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WHAT IS AN OYSTER HATCHERY?



OYSTER BROODSTOCK

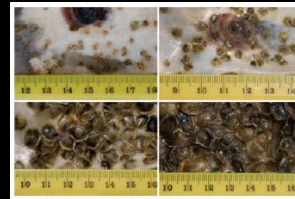


TECHNICIANS PERFORMING A STRIP SPAWN



OYSTER LARVAE TANKS

1. Broodstock (adult oysters) collected and spawned, larvae reared
2. Set on substrate for "planting" and grow out (can be done remotely) or set on micro-cultch for mariculture
3. Seed distributed for restoration, resource enhancement and commercial growout
4. Research and education conducted

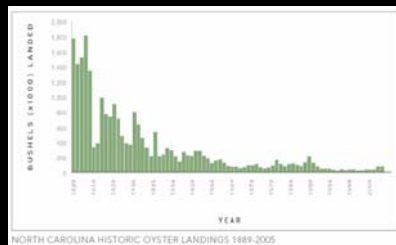


1-WEEK TO 4-WEEK OLD SPAT ON RECYCLED OYSTER SHELL



YEARLING SINGLES FOR GROWOUT

HISTORY



- 1.8 million bushels harvested in 1902
- 71,300 bushels harvested in 2005
- Decline due to many causes
- 1980-1990's diseases cause significant mortality

NORTH CAROLINA'S RESPONSE TO DECLINE

- State Oyster Rehabilitation Program (1947)
- Blue Ribbon Advisory Council on Oysters (1994)
- NCDMF Oyster Fishery Management Plan (2001)
- NCCF Oyster Restoration and Protection Plan (updated 2005)
- Legislation introduced 2005-2006 (Planning Oyster Hatcheries)



