staff | PI: Coldren and Tiling | | | | | | | | |
| Description | Funds received would support seagrass and oyster restoration at Samsons Island in Satellite Beach | | | | | | | | |
| Progress | Project was fully funded; awaiting contract executions and permitting | | | | | | | | |
| 15A | Waiting on contracts | Jensen Beach Impoundment Mangrove Restoration Project | Competitive Grant | State Wildlife Grant | Subcontract for Martin County | 4800 (TBF) | 2020 | One Time Payment @ Completion | TBD |
| Staff | PI: Coldren and Tiling; Support Staff: Smith | | | | | | | | |
| Description | Supports personnel time to perform mangrove, salt marsh, and water quality monitoring during restoration efforts at Jensen Beach Impoundment. | | | | | | | | |
| Progress | Project has started but waiting on contracts | | | | | | | | |
| 15B | Waiting on contracts | Jensen Beach Impoundment Restoration IRMA funding | Competitive FWC IRMA funds | FWC Funds for IRMA Recovery | Subcontract for Martin County | 6000 (TBF) | 2020 | One Time Payment @ Completion | TBD |
| Staff | PI: Coldren and Tiling; Support Staff: Smith | | | | | | | | |
| Description | Supports personnel time to perform mangrove, salt marsh, and water quality monitoring during restoration efforts at Jensen Beach Impoundment. | | | | | | | | |
| Progress | Project has started but waiting on contracts | | | | | | | | |

| Externally Funded Projects - Letters of Intent and Proposals Out for Review | | | | | | | | | |
|---|--|---|-------------------|--------------------------|---------------------|-----------------------|-------------|--------------------------------|-----------------------|
| Proj. # | Status | Project Title | Funding Type | Source | Type | Funding Amount to FOS | Fiscal Year | Income Type | Expected Income Month |
| N/A | Full Grant Submitted | Developing plastic-free alternatives for community-based oyster restoration in the Indian River Lagoon | Competitive Grant | IRL NEP | FOS Primary | \$22,364 | 2021 | N/A | N/A |
| Staff | PI: Coldren | | | | | | | | |
| Description | Supports developing plastic-free alternatives to current shell bagging. Supports expansion and continuation of current shell recycling program. | | | | | | | | |
| Progress | Grant Submitted. | | | | | | | | |
| N/A | Full Grant Submitted | Evaluating the role of genetic diversity in stress tolerance to improve seagrass restoration in the Indian River Lagoon | Competitive Grant | IRL NEP | FOS Primary | \$21,247 | 2021 | One Time Playment @ Completion | N/A |
| Staff | PI: Tiling | | | | | | | | |
| Description | Supports mesocosm experiments at FOS to test for stress tolerance of seagrasses | | | | | | | | |
| Progress | Grant Submitted. | | | | | | | | |
| N/A | Full Grant Submitted | Establishing Collection Protocol and Site Fidelity Indices for Seagrass Restoration in The Indian River Lagoon | Competitive Grant | IRL NEP | Collaboration w/ UF | \$13,114 | 2021 | One Time Playment @ Completion | N/A |
| Staff | PI: Tiling | | | | | | | | |
| Description | Supports mesocosm experiments at FOS to test for local adaption in seagrass. | | | | | | | | |
| Progress | Grant Submitted. | | | | | | | | |
| N/A | LOI Submitted | Restoring Shorelines in Martin County | Competitive Grant | Impact 100 Martin County | FOS Primary | \$100,000 | 2020 & 2021 | One Time Payment @ Initiation | N/A |
| Staff | PI: Coldren | | | | | | | | |
| Description | Proposed expansion to the shell recycling program to create a systematic approach to living shoreline restoration and collaborate with marine contractors. | | | | | | | | |
| Progress | LOI was submitted on January 8th. | | | | | | | | |