

# 2007 Florida Coastal Everglades LTER All Scientists Meeting

**Theme: On to FCE II**



## PARTICIPATING INSTITUTIONS:

Florida International University  
College of William & Mary  
Louisiana State University  
Rutgers University  
Texas A&M University  
University of Miami  
University of North Carolina-Wilmington  
University of South Florida  
University of Virginia

Everglades National Park  
South Florida Water Management District  
U.S.G.S., BRD & WRD  
NASA  
National Audubon Society



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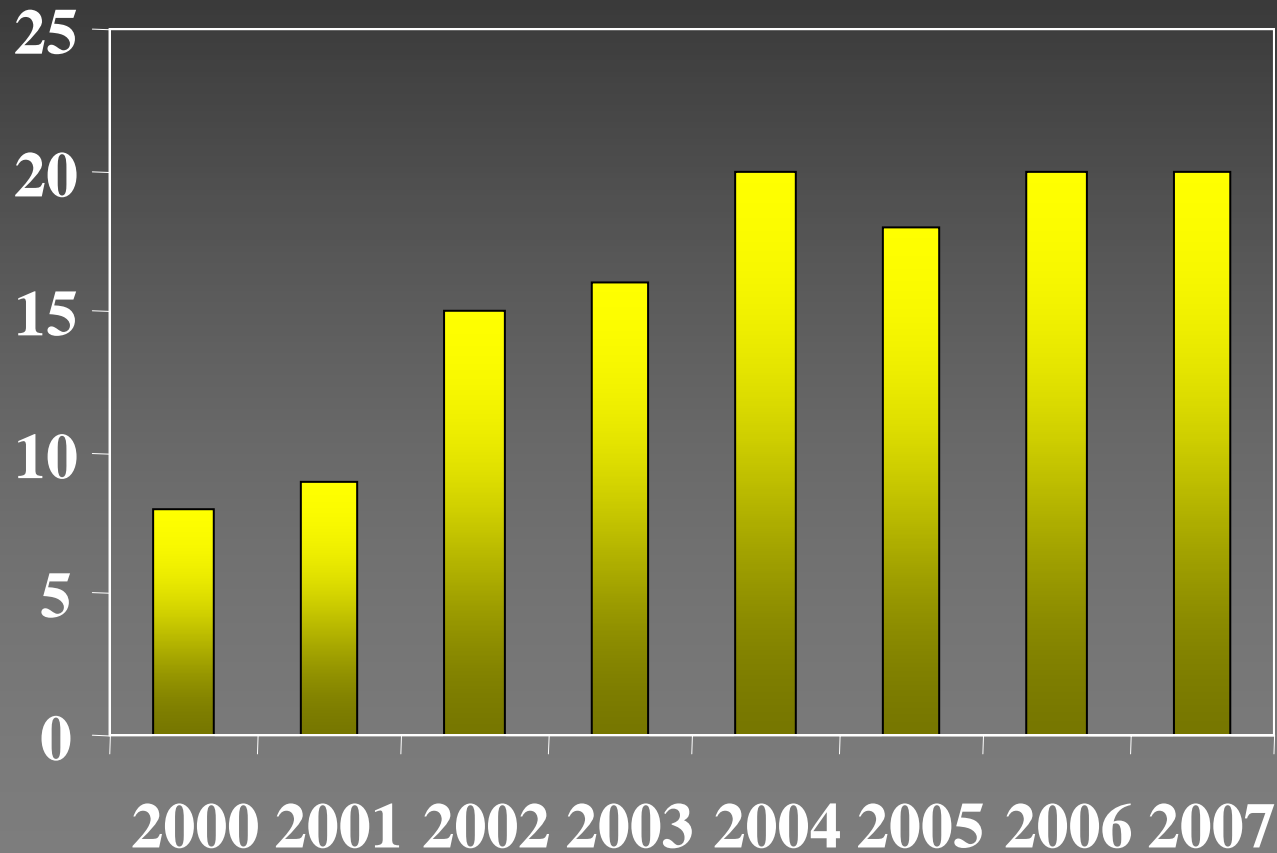
1. Welcomes & Thanks
2. FCE II funds on campus!
3. 2007 Supplements
  - Schoolyard LTER
  - REUs (4)
  - International Research Support
  - “other” supplements
4. State of the Program Report
5. FCE II refresher

# State of the FCE Program

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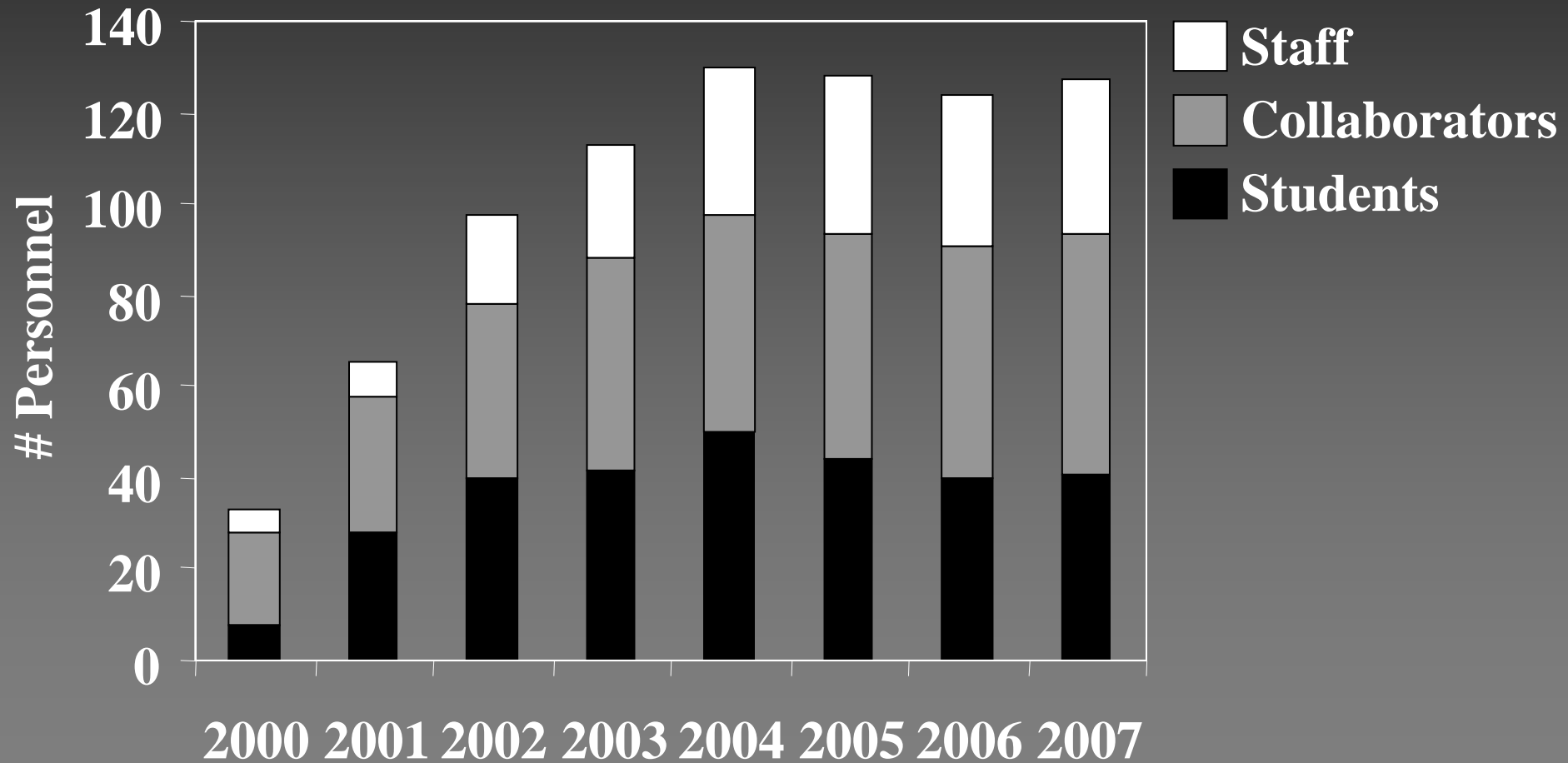
## Affiliated Institutions/Agencies