NC OYSTER HATCHERY PLANNING ADVISORY TEAM

under the direction of the NC Aquariums



Carteret Community College

NC Coastal Federation

NC Division of Marine Fisheries

North Carolina Sea Grant

UNC-CH CEP AEFS

UNC-CH Institute of Marine Sciences

UNC Coastal Studies Institute

UNCW Center for Marine Science

MISSION

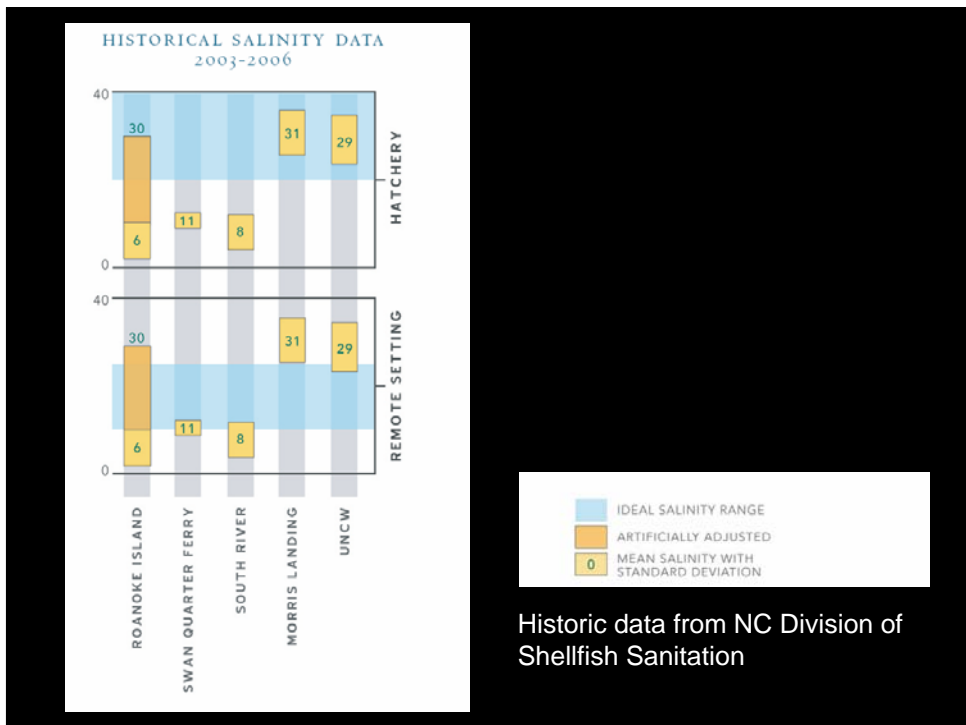
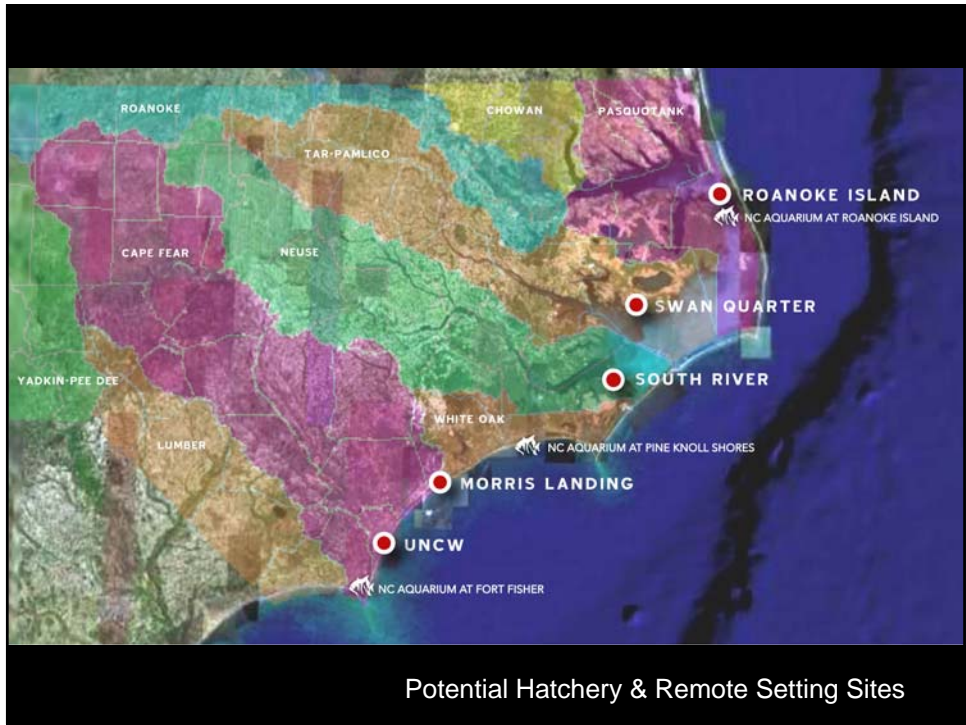
Determined by NC Oyster Hatchery Advisory Team

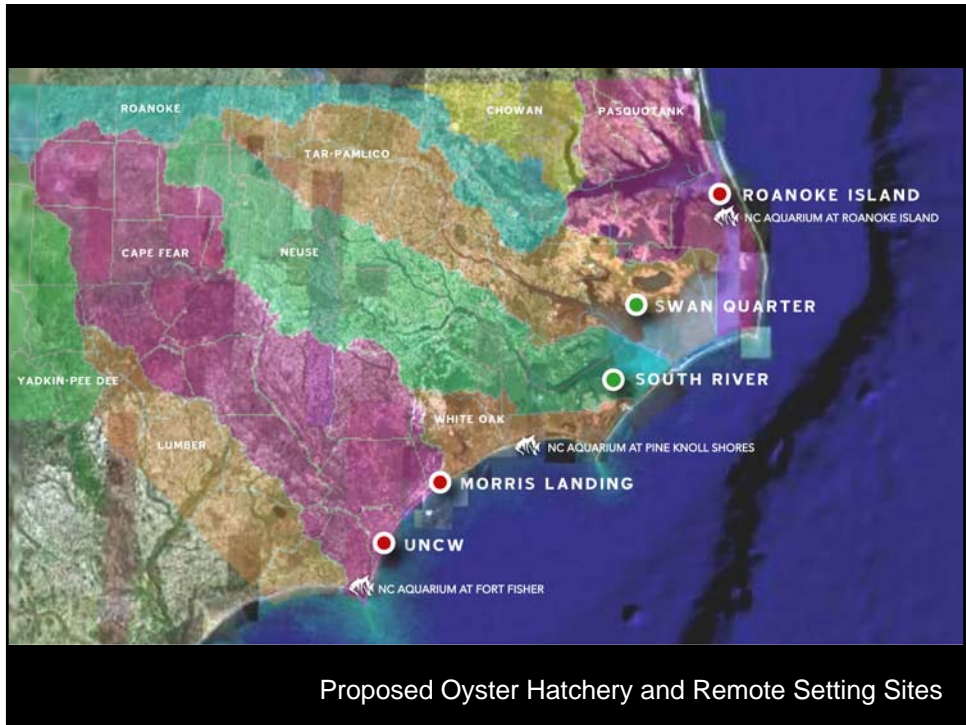
1. Construction of a hatchery/s to produce seed for existing NCDMF restoration and sanctuary programs
2. Establish an extension component to educate and train oyster growers (mariculture)
3. Develop an educational program to promote existing programs by multiple agencies
4. Establish a research and broodstock development program

