

Minutes
Albemarle-Pamlico Estuarine Study
Albemarle Citizens' Advisory Committee

College of the Albemarle
Elizabeth City, N. C.
November 7, 1988

Attendance: See Attachment A

Dr. Chesson called the meeting to order at 7:00 pm and welcomed attendees. In addition to regular CAC members, there were several visitors from the general public in attendance.

Dr. Chesson entertained a motion for approval of the minutes from the previous meeting (8/8/88). Motion to accept them as written was made by Al Howard with A. B. Whitley seconding. Motion carried.

New Business:

Early Implementation Project: Dr. Chesson introduced Jim Cummings from NRCD Soil & Water (N. C. Agriculture Cost Share Program) who presented a slide show on the cost-share program and best management practices (BMPs). Mr. Cummings reported that funds from the Albemarle-Pamlico Estuarine Study (A/P Study) to the Division of Soil & Water Conservation for an early implementation project at Merchants Millpond in Gates County for non-point source pollution control, totalled \$175,000. See Attachment B. A motion was made by Carolyn Hess and seconded by John Bone to direct a resolution to Senator Marc Basnight and the Coastal Water Quality Study Committee stating: "The Albemarle Citizens' Advisory Committee of the Albemarle-Pamlico Estuarine Study requests that the N. C. Legislature allocate sufficient resources so as to include the remainder of the counties in the Albemarle-Pamlico drainage area (Vance, Warren, Halifax, Edgecombe, and Martin) in the Agricultural Cost Share Program during the 1989 session." Motion passed.

Call for Proposals Review: B. J. Copeland, member of the Technical Committee of the A/P Study outlined the procedure to be implemented when issuing the 3rd cycle Call for Proposals in mid-November. He reiterated the first year's effort as being broad and "across the board," the second year's CFP saw some specificity and that the third CFP would be even more specific in its direction. Discussion ensued with Willy Phillips, co-liaison from P-CAC, stating that objectives should be defined so that projects can be designed to fulfill the objectives. Specific discussion on the program areas targeted for the third CFP developed, particularly A.1; A.3; A.5; and A.2. See Attachment C. General consensus was that an adequate knowledge of what has already been studied (relative to technical studies) is not widely known, and it is difficult to recommend further study areas under those circumstances. Dr. Copeland assured the group that the Technical Committee members were most knowledgeable concerning existing scientific studies and that CAC input was necessary in developing the CFP. Carolyn Hess made a

motion which was seconded by Webb Fuller to include in the recommendations for the CFP, a proposal to fund a natural resource inventory that will assimilate data we already have, so we will know where insufficient data exists. Motion passed. Dr. Chesson summed up the feelings of the committee members, based on the evening's general comments, saying that the A-CAC had concern with the general nature of the proposals and the writing of the CFP. The group concurred.

In a further motion, Capt. Al Howard moved that a data base, pertaining to all existing data in the areas of concern in the Albemarle and Pamlico watersheds be compiled ASAP, so that it can be determined where need exists for further study. Joe Stutts seconded. Motion carried.

Public Involvement Plan: Joan Giordano briefly outlined the Public Involvement Plan she submitted for CAC input. See Attachment D. The plan was well received and a motion by Capt. Al Howard and seconded by A. B. Whitley to convene a joint meeting (with Joan and the P-CAC) of the CAC Public Awareness & Governmental Relations sub-committees was made to review any changes in the plan and to approve a final draft. Motion carried.

Director's Report: Joan Giordano for Dr. Bob Holman. See Attachment E. Mrs. Giordano also distributed an A/P Study Calendar of Events as well as a preliminary budget of expenses incurred relative to the annual meeting 10/14 & 15. She emphasized that the total may change depending on line items 4, 6 and 8. See Attachment F. Comments on the annual meeting included a recommendation to shorten the day into night format and also that Saturday's (10/15) gathering did not convey the purpose of that meeting. General comment was that the meeting was too long, and that was what prompted Dr. Holman's recommendation to divide the next year's effort into three individual meetings; September 14, 1989 - Annual Researchers Review Workshop; September 29, 1989 - Roundtable Meeting of All Committees; and October 6, 1989 - Annual Public Meeting. The committee agreed.

Status & Trends Proposal Review: B. J. Copeland, Technical Committee member and co-author of the proposal with Jim Stewart of Water Resources Research Institute, N. C. State, described their proposal. See Attachment G. He said they would document status and trends of the Albemarle and Pamlico Sounds in terms of where we are, where are we going and what gaps exist. The program would be looked at in segments and will result in two publications: 1) a technical report reflecting a compilation of findings and conclusions; and 2) a general interest document reflecting a distillation of the technical findings and conclusions along with graphics and illustrations. Dr. Copeland added that citizen input is needed on the 6 task forces mentioned in the proposal and that he looked forward to citizen participation. Some of the 6 task force slots could be filled by CAC members. A motion by A. B. Whitley, seconded by Phil McMullan moved to endorse Dr. Copeland's proposal for funding. Motion carried.

CAC Vacancies & Replacements: Dr. Chesson reported that there were three vacancies on the A-CAC due to the passing of Bill McGeorge and the resignations of Dr. Rob Powell and Gerald Perry. Joe Stutts placed three names in nomination to fill the vacancies. They were: Brewster Brown, Rod Cross

and Frank P. Thomas, III (Va.). Discussion ensued with the recommendation being made that if personnel matters were being discussed, that an executive session might be in order. Capt. Howard moved that an executive session be called with Yates Barber seconding. The room was cleared of guests and non-CAC attendees.

Executive Session: Names proposed for nomination to the Policy Committee for filling A-CAC vacancies were:

Brewster Brown
Rod Cross
Frank P. Thomas, III
Steve Van Geisen
Watson Lawrence, Jr.

Discussion of the proposed nominees continued until motion was made by Webb Fuller and seconded by Capt. Al Howard to return to public session, for the purpose of voting on the proposed slate. Motion carried.

Public Session: Webb Fuller moved (seconded by John Stallings) that the following nominees be approved by acclamation and that they be proposed to the Policy Committee for appointment to the A-CAC:

Brewster Brown
Watson Lawrence, Jr.
Frank P. Thomas, III

The motion passed with dissent. (ayes 15, nays 4.) Dr. Chesson will propose the names to the Policy Committee at their next meeting on November 29th in Elizabeth City (COA) at 1:00 pm.

Comments: A visitor from the general public, Ms. Pat Cruz, spoke of seeing the press release announcing the CAC meeting and volunteered her help in any way it might be needed. She was thanked for her spirit of volunteerism and commitment to the environment and was directed to CAC member Carolyn Hess for assignment.