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# State of the FCE Program

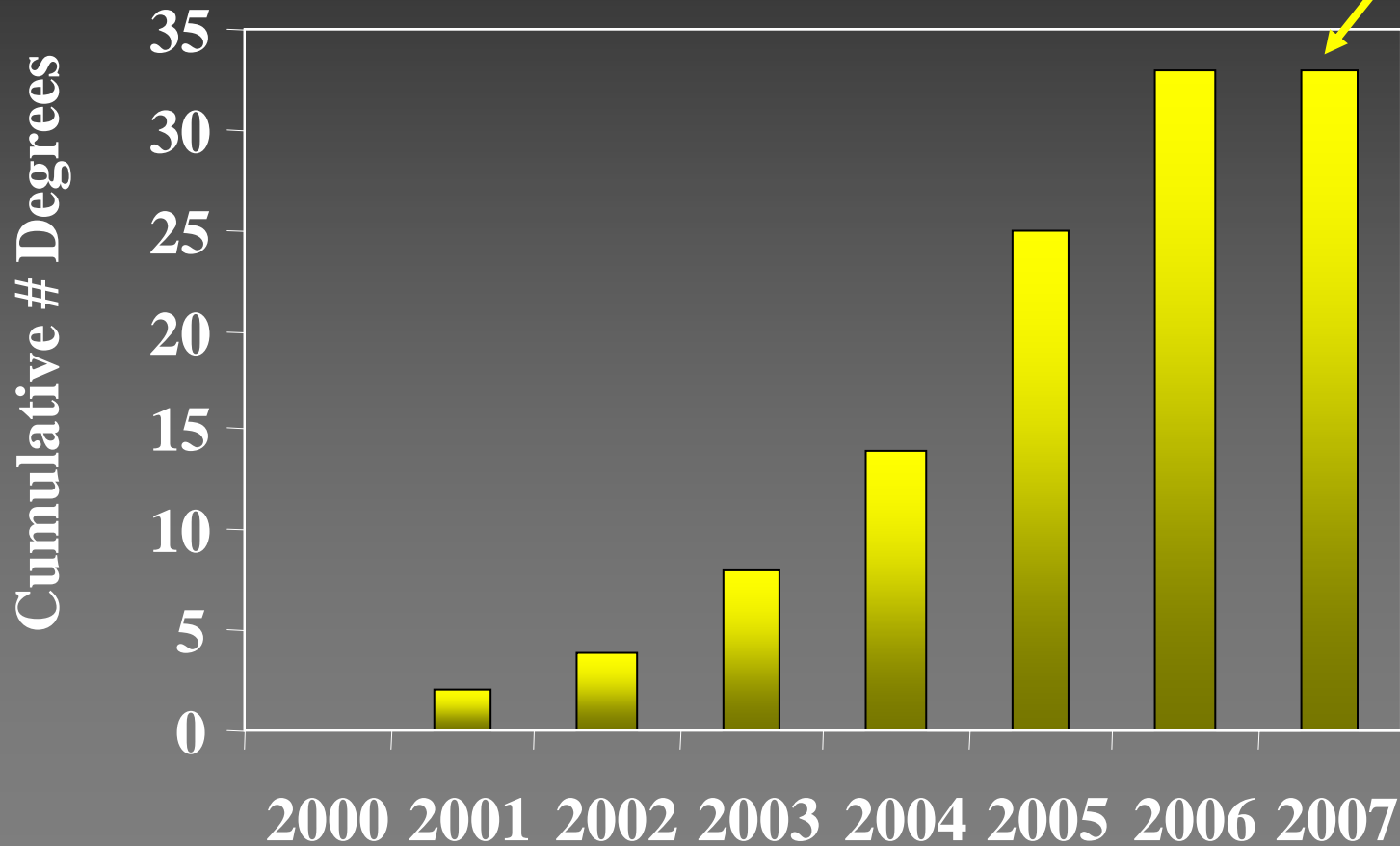
## Personnel



# State of the FCE Program