PROGRAM SCOPE

1. Production Component
2. Oyster Farming (mariculture) Component
3. Education/Extension Component







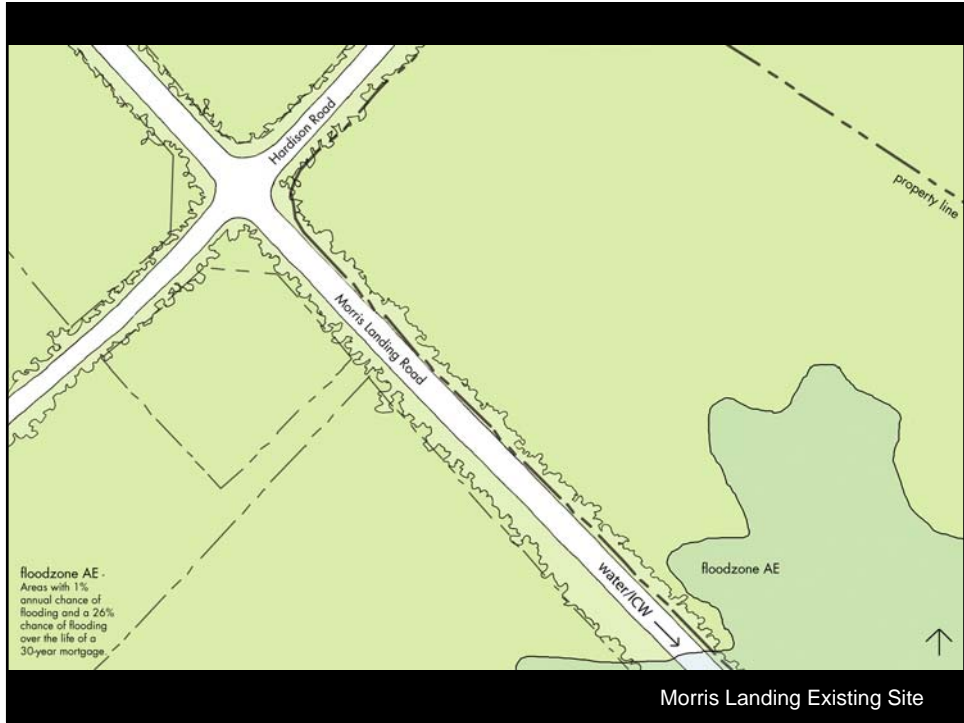
DESIGN TEAM GOALS

Frank Harmon Architect, Olympus Aquaculture Consulting, Inc., Riggs Ward, Consider Design, Swanson and Associates, Tim Martin Engineer, CMS Engineering

