#### ... the newsletter of the Albemarle-Pamlico Estuarine Study

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### From The Public Coardinator.

Public Participation in the Albemarle-Pamlico Estuarine Study (A/P Study) is of vital importance if the program is to be successful. To mitigate pollution and the degradation of water quality, or better yet, to prevent it, requires a continuing commitment from a public that is both involved and informed. Central to this thought are two components, education and public involvement.

Educating the public to the recognition that the Albemarle and Pamilico Sounds are a national heritage and an irreplaceable natural resource is a good first step. When ownership is established a natural mechanism of protection is set in motion. People tend to care for that which is their own.

Education also can be an alternative ro enforcement. Although enforcement, in same instances may act as an educational tool, it does not always rectify many pollution problems resulting from the actions of individuals, problems such as the improper disposal of wastes from homes, cars and boats At best, enforcement, when applied to situations of waste disposal, often can be infeasible or Impractical. Proper disposal rechniques and the nurruring of individual responsibility are better achieved through education and public participation. Most probably an appropriate combination of voluntary and regulatory programs will be needed for the effective overall management of our sounds.

The goal of public participation is to establish the public consensus that will ensure the long-term support and implementation of the Comprehensive Conservation Management Plan (CCMP). 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 implies the willingness of participants to work together and to compromise to achieve mutual goals.

To improve the Ablemarle and Pamlico Sounds through governmental programs implemented over a long period of time, with the support of the people who live in the drainage basins, is no small underraking. A series of public participation projects to help achieve that goal are a mainstay of the public involvement portion of the A/P Study. The program's Public Involvement Plan (PIP) is the document that describes the coherent process for integrating the work done by public participation project contractors with that being done by the public involvement coordinator and the Citizens' Advisory Committees. The PIP is designed to provide a broad framework which can be used to rie together the individual activities of agencies, academic institutions and private organizations into a clear and comprehensive approach to public involvement. It is based on these principles:

 The public has a right to know whether expenditures are producing benefits to the sounds.

 Implementation of programs over a long period of time will require continued public support.

 Regional efforts to restore the sounds have their foundations in local communities and county governments and these need to be part of the implementation strategies.

Capies of the PIP can be obtained by contacting Joan Giordano, Public Involvement Coordinator, A/P Study, P.O. Box 1507, Washington, NC 27889.



### From The Program Director

It is hard to believe that a year has passed since I joined the Study but time passes very quickly with all the different aspects of the program running simultaneously. I continue to be impressed with the commitment, the administrative board members have mode and your support for the program.

The mid-way point of the program's five-year duration is quickly approaching (May, 1990) and the efforts of the first two years will come into focus with the completion of a preliminary. Status and Trends Report (STR) this year. This report will document the present state of the Albemarle-Pamlico Estuarine System in four key care-

gories: Resource Critical Areas, Water Quality, Fisheries and the Human Environment. The document will also address absenced trends within these four key caregories by utilizing past and current records.

After a thorough review by peer reviewers and the four administrative boards that make up the program, a STR public

#### From The Program Director (Continued) ....

version will be printed and distributed. The A/P Study will also hold public meetings throughout the Study area in the winter of 1989 to gather public comment on the others, will be incorporated into the final Status and Trends Report which is due for completion in October, 1990.

The STR will be a very valuable element in developing the Comprehensive Conservation Management Plan (CCMP) due in November, 1992. The COMP will define management strategies to be utilized in protecting the invaluable resources located in this Estuarine System.



# Citizens' Advisory Committee Chairman's Message

by Derb Carrer, Chair Pamlico Cirizens' Advisory Committee

The next four months may be the most important, exciting, and challenging time yer for the Albemarle-Pamlico Estuarine Study. It is also a time when public awareness of and involvement in Study meetings and actions is critical.

I am writing these comments as chairman of one of the two cirizens' advisory committees for the Study. As chairman of the advisory committee, I sit on the Policy Committee. These comments report on three actions taken by the Policy Committee or its lost meeting which set the stage for the upcoming months.