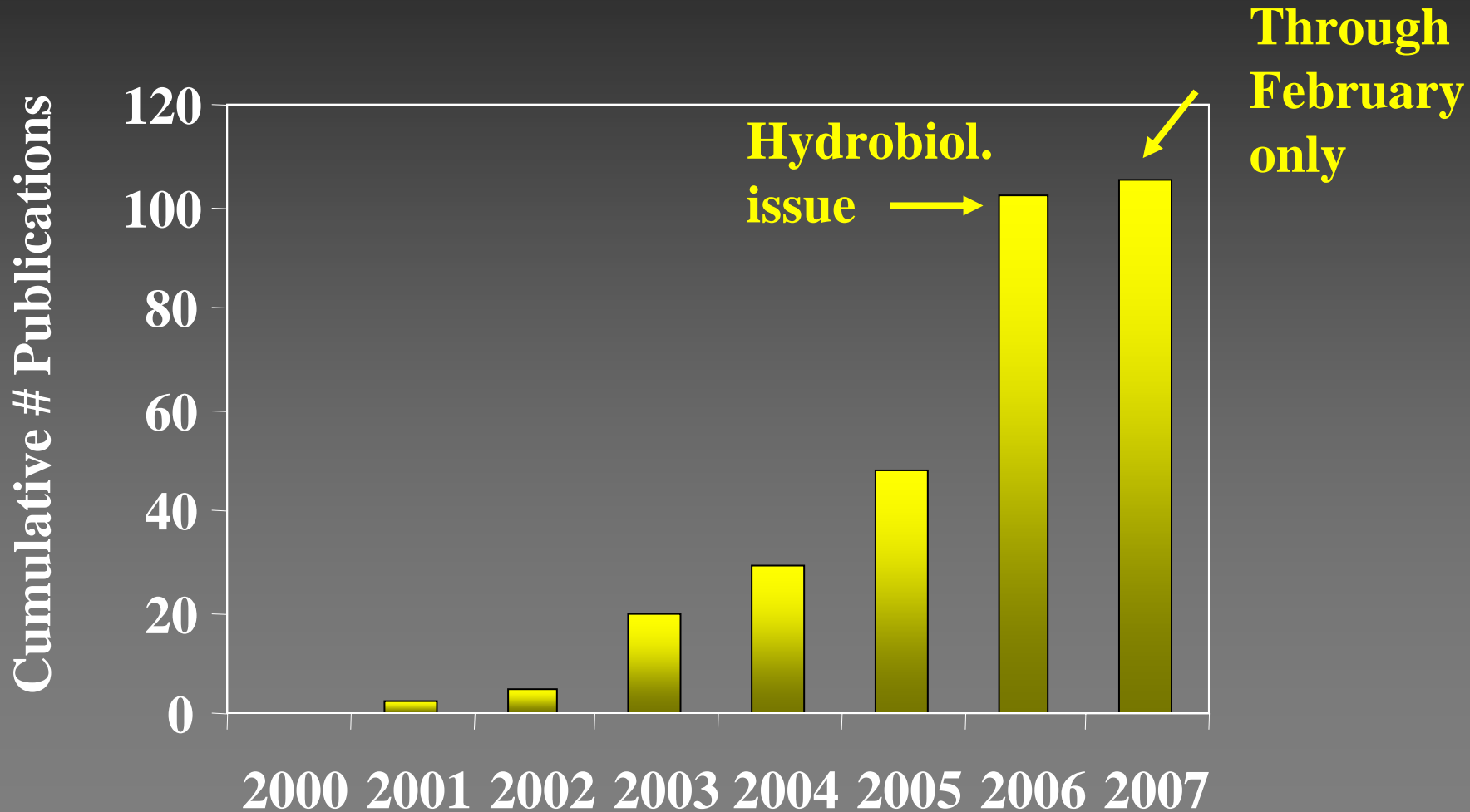
## Student Activity

Through  
February  
only



# State of the FCE Program

## Publications

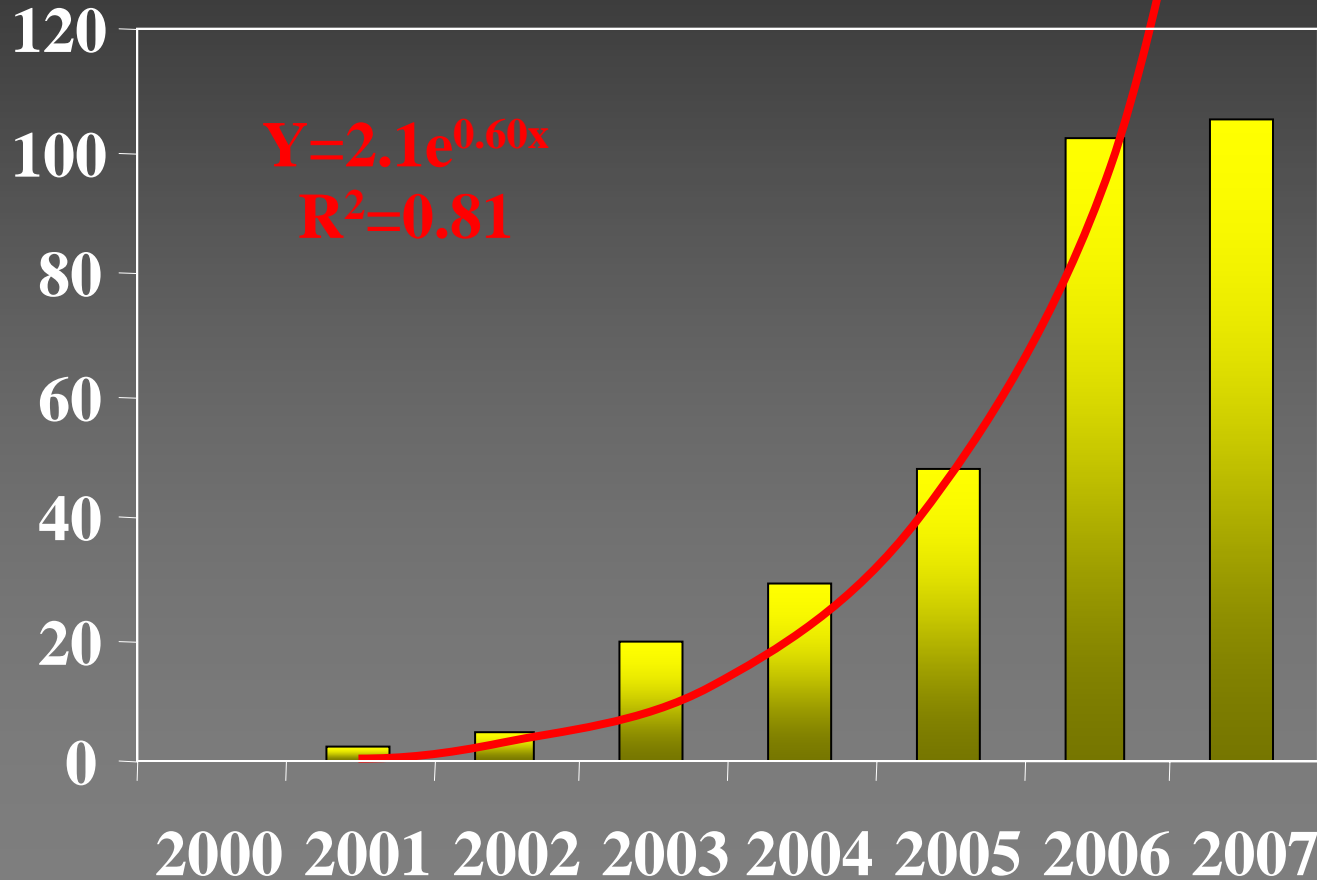


