
MARKET SPACE

Federal Agencies Funding Research on Vulnerabilty

- Federal Emergency Management Agency
- Corps of Engineers
- NOAA
- USGS
- EPA
- National Park and Fish & Wildlife Services

Origins of Product 4.1

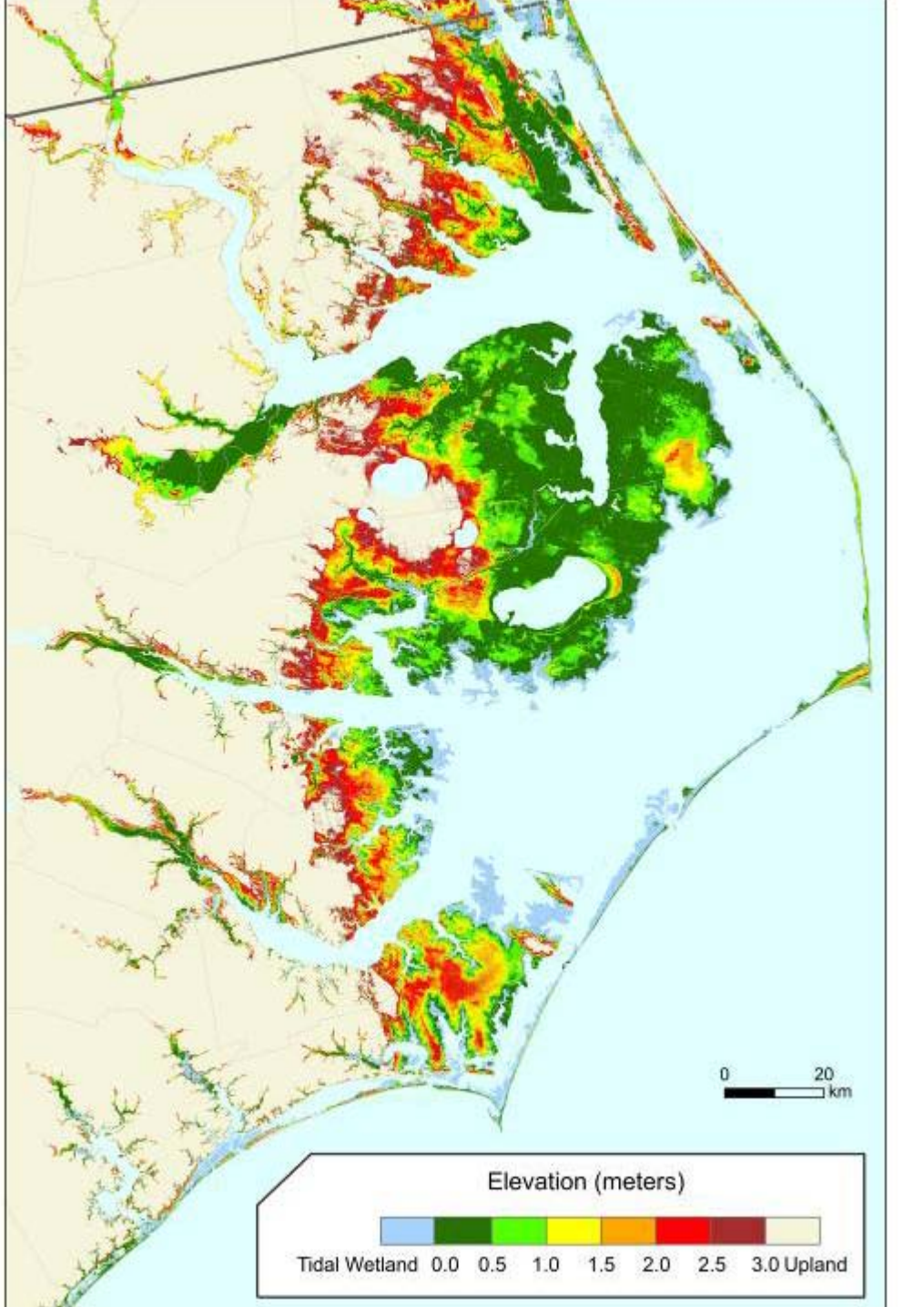
2002: Federal agencies promised products in *detailed* CCSP strategic plan

- "Elevation Maps Depicting areas vulnerable to sea level"
- "Planning maps depicting how state and local governments could respond to sea level rise"

2003: Final CCSP strategic plan proposed SA 4.1:

"Coastal Elevation and Sensitivity to Sea Level rise"

