

The Florida Senate
COMMITTEE MEETING EXPANDED AGENDA

**APPROPRIATIONS SUBCOMMITTEE ON AGRICULTURE,
ENVIRONMENT, AND GENERAL GOVERNMENT**

**Senator Albritton, Chair
Senator Rodrigues, Vice Chair**

MEETING DATE: Wednesday, January 13, 2021

TIME: 3:30—6:00 p.m.

PLACE: *Toni Jennings Committee Room, 110 Senate Building*

MEMBERS: Senator Albritton, Chair; Senator Rodrigues, Vice Chair; Senators Ausley, Berman, Boyd, Bradley, Brodeur, Garcia, Mayfield, Stewart, and Thurston

TAB	BILL NO. and INTRODUCER	BILL DESCRIPTION and SENATE COMMITTEE ACTIONS	COMMITTEE ACTION
PUBLIC TESTIMONY WILL BE RECEIVED FROM ROOM A1 AT THE DONALD L. TUCKER CIVIC CENTER, 505 W PENSACOLA STREET, TALLAHASSEE, FL 32306			
1	Overview of State Technology by Jamie Grant, State Chief Information Officer (CIO)		Presented
2	Update on Coral Reef Protection Efforts, Department of Environmental Protection		Presented
3	Update on Florida's Endangered and Threatened Species, Fish and Wildlife Conservation Commission		Presented
Other Related Meeting Documents			



DIGITAL SERVICE

Implementation Update

Senate Appropriations Subcommittee on
Agriculture, Environment, and General Government

James Grant, State Chief Information Officer

HB 1391: TECHNOLOGY INNOVATION

- Established the Florida Digital Service(FL[DS]).
- Connection to the US Digital Service.
- Of note, the bill directs FL[DS] to:
 - Create a state data catalog and dictionary.
 - Set enterprise architecture standards.
 - Establish data sharing agreements.
 - Promote data interoperability.
 - Support digital transformation.
 - Set technology procurement standards.

OUR MISSION

To deliver better
government services
and transparency to
Floridians through
design and technology.



OUR OBJECTIVES

FL [DS] has six key objectives to support our mission of delivering better government services to Floridians through design and technology. These represent the components of the project life cycle.



RECRUIT



ORGANIZE



ARCHITECT



INNOVATE



TRANSFORM



PROTECT

OUR PARTNERS

FL [DS] partners with all state agencies in our shared mission of delivering better government services to Floridians through design and technology. Our partners are grouped into verticals based on their missions.



Government
Operations



Healthcare



Economic
Growth



The Environment



Education



Public Safety
& the Law

RECRUIT TOP TECH TALENT

RECRUIT

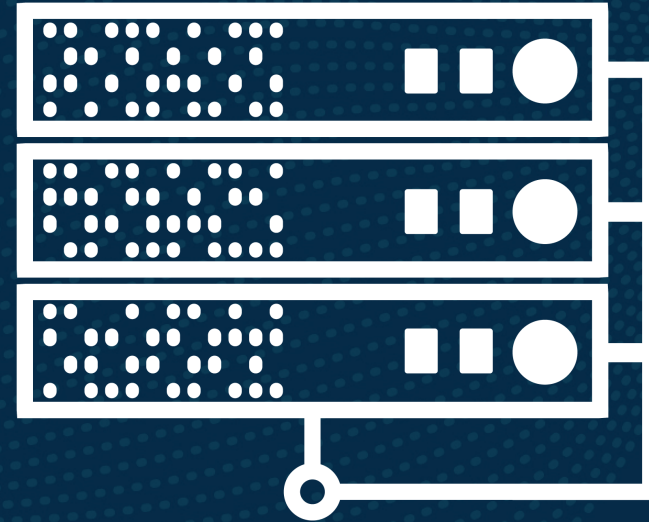
- Tours of Service Model.
- Support of Internships and Fellowships.
- Roles designed to mirror objectives and reflect the industry standard rather than bureaucratic nomenclature:
 - Technologist
 - Designer
 - Product Engineer
 - Solutions Architect
- Rolling applications through digital.fl.gov.



DATA MANAGEMENT

ORGANIZE

- We must first answer five questions to complete an inventory:
 - What data do we have?
 - Why do we collect it?
 - What is it used for?
 - Where is it stored?
 - Does it contain exempt information?
- Data Catalog and Dictionary
 - Established by Oct. 1, 2021, followed by continuous improvement.
 - Listing and defining of data elements.
- Master Data Management
 - Developing a framework to both share and protect data between entities.



CLOUD-READY ARCHITECTURE

ARCHITECT

- Enterprise architecture framework
 - Led by Enterprise Architect.
 - Supports real-time scalability.
 - Recognizes unique needs of our partners.
 - Facilitates interoperability.
- Established in Florida Administrative Code
 - Will include standards and terminologies.
 - Will be created through a collaborative process.
 - Rulemaking expected to begin in Spring 2021.
- Compliance
 - Required of Executive Agencies.
 - Opt-out consideration for Cabinet Agencies.



