



SOUTH FLORIDA ECOSYSTEM RESTORATION TASK FORCE



LEADERSHIP • PARTNERSHIP • RESULTS

Working Group/Science Coordination Group Draft Priorities for 2019

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EVERGLADESRESTORATION.GOV

Developing Priorities

- Joint meeting of the Working Group and Science Coordination Group (SCG) was held on November 28, 2018.
- Agenda included a facilitated discussion regarding priorities for 2019.
- Results were subsequently assessed by the Chairs, Vice Chairs, and the Office of Everglades Restoration Initiatives (OERI).
- Distilled into the set of suggested actions being presented today.
- Additional background information is also provided.

Developing Priorities

- The facilitated discussion covered ~20 topics
- These topics could be divided into two main categories:
 - Science
 - Communications

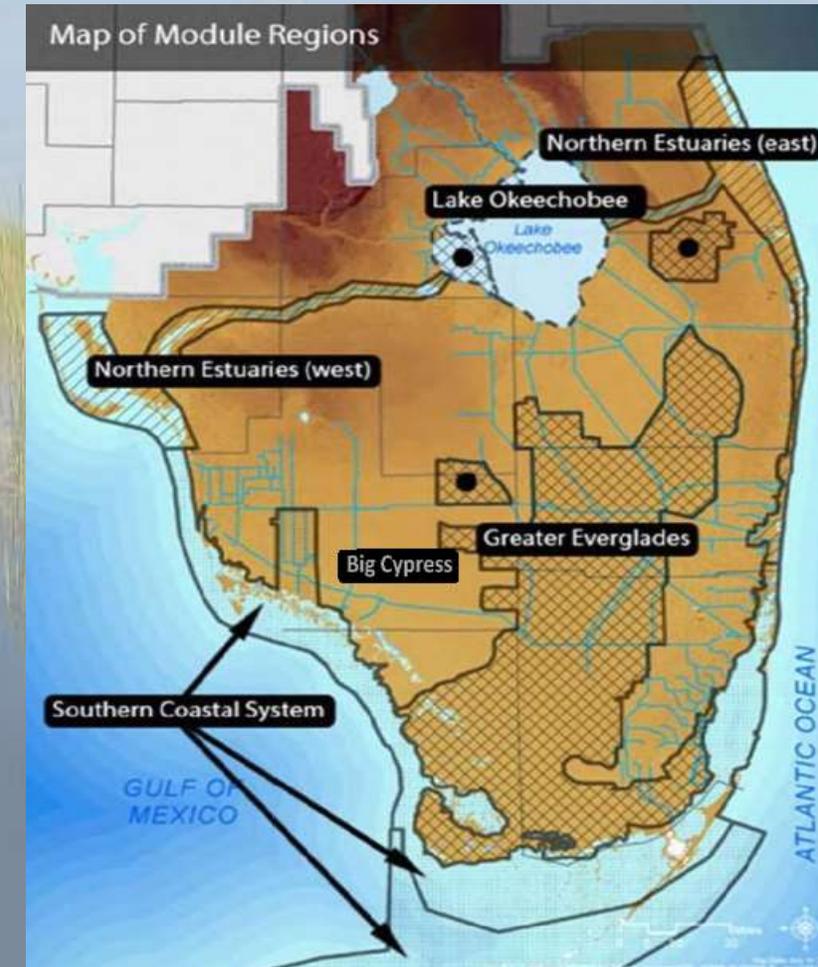
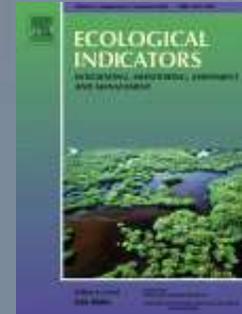
Draft Priorities

- Science
 - System-wide Ecological Indicators
 - Invasive Exotic Species Strategic Action Framework
 - Florida Bay
- Communications
 - Task Force Strategy
 - Web-based Briefing Tool
 - Reporting Efficiencies

System-wide Ecological Indicators

- Ecological indicators are used to communicate information about ecosystems and the impact human activity has on them.
- While individual indicators can help decision-makers adaptively manage at the local scale or for particular restoration projects, collectively indicators can help decision-makers assess restoration at the system scale.
- In 2005, the Task Force directed the SCG to develop a suite of system-wide indicators to assess current ecosystem health and provide a means to track ecosystem response to restoration.