# State of the FCE Program

## Publications

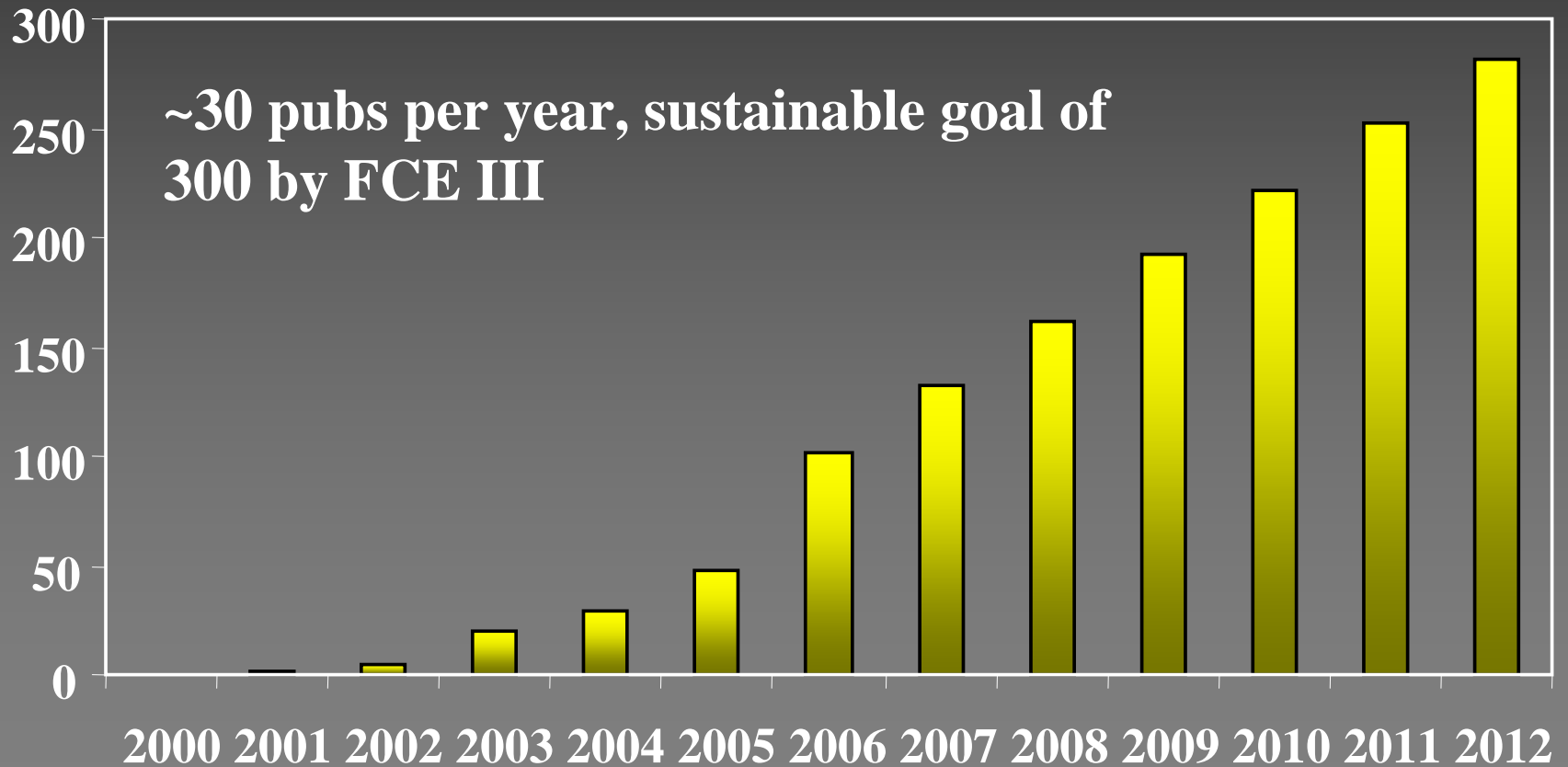
At this rate,  
need 78  
pubs this  
year  
=2,919 by  
2012