In further comment, Yates Barber briefly outlined a meeting held in Virginia on Friday 11/4 during which time he, Dr. Holman, Jim Cummings, Don Flowers, David Sides and five representatives from Virginia's S.E. Virginia Planning Commission discussed Virginia's part in a possible early implementation effort for a non-point source pollution effort. There may be \$175,000 available in early implementation funds from EPA to fund the project. He added that EPA is desirous of cooperation between N. C. and Virginia and that a future meeting in Hertford is scheduled for January 12, 1989.

In other business, Capt. Al Howard referred to the A-CAC recommendations that were forthcoming after the Annual Review Meeting. See Attachment H. He asked that on pg. 3, item 2, the third sentence ... an influential members of the community who are and one concerned ... be changed to ... an influential member of the community and one concerned ... The correction was duly noted and a motion

was made by Capt. Howard, seconded by A. B. Whitley, to add the document as an addendum to the A-CAC position paper presented at the Annual Review Meeting. Motion carried.

There being no further business, the meeting was adjourned at 10:30 pm. Next meeting is scheduled for February 7th at a time and place to be arranged.



ATTACHMENT A

<u>Name</u>	<u>Affiliation</u>
Barbara Cresson	Albemarle CAC
Earl Rountree	Albemarle CAC
A. B. Whitley TH	" "
John S. Bowe	" "
Yates Barber	" "
J. A. WRIGHT	" "
Carelye Barber	" "
DAVID S. WATSON	" "
W.C. Whitworth	" "
Edward Howard	" "
J. H. Stitts	" "
Marcia Stitts	" "
J. WEBB FULLER	" "
Scott Yates	Daily Advance
PATRICIA CRUZ	NEW ELIZABETH CITY RESIDENT
Bob Frost	AEA and Lost County Residents
DON BRYAN	Albemarle CAC
WILLY PHILLIPS	FEAC - ACAC WASLOW
CURTIS TURNAGE	ECSCY
Rod Cross	Pres. A.S.A.P.
John Skelton	Albemarle CAC
Samuel Cox	US Sail Cover Service
Sandra Strickland	Elizabeth City, N.C. Ag.
Sandi Horton	NRCO, Soil + Water, Cost Share
Jim Cummings	" " " " "
B J Copeland	UNC Sea Grant
Robert + Von Abernethy	Elizabeth City DCM

L. P. Williams	ACAC
Tommy Allan	ACAC
Terry Pratt	ACAC
Tom Perlic	Coordinator, Citizens Mon. PTRF
Glen Wood	ACAC
Redell Hassell	ACAC
Tom Burns	ACAC
Don Jordan	APED

HOW MUCH?

If you participate in this program, you will be reimbursed 75% of the average cost for each BMP installed. The remaining 25% of costs are the responsibility of the landowner, and include the use of existing materials and labor. Cost-Share Incentive Payments also are available to encourage the use of several animal waste management and crop rotation BMP's.



WHO?

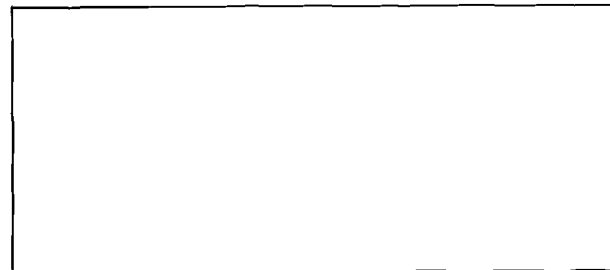
If you are a landowner or rent agricultural lands, you are eligible to participate in the North Carolina Agriculture Cost-Share Program.

WHEN?

Stop in to see your local soil and water conservation district office to get more information – today!

“In 1984 we asked our local soil and water conservation districts to assume responsibility for administering this program. Thanks to the districts’ efforts, this program is now called a ‘model of success’ throughout the Southeast.”

Jim Cummings, Program Coordinator
Division of Soil & Water Conservation

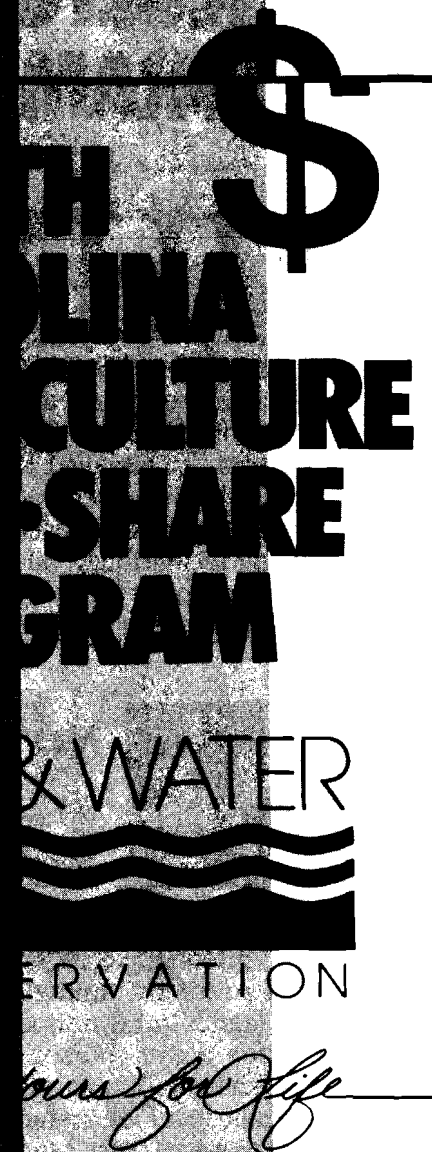


North Carolina Department of Natural Resources
and Community Development
Division of Soil & Water Conservation
P.O. Box 27687
Raleigh, NC 27611
(919) 733-2302

James G. Martin
Governor

S. Thomas Rhodes
Secretary

40,000 copies of this public document were printed at a cost of \$2,081.40 or \$.052 each.



NORTH CAROLINA AGRICULTURE COST-SHARE PROGRAM



WHY?

Our state's waters have suffered damages from too much sediment and excessive amounts of nitrogen and phosphorus. These conditions may cause algal blooms, foul odors, fish kills, impaired fishery habitats, higher water treatment costs, or they may decrease the recreational values of our waters. Our primary nursery areas are being harmed by too much freshwater from upstream.



The North Carolina Agriculture Cost-Share Program is intended to reduce the input of sediments, nutrients, animal wastes and pesticides (agricultural nonpoint source pollution) into the water courses of our state.