AGILE METHODOLOGIES

INNOVATE

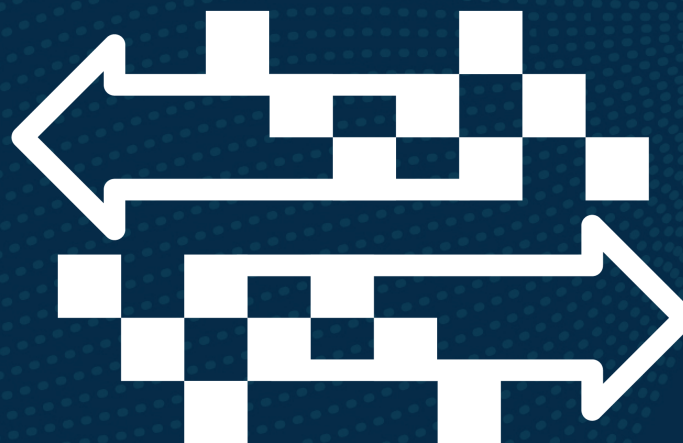
- Agile = results oriented.
- Achieve better value.
- Building Better, Buying Smarter
 - Build on the Enterprise Architecture.
 - Find new ways to address persistent challenges:
 - Acquisition
 - Project Management
 - Design with the end-user in mind, rather than simply for the bureaucratic need.
 - Align interests with partners.



DIGITAL TRANSFORMATION & INTEROPERABILITY

TRANSFORM

- Identify opportunities to modernize systems that can be used by multiple state agencies.
- Collaborate with Health and Human Services agencies on data interoperability use cases.
- Leverage emerging innovative technologies to increase efficiency, augment human capital, and expedite customer service:
 - Automation as a Service (AaaS)
 - Artificial Intelligence (AI)



PROTECT

- Protect Floridians' data and secure the state's digital assets from cyber threats.
- Florida Cybersecurity Task Force
 - Final Report due Feb. 1, 2021.
 - Aligned with the National Institute of Standards and Technology (NIST) Cyber Framework.
 - Will be incorporated into legislation.
- Intrastate Partnerships:
 - Private sector entities
 - State University System
- Federal and State Partnerships



ADDITIONAL UPDATES

DATA CENTER PROCUREMENT

- Pursuant to the General Appropriations Act, DMS initiated a procurement on June 30, 2020 to transition the State Data Center to a Managed Service Provider (MSP).
- The procurement includes provisions that allow for existing State Data Center contracts to be assigned to the MSP.
- The procurement is projected to be finalized with an award in mid 2021.



ADDITIONAL UPDATES

FUNDING METHODOLOGY

- Pursuant to HB 1391, FL[DS] is evaluating a new funding methodology for the Office of the State CIO for consideration by the legislature.
- This change would eliminate the current cost recovery model as requested by our partners.
- The methodology would ensure continued financial support for FL[DS] as agencies transition to the cloud and away from the State Data Center.
- This funding would continue to support the state's cybersecurity, data management, and technology project management functions.





Join us as we serve Florida, together.

THE FLORIDA SENATE
APPEARANCE RECORD

(Deliver BOTH copies of this form to the Senator or Senate Professional Staff conducting the meeting)

1/13/21

Meeting Date

Bill Number (if applicable)

Topic Florida Digital Service Presentation

Amendment Barcode (if applicable)

Name James Grant

Job Title State Chief Information Officer

Address 4050 Esplanade Way

Phone (850) 717-7001

Street

Tallahassee

FL

32399

Email james.grant@dms.fl.gov

City

State

Zip

Speaking: ☐ For ☐ Against ☒ Information

Waive Speaking: ☐ In Support ☐ Against
(The Chair will read this information into the record.)

Representing The Florida Digital Service within the the Department of Management Services

Appearing at request of Chair: ☒ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☐ No

While it is a Senate tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this meeting. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard.

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S-001 (10/14/14)



Protecting **FLORIDA** Together

Restoring Resilience to Florida's Coral Reef

Senate Appropriations Subcommittee on Agriculture, Environment, and General Government - Jan. 13, 2021