Indicators for Everglades Restoration, Ecological Indicators, Volume 6 Supplement, 2009.

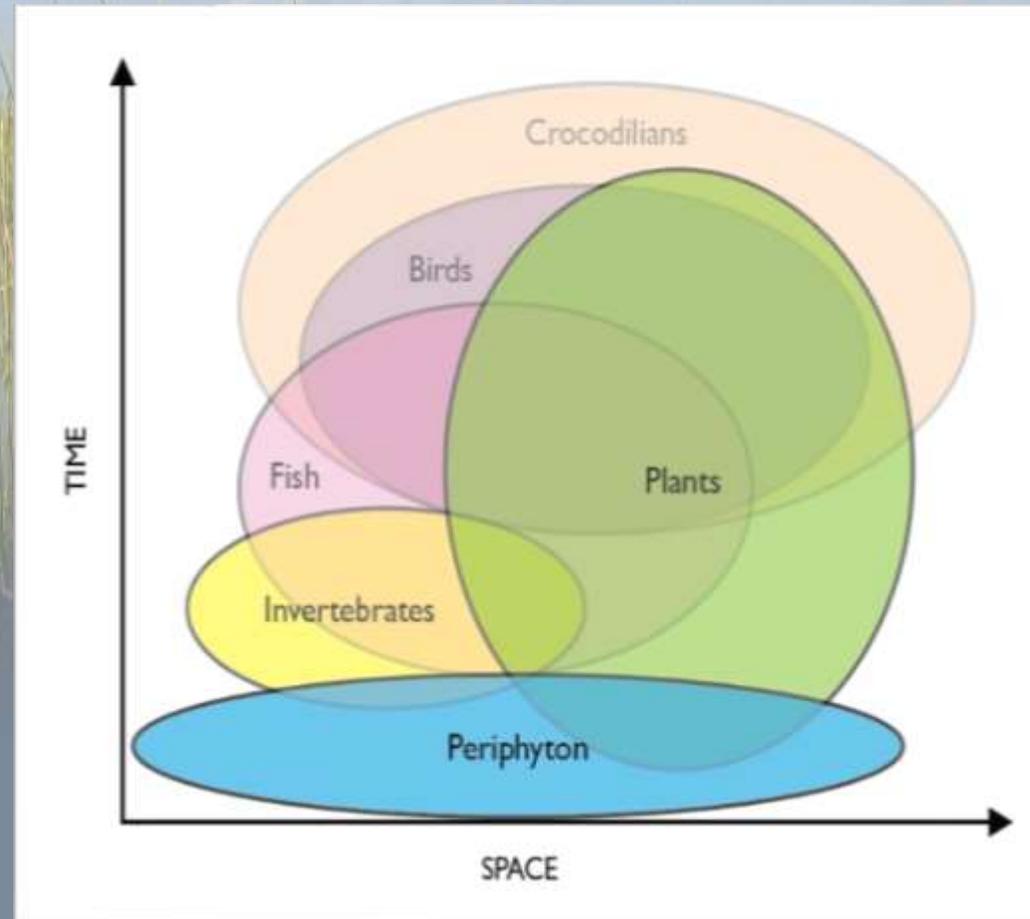


Source: RECOVER, System Status Report, 2009

System-wide Ecological Indicators

- The resulting 11 indicators were chosen based upon their collective ability to comprehensively reflect ecosystem response in terms of space and time:

- Invasive Exotic Plants
- Lake Okeechobee Nearshore Zone Submerged Aquatic Vegetation
- Eastern Oysters
- Crocodilians (American Alligators and Crocodiles)
- Fish & Macroinvertebrates
- Periphyton



- Wading Birds (White Ibis & Wood Stork)
- Southern Coastal Systems Phytoplankton Blooms
- Florida Bay Submersed Aquatic Vegetation
- Juvenile Pink Shrimp
- Wading Birds (Roseate Spoonbill)

System-wide Ecological Indicators

- **Issue:** The SCG has expressed interest in assessing the current suite of indicators to determine whether they are still appropriate, have sufficient data, cover the right geographic area, are able to detect trends, etc.
- **Proposal:** Series of SCG workshops to review/update the system-wide ecological indicators.