Cumulative # Publications



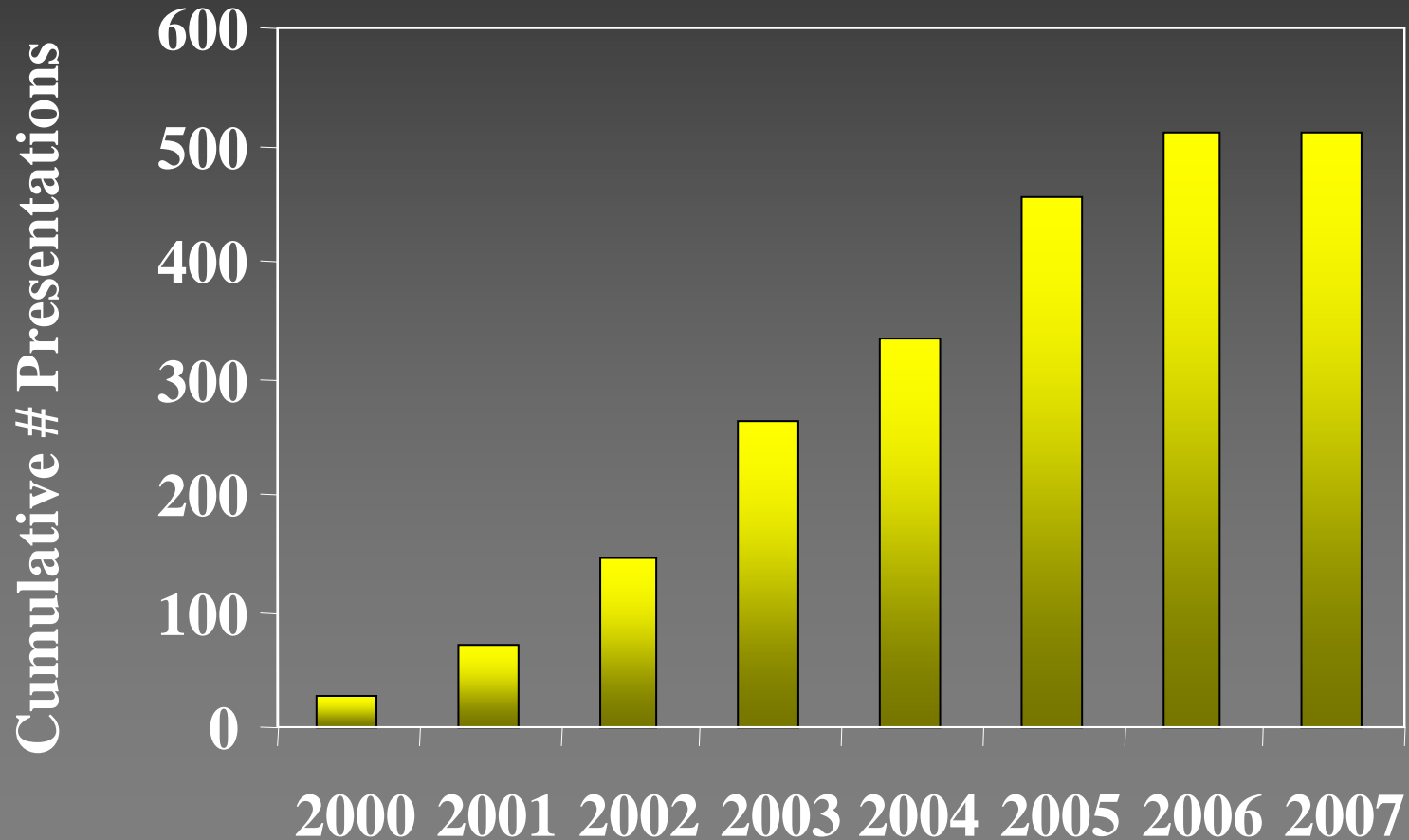
# State of the FCE Program

## Publications



# State of the FCE Program

## Presentations

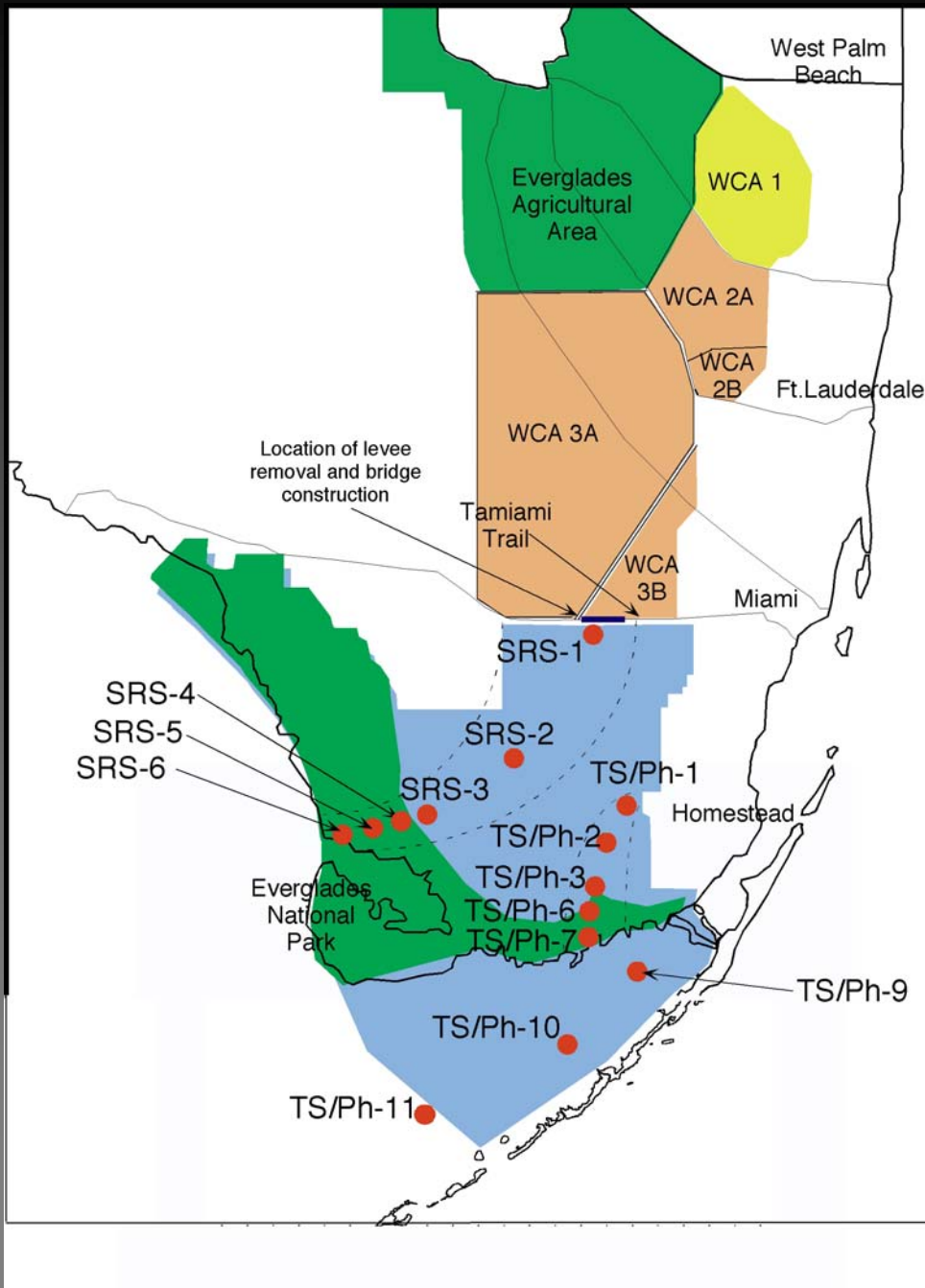


# FCE II Refresher

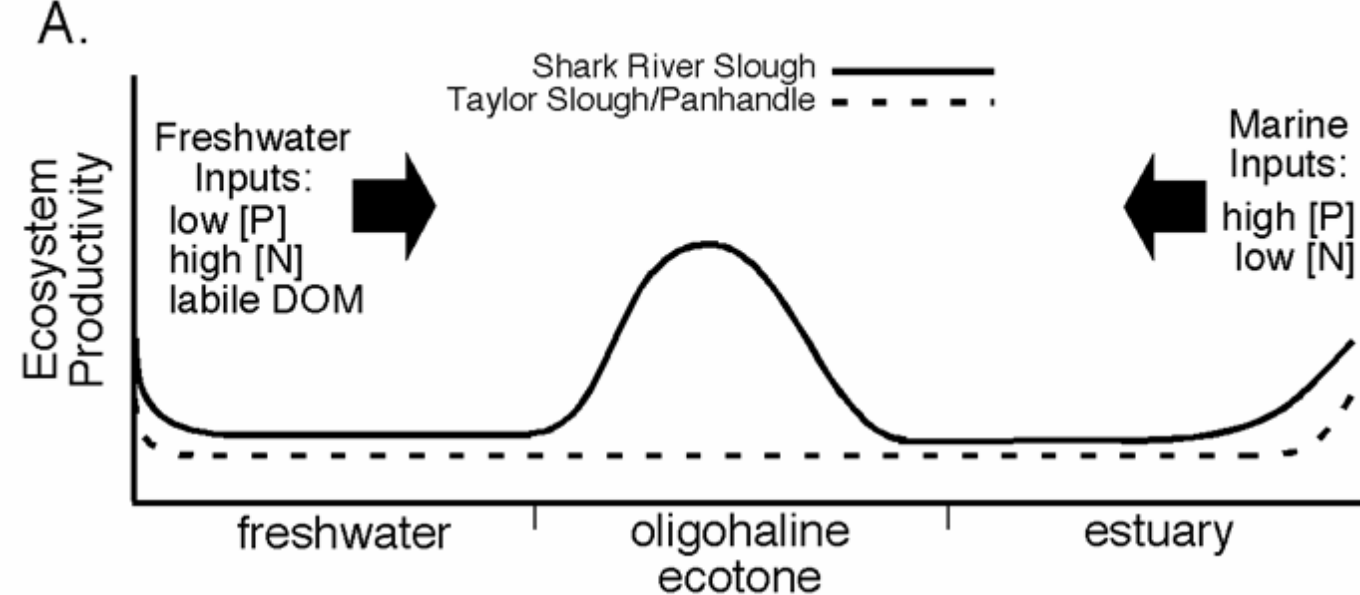
# FCE II Central Theme & Approach

In the coastal Everglades landscape, population & ecosystem-level dynamics are