ECONOMICALLY ESSENTIAL



Illustration by Dawn Witherington

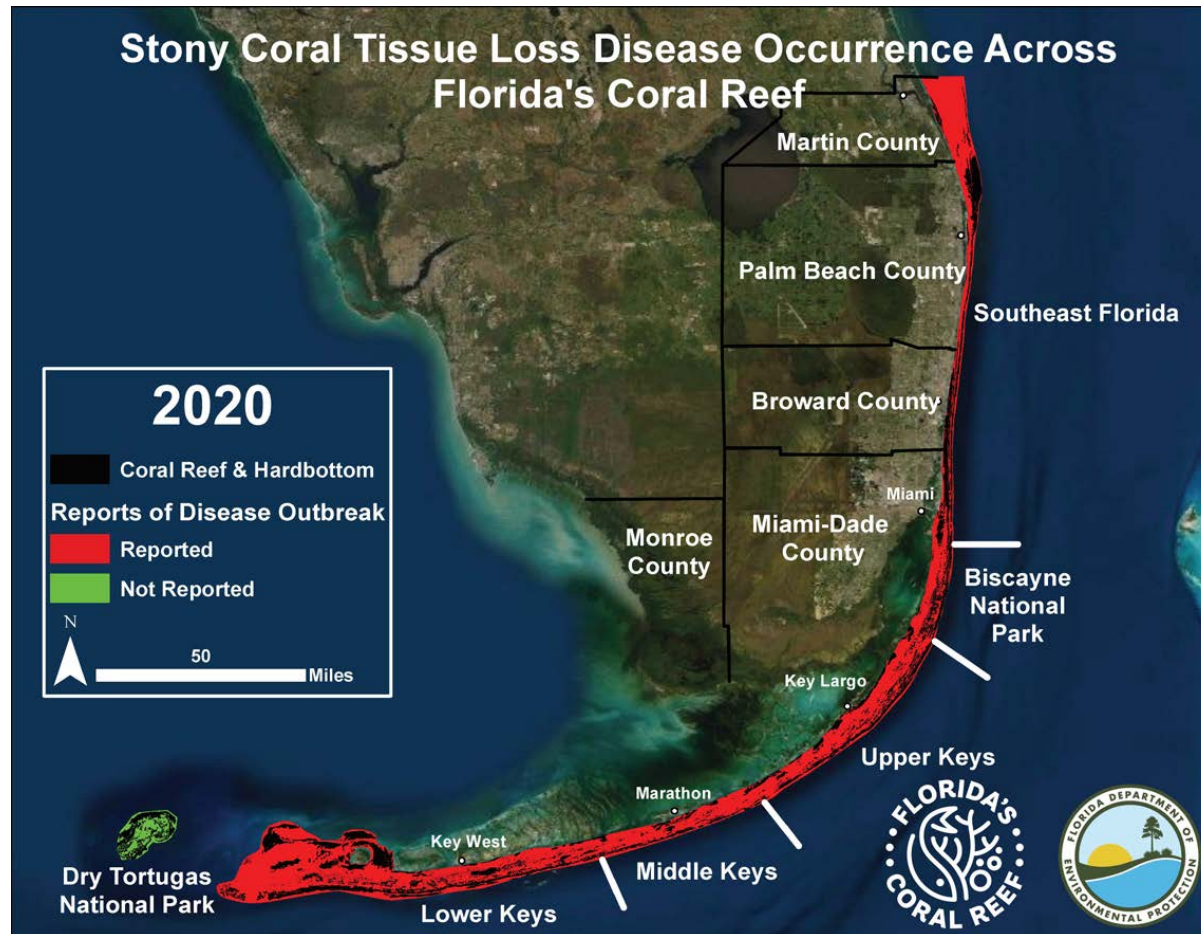
**\$675 million in annual
flood protection
benefits to people,
property and jobs**

**\$1.6 billion during a
severe storm event**

STONY CORAL TISSUE LOSS DISEASE



FLORIDA'S CORAL DISEASE OUTBREAK



FLORIDA'S CORAL DISEASE RESPONSE



The Florida Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission are fully committed to supporting the coral disease response efforts – including leading the coordination of a multi-faceted collaborative response effort with numerous partners from federal, state and local agencies, non-governmental organizations, universities, and members of the community to investigate and solve this problem.

OUR EFFORTS INCLUDE:

- **monitoring and modelling the disease spread;**
- **documenting the prevalence and severity of the outbreak;**
- **researching causative agents and environmental factors;**
- **developing novel coral disease treatments;**
- **gene banking corals in preparation for restoration efforts**
- **creating a state-wide Florida's Coral Reef outreach campaign and local reporting programs to facilitate stakeholder engagement through citizen science.**

DISEASE RESPONSE PARTNERS



US Army Corps
of Engineers®



THE FLORIDA
AQUARIUM



The Nature
Conservancy



ASSOCIATION
OF ZOOS &
AQUARIUMS



Callaway Marine
Technologies, Inc.