First, the Policy Committee re-examined the purpose of the A/P Estuarine Study and endorsed a new general statement of purpose. The previous stated purpose of the Study was "to enable resource managers to better preserve the productivity of the estuarine area by expanding relevant knowledge." The new statement of purpose emphasizes that the principal objective of the Study is to prepare and implement a comprehensive management plan for Albemarle and Pamilico Sounds

This approach assesses environmental concerns, recognizes that existing environmental problems have specific causes, and provides for a full consideration alternative

approach to better manage our productive coastal waters. In sum, this new statement of purpose marks a clear shift in program emphasis from scientific research to identifying opportunities for more effective man-

Second, to insure that these objectives are achieved, the Policy Committee adopted a revised set of milestones by which to evaluate program progress. These milestones establish specific dates by which certain actions are to be accomplished culminating in the adaption of a final comprehensive management plan in November 1992

Finally, the third major action of the Policy Committee was to endorse and provide for the preparation of both a preliminary Status and Trends Report and the outline of a draft management plan by the end of this year. It is these two undertakings that make the next four months so important and public involvement critical.

The preliminary Status and Trends Report due this September will assess the status of the water quality, living resources, and human environment in and around Albemarle and Pamlico Sounds; evaluate trends; and identify the probable causes of significant environmental changes. This information will be used to develop the outline of a comprehensive management plan. This outline is the first step to the final management plan and as such will establish a direction for the remainder of the

It is important that the public be involved to the maximum extent possible in establishing that direction. Public involvement is absolutely necessary to develop the public consensus for the adoption and implementation of a management

At this decisive point in the A/P Study, we need your ideas, perspectives, and involvement. There will be several meetings this fall of various committees of the Study and an annual public meeting in October. Call the public involvement coordinator to request a meeting schedule and rake advantage of these opportunities. We need your input.



Coming together beginning;

## Ask An Expert

We hear so many initials used when environmental issues or agencies are discussed. What do they mean?

Anyone who has ever sat in on a meeting dealing with environmental issues and regulations may have felt like they were lost in a bowl of alphabet soup! Especially so, if that meeting involved people who were already quite familiar with the topic being discussed. In such meetings it seems that every environmental agency or regulation gets referred to by its initials only -CRC, DEM, CAWA, NRCD, EMC, - and if you don't know which is what, you'll fall quickly behind.

When this morass of letters is combined with the complexities of environmental issues, even those who are fairly involved with the matter get confused.

This article will try to identify some of the agencies and regulations that affect coastal North Carolina.

NRCD - (N.C. Department of Natural Resources and Community Development) — NRCD is composed of all the environmental permitting, regulatory and legal divisions in the state, of which there are twelve. (There are other agencies involved in community development). NRCD has six regional offices, including one in Washington, N.C., which house staff members of the divisions necessary for environmental regulation in the stare's six regions.

The Secretary of NRCD is a governor's cabiner post. William Cobey is the Secretary of the department and is ultimately responsible for the policies of NRCD. The directors of the twelve different divisions serve as the Secretary's staff.

DEM - (Division of Environmental Management) — This regulatory division of NRCD is in charge of ground and surface water and air quality management in the store. DEM staff are state employees and it is DEM's authority to decide on permit applications and conditions, and to apply fines for permit violations. DEM is also responsible for most in-state enforcement of such U.S. Environmental Protection Agency (EPA) programs as the Clean Water Act, unless the Division of Coastal Management (DCM, described later) is involved. Paul Wilms is the Director of DEM.

EMC - (Environmental Management Commission) — EMC is the citizen oversight board of DEM. Its seventeen members are chosen by either the governor or the state legislature, and the members come from various fields related to environmental concerns (science, development, environmentalism etc.). They are not employees of regulatory divisions. EMC is the body that first approves any changes or additions to environmental regulations which DEM uses in its decisions. It also serves as the first level of appeal for anyone wishing to contest a permit decision or fine assessed by DEM.

DCM - (Division of Coastal Management) — DCM serves in a capacity similar to that of DEM, but it deals specifically with the regulations and statutes of the Coastal Area Management Act (CAMA, described later). DCM acts on permits applied for within the twenty-county area of coastal North Carolina, and like DEM, performs research and background work an regulatory changes and additions.

DCM staff are state employees who generally act on "major development" permits under CAMA. They may also be involved with activities in eastern North Carolina regulated by the EPA. George Everett is the Director of DCM.

CAMA - (Coastal Area Management Act) — CAMA is the law which provided for the establishment of regulations and protective measures that guide the actions and decisions of the Coastal Resources Commission (CRC, described larer) and DCM. CAMA was established in 1974 in response to the passing of the federal Coastal Zane Management Act (CZMA), which offered federal money to states that adopted their own coastal protection programs.

