

Timeline of Recent Research and Restoration Events

April 24 – EPA visited FOS to learn more about our seagrass restoration program and promote clean water initiatives. EPA Region 4 Acting Administrator, IRL NEP Executive Director, and local and state officials toured our seagrass nursery and planted seagrass at a field site.

April 29 – Glenn Coldren and Kathryn Tiling met with property owners north of Jensen Beach Causeway to discuss new living shoreline. It would be 5 adjacent properties and would be our largest living shoreline area to date.

May 1 – Kathryn Tiling and Glenn Coldren submitted abstracts to present at the Coastal and Estuarine Research Federation Conference (Nov. 3-7, 2019).

May 2 – Glenn Coldren conducted two interviews for WPTV Protecting Paradise for our microplastics project and our living shoreline program.

May 3 – Glenn Coldren met with Erin McDevitt from FWC to coordinate testing oyster restoration methods for MacArthur Beach State Park oyster reef restoration

May 6 – Kathryn Tiling met with Dennis Hanisak, Paul Wills and Jordon Beckler from Harbor Branch Oceanographic Institute to discuss seagrass nurseries and potential projects regarding seagrass sediment geochemical health metric.

May 7 – Kathryn Tiling participated in the seagrass survey that is conducted twice a year by SFWMD for the RECOVER program. Glenn Coldren did an interview for Indian River Business Magazine about our oyster reef restoration program.

May 8 – Kathryn Tiling participated in the seagrass survey that is conducted twice a year by SFWMD for the RECOVER program. Glenn Coldren led the oyster bagging component of the Oyster Reefs as Habitat Field Trip with the Education Department.

May 13 – Glenn Coldren provided IRL NEP a summary of all CCMP Activities from April 2018 to March 2019. Pam Hopkins participated in shorebird rooftop surveys.

May 14 – Glenn Coldren participated in a microplastics filtering and identification training session at UCF in Orlando as part of the “Microplastics, oysters, and the Indian River Lagoon” grant.

May 15 – Kathryn Tiling led a seagrass training workshop with 14 volunteers who learned about seagrass biology, importance and the restoration program, FOSTER. Glenn Coldren and Pam Hopkins participated in a meeting with Martin County Mosquito Control and Martin County Engineering Department to discuss restoration and management needs for the FOS mosquito control impoundment.

May 16 – 19 – Pam Hopkins attended the annual conference held by the Florida Native Plant Society. The theme this year was “Transitions”.

May 20 – Glenn Coldren trained one volunteer in microplastics water sample filtering. An additional three volunteers are scheduled for training to assist with water sample filtering this week.

May 21 – Glenn Coldren met with Piper’s Landing property managers to discuss an initiative of Piper’s Landing encouraging homeowners to install living shorelines rather than seawalls and creating an example living shoreline site to highlight living shorelines to the community.

Seagrass Nursery Expansion:

- Work continues on installing the inflow lines. Shoreline nursery tanks are prepped for sediment fill and lining. The research wet lab continues to operate.

Research Interns and Students

- The research department will have two summer interns.
 - Elliot Hoogerland, Michigan State University
 - Zachary Akdag, Martin County High School
- The research department will have one visiting student conducting research.
 - Theresa Gruninger, Master’s Student, University of Florida: The effect of oyster reefs on seagrass herbivory

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	Income	Expense
4	In Progress	Seagrass nursery expansion	Donations	Oceans Alive Cash Call	FOS Primary	\$72,000	2018 & 2019	Ocean's Alive Cash Call	Already Received	4835	6335
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	Projected extended into Fiscal Year 2019; FY18 Income was 4680 and Expense was 5690; FY19 Expense was changed to 6335. Work continues on plumbing the nurseries. Majority of table and tank construction is complete.										
5	In Progress	Sewall's Point Living Shoreline	Donation	Private	FOS Primary	\$5,600	2019	One Time Payment @ Completion	June/July 2019	4680	5700
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	Project moved into FY19 due to discharges. All reefs are built. Waiting for vegetation to grow out for final planting.										
6	In Progress	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	August 2019	4680	5700
Staff	PI: Coldren										
Description	Subcontract with Johnson Engineering to perform ground truthing oyster surveys. Funds are for personnel time.										
Progress	Sonar mapping by Johnson Engineering is ongoing. FOS will conduct ground truthing over summer 2019.										
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	4680	5690
Staff	PI: Coldren; Support Staff: Tiling										
Description	Supports purchasing supplies for sediment elevation studies on oysters and seagrasses.										
Progress	Final executed contract received May 2019. Work to be completed over summer and fall of 2019.										
8	In Progress	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	October 2020	4680	5700
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	1st and 2nd quarter reports completed. Reef deployment complete and monitoring is ongoing. Shell collection is ongoing.										