Status of Ecological Indicators (2014-2018)

	WY2014	WY2015	WY2016	WY2017	WY2018
Invasive Exotic Plants	Y	Y	Y	Y	Y
Lake Okeechobee Nearshore Zone Submersed Aquatic Vegetation	R	R	R	R	R
Eastern Oysters- Modified (Northern Estuaries only)	R	R	R	R	R
Crocodylians (American Alligators & Crocodiles)- Modified (DOI Lands Only)	R	R	R	R	R
Fish & Macroinvertebrates (WCA3 and ENP only)	R	R	R	R	R
Periphyton- Modified (no species composition)	Y	Y	Y	Y	Y
Wading Birds (White Ibis & Wood Stork)	R	R	R	R	R
Southern Coastal Systems Phytoplankton Blooms	Y	Y	Y	Y	R
Florida Bay Submersed Aquatic Vegetation	Y	Y	Y	Y	Y
Juvenile Pink Shrimp- Modified (no sampling)	B	B	B	B	B
Wading Birds (Roseate Spoonbill)	R	R	R	R	R

Red (R) Well below restoration target. **Yellow** (Y) Below restoration target. **Green** (G) Meets restoration target. **Black** (B) No Assessment/missing data.

Invasive Exotic Species

- Florida has the highest severity of threats posed to native habitats and species by invasive exotic species in the continental United States.
- Recognizing the importance of protecting valuable resources by managing the growing threats of invasive exotic species, the Task Force developed an ***Invasive Exotic Species Strategic Action Framework*** (Framework) in 2014.
- Since 2014, new efforts have begun and new invaders have been identified.