The cost-share program helps landowners improve their level of on-farm management through the use of Best Management Practices (BMP's). These include vegetative, structural or management systems that are used to improve the efficiency of farming operations by reducing potential pollutants into surface waters.

HOW?

Your local soil and water conservation district supervisors and district staff make this program tick. They work with landowners and renters to:

- help you decide which BMP's are best suited for your operation;
- approve your conservation plans;
- recommend additional practices to the North Carolina Soil and Water Conservation Commission; and
- deliver your check after work is completed.

The North Carolina Soil and Water Conservation Commission allocates money for agreements and approves BMP's. So far, 4,700 landowners have signed up to install BMP's on 365,000 acres of land.

The North Carolina Division of Soil and Water Conservation in the Department of Natural Resources and Community Development provides administrative assistance to district field personnel.

The Agriculture Cost-Share Program is a huge success because it is mainly administered locally – by your soil and water conservation district office.

WHAT?

Some of the Best Management Practices (BMP's) include:

- animal waste management systems;
- conservation tillage;
- critical area plantings;
- cropland conversion to permanent vegetation;
- diversions;
- fertilizer management;
- field borders;
- filter strips;
- grade control structures;
- grassed waterways;
- sediment control structures;
- sod-based rotations;
- stock trails;
- stream crossings;
- stripcropping;
- terraces; and
- water control structures.

MERCHANTS MILLPOND STATE PARK (GATES COUNTY):
INSTALLATION OF AGRICULTURAL BEST MANAGEMENT PRACTICES (BMPs)

Present Conditions

Gates County and the Gates Soil and Water Conservation District have actively participated in the North Carolina Agriculture Cost Share Program for Nonpoint Source Pollution Control since the Program's inception in the fall of 1984. The District has written over 80 contracts with landowners for \$173,000 to install BMP's on 7,000 acres of cropland and to construct seven animal waste management systems (see summary report).

The Gates District recognizes the need to further accelerate the implementation of the BMP's and to target funding for special areas of concern, especially Merchants Millpond. The Pond has been identified as having ". . . a dark cloud on the horizon" (Wildlife in North Carolina) due to its "hypereutrophic" (Division of Environment Management [DEM]) condition. Previous water quality studies have indicated that "agricultural nonpoint sources play a higher role in the eutrophication of the Pond" (DEM).

Merchants Millpond is located in central Gates County, North Carolina, and is part of the Chowan River Basin, an area experiencing many water quality problems associated with eutrophic conditions. The Millpond watershed is heavily agricultural with over 300 farms, 30 percent of which are supporting confined animal operations. Swine (farrow to finish) make up the majority of the animal operations and as many as 30 landowners in the watershed continue to range the animals in the wetland areas of Duke Swamp, Middle Swamp and Lassiter Swamp.

Humenik, et al (1983) in their study of nonpoint sources in the Chowan River Basin provided an extensive list of recommendations for the Basin, including the need for:

1. Proper animal waste management including restriction of stream access and proper application of animal wastes;
2. Soil testing and waste analysis.

The conditions in Merchants Millpond continue to remain critical. The Pond suffers severe eutrophication problems and watershed agricultural operations have not been improved or updated at the same pace as much of the remaining areas of the Chowan River Basin.

Future Needs

The Gates Soil and Water Conservation District has developed a strategy plan designed to correct problems associated with "improperly managed livestock operations, eroding cropland and surface drainage of cropland . . ." Based on preliminary investigations by the District 70 percent of the landowners are willing to install BMP's to protect water quality if technical assistance and 75 percent cost sharing is made available.

Technical assistance is critical to be able to plan, design and install the BMP's. Almost five years of personnel time would be required to meet the needs in the watershed but the District is unable to provide the assistance due to present requirements of the North Carolina Agriculture Cost Share Program and the federally mandated 1985 Food Security Act. The USDA, Soil Conservation Service has agreed with the District to provide technical, supervisory, and engineering assistance. However, one additional full time employee will be needed for three years to provide accelerated technical assistance in the watershed.

If adequate technical assistance is available, the Gates District has projected a schedule of installation for three years that would require \$307,700 in cost share monies (see attached schedule). The bulk of the funding (\$195,000) would go to correct problems with confined animal operations; including 12 waste storage lagoons and associated waste application. Soil testing and waste analysis will be a required part of the waste application. Almost 5,000 acres of cropland will receive BMP's designed to protect off-site water resources.

The Gates District has recognized the need for a low cost alternative to correct problems with confined operations that do not include "housed" animals at this time. While encouraging and assisting landowners in their progress toward more efficient operations the District proposes a system of stream protection systems (livestock exclusion, filter strips and watering facilities) that will stop the current practice of "free-ranging" swine. DEM will closely monitor several of these systems to determine the effectiveness of the BMP.

Planned Project

The Gates District and DEM have already developed basic strategies for the Merchants Millpond project (see attached plans). The District will follow previous landowner contacts with instructional public meetings and a sign-up period for the landowners. The first year of the three year proposal would require an initial planning and start-up phase. However, the District predicts almost \$70,000 in cost sharing could be spent, including the installation of four waste management systems and eight stream protection systems. Planning and installation efforts will be coordinated with DEM's sampling efforts. The second year of the planned program will require \$200,000 in cost share funds to fully accelerate the installation of the BMP's. Four additional waste management systems will be completed and waste application will begin on the previously installed systems. Informational efforts on proper animal management will continue to be directed to those landowners not "housing" their livestock.

A third year of funding will be needed to maintain the pace of the accelerated program. Plans written the first two years will be completed in three years as dictated in the initial contract. All contracts will meet requirements of the NCACSP (NCAC Title 16, Chapter 6, Section 6E) and all BMP's will be installed according to USDA, Soil Conservation Service technical specifications. Landowners will be required to sign a maintenance agreement as used in the NCACSP.

Effects

A two-year funding level will allow almost 85 percent of the stated needs to be addressed. Animal waste management systems and stream protection systems will decrease nitrogen and phosphorous inputs to the stream system by 150,000 lbs. and 80,000 lbs., respectively. BMP's installed on the cropland (including water control structures) will decrease sediment delivery by thousands of tons and decrease nitrogen and phosphorous inputs from cropland 50 to 90 percent. The majority of the BMP's installed will remain effective a minimum of ten years and should serve as a major factor in the attempt to save Merchants Mill Pond.

The key to the success of the Project remains good communication between the District, landowners and DEM, and adequate funding for technical and cost share assistance. Future programs in the Albemarle-Pamlico Estuarine Area may well be shaped by the work done by the landowners, District and DEM in trying to correct nonpoint source pollution problems in Merchants Millpond.