RIVERBANKS
ZOO & GARDEN
columbia south carolina



NOVA SOUTHEASTERN
UNIVERSITY

ROSENSTIEL
SCHOOL of MARINE &
ATMOSPHERIC SCIENCE



Oregon State
UNIVERSITY



UNIVERSITY of
FLORIDA



جامعة قطر
QATAR UNIVERSITY



FIU

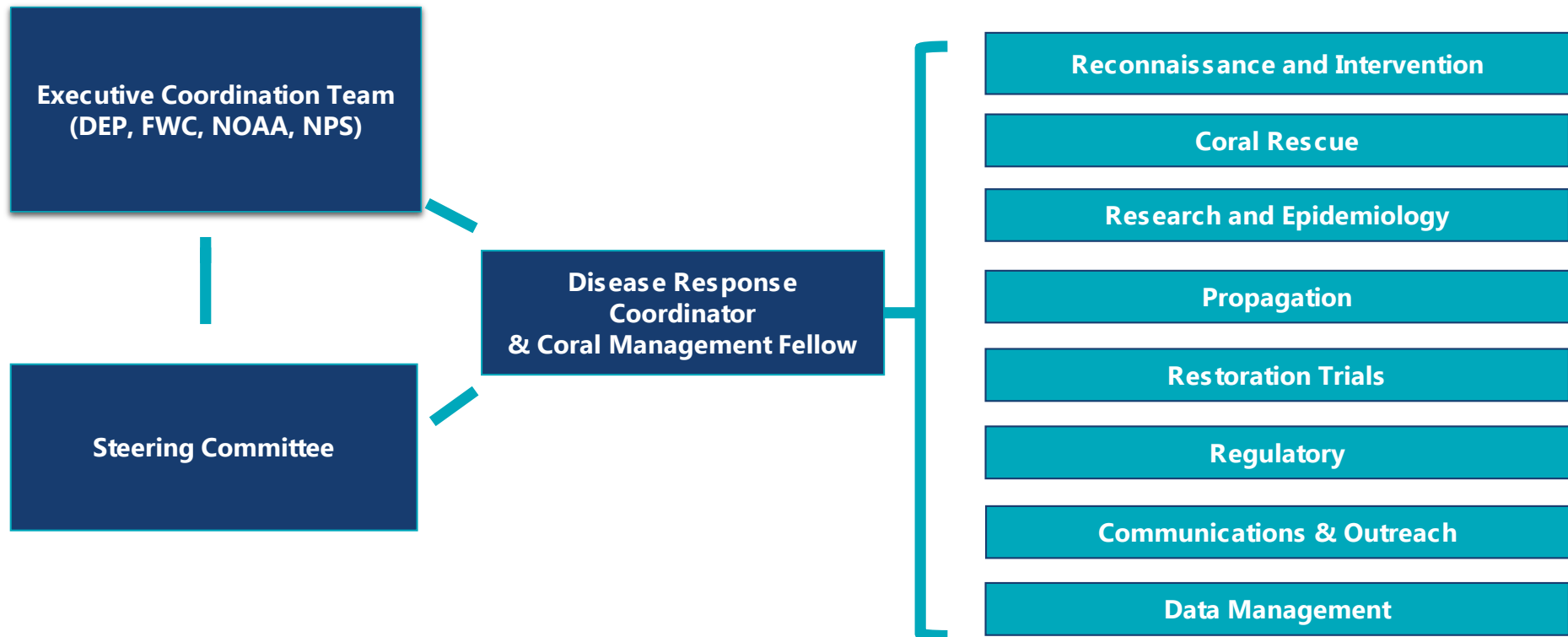
FLORIDA
INTERNATIONAL
UNIVERSITY



UNIVERSITY OF
SOUTH FLORIDA



DISEASE RESPONSE STRUCTURE



RECONNAISSANCE & INTERVENTION



TREAT PRIORITY CORALS TO MAINTAIN A WILD POPULATION

- Track extent of disease; locate survivors
- Apply treatments to priority corals
- Develop and trial new treatments



Laboratory Trials



Small-Scale Field Trials

CORAL RESCUE



RESCUE HEALTHY CORALS TO PRESERVE GENETIC STOCK

Save high priority corals in advance of outbreak margin

- Goal of ~4,000 corals to capture ~95% of remaining genetic diversity

House corals in land-based facilities

- Corals housed with expert aquarists across the country in a public-private partnership with the Association of Zoos and Aquariums
- 6 facilities in Florida, 15 facilities in 11 other states

Genetic Rescue in the 'endemic' region

- Determine best management practices to capture genetic information from survivors in disease impacted areas



RESEARCH & EPIDEMIOLOGY



IDENTIFY PATHOGEN(S) AND CHARACTERIZE THE DISEASE

Bacterial and Viral Profiling

- Determine the differences in bacterial and viral communities in healthy vs. diseased corals

Histopathology

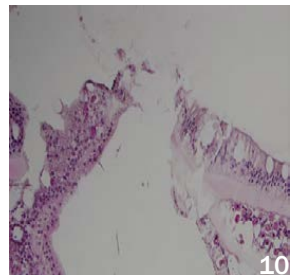
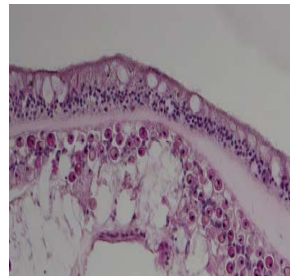
- Look at changes in tissue caused by disease to uncover what may be 'dissolving' the tissue

'-omics'

- Study the genes, proteins and certain molecules related to disease progression

Environmental Factors

- Identify any environmental factors (nutrients, temperature, salinity, etc.) that may drive disease



CORAL PROPAGATION



GROW CORALS FOR LARGE-SCALE REEF RESTORATION

- **Develop infrastructure within and outside of Florida**
- **Build expertise**
- **Incorporate genetic considerations**
- **Grow hearty corals**

