Welcomes

Changing Climates, Sea Levels, and Species: Legal & Policy Responses for South Florida

Friday, April 8, 2016 8:30 am - 3:00 pm
Nova Southeastern University

- 23,000 students; 167,000 alums
- 52st year!
- One of largest enrollment in US’s 1,600 nonprofit private colleges & universities
- Largest in Florida
- FL Econ. impact ~$1.5B
- Main Campus—300 acres
- One of FL’s important resources!
- 18 Colleges
NSU Halmos College of Natural Science and Oceanography (HCNSO)

- Two Campus: Davie and Ocean
- Classrooms; Teaching and Research Labs
- Emphasis: Education & Research
- 4 Depts: Math, Chemistry & Physics, Biology, Marine Biology & Environmental Science
- 65 Faculty & Researchers; 200 Staff & Research Assistants
Halmos College of Natural Sciences and Oceanography
The mission of the Halmos College of Natural Sciences and Oceanography is to carry out innovative, basic, and applied research and to provide high-quality, graduate and undergraduate education in a broad range of natural, marine, & environmental sciences.
**HCNSO Academics**
Graduate Certificate Program
4 B.S., 4 M.S., 1 M.A. degrees, Ph.D. degree

*Largest undergrad College*
*Largest Major: Biology*

**HCNSO Research:**
• Coral Reefs, Fish, Fisheries
• Conservation biology
• Math, Chemistry, Biology
• Physics of the Ocean
• Largest active Extramural Awards
Florida’s Extensive Coral Reefs
84% of Nation’s reefs

Coral Reefs in S. Florida:
$6.1B/y in sales & income
71,000 jobs/y.
Broward: $2B/36K jobs!
NSU Mapping Coral Reefs
Satellite View of Florida, the Ocean State
Relative Sea Level (meters)

Time (thousands of years before present)

7000 yrs ago

~1950
<table>
<thead>
<tr>
<th>Year</th>
<th>IPCC AR5 Median (inches)</th>
<th>USACE High (inches)</th>
<th>NOAA High (inches)</th>
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<tr>
<td>2100</td>
<td>31</td>
<td>61</td>
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Coral Reef Restoration: Coral Nurseries

Ocean Based

Land Based

TRANSPLANTED
Coral Reef Restoration Through Coral Nurseries
Additional Research Initiatives, e.g.,

- Bioinformatics
- Lion Fish
- Deep Sea Life and Ecosystems
- Ecotoxicity/Pollution Testing
- Sex: Coral Mutants and Hybrids
Shark Research Investigations

Top Predators, Overfishing; Cascading Ecosystem Effects; Genomics/Genetics/Conservation
GHRI & SOSSC:
Example: Shark Migrations
NSU HCNSO Science & Academics: Poised for the future

• Outstanding new infrastructure
• Research/Education: Natural Sciences & Oceanography!
• Of course, Help Is Needed
Development Inspiration
Thank you!
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