Invasive Exotic Species

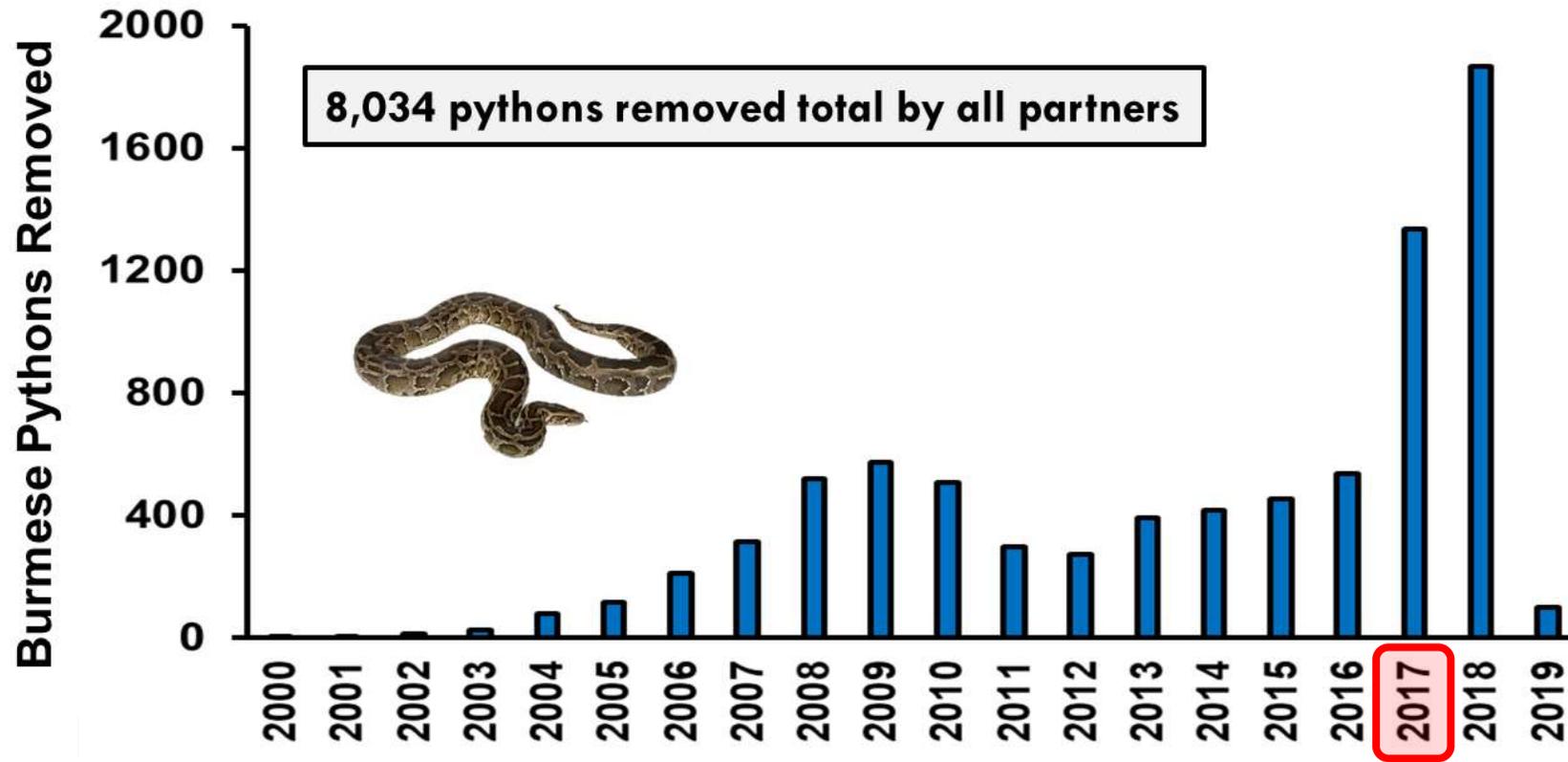
Example: **Burmese Pythons**

- The Florida Fish and Wildlife Conservation Commission and the South Florida Water Management District both launched python specific programs in 2017.
- Working on public lands, including Everglades National Park and Big Cypress National Preserve, the implementation of contractor programs dramatically increased the capture of pythons within these areas.



Burmese pythons are generalist predators, capable of eating most all terrestrial vertebrate species.