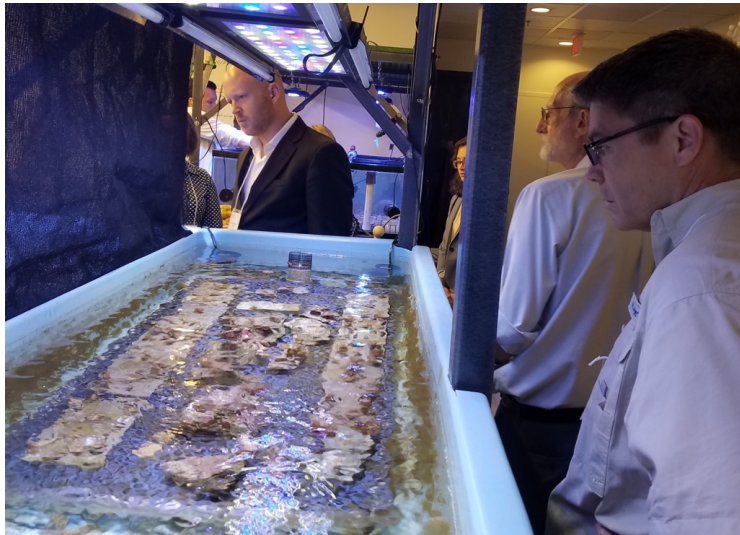


RESTORATION TRIALS & OUTPLANTING



DETERMINE WHAT, WHERE, AND WHEN TO RESTORE

- Conduct Outplanting Trials
- Identify Network of Restoration Sites
- Conduct Meaningful Restoration



DATA MANAGEMENT & COMMUNICATION



SHARING INFORMATION INTERNALLY AND EXTERNALLY

Information Availability

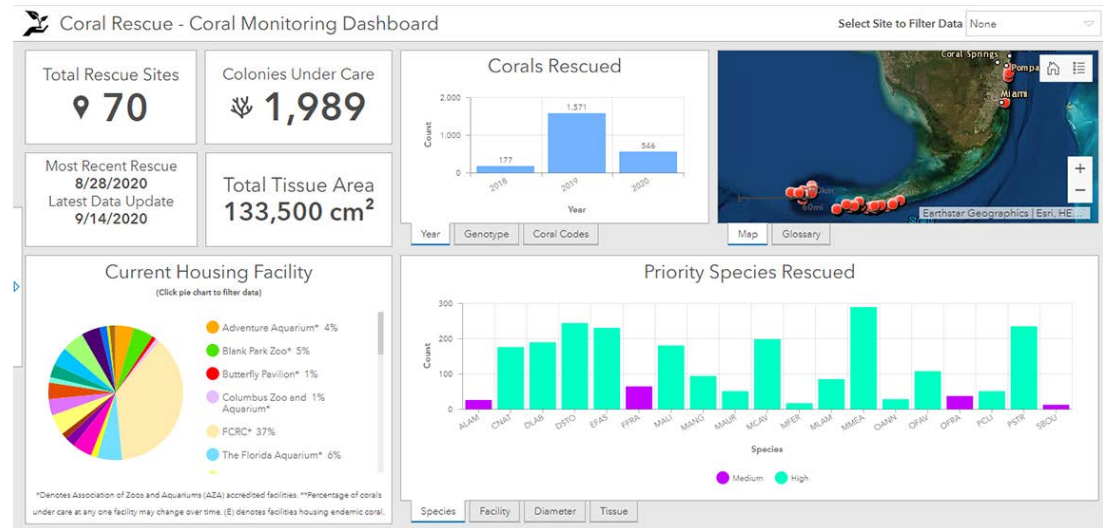
- DEP & FKNMS web portals for Florida-focused information
- NGO partner websites for the wider Caribbean

Data Visualization

- Dashboards and GIS products

Data Collation, Organization and Dissemination

- Ensure all data is available to partners for analysis



FloridaDEP.gov/rcp/CoralDisease

TURNING THE TIDE

Milestones



3,378 priority corals treated and saved



1,989 corals of 19 priority species rescued to create a genetic bank



375 baby corals born from rescued colonies returned to the reef

RESTORING RESILIENCE



SHORT TERM

Enhance Disease Response &
Launch a Coral Restoration Industry



LONG TERM

Reduce Local Stressors &
Restore Environmental Conditions to
Improve Reef Resilience

RESTORING RESILIENCE

Path Forward, Long Term



BUILD PUBLIC PRIVATE PARTNERSHIPS TO IMPLEMENT ECOSYSTEM RESTORATION



RESTORING 7 ICONIC REEFS IN THE FLORIDA KEYS + MORE



RESTORING RESILIENCE

Path Forward, Long Term



BUILD PUBLIC PRIVATE PARTNERSHIPS TO IMPLEMENT ECOSYSTEM RESTORATION



MANAGING FOR RESILIENCE



CORAL REEF WATER QUALITY MONITORING

Projects Assessing

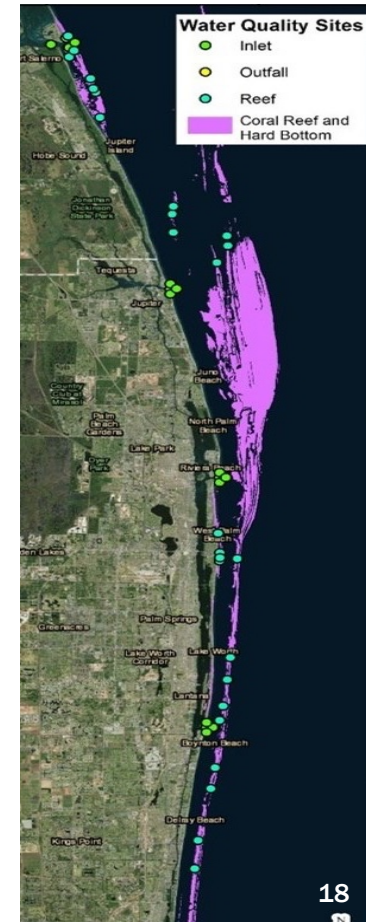
- Potentially harmful levels of nutrients
- Indicators of freshwater sources
- Sedimentation/turbidity

