

NC LEGISLATIVE COMMISSION ON GLOBAL CLIMATE CHANGE (NC LCGCC)

- 1. WE CAN'T GO BACK**
- 2. STATUS QUO IS UNATTAINABLE**
- 3. HOW DO WE ALLOW THE SYSTEM TO
EVOLVE IN RESPONSE TO CLIMATE
CHANGE IN ORDER TO PROTECT AND
MITIGATE THE INVALUABLE COASTAL
RESOURCES AND MAINTAIN A VIABLE
COASTAL ECONOMY?**

NC LEGISLATIVE COMMISSION ON GLOBAL CLIMATE CHANGE (NC LCGCC)

THREE PRIME OBJECTIVES OF THE COMMISSION

- 1. TO BETTER MANAGE THE HUMAN ACTIVITIES THAT ARE APPARENTLY IMPACTING GLOBAL CLIMATE CHANGE;**
- 2. TO DEAL WITH THE POTENTIAL CONSEQUENCES OF GLOBAL CLIMATE CHANGE ON THE CITIZENS, NATURAL RESOURCES, AND ECONOMY OF THE STATE; AND**
- 3. TO TAKE ADVANTAGE OF ECONOMIC OPPORTUNITIES THAT MAY RESULT FROM GLOBAL CLIMATE CHANGE AND THE EMERGING CARBON MARKET.**

NC LEGISLATIVE COMMISSION ON GLOBAL CLIMATE CHANGE (NC LCGCC)

PRELIMINARY RECOMMENDATIONS FOR MITIGATING THE CONSEQUENCES OF CLIMATE CHANGE IN NC

- 1. THE GENERAL ASSEMBLY SHOULD CREATE AND FUND A STATE-SANCTIONED BLUE RIBBON COMMISSION ON ADAPTATION TO CLIMATE CHANGE.**

- 2. THE GENERAL ASSEMBLY SHOULD CREATE AND FUND A COASTAL ADAPTATION PROGRAM TO:**
 - A. PURCHASE LAND OR CONSERVATION EASEMENTS ON “AT RISK” PORTIONS OF THE LOW-LYING COASTAL ZONE.**

 - B. COST SHARE INCENTIVES WITH LAND OWNERS FOR MANAGEMENT OF ECOLOGICALLY BENEFICIAL EROSION CONTROL STRUCTURES ON ERODING ESTUARINE SHORELINES.**

 - C. CARRY OUT RESEARCH, MAPPING, AND INVENTORY OF COASTAL RESOURCES TO PROVIDE AN ASSESSMENT OF THE PHYSICAL AND ECOLOGICAL PROPERTIES OF THE COASTAL SYSTEM AND POTENTIAL CUMUATIVE IMPACTS.**

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PRELIMINARY RECOMMENDATIONS FOR MITIGATING THE CONSEQUENCES OF CLIMATE CHANGE IN NC

- 3. LEGISLATION FOR THE COASTAL ADAPTATION PROGRAM SHOULD INCLUDE THE FRAMEWORK FOR MAPPING AND INVENTORYING THE STATE'S EXTENSIVE COASTAL AND RIVERINE RESOURCES INCLUDING, BUT NOT LIMITED TO:**
 - A. THE LAND AREAS WITHIN THE COASTAL ZONE,**
 - B. THE OCEAN AND ESTUARINE SHORE ZONES, AND**
 - C. SUB-AQUATIC BATHYMETRY, SEDIMENTS, AND VEGETATION.**

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4. LEGISLATION FOR THE COASTAL ADAPTATION PROGRAM SHOULD INCLUDE THE FRAMEWORK FOR ESTABLISHING TWO KINDS OF PERMANENT MONITORING STATIONS WITHIN THE NC COASTAL ZONE:

**A. A SYSTEM OF OCEANIC, ESTUARINE, AND RIVERINE STATIONS TO MEASURE
ABSOLUTE CHANGES IN SEA LEVEL, CHARACTERIZE THE DYNAMICS OF STORM
SURGES AND TIDES, AND MONITOR WATER FLOW AND QUALITY THROUGH THE
COASTAL SYSTEM.**

**B. A SERIES OF LAND-BASED SITES TO MONITOR ECOLOGICAL CHANGE OF
HABITATS THROUGH TIME (e.g. GROWTH RATES, STRUCTURE AND FUNCTION,
FRESHWATER RESOURCES, SALTWATER INTRUSION, SEDIMENTATION AND
EROSION RATES, AND DEVELOPMENT, ETC.**