Literature Cited

Dean, Jim. 1982. Merchants Mill. Wildlife in North Carolina. 46(9): 8-14.

Division of Environmental Management, NCDNRCD. (nd). Proposed study plan for Merchants Millpond. Raleigh, NC. 6p.

Gates Soil and Water Conservation District. 1988. Strategy Plan, installation of agricultural best management practices. Merchants Millpond Watershed Project. Gatesville, NC. 2p.

Humenik, F. J., B. A. Young., and F. A. Koehler. 1983. Investigation of strategies for reducing agricultural nonpoint sources in the Chowan River Basin. UNC-WRRI Report 211 Water Resources Research Institute, Raleigh, NC. 140 p. 6 Appendices.

NORTH CAROLINA AGRICULTURE COST SHARE PROGRAM
for
NONPOINT SOURCE POLLUTION CONTROL

August, 1988

Legislative Authority	Statutory - G.S. 143-215.74
Source of Funds	State General Fund
Amount of Funds	\$5,815,992.00 + 825,000.00 ¹
Administration of Funds	North Carolina Soil and Water Conservation Commission with direct staff support from the Department of Natural Resources and Community Development, Division of Soil and Water Conservation.
Practices Cost Shared	Conservation tillage; diversions; filter strips; field borders; critical area plantings; sediment control structures; sod-based rotations; grassed waterways; stripcropping; terraces; cropland conversion to grass, trees, or wildlife plantings; grade control structures; water control structures; and animal waste management systems.
Percent Cost Shared	75% of the average cost for each practice (farmer provides 25% which can include in-kind support) up to a maximum of \$15,000 per year to each applicant. Applicants who receive cost sharing will be required to maintain and continue the practices for a specified minimum life and agree to perform certain fertilizer and/or waste management practices.
Purpose	<p>To reduce the input of agricultural nonpoint source pollution (sediment, nutrients, animal wastes and pesticides) into the water courses of our state.</p> <p>To assist farmers in making their production operations more efficient by increasing the level of on-farm management.</p>
Program Area	Fifty-six counties are presently eligible for funds to cost share with landowners. Cost share monies are allocated to counties (districts) based on water quality protection needs and degree of agricultural pollution. Allocations to districts ranged in Program Year 1989 from \$12,200.00 to \$156,880.00. Expansion of Program statewide is expected by 1989.

¹\$825,000 available to Local Governments statewide for 50:50 cost sharing to hire additional technical personnel.

NORTH CAROLINA AGRICULTURE COST SHARE PROGRAM
CHOWAN RIVER BASIN BMP SUMMARY

for

Program Years 85, 86, 87, and 88
October 11, 1988

I. Agreements ¹	809
Acres (Total)	63,655
Erosion Control Acres	30,182
Tons Saved/Year	123,244
II. Animal Waste Systems	37
Volume (Gallons)	18,440,000
Animal Units	1,921,906
Nitrogen (Annual Storage)	6,800,000
Phosphorous (Annual Storage)	4,700,000
III. Land Application	
Acres	19,411
Gallons (Dairy, Swine, Poultry)	48,402,210
Tons (Poultry)	55,082
Nitrogen	15,700,000
Phosphorous	13,800,000
IV. Erosion Control Practices	
Rotation	193
Conversion to grass/trees	91
Conservation Tillage	19,371
Critical Area Planting	80
Terraces/Diversions (L. ft.)	259,410
V. Sediment Control	
Field Border/ Filter Strips	626
Grassed Waterways	483
Grade Stabilization/Sediment Control Structures	125
VI. Water Control Structures	148

¹ Represents approximately \$1,650,000 in cost share monies.

James R. Cummings
NCASP Program Coordinator



State of North Carolina
 Department of Natural Resources and Community Development
 ALBEMARLE-PAMLICO ESTUARINE STUDY
 512 North Salisbury Street • Raleigh, North Carolina 27611

James G. Martin, Governor
 S. Thomas Rhodes, Secretary

Robert E. Holman, Director

October 24, 1988

MEMORANDUM

TO: Policy Committee
 Technical Committee
 Citizens' Advisory Committees

FROM: Technical Review Subcommittee

SUBJECT: Projects to be Considered as Part of the FY 1989-1990
 Call for Proposals and Review of the Public Involvement Plan

This memorandum covers program areas that need specific projects to help develop the status and trend report or to prepare early management strategies. In addition, public participation projects are also targeted based on recommendations from the public affairs subcommittee and external reviewers. These projects include the following recommendations:

A. INFORMATION/STRATEGIES

- 1) Create a current land use map of the entire study area that is compatible with Land Resources Information Service computer format and USGS land use map developed in the early 1970s.
- 2) Define what is a critical area to the program. Then determine the location and size of these areas.
- 3) Determine the nutrient budgets (nitrogen and phosphorus) for all major tributaries leading into the two Sounds.
- 4) Evaluate the toxic issue by compiling all existing data on this subject for the entire study area.
- 5) Develop management plans for small areas (e.g., Currituck Sound/Back Bay) to be utilized as a forerunner to the comprehensive conservation management plan (CCMP).
- 6) Direct early implementation funds towards BMP's for urban settings and not just for agriculture. Greenville or Nags Head may be two likely candidates.

P.O. Box 27687, Raleigh, North Carolina 27611-7687 Telephone 919-733-0314

An Equal Opportunity Affirmative Action Employer

- 7) Earmark funds to be set aside and utilized to follow up the status and trends scoping work (Fall 1989), if funded. This would be needed in order to complete the major milestones and develop specific strategies for the CCMP.
- 8) Determine recreational harvest of all major fishery species and quantify commercial by-catch and its economic value.

B. PUBLIC PARTICIPATION

- 1) Fund social science projects that evaluate the public response to various education, incentive and regulation programs; measure citizens' attitudes toward management alternatives and the cost/benefit associated with each alternative.
- 2) Develop workshops or other related activities to assist the public participation coordinator in developing better communications with local governments.
- 3) Conduct public meetings to generate discussion in a wide range of locations convenient to the public in the study area. Assist staff in setting up annual meeting into three separate events.
- 4) Create a series of regularly scheduled radio programs (one-half hour in length) specific to environmental issues in the study area.
- 5) Create secondary education programs (within the schools) addressing environmental issues specific to the study area.

Please review these recommended project areas and be prepared to discuss them, as well as any others, at your next meeting. Since the Call for Proposal package will be sent out the week of November 14, all Policy Committee members are encouraged to submit their comments to the program office by November 10, 1988.

The Public Involvement Plan developed by our public participation coordinator is also enclosed for your review. Please examine the plan and be prepared to discuss it at your next meeting. This plan provides a focus and overall strategy for the public participation component of the program.