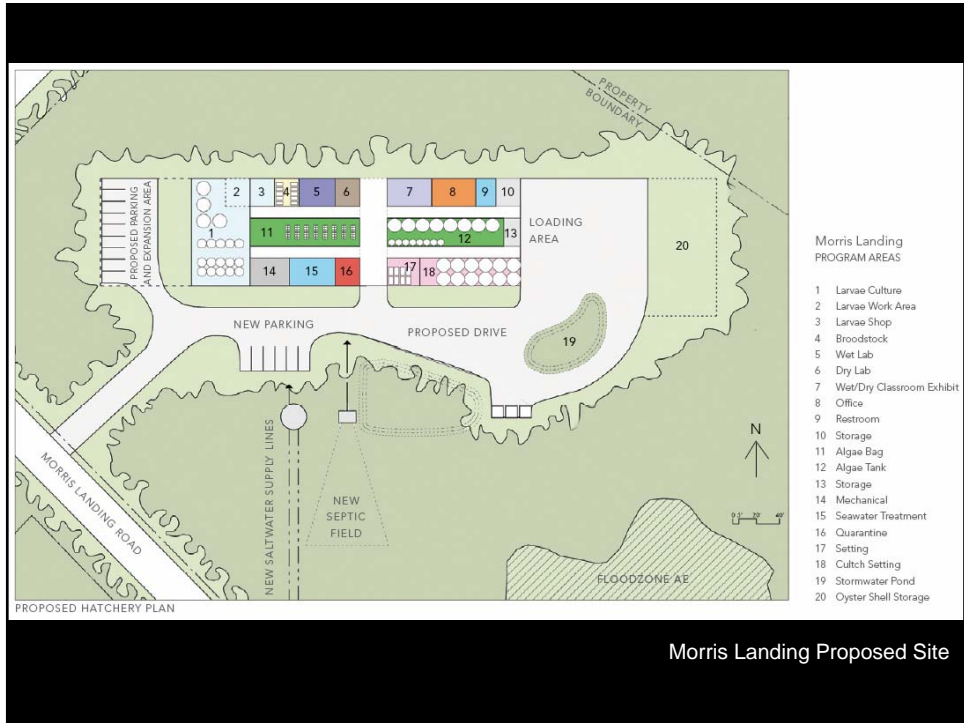
1. RESPECTS SITE
2. BUILD WITH SUSTAINABLE MATERIALS
3. ORIENTED TO RESPECT SUN AND WIND
4. ALLOWS FLEXIBILITY AND EXPANSION
5. CONSERVES ENERGY
6. CULTURE TEMPERATURES

ALGAE CULTURE	22° C (71.6° F)
LARVAE CULTURE	24 - 26° C (75 - 79° F)
SETTING AND NURSERY	24 - 26° C (75 - 79° F)

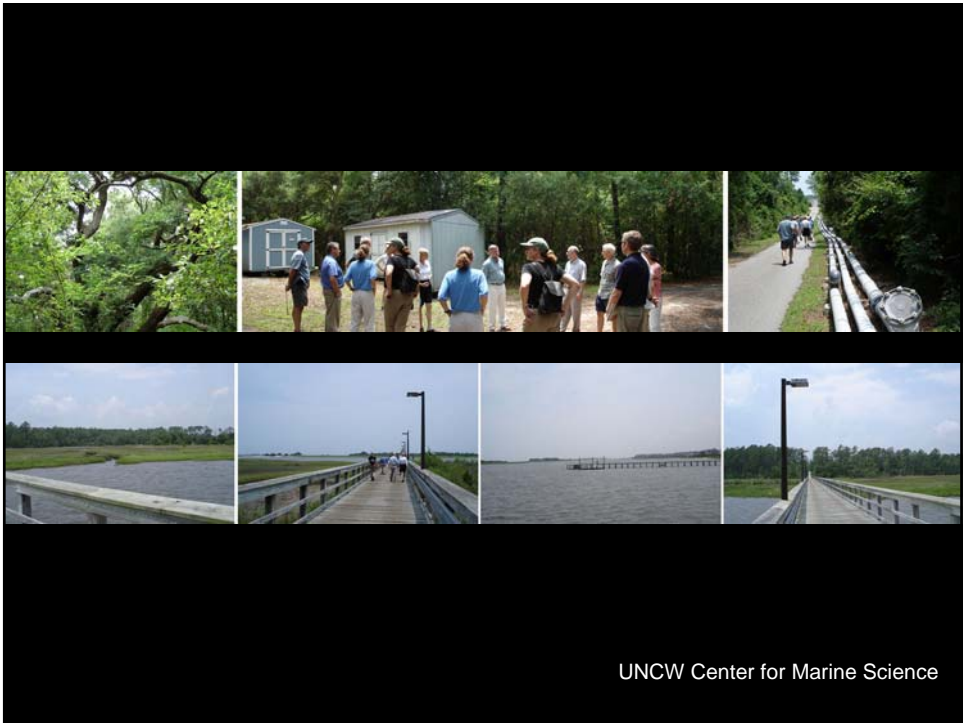
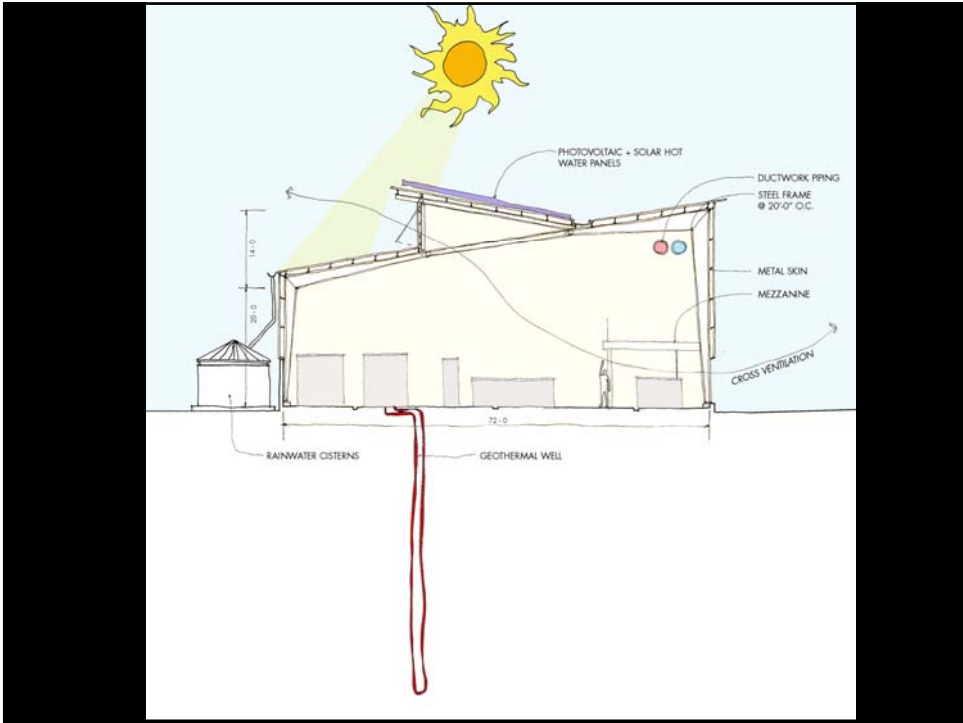




