

Success With Land Based Coral Nurseries



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THE OCT. 2011 CORAL REEF TF RESTORATION AND MITIGATION PANEL

“State of coral reefs necessitate active restoration to enable coral reefs to recover in conjunction with threats”



Coral Nurseries: Tools in the Reef Restoration Toolbox



1) COLLECTION of FRAGS



**3) GROWTH &
REPRODUCTION**



**4) ENHANCED
RECOVERY**



2) GROWOUT & OUTPLANTING

Coral Nurseries: A “tool in the toolbox”

Offshore coral nurseries currently being used, but limitations:

- Hurricanes
- Cold Snaps
- Warm Bleaching
- Groundings
- Disease
- other



Kirk Kilfoyle / Nova Southeastern University

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NCRI Current Coral Nursery

- 2,000 gal. outdoor coral culture
- Houses approx. 900 individual corals
- Five Atlantic/Caribbean species
- Threatened staghorn – *Acropora cervicornis*



Advantages of Land Based Nurseries

- Genetic stock protected from environmental stressors
- Supply of captive-reared, genetically consistent corals
- Reduces collection pressure on wild stocks
- Specimens available for experimentation & restoration



Acropora Transplant Feb. 17th

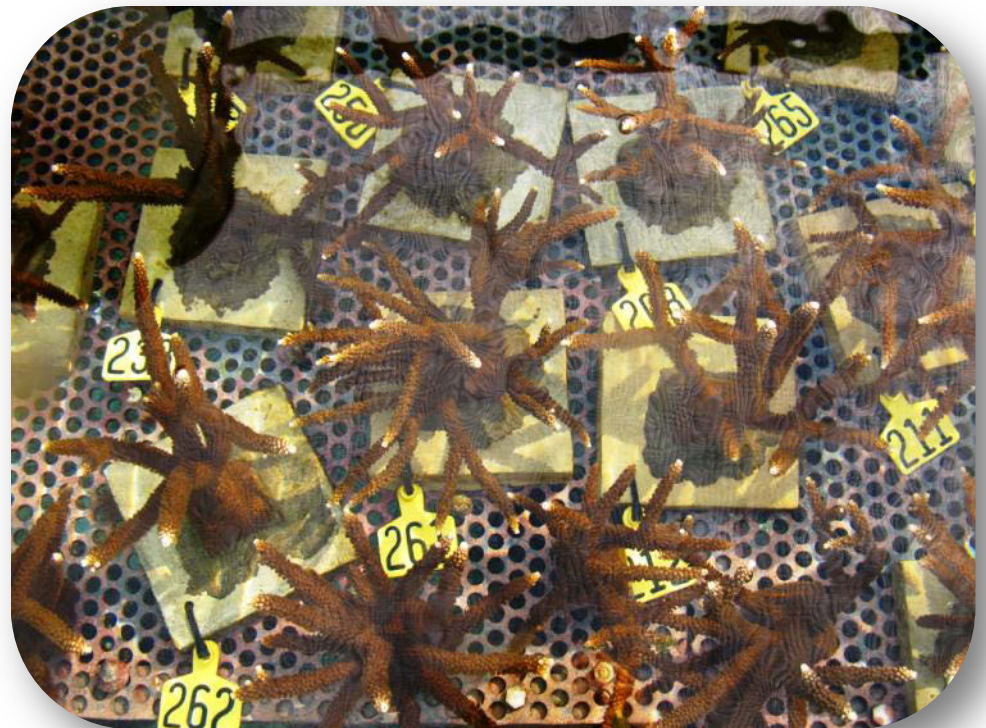
- 28 basketball sized corals transplanted
- First time in Broward
- Will compare to 1000 corals in offshore nursery
- Will monitor monthly



New NCRI Coral Nursery

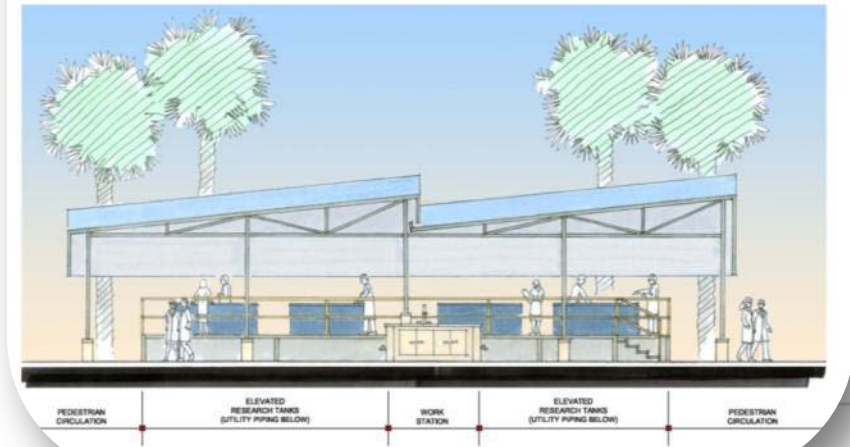
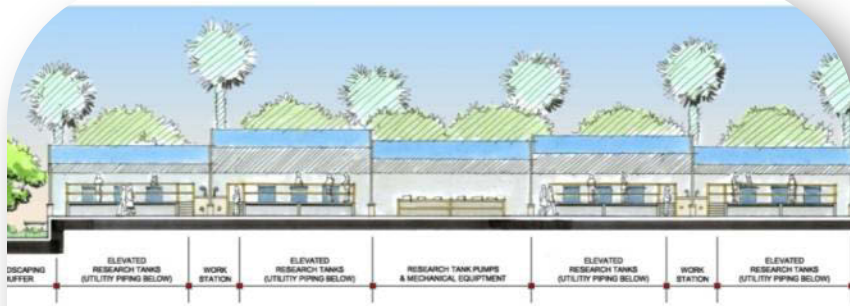
May 2012 - Center of Excellence for Coral Reef Ecosystem Science Research Facility