REH:kn

Enclosures

DRAFT

Public Involvement Plan

Introduction

What is public participation? Public participation, in the context of the Albemarle-Pamlico Estuarine Study, means involving citizens in the decision-making process. Informing and involving the public and getting its support can be a most difficult undertaking, yet it is the cornerstone of a successful and effective public participation program. Needless to say it is essential to the development and implementation of the Comprehensive Conservation Management Plan (CCMP). This plan is the collaborative problem-solving process in which key members of the public need to be fully initiated. The desired long-term improvements in the estuary resulting from the CCMP will undoubtedly affect the daily life of all citizens. Their input and consensus are vital if the CCMP is to be implemented successfully. Everyone in the basin needs to understand his role as a user of the estuary. Because so much is at stake, full program commitment into designing and executing an effective public participation plan is indispensable.

Goal

The goal of public participation is to establish the public consensus that will ensure long-term support and implementation of the CCMP.

Public consensus must be achieved (at least) during two phases: first when priority problems are identified and second, when solutions and action strategies for

implementation are selected and adopted. Consensus signifies substantive agreement among four component groups: elected officials, environmental managers, scientists and the public. These groups must concur on what is technically well-founded, feasible, fair and likely to succeed.

Consensus also implies the willingness of participants to work together and to compromise. When consensus is not able to be achieved or when consensus is counter to regulation, agencies will need to carry out their legal responsibilities.

The public must have relevant, timely and accurate information if it is to achieve consensus. To participate intelligently in the decision-making process the public must be well-informed. The essential components of a basic public participation program should include:

- *an experienced staff person
- *a comprehensive mailing list
- *a general program slide show
- *a written information piece: newsletter, news-bulletin or fact sheet
- *public meetings
- *a defined role for the citizens' advisory committees
- *local government liaison network

The seven elements are neither expendable nor interchangeable. They are the foundation of the public participation plan.

Staff Person

The public participation coordinator serves in a pivotal capacity because of her responsibility for the public participation plan and her interaction with all kinds of citizens and organizations. Public speaking and writing skills are necessary for adequate discharge of duties. A good listener as well, this person must be able to convey citizens' concerns to program administration. Sensitivity to the biases of various interest groups and an ability to put those biases into perspective, while remaining neutral, are essential qualities. Understanding the workings of government as well as the problems of the estuary are helpful. The public participation coordinator also provides support to other estuary managers in dealing effectively with public groups and the media.

Comprehensive Mailing List

It is essential to know who constitutes the public for our estuary. Creating a representative, accurate mailing list of organizations and people and identifying target audiences, lays the groundwork for information and participation activities. Included should be:

- *Conservation and environmental organizations
- *Service and civic groups
- *Recreational boating clubs
- *Commercial and recreational fishing associations
- *Real estate firms and developers

- *Agricultural businesses and farm groups
- *Seafood packers and marketers
- *Chambers of Commerce, business and industry
- *Shippers and port related groups
- *Local government elected officials
- *Federal and state legislators
- *Federal, state and local agency officials
- *Scientists and educators
- *Media - print, radio & T.V.

This listing should be computerized. Coding and software that permits sorting by both geographic area and interest groups will exploit potential of the mailing list greatly. Assembling a list of names is not enough, however. Personal contact with interest group leaders, media representatives and key legislators and officials is fundamental to success of the public participation program. Initiation of contacts will sometimes be the public participation coordinator's responsibility. Creation of opportunities for communication between other program personnel and target groups is helpful. Staff also needs to keep participants informed about work progress during the course of the program. Public meetings, a slide show and a basic information paper (newsletter) are essential tools to initiate and maintain contact with target audiences.

General Program Slide Show

A picture is worth a thousand words. We have accomplished

the production of this very useful educational tool. It is ready for use by CAC members. The advantage of the slide show is that it ensures consistency in the delivery of the Albemarle-Pamlico Estuarine Study message regardless of the presenter. Also the slide show can be tailored to a specific audience (i.e. boaters, fishermen, etc.) by adding a few slides.

A Written Information Paper

Because information fuels the public participation program, misinformation or uninformed people cannot participate effectively. Our goal is to capture public attention. Newsletters, bulletins and fact sheets are good choices. We are on our way in this area.

Public Meetings

There are two types of public meetings:

- 1) regularly scheduled meetings of organized groups to which we are invited to speak, and
- 2) meetings we organize.

The wiser allocation of time is, by far, a benefit of utilizing the former. Attendance at dozens of meetings can be accomplished in the time it takes to organize our own. By meeting others on their own turf the importance of that group's participation in the APES program can be reinforced. Outreach potential is substantially broadened. A goal should be to meet with 2-3 groups within each of the categories targeted for our mailing list.

Citizens' Advisory Committee

Ensuring direct citizen involvement in the policy-making process is the reason for the creation of the Citizens' Advisory Committees (CACs). A clear charge for the CACs, what its purpose is and how it functions, must be established. The CACs primary role is to help see that the public participation goal is met and that, through public consensus, long-term support for the Comprehensive Conservation Management Plan implementation is assured.

Other specific functions of the CACs include:

- *Help establish program goals and objectives
- *Help set funding levels
- *Assist with public participation activities
- *Help communicate program activities to user groups
- *Comment on research priorities
- *Review technical findings and analyses
- *Help develop implementation plans

Local Government Liaison Network

An outgrowth of the Citizens' Advisory Committees can be the Local Government Liaison Network, especially given the keystone role of local government in land-use control. The idea is to provide a straightforward mechanism for communication (comment and criticism) from local governments to the Albemarle-Pamlico Estuarine Study, and for dissemination of information from the study to local governments. Similarly, local governments should be able to

benefit significantly by simply knowing of actions planned or anticipated by neighbors.

Key to this public involvement plan is adequate funding and staffing. The suggested plan includes activities which may need to be funded and conducted by participating agencies, private organizations, foundations or which may need to be accomplished through the APES grants process. In any case, the above is submitted as a suggestion, a place to begin, and something upon which to build a comprehensive, workable plan.