controlled by the relative importance of water source, water residence time, and local biotic processes. This phenomenon is best exemplified in the oligohaline ecotone, where these 3 factors interact most strongly and vary over many [temporal & spatial] scales.

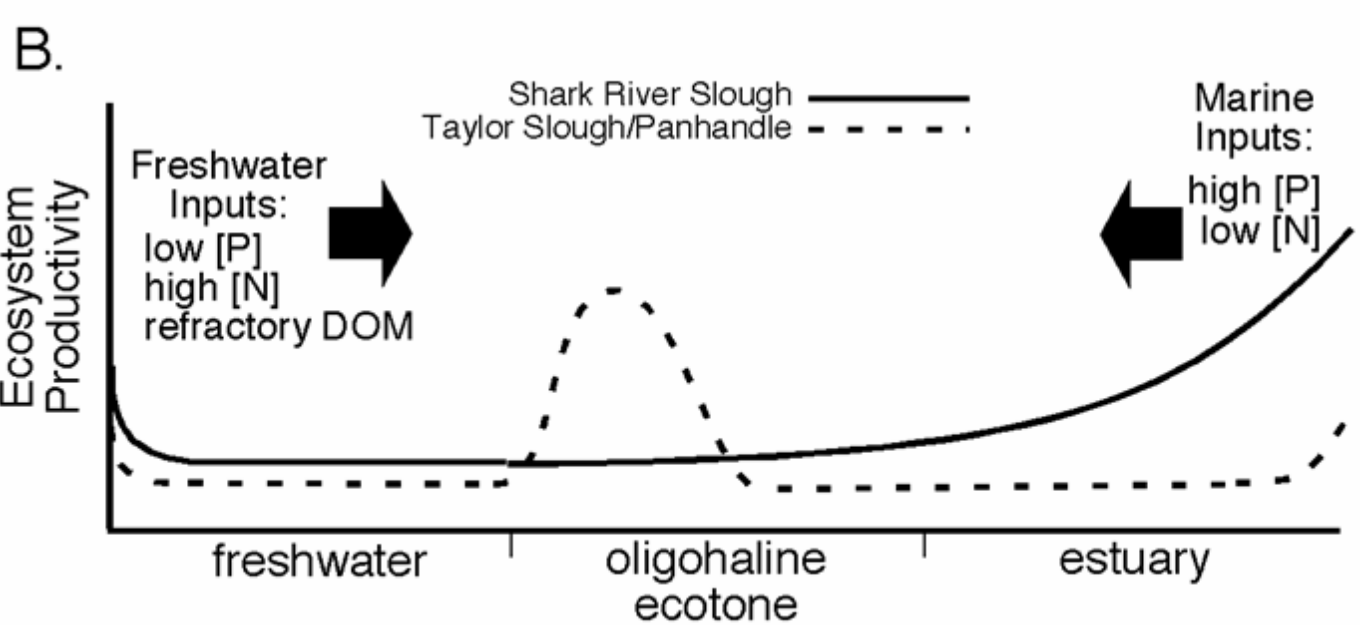
Reminder of the slight change in transect configuration relative to FCE I