Invasive Exotic Species

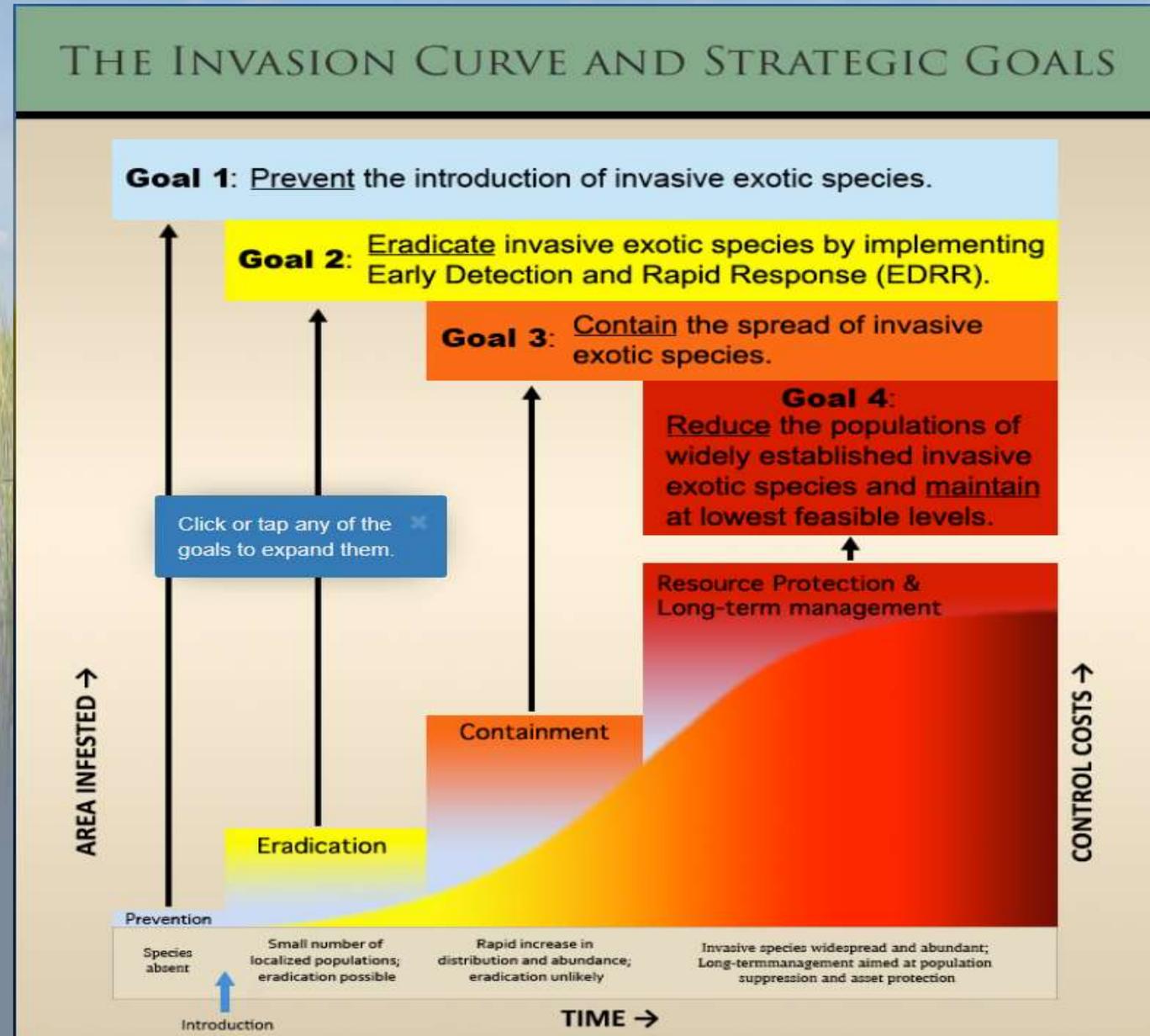


Contractor Programs

Invasive Exotic Species

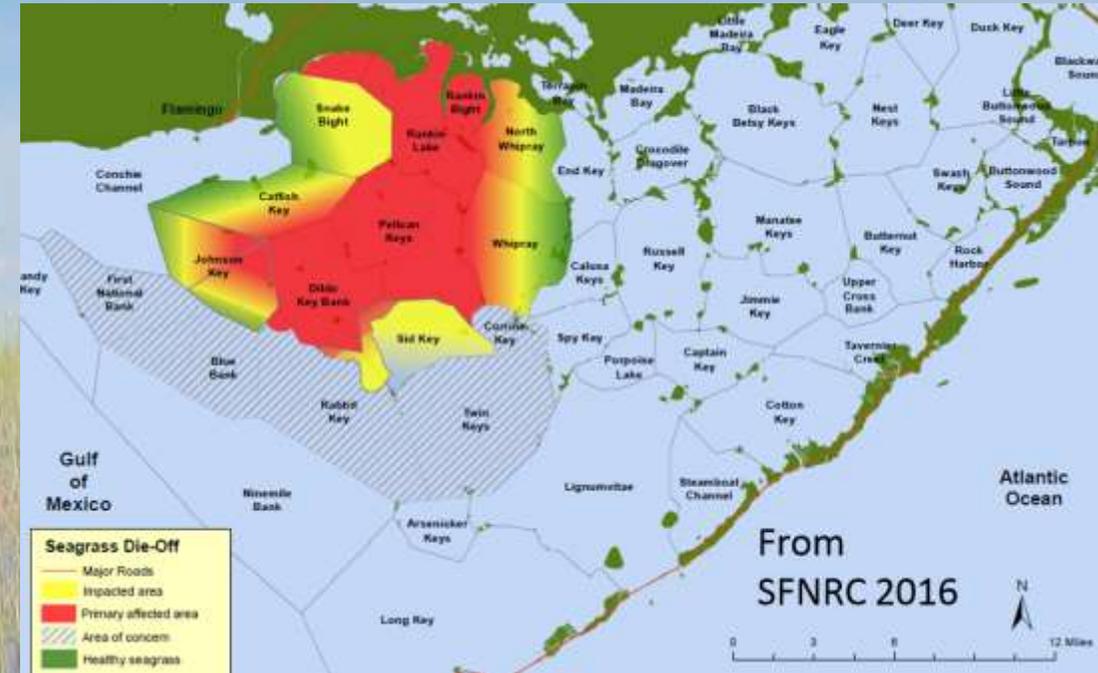
- **Issue:** There are many new efforts underway since the Framework was first developed.
- **Proposal:** Conduct workshop to discuss updates to the Framework including the web-based document.

The Invasion Curve - the longer we wait to address a particular invasion, and the more widespread that invasion becomes, the more expensive it is to address.