DRAFT

Public Involvement Plan

I. Public Education and Information

A. Printed materials

- 1) newsletter
- 2) fact sheet
- 3) brochures
- 4) articles
- 5) press releases

B. Non-print media

- 1) oral presentations
 - a) civic groups
 - b) public programs
- 2) film/videos/slides
- 3) t.v.
- 4) radio
- 5) CAC meetings

C. Special Events

- 1) workshops
- 2) annual review meeting
- 3) press conferences
- 4) exhibits

D. Mailing List

- 1) see listing in body of plan

II. Public Participation - Hands-On

A. CAC meetings

- 1) field trips

B. Citizens Monitoring

C. Youth projects

- 1) planting sea grasses
- 2) clean-up
- 3) project contest

D. Festival

III. Local and State Government Liaison Network

- A. Workshop for state and local officials
 - 1) bring together key APES participants and public officials
 - 2) hear research presentations
 - 3) present examples of APES-related projects being conducted at state and local levels

- B. Formation of state level caucus
 - 1) representatives and senators - APES area
 - 2) hold public hearings
 - 3) propose legislation

- C. Coalition of coastal communities

Albemarle CAC Meeting

November 7, 1988

College of the Albemarle

Program Status Report - Director

- 1) All FY 1988-89 funded projects have been started.
- 2) Annual Meeting was carried out on October 14-15, 1988 in Washington, NC.
 - a) Thank all those who helped make the event possible especially the CAC Ad Hoc Agenda Committee.
 - b) I feel the meeting achieved the three tasks of researcher's review, round table meeting of all committees and informing the public of the study's status.
 - c) The material expenditures to date associated with the Annual Meeting (enclosed list).
- 3) Fair Exhibit (displayed at the Annual Meeting).
 - a) Number of people through the NRCD tent at the State Fair was between 150,000 and 175,000.
 - b) The fair exhibit will be set up for two months at each of the three NC Aquariums starting with the Roanoke Island facility on November 9, 1988 and finish on April 30, 1989 at the Fort Fisher facility.
 - c) Need ideas for next year's fair exhibit.
 - d) Need suggested uses of the exhibit past April 30, 1989.
- 4) A/P Study Annual Schedule (enclosed).
 - a) Discussion of new scheduled events (annual meeting components).
 - b) New dates for meetings set in advance to have a one-year schedule so committee members can plan for meetings.
- 5) Consideration by CAC to form subcommittees on the following topics: local government liaison, public meetings, fair/presentation committees and public education.

<u>Date</u>	<u>Event</u>
November 7-9, 1988	CAC Meetings to Review Proposed Project Area Needs
November 10, 1988	Technical Committee Meeting to Review Proposed Project Needs
November 14, 1988	Develop Call for Proposals
November 18, 1988	Issue Call for Proposals
November 29, 1988	Policy Committee Meeting
January 13, 1989	Review of Proposals (submittal due date)
February 7-9, 1989	CAC Meetings to Evaluate Specific Proposals
February 21, 1989	Technical Committee Meeting to Consider Subcommittees' Proposal Recommendations
February 27, 1989	Policy Meeting to Consider Technical Committee's Proposals and Annual Budget Recommendations
March 3, 1989	Return Selected Proposals to Authors for Revisions
March 17, 1989	Revised Proposals to Director/Subcommittees
April 7, 1989	Final Proposals to EPA for Approval
*April 14, 1989	Roundtable Meeting of All Committees
April 24-26, 1989	CAC Meetings
May 10, 1989	Technical Committee Meeting
May 17, 1989	Policy Committee Meeting
July 1, 1989	Projected EPA Award of Funding
August 7-9, 1989	CAC Meetings
August 22, 1989	Technical Committee Meeting
August 29, 1989	Policy Committee Meeting
*September 14, 1989	Annual Researchers Review Workshop
September 19, 1989	Technical Review Subcommittee Meeting
*September 29, 1989	Roundtable Meeting of All Committees
*October 6, 1989	Annual Public Meeting
October 10, 1989	Develop Call for Proposals
**October 25-27, 1989	CAC Meetings
**November 7, 1989	Technical Committee Meeting
**November 21, 1989	Policy Committee Meeting

*New scheduled events for discussion

**New committee meeting dates (assigned one year in advance)

ALBEMARLE-PAMLICO ESTUARINE STUDY

FIRST ANNUAL MEETING - OCTOBER 14/15, 1988

Material Expenditures to Date* - November 1, 1988

	<u>Costs</u>
1) Building/Equipment Rental and Clean-up	232
2) CAC per diem	600
3) Free-Standing Exhibit	1,954
4) Printing agenda, fact sheet, newsletter abstracts and postage	3,401
5) Saturday bag lunch (leftovers)	235
6) Expenses reimbursed to external reviewers	1,533
7) Newspaper Ads	250
8) Miscellaneous Materials	<u>96</u>
Total	\$ 8,301

*Expenses do not include any staff or office costs related to event.

DEVELOPMENT AND PUBLICATION OF STATUS AND
TRENDS IN ALBEMARLE/PAMLICO SOUND

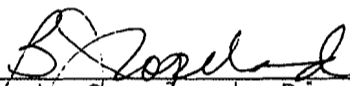
A Proposal to

Albemarle-Pamlico Estuarine Study
N. C. Department of Natural Resources and
Community Development

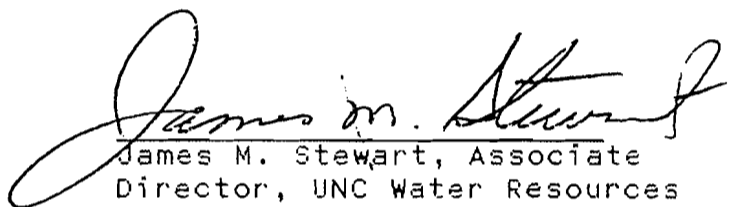
for

1 January 1989 to 31 August 1989

by

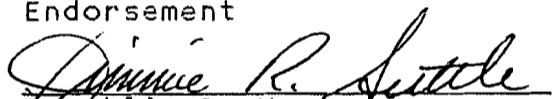


B. J. Copeland, Director
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James M. Stewart, Associate
Director, UNC Water Resources
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Endorsement



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STATUS AND TRENDS IN ALBEMARLE/PAMLICO SOUND

Development of Work Groups and Publication

Introduction

Estuarine management is the responsibility of all, but the actual management requires good technical information and an informed public that understands the system, its problems and issues. Such understanding forms the basis for long-term commitment and development of support for specific management strategies. Considerable technical knowledge about estuaries exists in publications, reports and the scientific community of state, federal and private organizations. In addition, new information is being generated by studies supported by the Albemarle-Pamlico Estuarine Study. Only limited efforts have been undertaken to synthesize and integrate this knowledge into a comprehensive report.

The work proposed herein is an attempt to synthesize the existing understanding of the Albemarle/Pamlico Sound, and to assess the status and trends apparent in the system. Additionally, we plan to establish the precursor to the development of a management plan for the Sounds. Technical documents arising from the analysis of each segment of the estuarine study will be summarized in a overall, easily understood report.

