

Other estuary programs provide lessons for A/P

By DERB CARTER

(Mr. Carter is Chairman of the A/P Study's Pamlico Citizens Advisory Committee, and a Staff Attorney with the Southern Environmental Law Center. -ED.)

The Albemarle-Pamlico Estuarine Study is one of 17 management conferences now designated under the EPA's National Estuary Program (NEP). In late May, I attended the third National Coastal Program Conference in San Diego, along with representatives from all 17 programs. The conference provided the opportunity to assess the status and progress of our program as compared to others on both coasts.

The principal purpose of all the estuary programs is to develop a management plan to better protect the water quality and living resources of specific coastal waters with identified environmental problems. Only one program, Puget Sound, has adopted a Comprehensive Conservation and Management Plan (CCMP) which has been approved by EPA; all others are in some stage of study or plan development. The success of each program will be measured by how effectively their management plan addresses and corrects identified environmental problems.

While the A/P Study has made strides in assessing environmental problems, completing research, gathering data, and increasing public awareness of the importance and values of the estuary, the critical task of preparing the management plan is now at hand. Based on experiences, both successes and failures, of other estuary programs discussed at the conference, I can offer the

following observations on this process.

First, adopt goals. A management plan must have clearly stated goals and objectives. These should be arrived at by consensus if possible. Goals provide a collective vision of the future and statement of purpose for the management plan. Objectives provide targets for strategies to improve management and protection of water quality, fisheries, and other resources.

Second, be innovative. Remember that estuary programs were established in part because existing environmental management programs have not effectively addressed environmental problems. This lack of effectiveness may result from inadequate authority to control certain activities, fragmented authority between agencies, inadequate funding, or other reasons. The management plan exists to correct these deficiencies and achieve better overall management of the estuary.

Third, ensure accountability. The management plan must clearly define the official or agency which will be responsible for implementing recommendations.

Fourth, involve the public. The management plan will succeed to the extent it has the broad-based support of the public. The public must be involved early, often, and extensively in the development of the CCMP to ensure political support for implementation.

The experiences of other estuary programs can provide some guidance to the A/P Study as we approach development of the CCMP. But the ultimate success of the Study will depend on the support and involvement of the public and the leadership and vision of those charged with its development and implementation.

THE ALBEMARLE-PAMLICO ESTUARINE STUDY

Initiated in 1987, the Albemarle-Pamlico Estuarine Study is a five-year program of research and education on the Albemarle and Pamlico sounds and the rivers that feed them. The Study is charged with developing a Comprehensive Conservation and Management Plan (CCMP) to help guide long-term environmental protection of the estuary. The schedule for the drafting, review and publication of the CCMP is as follows:

<u>PROGRAM GOAL</u>	<u>PROJECTED COMPLETION</u>	<u>STATUS AS OF SEPT. 1991</u>
CCMP implementation	1993 and beyond	On schedule
Final CCMP published	November 1992	On schedule
Final revisions to CCMP	October 1992	On schedule
Public meetings on second draft	September 1992	On schedule
Second draft of CCMP published	September 1992	On schedule
Revisions to CCMP draft	April-August 1992	On schedule
Public review of CCMP draft	March 1992	On schedule
Public meetings on CCMP goals	November 1991-February 1992	On schedule
CCMP Target Environmental Goals set	Summer-Fall 1991	Approved

Coming together is a beginning;

Q & A: A view of the A/P Study from DEHNR's Ernie Carl

Dr. Ernest A. Carl is Deputy Secretary of the N.C. Department of Environment, Health and Natural Resources. He is the highest-ranking state official with ongoing involvement in routine operations of the A/P Study, and he also serves as co-chairman of the Study's Technical Committee.