Morris Landing Existing Site

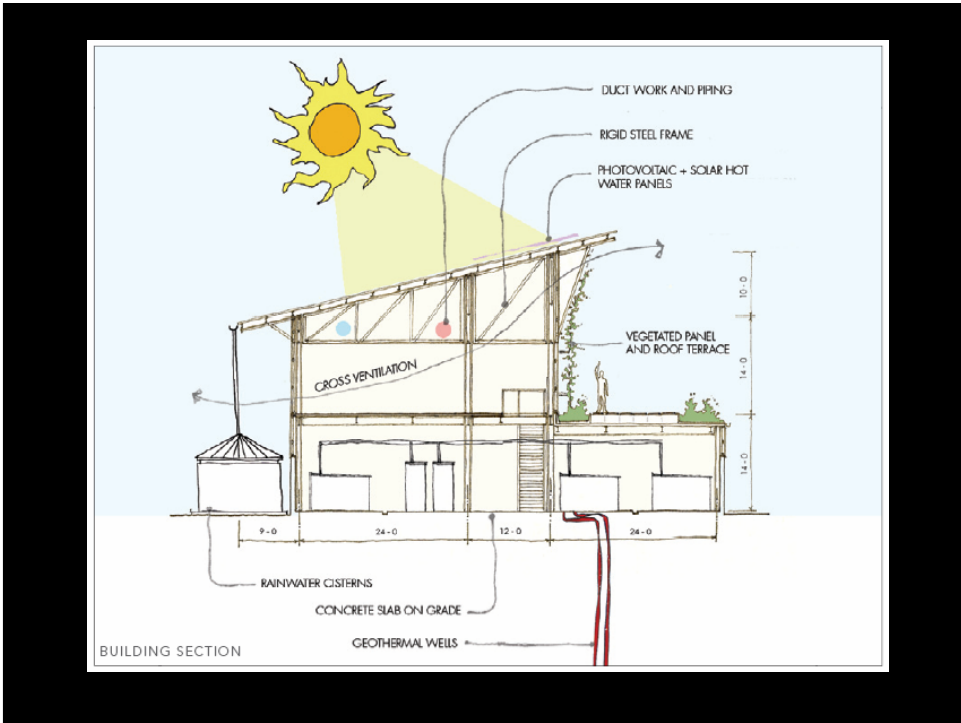
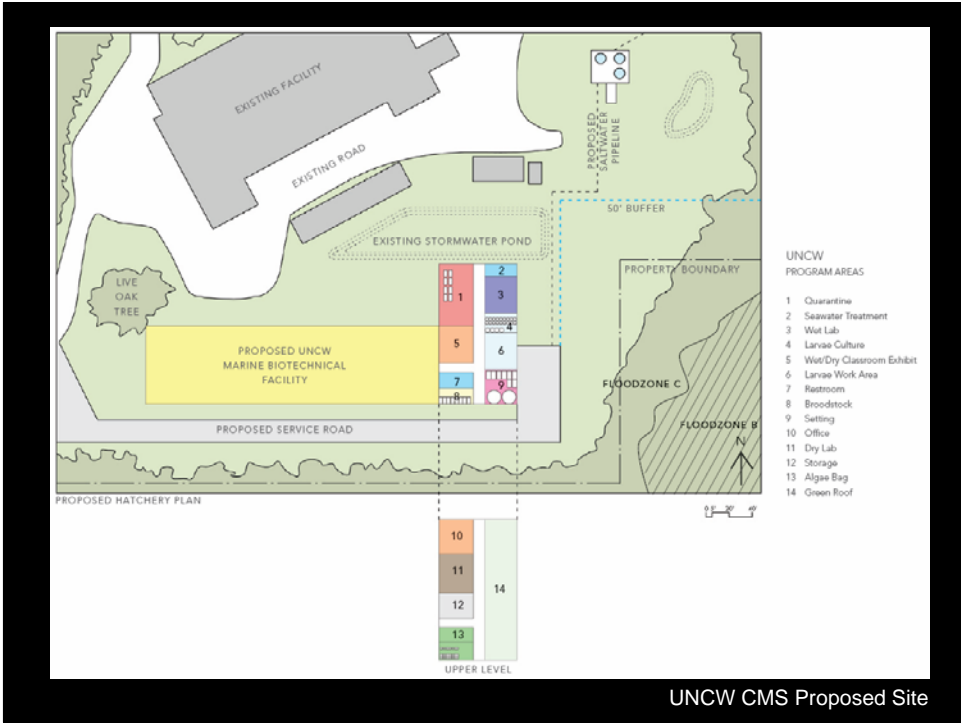