Background

The APES Policy Committee (15 August 1986) resolved that:

The goal of the Albemarle-Pamlico Project will be to provide the scientific knowledge and public awareness needed to make rational management decisions so that the Albemarle-Pamlico estuarine system can continue to supply citizens with natural resources, recreational opportunities, and aesthetic enjoyment.

The objectives of the project will include, but are not limited to, generating understanding of what is needed to maintain, and where necessary restore, the chemical, physical, and biological integrity of the estuary, the wildlife habitat of the estuary, the production levels of recreational and commercial fisheries of the estuary.

This proposed exercise will provide the precursor for achieving the resolution stated above.

Proposed Work

The overall goal of this project will be to provide agencies, scientists and interested publics with an integrated packet of information describing the state of knowledge of the system. It is intended that two publications will result from the exercise described below, using the best expertise available. Specific objectives, therefore, are:

1. Develop an outline for each of the key issues (i.e. Critical Areas, Water Quality, Fisheries Dynamics, Human Environment, Data Management and Public Participation) and set up a mechanism for analysis and summarization.
2. Organize and assemble work groups for each of the six key areas and challenge them to develop a consensus of the status of each.
3. Develop a narrative of the status and trends of the six key areas and test the conclusions against technical experts, organizations and leaders of public opinion, with responsibilities for the APES system.
4. Publish the current information in a general interest format.

Work Plan

We plan to approach the exercise through a series of work sessions with the first being held to assemble the work teams, develop each outline and challenge the teams to achieve the goal. This will be followed by a series of activities whereby investigators holding APES projects and/or working on related projects funded by other state and federal agencies (e.g., Sea Grant, WRI, NOAA, EPA, etc.) will present findings to the team. After the process of gathering data and brainstorming about the issues, the team will receive writing assignments for developing the technical narrative. A Communications Specialist will edit the technical report and develop a general interest document with illustrations and graphics.

We anticipate that the process will occur during January to June 1989. The technical report will reflect a compilation of findings and conclusions as determined by each work team. The general interest document will reflect a distillation of the technical findings and conclusions along with graphics and illustrations.

Tentative Work Teams are:

- I. Critical Areas: Dave Adams (NCSU) captain --
Roger Rulifson (ECU), Mark Brinson (ECU),
Mike Gantt (USFWS), Charles Roe (NRCD)
- II. Water Quality: B.J. Copeland (Sea Grant) captain --
Hans Paerl (UNC-CH), Ed Kuenzler (UNC-CH),
George Everette (DEM), Jerad Bales (USGS),
Don Stanley (ECU)
- III. Fisheries Dynamics: Bill Hogarth (DMF) captain --
Ed Noga (NCSU), Pete Peterson (UNC-CH),
John Miller (NCSU), Don Hoss (NMFS)
- IV. The Human Environment: Ray Burby (UNC-CH) captain --
Milton Heath (Inst of Gov), Kerry Smith (NCSU),
Jeff Johnson (ECU), Dave Owens (DCM)
- V. Data Management: Jim Turner (USGS) captain --
Karen Siderelis (NRCD), Steve Walsh (UNC-CH),
Alan Klimek (DEM), EPA representative
- VI. Public Participation: Joe Phillips (NCSU) captain --
Richard Andrews (UNC-CH), Mike Orbach (ECU),
Jim Stewart (WRII), Steve Benton (DCM),
Lundie Spence (Sea Grant), Tom Ellis (NCDA)

TASK 1

Members of the work groups will be identified and contacted. Materials will be prepared for the workshop leaders to indicate time and expectations for the project. The project will be described and challenges issued. Arrangements will be made for all work groups to meet in January. This task will be performed by the Principal Investigators during December 1988.

TASK 2

Work group leaders and workers will be formally requested to serve. A letter describing the need for the project, importance of the time frame, and the tasks to be discharged will be sent to all participants. Participants will be expected to sign a commitment. This task will be performed by the APES Coordinator during December 1988.

TASK 3

Members of all workgroups will meet with the Principal Investigators and the APES Coordinator for in-depth review of study goals and objectives. Deadlines will be established for

producing the two publications. An outline for each segment will be finalized. Logistics and interactions will be finalized.

Each work group will hold their first session. Working from suggested procedures, topics and overall project design will be scheduled. Assignments for each individual will be made and the analyses will begin. Additional meetings and interactions will be scheduled. This task will be performed by the Principal Investigators and project participants during early January 1989.

TASK 4

Each work group will review the status and trends of Albemarle-Pamlico Sound and draft their reports according to outline. Meetings among the work groups will occur according to previously agreed schedules and/or as deemed necessary by the group leaders.

Emphasis will be placed on examining each area from the standpoint of management questions. Analysis will be done on each issue within each area (for example--Nutrient recycling rates in the Water Quality section) to assess the availability of data and the need for additional information before improvements in existing management capabilities can be made. The idea is to develop a protocol for making decisions that will lead to incremental improvements in our predictive capabilities. This task will be performed by project participants under the leadership of the Principal Investigators during February and March 1989.

TASK 5

Draft reports will be edited, formatted and integrated with supporting graphics into six technical reports. Draft documents will be circulated to managers and two outside reviewers for comments and suggestions. The main issue here is the direction of the technical report for management questions and the analysis of information in support of those questions. The drafts will also be submitted for review by the APES publication review committee. This task will be performed by the technical editor and Principal Investigators during April 1989.

TASK 6

Revisions to the draft will be incorporated to produce a final technical report for each of the six subject areas. These reports will be published by UNC Sea Grant and/or UNC Water Resources Research Institute in accordance with their format.

A "Summary Report" will be developed from the contents of the six subject area reports. The idea here is to produce a general interest document relating the overall status and trends of the estuarine system. By combining text, graphics and photographs,

the summary report will include an analysis of the current condition of the estuaries and the needs for effective management. This task will be performed by the Technical Editor and the Principal Investigators during April and May 1989.

TASK 7

After revisions have been accumulated, analyzed and incorporated, the Technical Reports and the Summary Report will be printed and distributed. Approximately 200 of each of the six Technical Reports and about 500 of the Summary Report will be printed. This task will be performed by the Technical Editor during June 1989.