The Advocate submitted several questions to Dr. Carl about his views on the progress of the Study and the future of its Comprehensive Conservation and Management Plan (CCMP). Below are his responses:

ADVOCATE: *What do you feel has been the strongest overall aspect of the A/P Study thus far, and why? What has been the weakest, and why?*

DR. CARL: The strongest aspect of A/PES is that it provides an opportunity to sort through the various theories of what is going on environmentally in the Albemarle and Pamlico systems. The public, environmental activists, the government, industries, and local jurisdictions each hold somewhat differing views of reality. The idea is that science can be brought to bear to sort through these views and propose a rational defensible plan to protect the sounds. Such a plan should attract widespread support because it is based on real, measurable problems and aimed at real, measurable causes of those problems.

As more and more data are assembled, it has become apparent that some strongly held views are not accurate. It is hard for people to change their thinking.

ADVOCATE: *What has the Study helped us learn about the estuary that we didn't know four years ago when the Study began?*

DR. CARL: The most important thing is that the Study has made us look at the estuary as a single interlocked entity. It has taught us that concepts such as pollution, fish kills, troubled waters, clean and pristine cannot be acted upon. They contribute to confusion in natural resource management and frustrate public understanding. Only when we talk about real compounds, like nitrate, phosphate and cadmium, entering the system from real locations, in measured amounts, and arriving at other locations where they cause documentable problems, can we take effective action. Vagueness is the friend of hysteria and waste, and the enemy of action, public support and solutions to environmental problems.

ADVOCATE: *Based on our current scientific understanding, what are the most serious threats to the long-term health of the A-P estuarine system?*

DR. CARL: Over the last 50 years water quality has generally improved in the A/P, with some notable exceptions. During that time the area has experienced massive growth in population, economic growth, and water usage. This trend will probably continue to accelerate. The "threat" is that environmental oversight (regulation, enforcement, cooperation) will not keep pace with growth because of failure of nerve in government or a loss of public support in backlash to unsupportable and unnecessary regulations.

ADVOCATE: *In what ways might what we have learned through the Study add to better management of the estuary?*

DR. CARL: In many ways, the Study has already contributed to better management. State resource managers are involved in the Study and react to research results as they come in. For example, nutrient sensitive status has been conferred on the Neuse and the Tar-Pamlico complex. Marine Fisheries has begun to take overfishing seriously. For the future, we have a better understanding of metals distribution in the estuaries and a much improved system of monitoring stations. We know about nitrogen falling out of the sky and will be adjusting other N+ load allowances as quantitative measurements become known. Perhaps most important, I think solid scientific information will allow us to gain a partnership with the counties on land use planning.

ADVOCATE: *Do you think it is possible to improve protection of the estuary without stronger regulations and/or improving the enforcement capability of regulatory agencies?*

DR. CARL: As population increases, regulation and enforcement must increase but we should not overlook voluntary efforts in the process. The Agricultural Cost Share Program has been very cost effective and is voluntary. The same is true of Waste Reduction. Wastewater treatment plant financing must somehow be increased since infrastructure costs precede the tax return they support. Like the ecosystem itself, everything is locked together and must be developed as a coherent whole.

ADVOCATE: *What sort of role do you feel the public needs to play in implementation of the CCMP, and how should that role be fostered through the CCMP?*

DR. CARL: The public's role in producing the the CCMP is extremely important, and if their role is to be effective, the public has a huge responsibility to educate itself to the facts on which the CCMP must be based. If the CCMP is scientifically supportable and has support of the public as well, it will succeed famously. If it is scientifically sound, but unsupported by the public, it will fail. If it has public support but is based on folklore, it will degenerate into "the dance of the hobgoblins." Everyone has to pull together to make this work!

ADVOCATE: *A new governor and administration will be installed at about the same time the CCMP is supposed to go into effect. What can be done to assure implementation of the plan by future administrations?*

DR. CARL: To be effective, the CCMP must retain its effect through not just the next administration, but the next four administrations. Only the voters can control this. I think that scientific supportability and public support (mostly at the polls) will get the plan going initially, but keeping it going will require real-world results. This is why accuracy is so important in the CCMP.