Morris Landing Proposed Site

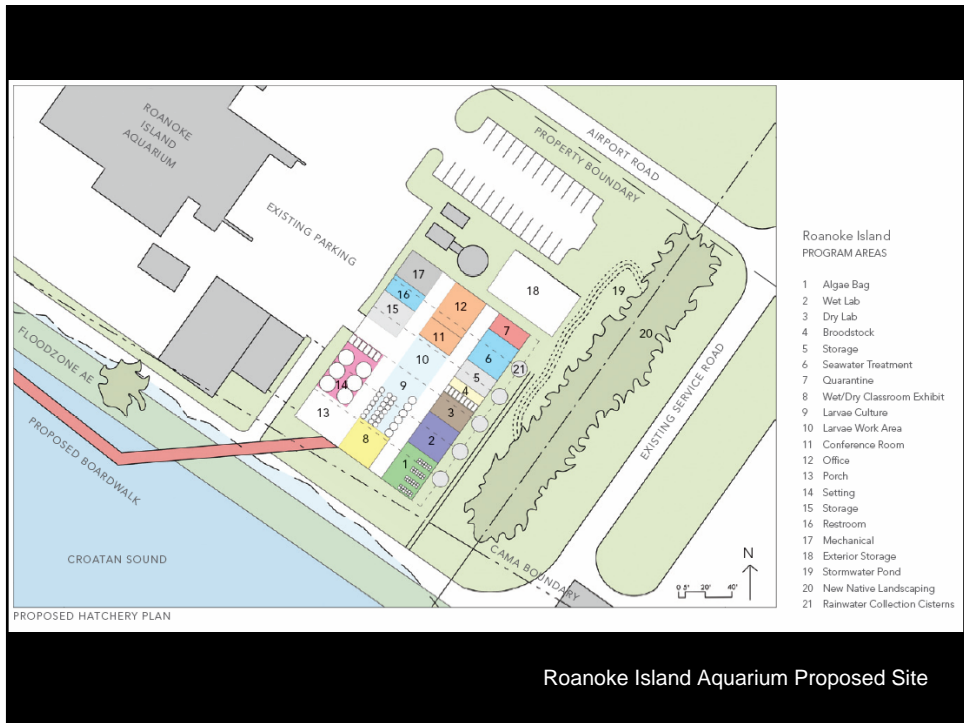
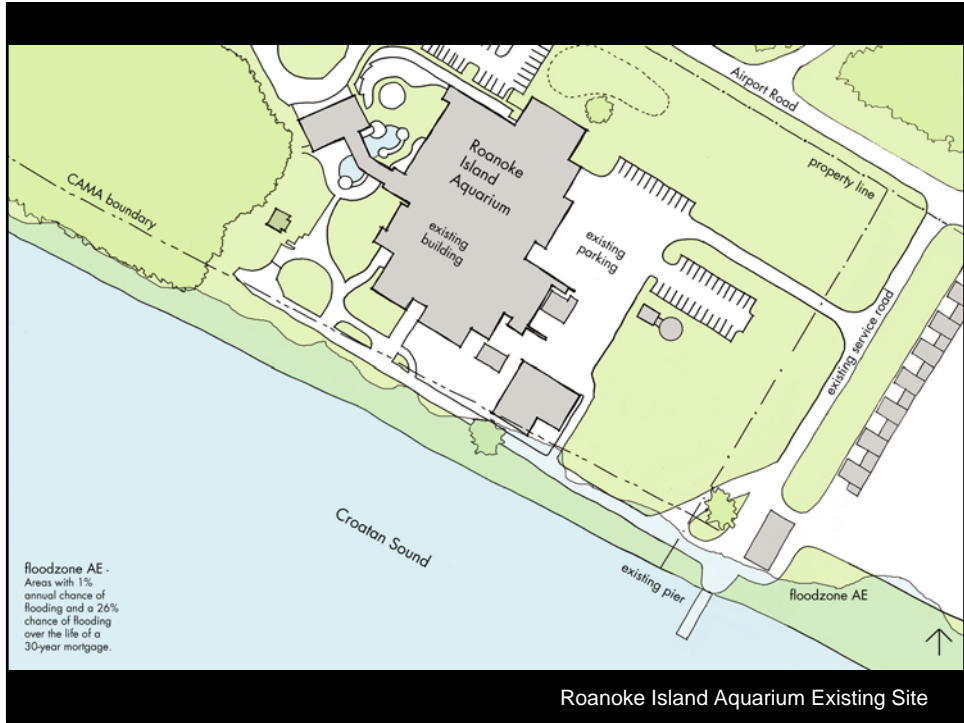