Budget

Salaries and Wages		16,260
Writer/Editor (4 months)	9,810	
Clerical (6 months @ 50%)	5,000	
Hourly Labor (100 hours @ 4.50)	<u>450</u>	
Fringe Benefits (22.8 % of 15,810 and 7.51 % of 450)		3,639
Travel		12,000
Supplies		1,000
Consultants (30 days @ \$400)		12,000
Publication Costs		10,000
Communications (Postage and Telephone)		1,000
Total Direct Costs		<u>55,899</u>
Indirect Costs (26.5 % of 55,899)		14,813
Total Project Costs to APES		<u>70,712</u>



College of The Albemarle

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(919) 335-0821

MEMORANDUM

October 31, 1988

TO: Albemarle Citizens' Advisory Committee

FROM: Parker Chesson *PJC*

SUBJECT: Albemarle CAC's Recommendations

During the executive session of the APES first annual meeting on Friday, October 14, 1988, the members of the Albemarle Citizens' Advisory Committee submitted two recommendations for consideration by the members of the Policy Committee. The purpose of this memorandum is to provide the members of the Policy Committee some background information, concerns, and reasons that produced the recommendations. The two recommendations were:

- A. To begin preparing the Comprehensive Conservation and Management (CCMP) plan now based upon available information while continuing to conduct extensive studies in order to update existing information. This proposal was generated by the committee members over concern for the conceived magnitude of the task in developing a CCMP for the Albemarle and Pamlico Sounds and their tributaries. Problems considered in developing the recommendation were:
- (1) The need for a comprehensive review of federal and state statutes impacting on the effort to restore and preserve our sounds.
 - (2) The number of federal and state agencies responsible for resolving some parts of the problem.
 - (3) The desire of the staff of the various agencies to focus on their programs, thereby requiring a great effort to coordinate the various agencies into a comprehensive management plan. The task of coordinating the agency functions and responsibilities into a smooth working and efficient organization will require much skill and adroitness.

(4) Therefore, the need to establish an administrative organization early on to insure the organization is in place and functioning prior to the end of the APES program. Early implementation of the organization for managing the CCMP will 1) permit identifying the number and qualifications of the staff; 2) the development of the budget for carrying out the requirements of the CCMP; 3) the monitoring program necessary to insure compliance with the requirements of the CCMP; and 4) permit development of an extensive and continuing research program to maintain the CCMP as an effective instrument to restore and maintain the waters of our sounds and their tributaries.

B. To establish a legislative liaison committee. In considering the need for an early beginning to develop the CCMP and the administrative organization to implement the CCMP, it became very apparent there would be a need for a committee to work with the members of the General Assembly in order to insure appropriate legislation and funding programs would be in place to implement the CCMP when the APES program is completed. The members of the Legislative Liaison Committee would work very closely with the members of the Policy Committee to insure that proposed legislation will in fact support the policies of the APES and CCMP. The duties of the Legislative Liaison Committee would be:

- (1) To review state statutes to determine if any statutes would adversely impact upon the ability to carry out the provisions of the CCMP. Two examples of such statutes that will adversely impact upon the program are Senate Bill 641 and House Bill 1458 of the 1979 session of the General Assembly. Copies of the bills are attached.
- (2) To prepare legislation to correct the statutes that adversely impact upon the ability to restore and maintain the quality of the waters in our sounds and their tributaries.
- (3) To work with the members of the General Assembly to insure adequate budget funding is provided.

Composition of the committee would be:

- (1) One member from each of the board of county commissioners for each county in the area of the APES program.

- (2) One citizen from each of the counties in the area of the APES program. The citizens should not be serving as a member of the Citizens' Advisory Committees. The citizens should be an influential members of the community ~~who are~~ and one concerned and interested in seeing the quality of the waters in our sounds and their tributaries restored and maintained.

We will discuss these recommendations at our November 7 CAC meeting.

JPCjr:sws

Enclosures: Senate Bill 641
House Bill 1458

cc: Bob Holman
Joan Giordano
Derb Carter

Addendum 2
GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 1979
RATIFIED BILL

CHAPTER 929

SENATE BILL 641

AN ACT TO AMEND G.S. 143-214.3 SO AS TO REVISE THE WATER QUALITY STANDARDS.

The General Assembly of North Carolina enacts:

Section 1. A new section is added to Chapter 143 of the General Statutes to read as follows:

"§ 143-214.3. Revision to water quality standard.--(a) Any person subject to the provisions of G.S. 143-215.1 may petition the Environmental Management Commission for a hearing pursuant to G.S. 143-215.4 for a revision to water quality standards adopted pursuant to G.S. 143-214.1 as such water quality standards may apply to a specific stream segment into which the petitioner discharges or proposes to discharge.

(b) Upon a finding by the Environmental Management Commission that:

- (1) natural background conditions in the stream segment preclude the attainment of the applicable water quality standards; or
- (2) irretrievable and uncontrollable man-induced conditions preclude the attainment of the applicable water quality standards; or
- (3) application of effluent limitations for existing sources established or proposed pursuant to G.S. 143-215.1 more restrictive than those effluent

standards and limitations determined or promulgated
by the United States Environmental Protection
Agency pursuant to Section 301 of the Federal Water
Pollution Control Act in order to achieve and
maintain applicable water quality standards would
result in adverse social and economic impact,
disproportionate to the benefits to the public
health, safety or welfare as a result of
maintaining the standards; and

- (4) there exists no reasonable relationship between the
cost to the petitioner of achieving the effluent
limitations necessary to comply with applicable
water quality standards to the benefits, including
the incremental benefits to the receiving waters,
to be obtained from the application of the said
effluent limitations;

Then the Environmental Management Commission shall revise the
standard or standards, as such standard may apply to the
petitioner, provided that such revised standards shall be no less
stringent than that which can be achieved by the application of
the highest level of treatment which will result in benefits,
including the incremental benefits to the receiving waters,
having a reasonable relationship to the cost to the petitioner to
apply such treatment, as determined by the evidence; provided,
however, in no event shall these standards be less stringent than
the level attainable with the application by the petitioner of
those effluent standards and limitations determined or

Senate Bill 641

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 1979
RATIFIED BILL

CHAPTER 889

HOUSE BILL 1456

AN ACT TO AMEND G.S. 143-215.2 CONCERNING THE USE OF SPECIAL ORDERS AGAINST FARM OPERATIONS.

The General Assembly of North Carolina enacts:

Section 1. G.S. 143-215.2(a) is amended by adding the following sentence at the end thereof:

"Provided, however, that the provisions of this section shall not apply to any agricultural operation, such as the use or preparation of any land for the purposes of planting, growing, or harvesting plants, crops, trees or other agricultural products, or raising livestock or poultry."

Sec. 2. This act is effective upon ratification.

In the General Assembly read three times and ratified, this the 8th day of June, 1979.

JAMES C. GREEN

James C. Green

President of the Senate

CARL J. STEWART, JR.

Carl J. Stewart, Jr.

Speaker of the House of Representatives