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- 5. THE BLUE RIBBON COMMISSION AND COASTAL ADAPTATION PROGRAM SHOULD DEVELOP POLICIES CONCERNING CONTROVERSIAL ECONOMIC AND RESOURCE MAINTENANCE ISSUES FOR THE NC COASTAL ZONE INCLUDING, BUT NOT LIMITED TO:**
 - A. HARDENING OF ESTUARINE SHORELINES WITH ENGINEERED STRUCTURES VERSUS ECOSYSTEM MIGRATION IN RESPONSE TO ONGOING SEA-LEVEL RISE.**
 - B. MANAGING AND/OR RETREATING FROM THE BARRIER ISLAND, HIGH HAZARD OCEAN AND INLET SHORELINES.**
 - C. MAINTAINING AND/OR MOVING THE INFRASTRUCTURE ASSOCIATED WITH BARRIER ISLANDS.**
 - D. BUILDING AND MAINTAINING BARRIER-DUNE RIDGES ALONG THE OCEAN SHORELINE OF BARRIER ISLANDS TO PREVENT STORM OVERWASH EVENTS AND OPENING OF NEW INLETS TO TAKE PLACE VERSUS ALLOWING THESE CRITICAL ISLAND BUILDING PROCESSES TO OCCUR NATURALLY.**

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- 6. THE BLUE RIBBON COMMISSION AND COASTAL ADAPTATION PROGRAM SHOULD DEFINE A SET OF SHORT-TERM (5-10 YEAR), MID-TERM (25-50 YEAR), AND LONG-TERM (50-100 YEAR) ENVIRONMENTAL CHANGE TARGETS AND MITIGATION MEASURES THAT SHOULD BE REQUIRED IF SPECIFIC EFFECTS OF CLIMATE CHANGE REACH PROJECTED LEVELS.**
 - A. DEVELOP A SET OF METRICS UPON WHICH THE MITIGATION MEASURES WILL BE BASED ALONG WITH A SET OF MANDATORY ACTION POLICIES AND APPROPRIATE ECONOMIC INCENTIVES TO MAKE THE MITIGATION MEASURES SUCCESSFUL.**
 - B. DEVELOP AND IMPLEMENT AN ENVIRONMENTAL “SCORE CARD” THAT TRACKS ECOSYSTEM CHANGE RESULTING FROM CLIMATIC SHIFTS AND WPECIFIC FOCUS ON THOSE RESOURCES THAT HAVE DIRECT ECONOMIC PRIORITIES (e.g. AGRICULTURE, SILVICULTURE, TOURISM, FISHERIES, ETC.).**
 - C. EXPLORE THE POTENTIAL FOR MARKET OPPORTUNITIES ASSOCIATED WITH EACH OF THE MITIGATION MEASURES.**

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- 7. THE GENERAL ASSEMBLY SHOULD ENACT LEGISLATION TO REQUIRE SELLERS OF COASTAL PROPERTIES TO DISCLOSE POTENTIAL HAZARDS TO BUYERS. THE COASTAL HAZARDS DISCLOSURE SHOULD ACCOMPANY ALL REAL ESTATE TRANSFERS OF PROPERTIES WITHIN COASTAL COUNTIES THAT EITHER ARE DIRECTLY ON OCEAN, INLET, OR ESTUARINE FRONTAGE OR ARE WITHIN THE 100-YEAR FLOOD ZONE.**
- 8. THE COASTAL ADAPTATION PROGRAM SHOULD CARRY OUT AN ACTIVE OUTREACH PROGRAM TO EDUCATE THE PUBLIC, MANAGERS, AND POLITICIANS WITHIN NC CONCERNING CLIMATE CHANGE AND THE COASTAL ADAPTATION PROGRAM.**

NC LEGISLATIVE COMMISSION ON GLOBAL CLIMATE CHANGE (NC LCGCC)

- 1. WE CAN'T GO BACK TO THE WAY IT WAS AND THE STATUS QUO IS UNATTAINABLE!**
- 2. HOW DO WE PROTECT THE INTEGRITY OF THE COASTAL RESOURCES AND MAXIMIZE THEIR ECONOMIC UTILIZATION WITHOUT JEOPARDIZING THE EVOLVING CHARACTER OF THE RESOURCES AS THEY RESPOND TO CLIMATE CHANGE THROUGH TIME?**