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	Income	Expense
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	4680	5690
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	Final executed contract received May 2019. Training and events have been schedule for summer 2019.										
10	In Progress	Microplastics, Oysters and the Indian River Lagoon	Competitive Grant	IRL NEP	Subcontract for UCF	\$14,998	2019	One Time Payment @ Completion	February 2020	4680	5640
Staff	PI: Coldren; Support Staff: Hopkins										
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 began in March of 2019 and will continue for one year. Infrastructure built and volunteer training ongoing.										
11	Complete	Lululemon	Donation	Lululemon	FOS Primary	\$3,000	2019	One Time Payment @ Initiation	Already Received	5680	5690
Staff	PI: Coldren										
Description	Funds received supported oyster bagging, mangrove planting and oyster deployment.										
Progress	Events completed. Funds used to support FLOOR as needed.										
12	In Progress	Research Lab Replacement Trailer	Donations	Private	FOS Primary	\$28,000	2019	One Time Payments via Donors	Already Received		
Staff	PI: Coldren										
Description	Funds replacement of research lab trailer.										
Progress	Design completed; working on finalizing quotes and specs.										
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	May 2019		
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	Selected as semi-finalist. Awaiting receipt of check.										

Externally Funded Projects - Awarded, Not Executed

Proj. #	Status	Project Title	Funding Type	Source	Lead Institution	Funding Amount to FOS	Fiscal Year	Income Type	Expected Income Month	Income	Expense
TBD	Waiting for Paper-work	Jensen Beach Impoundment Mangrove Restoration Project	Competitive Grant	State Wildlife Grant	Subcontract for Martin County	\$4,800	2020	TBD	TBD	TBD	TBD
Staff	PI: Coldren										
Description	Supports personnel time to perform mangrove, salt marsh, and water quality monitoring during restoration efforts at Jensen Beach Impoundment.										
Progress	Project has been awarded, but awaiting final agreements for execution.										
TBD	Waiting for Paper-work	Jensen Beach Impoundment Restoration IRMA funding	Competitive FWC IRMA funds	FWC Funds for IRMA Recovery	Subcontract for Martin County	\$6,000	2020	TBD	TBD	TBD	TBD
Staff	PI: Coldren										
Description	Supports personnel time to perform mangrove, salt marsh, and water quality monitoring during restoration efforts at Jensen Beach Impoundment.										
Progress	Project has been awarded, but awaiting appropriations from FWC and final agreements										

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	Income	Expense
N/A	Full Proposal Submiss.	A new sediment geochemical health metric for Florida seagrass restoration	Competitive Grant	FL Sea Grant	Collaboration w/ HBOI	-	2020 & 2021	N/A	N/A	N/A	N/A
Staff	PI: Tiling										
Description	Supports sediment analyses at our current sites. No direct funds, but HBOI will purchase few supplies needed (burlap, gas). Grant funding is primarily for student stipends, electrochemical analyzers, and travel as per FL Sea Grant student focus.										
Progress	HBOI LOI was accepted. Full proposal being compiled for submission early June.										
N/A	In Review	Samsons Island Submerged Lands Restoration (SISLR)	Competitive Grant	IRL NEP	Subcontract for City of Satellite Beach	\$11,310	2020	N/A	N/A	N/A	N/A
Staff	PT: Coldren; Support Staff: Tiling										
Description	Funds received would support seagrass and oyster restoration at Samsons Island in Satellite Beach										
Progress	Proposal submitted to IRL NEP and is in review. Awaiting decision.										
N/A	Not Awarded	The role of seeds in the resilience and restoration of shoal grass, Halodule wrightii, in the Indian River Lagoon	Competitive Grant	FL Sea Grant	Subcontract for UF	LOI only; No final budget	2020 & 2021	N/A	N/A	N/A	N/A
Staff	PI: Tiling										
Description	Funds received would support a study on seagrass seeds. FOS would be involved in seed germination and nursery growth with test plantings.										
Progress	Letter of Intent was submitted to FL Sea Grant. We received 2 positive and 1 negative reviews, but LOI was not selected for full proposal.										
N/A	Not Awarded	Multiple Stressors and Mutualism Breakdown- When and where do we find positive effects of the seagrass bivalve interactions?	Competitive Grant	NSF Biological Oceanography	Subcontract for UF	\$25,000	2020 & 2021	N/A	N/A	N/A	N/A
Staff	PI: Tiling										
Description	Funds received would support personnel and supplies for seagrass-bivalve in field restoration experiments.										
Progress	Proposal was submitted to NSF but was not selected.										