

MBNEP Science Advisory Committee

AUMERC
April 27, 2012



Agenda

- Welcome, Call to order
- Review/Approval: Minutes 2-8-12
- Presentation/Vote: Tentative Final Stresses, Ecosystem Service, Habitat Rankings Report
- Action: Begin Construction of BCG
- Other
- Next Meeting
- Adjourn

The Respondents

Dr. Becky Allee, NOAA Coastal Services Center

Eric Brunden, Weeks Bay NERR

Dr. Ruth Carmichael, Dauphin Island Sea Lab

Dr. Just Cebrian, Dauphin Island Sea Lab

Bart Christiaen, Dauphin Island Sea Lab

Mike Dardeau, Dauphin Island Sea Lab

Dr. Dennis DeVries, Auburn University

Dr. Scott Douglass, University of South Alabama

Maury Estes, Universities Space Research Association at NASA/MSFC

Carl Ferraro, ADCNR-State Lands Coastal

Conrad Gazzier, Environmental Consultant

Meg Goecker, NOAA Restoration Center

Stevens Heath, AMRD Emeritus

Andrew Henderson, ADCNR Freshwater Fisheries

James Jeter, Alabama Forestry Commission

Steve Jones, Geological Survey of Alabama

Dr. Latif Kalin, Auburn University

Charlene LeBleu, Auburn University

Dr. John Lehrter, USEPA Gulf Breeze Lab

Paul Looney et al., Volkert & Associates

Carl Pinyerd, Thompson Engineering

Randy Roach, US Fish & Wildlife

Lloyd Scott, Environmental Studies Center

Stephen Sempier, University of Southern Mississippi

Ronald Thom, Pacific Northwest National Laboratory

Judy Haner et al., The Nature Conservancy

Tim Thibaut et al., Vittor & Associates

Dr. William Walton, Auburn University

Dr. Russell Wright, Auburn University

Tentative Final Stresses, Ecosystem Service, Habitat Rankings Report

Stressors having the Most Impact

- Land Use Change
- Fragmentation
- Dredging and Filling
- Sedimentation

Ecosystem Services Under Most Stress

- Biodiversity
- Wildlife Habitat
- Water Quality
- Primary Production

*Fifth and Sixth were...
Nesting Habitat
Fisheries*

Habitats that are Most Stressed

- Freshwater Wetlands
- Intertidal Marshes and Flats
- Riparian Buffers
- Streams and Rivers

Habitats with associated High Ranking Ecosystem Services and Stress Impacts

Habitat	Ecosystem Services Most Stressed	Top Stress Impacts
Freshwater Wetlands	Nesting for birds and turtles Biodiversity Wildlife, Fisheries	Land Use Change Fragmentation Dredging and Filling
Intertidal Marshes and Flats	Biodiversity Fisheries Wildlife Water Quality	Sediment Sea Level Rise Fragmentation
Streams and Rivers (Riparian Buffers)	Fish Biodiversity Water Quality Sediment	Freshwater discharge Land Use Change Sediments

Next Step: Constructing a Biological Gradient Framework