CAMA affects only the twenty easternmost counties of North Carolina, where the fragile ecosystems the CZMA sought to 
protect, are found. CAMA requires each 
county to adopt Land Use Plans (LUPs). LUPs 
are essential to prevent environmental 
degradation while achieving economic 
growth. The CRC must approve the adoption 
of, and any amendments to, county and 
municipal LUPs.

CAMA also regulates critical resource areas designated as Areas of Environmental Concern (AEC) through the CRC and DCM. The state guidelines for AECs, which were developed by the CRC and adopted by rule, contain specific and detailed permitting criteria.

CRC (Coastal Resources Commission)

— CRC is the citizen oversight board for DCM and CAMA. Like the EMC, its thirteen members are appointed by political leaders, and all come from different fields related to coastal management, but are not state regulatory employees. The CRC is the first point of appeal for the DCM permit decisions under CAMA.

This list gives only a brief sketch of the agencies and regulations involved when dealing with environmental issues. As can be seen, even the most simple descriptions quickly turn complex where environmental protection is concerned. In future issues of the Advocare we will look at other agencies and regulations.

This article was originally produced by the Pamlico-Tar River Foundation, under a grant by the Albemarle Pamlico Estuarine Study, and was edited with permission for inclusion here.



#### Albemarle-Pamlico Estuarine Study Publications List

No.	Abbreviated Title	Author/Editor	Status
86-01(1)	Existing Management Programs	Brower (UNC)	Available
87-01(P)	Source Document	Rader et al. (A/P Study)	Available
87 O2(P)	Workplan I	Rader et al. (A/P Study)	Draft Document Only
87-03(1)	Proceedings: Modeling Workshop	Stewart/Duffy (WRRI / SCI)	Available
87-04(1)	Proceedings: Remore Sensing Workshop	Stewart (WRRI)	Available
87-05(1)	Proceedings: Fish Disease Workshap	Stewart (WRRI)	Available
87-06(P)	Citizens' Monitoring Pilot	Lekson (PTRF)	Available
88-01/02(P)	Baseline Monitoring Network	Rader et al (A/P Study)	Being Revised
88-03(P)	Cirizen's Guidebook	Kennedy (NC Coastal	Available
		Federation)	
88-04(P)	Status Report: March 1988	Rader (A/P Study)	Available
88-05/P)	Beoufort County Magazine	Rader (A/P Study)	Available
88-06(1)	Water Quality/Hydrology Bibliography	Bales (USGS)	Available
88-07(1)	Turrie Excluder Device	Pearce/Street (Mariners' Marine/DMF)	Available
88-08(P)	Project Abstracts for the	Holman	Available
	Period 1987-89	(A/P Study)	
88-09(1)	Red Tide Persistence	Tyler (Versor)	Available
88-10(1)	Submerged Aquatic Vegetation (Eastern)	Ferguson (NOAA)	Final Draft Stage
88-11(P)	Can Albemarle and Pamlica De Saved?	Taylor (Wildlife of NC)	Available
88-12(1)	Obstructions to Anadromous Fish Migration	Collier (USFGWS)	Final Draft Stage
88-13(1)	Value of Recreational Fishing AVP Estuaries	K. Smith (NCSU)	Final Draft Stage
88-14(1)	Analysis of Fringe Werlands in A/P Sounds	Brinson (ECU)	Draft Document Only
89-01(P)	Progress Report for 1989	Holman A/P Srudy	Available
89-02(1)	Fish Srock Assessment	Phalen (DMF)	Draft Document Only
89-03(1)	Baseline Demographic Trends	Tscherrer (ECU)	Droft Document Only
89·04(P)	Public Involvement Plan	Giordono A/P Study	Available
89-05(1)	Scoping of Water-Column and Bottom Sediments	Wells (UNC)	Draft Document Only

(I) Information Acquisition Documents

(P) Public Participation or Program Documents
(\*) Not on A/P Study Document, but material is related to study.

Reprints of the above listed publications can be obtained by contacting Joan Giordano, Public Involvement Coordinator, A/P Study, P.O. Box 1507, Washington, N.C. 27889. A limited number of copies is available.