- 6,000 gallons
- 5,000+ corals
- State-of-Art seawater system
- Larger and more successful offshore transplants



Outdoor Coral Nursery and Aquaria

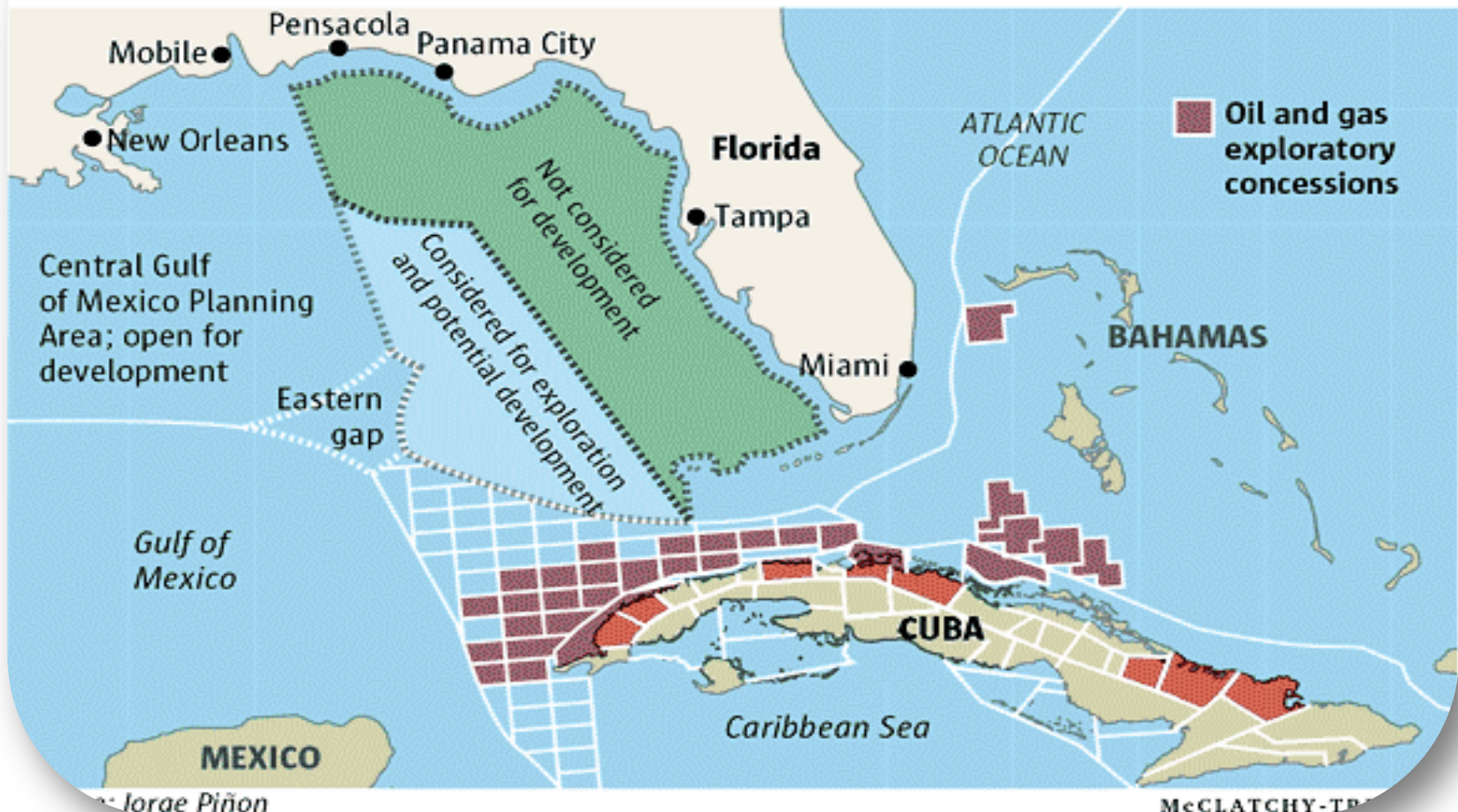
- 25 replicate mesocosms / replicate tanks
- Control dose, temp, salinity, etc.
- Clean up effluent



Repsol has begun drilling in Cuba Feb, 2012

Cuba's bounty, Florida's fear

Floridians worry that Cuba's anticipated drilling in these areas could lead to spills that soil the state's reefs, fisheries and coastline.



The US Needs to be Prepared:

Needed now to facilitate more effective and response to such a (likely) emergency event:

- Research
- Predictive Model
- Tools
- Resources ...

**Land Based
Coral Nurseries!**





Thank you!