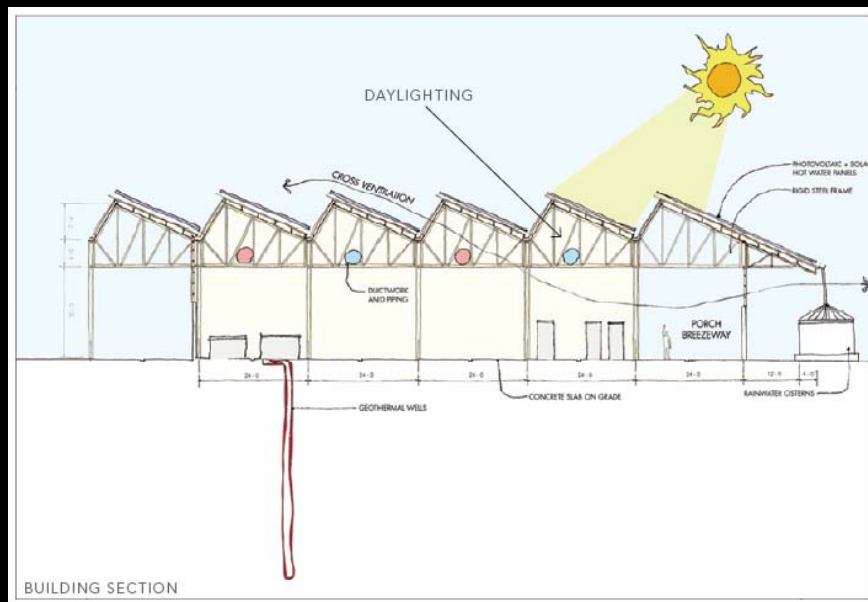
UNCW Center for Marine Science











EDUCATION & EXTENSION



EXHIBITS



EDUCATIONAL LABORATORIES

- Interpretive exhibits at each Aquarium
- Educational laboratories at the hatchery facilities for extension
- Graphic panels located at remote setting sites and hatchery facilities

Visit www.ncoysters.net
for complete program documents and additional information



ALBEMARLE ECOLOGICAL FIELD SITE
Mallie Payne, Student
Carolina Environmental Program, UNC Chapel Hill

Support North Carolina. SUPPORT OYSTERS.