#### Third Year Technical & Public Participation in Projects

TECHNICAL SUBJECT	INVESTIGATOR/INSTITUTION	PUBLIC PARTICIPATION SUBJECT	INVESTIGATOR/INSTITUTION
Regional Inventory & Protection Plan for Critical Natural Areas, Wetlands	Roe - Div. of Porks & Rec. NRCD	Community Education Outreach II	Stroud - PTRF
& Endangered Species Habitats (phase II)		Public Education Program in the Albemarle Sound Area	Albemarle Environmental Association
Hyde Co. Soil Survey	Pierce-Div. Soil/Water Conservation - NRCD	Albemarle-Pamlico Public Participation: Raising Public Involvement Program for	Carlock-Va. Planning District Commission
Mapping & GIS Implementation of Land Use & Land Cover Categories	Siderelis-Land Resource Info System	Southeastern Va.	
for the Albemarle Pamlico Estuarine Area		Poster Series/Bumper Strickers	Numberg - PTRF
Abundance & Viability of Striped Bass Eggs Spowned in the Roanoke River, NC in 1990	Rulifson - EQJ	CAC Assistance in Press Tour, Organizing Annual Meeting & Preparing Estuarine Management Recommendations for Protecting the Albernarie & Pamilica Sounds	Kennedy - NCCF
Food/Feeding of Larval Fishes in the Roanoke River and Western Albernarie Sound, NC	Rulifson - EQU	Vital Issues of Protecting Water Quality - Teocher Training & Curriculum Implementation	Okun - UNC
Shell Disease in Blue Crobs, Callinectes sapidus, from the Albemarle-Pamlico Estuary	Noga - NCSU Engel - NOAA/Nar'l Marine Fisheries	Leadership Development Workshops on Water Quality Impacts of Nonpoint Source Pollution	Hoban - NCSU
Public Arritude Towards Water	Hoban - NCSU		
Quality & Management Alternatives in the Albernarie-Pamilico Estuarine System.		A Public Farum on Management Needs for Protecting the Estuarine Natural Resources in the Albemarle- Pamlico System	Shaw-Div. of Goostal Mgmt. NRCD
A Comprehensive Environmental Management Plan for the Currituck Sound Drainage Area (Part I)	Adams - NCSU	Total: \$ 204,962	
Federal Consistency Review for NC Estuarine Management Program	Nichols - Research Triangle Institute		
The Parential for Eutrophication G Nuisance Algal Blooms in the	Peri - UNC		

Nuisance Algal Blooms in the Albemarle Pamilica Estuary

Citizen Monitoring: Albemarle Pamilico Estuary

Determination of Flows & Flow Patterns in the Pamlico River & Neuse River Estuaries

Evaluation of Off-site Changes in Hydrology & Warer Quality Resulting from BWPs in the Albernarle-Pamlico Region

Reduction of Estuarine Nutrient Loading: N & P Removal in Coastal Swamps

Heavy Metal Pollutants in Organic-Rich Muds of the Albemarle Sound Estuarine System: Their Concentration, Distribution & Effects Upon Benthic Environments & Water Quality Perlic - PTRF

Boles - USGS

Bales - USGS

Kuenzler - UNC

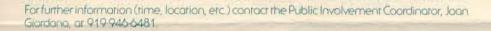
Riggs - ECU



Toral: \$ 756,532

### Upcoming Events.

DATES FOR 1989	EVENT		
August 1	Complete EPA Award of Funding		
August 9	Preliminary Planning Meeting - Annual Meeting		
August 18	Technical Review Sub-Committee Meeting		
August 22	Technical Committee Meeting		
August 23, 24	CAC Meetings		
August 30	Roundtable Meeting of all Committees		
August 31	Policy Committee Meeting		
September 13	Review of Federal & State Agencies		
September 14	Annual Researchers' Review Workshop		
Seprember 19	Technical Review Sub-Committee Meeting		
October 6	Annual Public Meeting (Tentative)		
October 25,27	CAC Meetings		
November 8	Technical Committee Meeting		
November 21	Policy Committee Meeting		





The Albemarle Pamlico Estuarine Srudy is a joint effort of the state, federal government and local interests, intended to facilitate effective management of the very valuable, productive resources in the major estuaries of northern and central North Carolina.

The Albemarle-Pamlico Advocare is the quarterly newsletter of the A/P Study. For questions or comments, contact Joan Giordano, Editor, 1424 Carolina Ave., Washington, N.C. 27889 or call 919/945-6481



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P.O. Box 1507
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