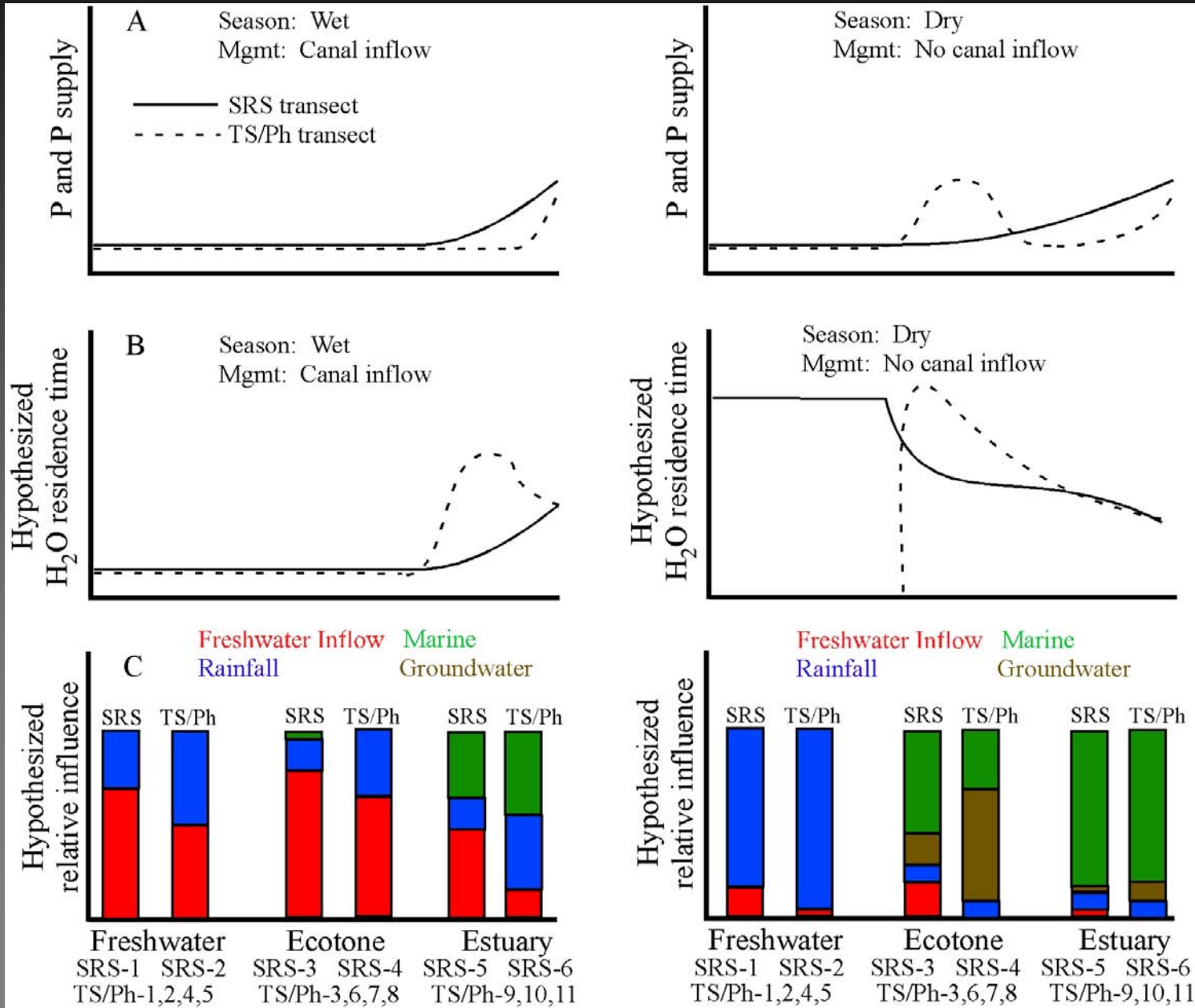
# FCE I Hypothesis



# FCE I Data

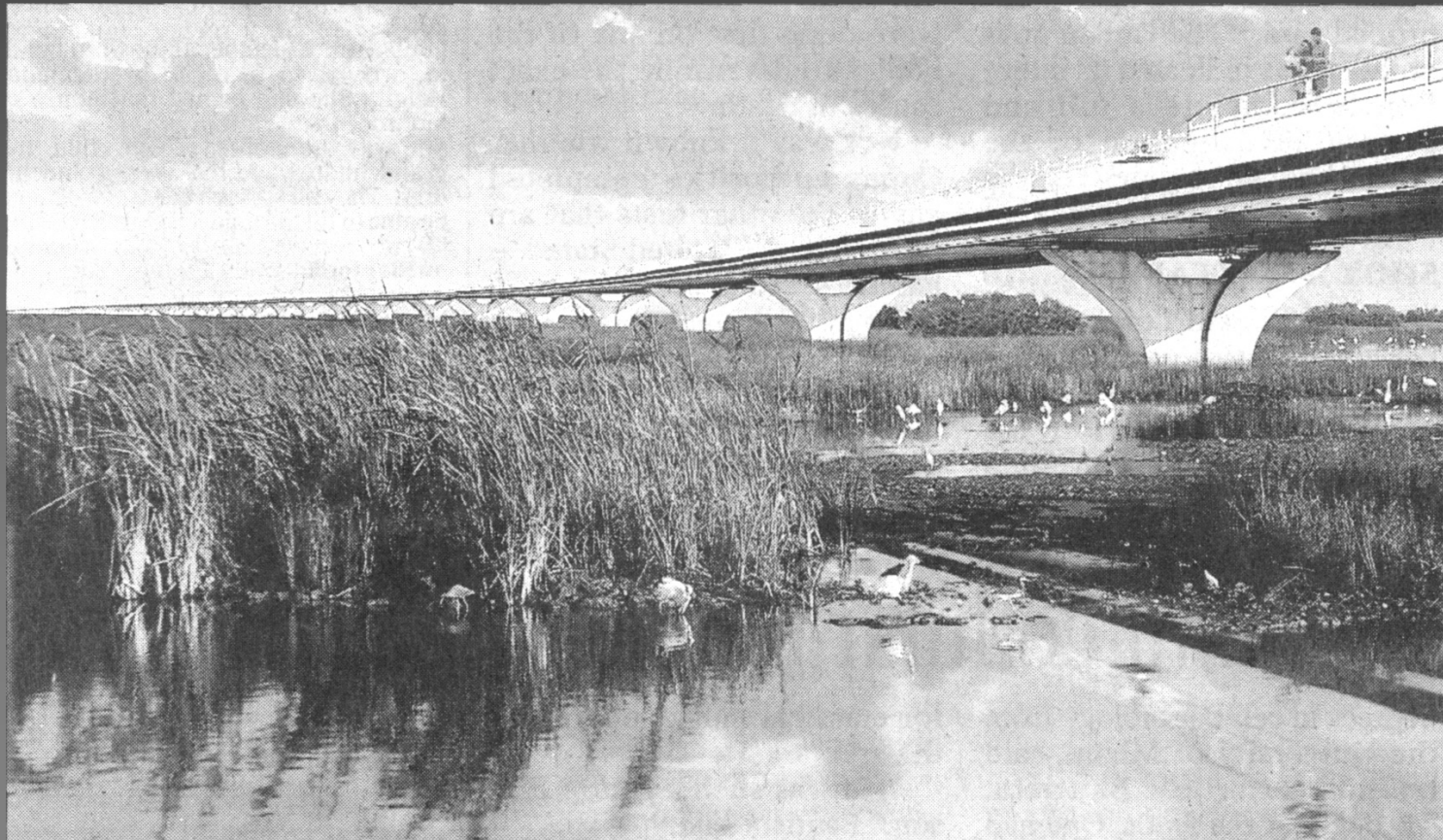


# FCE II Conceptual Model



# FCE II Grand Experiment

**Oligotrophy in the oligohaline ecotone region is coupled with freshwater flow; increasing freshwater flow will enhance oligotrophic conditions in the estuarine ecotone.**