Initial Findings

- Differences detected between SE Inlets based on different types of land use
- Analytes (nutrients) are elevated to levels that may harm corals

Next Steps

- Investigate coral reef specific water quality standards
- Compare with Stony Coral Tissue Loss Disease data
- Implement priority pollution reduction projects



FY 20-21 DEP FUNDING



Resilient Coastline Funding (\$5M RECURRING):

Current funds are being used to:

- Mitigate the impacts of the disease through direct intervention and identification of surviving colonies of susceptible species.
- Develop new colony-level intervention tools and narrow down the list of potential causative pathogens, disease vectors and environmental conditions that have contributed to the onset and perpetuation of the disease.
- Support land-based aquaria to preserve genetic diversity and serve as broodstock for future coral propagation and restoration.
- Implement regional offshore water quality monitoring to establish baseline data for northern reefs.

FY 20-21 DEP FUNDING



New \$10M Coral Protection and Restoration Grant to Local Governments and Nonstate entities

These funds are going towards nutrient reducing water quality projects that will benefit both Biscayne Bay and Florida's Coral Reef, such as:

- **Septic-to-sewer conversions**
- **Stormwater projects**
- **Wastewater management projects**
- **Watershed restoration and nutrient reduction analysis**
- **Investigations into building practices and green infrastructure for improved water quality**

FY 20-21 FWC FUNDING



Current funds – both state and IRMA disaster to FWC – are being used to conduct disease surveillance, rescue of corals ahead of the disease front and transport to facilities within Florida or across the country, construct propagation facilities, and prepare and plan for future propagation and restoration efforts.

- **\$820,000** - Support for Coral Rescue, Restoration and Development of Propagation Infrastructure (R \$600,000 and NR \$220,000)
- **\$400,000** – Support for coral onshore nursery care, gene banking, genetic management and coral restoration (IRMA Disaster Funds to FWC, Year Two)
- **\$2,431,931** – Support coral holding and propagation infrastructure and genetic work at the Florida Aquarium (NR State Funds and IRMA Disaster Funds to FWC, Year Two)
- **\$1,940,000** – Coral restoration and support for the Mote Science Education Aquarium (NR State Funds)

FLORIDA'S CORAL REEF CAMPAIGN



Conserving Florida's Coral Reef

With your help, we can rescue and restore Florida's Coral
Reef and share the wonders of our waters with
generations to come.



THANK YOU!

THE FLORIDA SENATE
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1-13-2021

Meeting Date

Bill Number (if applicable)

Topic Coral Reef Protection Efforts

Amendment Barcode (if applicable)

Name Alex Reed

Job Title Director, Office of Resilience and Coastal Protection

Address 3900 Commonwealth Blvd

Phone 850-245-2118

Street

Tallahassee

FL

32399

Email

City

State

Zip

Speaking: ☐ For ☐ Against ☒ Information

Waive Speaking: ☐ In Support ☐ Against
(The Chair will read this information into the record.)

Representing FL Dept of Environmental Protection

Appearing at request of Chair: ☒ Yes ☐ No

Lobbyist registered with Legislature: ☐ Yes ☒ No

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S-001 (10/14/14)

Threatened and Endangered Species in Florida



Senate Appropriations Subcommittee on Agriculture, Environment, and General Government
January 13, 2021

Melissa Tucker, Director, Division of Habitat and Species Conservation



Florida Fish and Wildlife Conservation Commission

Florida Fish and Wildlife Conservation Commission

Managing fish and wildlife resources for their long-term well-being and the benefit of people.



Management

- Habitat management and restoration
- Species management



Research



- Status of species and habitats
- Restoration techniques
- Disease studies



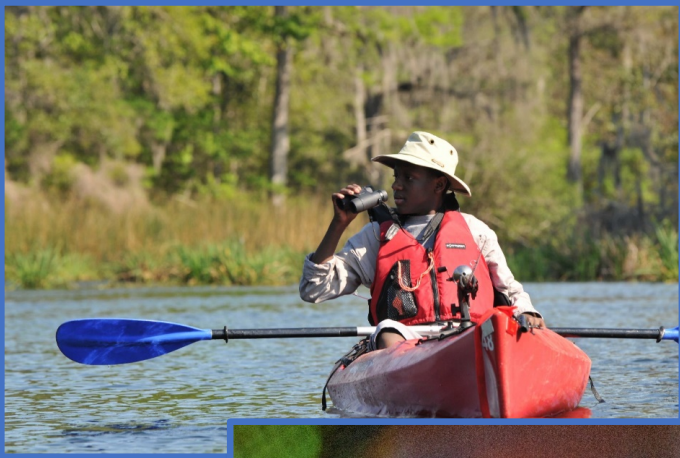
Law Enforcement

- Uniformed patrols
- Investigations
- Search and rescue



Public Access

- Freshwater fishing
- Saltwater fishing
- Hunting
- Wildlife viewing



Threatened and Endangered Species

- Federal – Endangered Species Act
 - USFWS
 - NOAA
- State
 - FWC – Fish and Wildlife
 - FDACS – Plants