Florida Bay

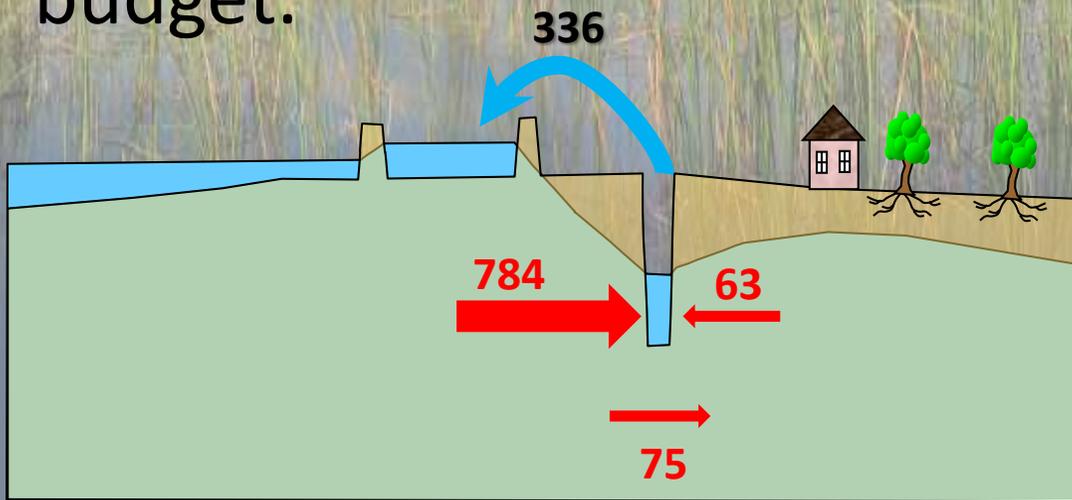
- Everglades restoration includes getting the water right in terms of quantity, quality, timing, and distribution (QQTD).
- The health of Florida Bay is linked to the upstream QQTD of water.
- Seagrass serves many critical functions within estuarine and coastal ecosystems, such as habitat, food, and water quality.
- Decreased freshwater inputs, increased temperatures, decreased oxygen, and increased salinities contribute to seagrass die-offs.



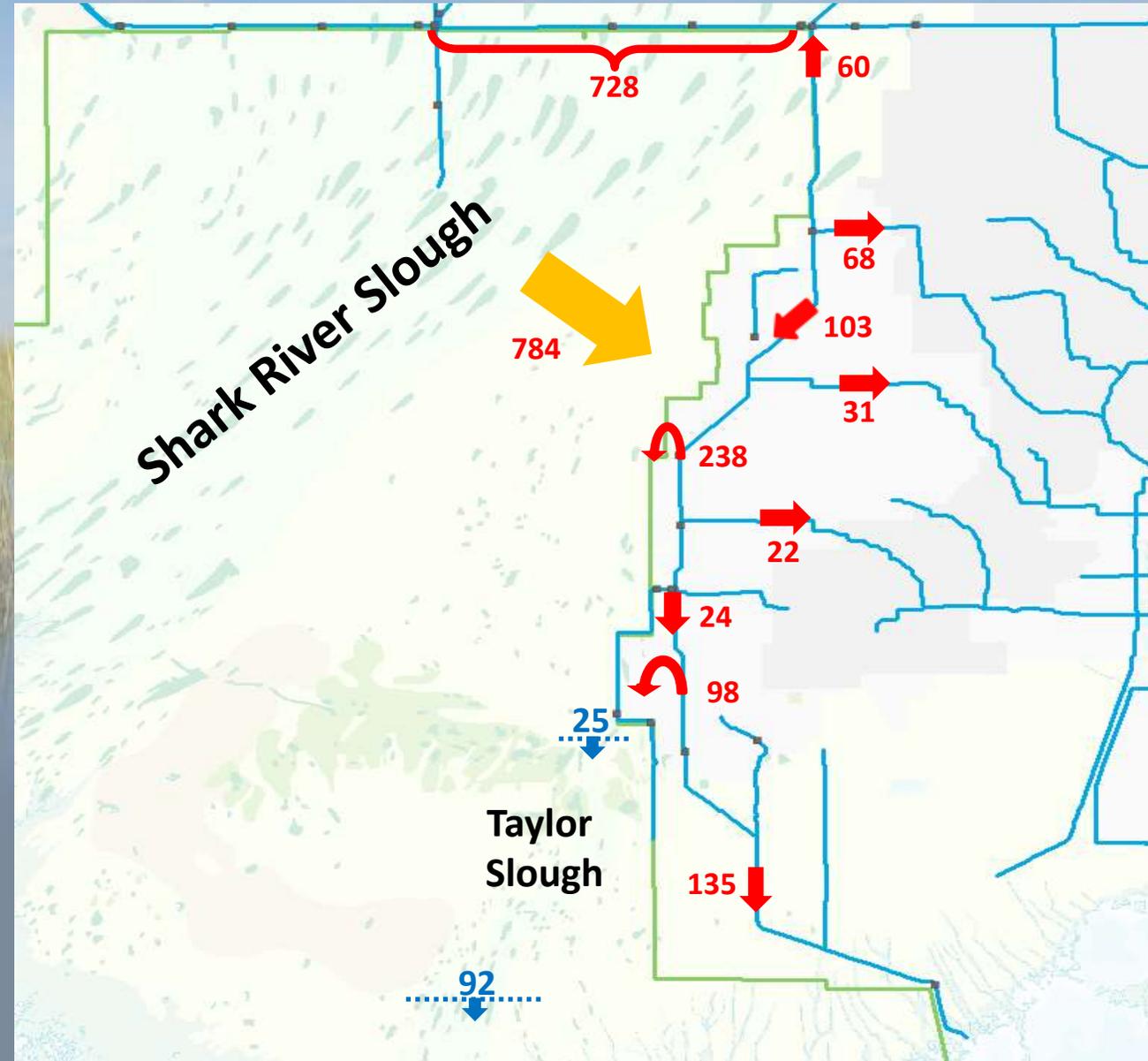
Florida Bay seagrass dieoff, December 2015. Persistent deficit of surface water inflows, coupled with a localized drought, and high water temperatures.