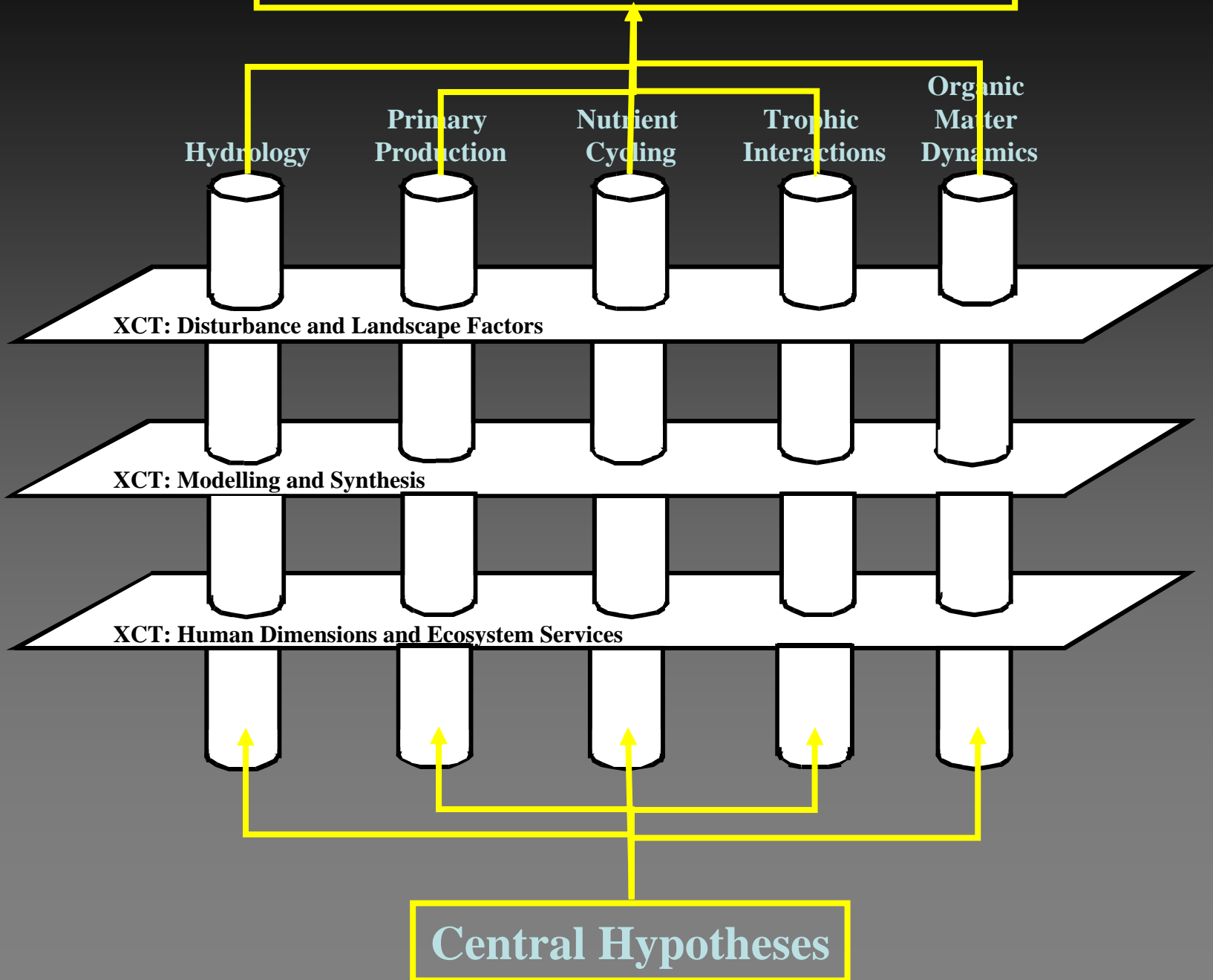


# **FCE II Central Hypotheses**

- 1. Increasing inputs of freshwater will enhance oligotrophy in nutrient-poor coastal systems, as long as the inflowing water has low nutrient content; this dynamic will be most pronounced in the oligohaline ecotone.**
- 2. An increase in freshwater inflow will increase the physical transport of detrital organic matter to the oligohaline ecotone, which will enhance estuarine productivity. The quality of these allochthonous detrital inputs will be controlled by upstream ecological processes.**
- 3. Water residence time, groundwater inputs, and tidal energy interact with climatic and disturbance regimes to modify ecological pattern and process in oligotrophic estuaries; this dynamic will be most pronounced in the oligohaline ecotone.**



# Understanding Ecosystem Function



# FCE II Organizational Structure

## FCE II Working Groups:

1. Hydrology (**René P.** & V. Engel)
2. Nutrient cycling (Anne H. & J. Boyer)
3. Organic matter dynamics (**Rudolf J.** & R. Chambers)
4. Primary production (**Evelyn G.** & Jim F.)
5. Trophic interactions (**Mike H.** & Joel T.)

## FCE II Cross-Cutting Themes:

1. Modelling and synthesis (Fred S.)
2. Climate & Disturbance (Bill A.)
3. Human dimensions (Laura O.)

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## Agenda - Day 1

9:00-9:30	Welcome and State of the Program	Gaiser & Childers
9:30-10:30	State of the FCE database and Website	Powell & Rugge
10:30-10:45	Break	
10:45-11:45	State of Education & Outreach	Dailey & Oehm
11:45-12:00	FCE Graduate Student activities	Williams
12:00-1:15	Lunch – Student group mtg.	
1:15-2:15	Nutrients & DOM working group	Boyer et al.
2:15-3:15	Soils & Sediments working group	Jaffe et al.
3:15-3:45	Break	
3:45-4:45	Trophic Dynamics working group	Trexler et al.
4:45-5:00	Group Photo	
5:00-7:00	Poster Session and Social	

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## Agenda - Day 2

8:45-9:00	Welcome	Gaiser
9:00-10:00	Primary Production working group	Gaiser et al.
10:00-10:30	Hydrology working group	Price
10:30-11:00	Break	
11:00-11:30	Climate working group	Anderson
11:30-12:00	Update on ISSE	Childers
12:00-1:15	Lunch - IEC mtg.	
1:15-2:15	Human Dimensions group	Ogden et al.
2:15-2:45	Break	
3:00-4:00	Group discussion on integration	
5:00-?	Post-ASM BBQ at Gaiser's	