Threatened and Endangered Species

More than 1200 species of fish and wildlife in Florida

- Federally listed fish and wildlife: 103
- State listed fish and wildlife: 40



FWC and Threatened and Endangered Species



Management



Research

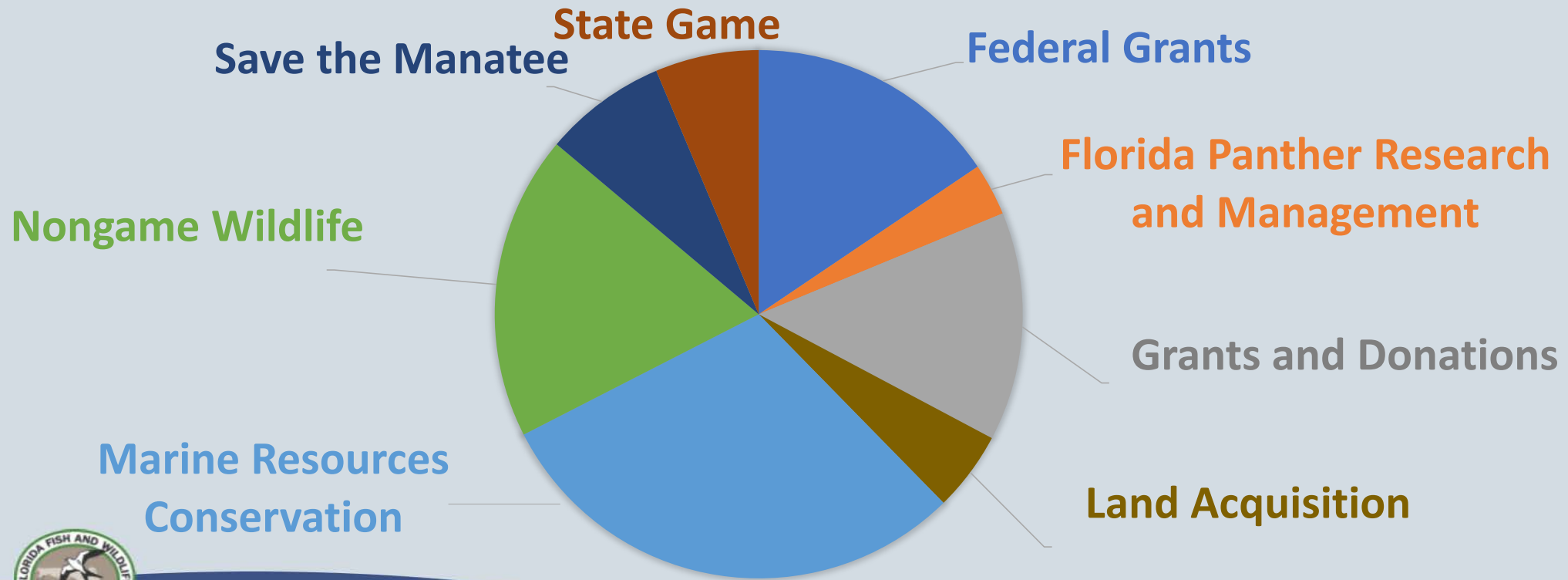


Law Enforcement



Funding for Threatened and Endangered Species

\$27,470,401



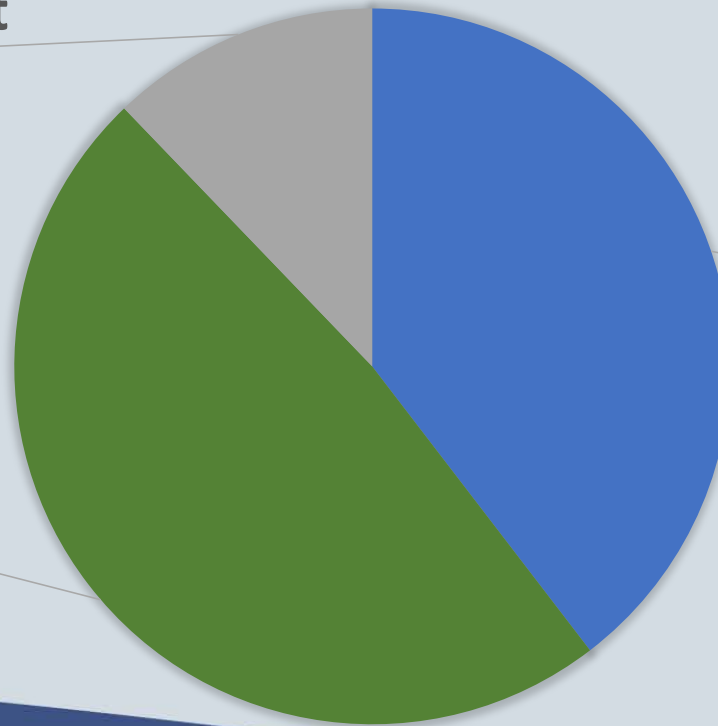
Funding by Activity for Threatened and Endangered Species