- EPA,
- NOAA,
- USGS


0
20
km
Elevation (meters)
Tidal Wetland 0.0 0.5 1.0 1.5 2.0 2.5 3.0 Upland

If we knew then what we know now…

Agency Leads thought they had signed up to…

- Synthesize the products in strategic plan
- Focus on Mid-Atlantic
- Focus on what's new

Mike said that CCSP wanted us to…

- Synthesize all previous important work
- Scope should be entire United States
- Make sure it is not just EPA and NOAA studies

Prospectus Process

- Prospectus
  - Meets Mike's criteria
  - Clearly state required agency contributions
- CCSP decides which portions it wants

Prospectus: Key Questions

1) Which lands could be inundated by the tides without shore protection?
2) How would the floodplain boundaries change?
3) Which land could potentially erode?
4) Ability of wetlands to vertically accrete: Will sea level rise cause the area of wetlands to increase or decrease?
5) Which lands have been set aside so that wetlands will migrate inland; which land [will] require shore protection? Which lands could be available for either?

That is: What happens to the land?

Other Questions

For alternate scenarios of sea level rise and shore protection

- Population, economic activity, land use in vulnerable area?
- Cost of shore protection?
- Ecological implications?
- Flood damages?
- Public's access to (and use of) the shore?

Decisions:

- Which near-term actions (if any) justify different decisions?
- What options are being considered by specific organizations?
- What lessons can the Mid-Atlantic States learn from the unfolding consequences in Louisiana?

Answers on three scales

- National—literature review
- Middle Atlantic
  - Quantitative estimates of key questions
  - GIS data for 1:100,000 maps provided to collaborators
- Estuary or county scale
  - Case studies
  - Maps and some key questions

Participating Agencies

Lead Agencies: EPA, NOAA, USGS

Supporting Agencies: NASA, DOE

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Department of Defense

- Corps of Engineers--Shore protection
- 2nd largest landowner

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DOI Parks and Refuges

Federal Lead Authors

Lead Agencies: EPA (J. Titus), NOAA (S. Gill) , USGS (J. Williams)

FEMA: M. Craghan (Philadelphia District)

Department of Defense--Corps of Engineers

- K. Nook (Baltimore District) and/or
- A. Morang (WES Vicksburg)

DOI Parks and Refuges (D. Cahoon USGS)

Non-Federal Contributing Authors

- EPA Contractors
  - U of New Orleans (wetland key question)
  - Many subs to contribute site-specific understanting
  - Mapping Contractors
- NOAA Seagrant
- Volunteer Submissions Solicited
  - Will provide the new data in time for analysis
  - NOAA handling travel to meetings

Schedule

Final prospectus posted	January 06
First batch of GIS Data Posted	January 06
First FAC/Lead Authors Meeting	February 06
Rough draft for Key Questions 1-5	April 05
All GIS Data Posted	April 05
Rough draft for Case Studies	June 06
Stakeholder Review Draft	August 06
Stakeholder Review complete	October 06
Expert Review (first) draft	December 06
Public Comment (second) draft	May 07
Public Comment Period	August 07
Third draft submitted to CCSP	September 07
Final product released	October 07

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Remember: This is still a proposal.

Prospectus: Key Questions

1) Which lands could be inundated by the tides without shore protection?
2) *Need FEMA*
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Prospectus: Key Questions

1) Which lands could be inundated by the tides without shore protection?
2) *Need FEMA*
3) Which land could potentially erode?
4) *Need Wetland Accretion Specialists to pull together in January*
5) Which lands have been set aside so that wetlands will migrate inland; which land [will] require shore protection? Which lands could be available for either?

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Prospectus: Key Questions

1) Which lands could be inundated by the tides without shore protection? (EPA and NOAA)
2) *Need FEMA*
3) Which land could potentially erode? (USGS)
4) *Need Wetland Accretion Specialists to pull together in January*
5) Which lands have been set aside so that wetlands will migrate inland; which land [will] require shore protection? Which lands could be available for either? (EPA)

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Other Questions

For alternate scenarios of sea level rise and shore protection

- Population, economics, land use?
- Cost of shore protection?
- Ecological implications?
- Flood damages?
- Public's access to the shore?

Other Questions

For alternate scenarios of sea level rise and shore protection

- Population, economics, land use? (NOAA)
- Cost of shore protection? (Corps?)
- Ecological implications? (local experts)
- Flood damages? (FEMA?)
- Public's access to the shore? (lawyers)