Florida Bay

- **Issue:** Interest in looking at the influence of groundwater on Florida Bay.
- **Proposal:** SCG participation in evaluating the bay's "water budget."



Average Annual Water Budget for Alternative O (COP), in 1,000 ac-ft.



Task Force Strategy

- The Task Force has a strategy document that describes the overall Everglades restoration effort.
- Three broad strategic goals have been established:
 - Goal 1) Get the water right.
 - Goal 2) Restore, preserve, and protect natural habitats and species.
 - Goal 3) Foster the compatibility of the built and natural systems.

Task Force Strategy

- To simplify reporting requirements, the Task Force's Biennial Report now reports restoration progress by program area instead of by strategic goal.
- This eased the reporting burden on our partners but we may have lost a helpful way to communicate restoration progress.
- Expressing progress by goal area may help a broader audience connect to the restoration effort.

Task Force Strategy

- **Issue:** Interest in improving restoration communications by trying to “humanize and localize” restoration efforts.
- **Proposal:** OERI staff to create a one-pager of results by strategic goal in that vein.

Communication Coordination

- The Task Force, Working Group, and SCG have an extensive and diverse set of members.
- While each member/agency has its own communications teams and efforts, there are benefits to having a cohesive and coordinated source for restoration information.
- Such a source must also link back to the individual member agency websites for further information.

Communication Coordination

- OERI developed, through a partnership with Everglades National Park, a web-based briefing tool.
- This tool was established on EvergladesRestoration.gov in August 2018.
- There are opportunities to improve the existing tool and enhance the ability for users to access detailed and linked information on Everglades Restoration.

Communication Coordination

- **Issue:** Interest in better coordination of communications efforts on restoration.
- **Proposal:** OERI to work with members to enhance the web-based briefing tool currently on EvergladesRestoration.gov.

Reporting Efficiencies

- At the November 2018 meeting, there was discussion about how to improve reporting efficiencies.
- The Task Force has multiple Congressionally-mandated reporting requirements.
- Each member agency has its own reporting requirements.
- Reports may be similar but often have different scopes and time-frames.

Reporting Efficiencies

- **Issue:** Interest in assessing if there is a way to improve reporting efficiencies for the various reporting requirements.
- **Proposal:** OERI to discuss possibilities with member agencies.



QUESTIONS?