\$27,470,401

Law Enforcement
12%

Research
40%

Management
48%



Management



- Habitat management and restoration
- Improve or create nesting or breeding opportunities



Management

- Technical assistance to partners and the public
- Private lands collaboration



Research

- Breeding success and survival
- Wildlife diseases and cold stress
 - Panthers
 - Sea turtles
 - Manatees



Research



- Habitat needs and assessment
- Research collaboration



Law Enforcement

- Species assistance
- Investigations



Recovery and Prevention of Federal Listing



- Conservation actions
- Multi-state coordination



Thank You



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January 13, 2021

Meeting Date

Bill Number (if applicable)

Topic Update on Florida's Endangered & Threatened Species

Amendment Barcode (if applicable)

Name Melissa Tucker

Job Title Director, Division of Habitat and Species Conservation

Address Farris Bryant Building 620 S. Meridian Street

Phone (386) 623-0986

Street

Tallahassee

FL

32399

Email melissa.tucker@MyFWC.com

City

State

Zip

Speaking: ☐ For ☐ Against ☒ Information

Waive Speaking: ☐ In Support ☐ Against
(The Chair will read this information into the record.)

Representing Florida Fish and Wildlife Conservation Commission

Appearing at request of Chair: ☒ Yes ☐ No

Lobbyist registered with Legislature: ☒ Yes ☐ No

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S-001 (10/14/14)

CourtSmart Tag Report

Room: SB 110

Case No.:

Type:

Caption: Senate Appropriations Subcommittee on Agriculture, Environment, and General Government **Judge:**

Started: 1/13/2021 3:30:50 PM

Ends: 1/13/2021 5:12:15 PM

Length: 01:41:26

3:30:56 PM	Sen. Albritton (Chair)
3:35:34 PM	TAB 1 - Overview of State Technology
3:36:25 PM	Jamie Grant, State Chief Information Officer, Department of Management Services
4:02:55 PM	Sen. Albritton
4:03:20 PM	Sen. Stewart
4:04:13 PM	J. Grant
4:07:12 PM	Sen. Stewart
4:07:42 PM	J. Grant
4:09:40 PM	Sen. Stewart
4:10:12 PM	J. Grant
4:11:50 PM	Sen. Albritton
4:12:22 PM	J. Grant
4:14:43 PM	Sen. Brodeur
4:16:53 PM	Sen. Berman
4:17:33 PM	J. Grant
4:18:56 PM	Sen. Berman
4:19:27 PM	J. Grant
4:21:56 PM	Sen. Berman
4:22:17 PM	Sen. Albritton
4:22:40 PM	J. Grant
4:22:50 PM	Sen. Albritton
4:22:55 PM	TAB 2 - Update on Coral Reef Protection Efforts, Department of Environmental Protection
4:23:38 PM	Alex Reed, Director, Office of Resilience and Coastal Protection, Department of Environmental Protection
4:39:48 PM	Sen. Albritton
4:39:51 PM	Sen. Stewart
4:40:27 PM	A. Reed
4:40:58 PM	Sen. Albritton
4:42:53 PM	A. Reed
4:43:38 PM	Sen. Albritton
4:44:14 PM	A. Reed
4:45:06 PM	Sen. Albritton
4:45:31 PM	Sen. Mayfield
4:46:04 PM	A. Reed
4:46:28 PM	Sen. Mayfield
4:47:15 PM	A. Reed
4:47:42 PM	Sen. Mayfield
4:48:33 PM	A. Reed
4:49:32 PM	Sen. Albritton
4:51:11 PM	A. Reed
4:52:32 PM	Sen. Ausley
4:53:19 PM	A. Reed
4:53:38 PM	Sen. Ausley
4:54:13 PM	Sen. Albritton
4:54:48 PM	Sen. Ausley
4:55:31 PM	Sen. Albritton
4:55:57 PM	TAB 3 - Update on Florida's Endangered and Threatened Species, Fish and Wildlife Conservation Commission
4:56:32 PM	Melissa Tucker, Director of Habitat and Species Conservation, Fish and Wildlife Conservation Commission
5:07:54 PM	Sen. Albritton
5:08:00 PM	Sen. Boyd
5:08:09 PM	M. Tucker

5:08:31 PM	Sen. Berman
5:09:38 PM	Sen. Rodrigues
5:09:49 PM	M. Tucker
5:10:06 PM	Sen. Albritton
5:11:17 PM	M. Tucker
5:11:19 PM	Sen. Albritton