Keeping together is progress;



A/P STUDY RESEARCH FOCUS

Project: Regional Inventory for Critical Natural Areas, Wetland Ecosystems and Endangered Species Habitats of the Albemarle Estuarine Region (Phase I)

Project Leader: Cecil Frost, N.C. Natural Heritage Program **Report #90-01**

Project Goal - To identify important natural areas in the Albemarle Sound region (Phase II is taking inventory of the Pamlico Sound region.) The report lists the natural areas most in need of preservation.

Method of Operation - After potential sites were identified, areas were rated on whether they were: (1) rare from a national, state, or regional standpoint, (2) large in relation to similar communities, (3) biologically mature, and (4) relatively undisturbed.

Findings - Of the over 300 sites examined during the study, five areas (1-5 on the following list) were determined to have "national significance," meaning they represent outstanding examples of ecosystems that are greatly diminished or even endangered nationwide. Nine other areas were rated as significant at a state level.

The study cites timber harvesting and agriculture as the biggest overall causes of habitat loss, with residential development being an additional threat to shoreline areas. Highway expansion, pollution, collateral damage from nearby activity, and wildfire control are other factors that disrupt natural ecosystem function.

Long-term protection of the 14 priority sites is urged. Such protection could involve options like public or conservancy ownership, conservation agreements with private owners, or restrictions on activity in the sites.

Most Significant Natural Areas in the Albemarle Area (in priority order; "unprotected" means privately owned without conservation agreement)

1. Roanoke River floodplain (Halifax, Bertie, Martin counties). Status: 75-80% protected.
2. Northwest River/North Landing River (Currituck County, southern VA). Status: 10-15% protected.
3. Great Dismal Swamp (Camden, Pasquotank counties, southern VA). Status: 75% protected.
4. Chowan River floodplain (Gates, Hertford counties, southern VA). Status: 30% protected.
5. North River/Great Swamp (Camden, Currituck counties). Status: 10% protected.

Areas of state significance: Lake Phelps/Pungo Lake (Washington, Hyde counties), mostly protected. Perquimans-Pasquotank hardwood flats, (Perquimans, Pasquotank counties), unprotected. Merchants Millpond area (Gates County), mostly protected. Chowan Sand Banks (Gates County), unprotected. Maple Swamp-Church Island (Currituck County), unprotected. Chinkapin Creek forest (Hertford County), unofficially protected. Chowan County Carolina Bays (Snow Hill Bay, Gallberry Swamp), unprotected. Cashie River floodplain (Hertford County), unprotected. East Dismal Swamp/Van Swamp (Washington County), unprotected.

A/P Committee News

CITIZENS ADVISORY COMMITTEE

Met: August 6, Williamston (joint) Attending: 18 of 60

** CACs discuss CCMP process and urge:

- 1) That CCMP be action-oriented to ensure positive reception by the public.
- 2) That CCMP address the fact that different river watersheds have different problems and solutions.
- 3) That CACs be heavily involved in development of CCMP. Director Waite notes that all CAC members have opportunity to serve as reviewers on drafts, and he assures members that materials will be circulated in a timely fashion.

TECHNICAL COMMITTEE

Met: August 20, Raleigh Attending: 13 of 23

** TC discussed first draft of specific objectives that define CCMP Target Environmental Goals. Committee supported direction of objectives and will review them for comment.

** Heard report on nationwide water quality assessment program of U.S. Geological Survey. A-P watershed is one of 60 watersheds to be studied nationwide. USGS will work to ensure that its research complements rather than duplicates A/P Study research.

POLICY COMMITTEE

Met: August 29, Kill Devil Hills Attending: 11 of 11

** Discussed objectives that define Target Environmental Goals. Staff will continue gathering information to support quantifiable objectives for meeting goals. Goals and objectives will be finalized by Dec. 4 (next regularly scheduled PC meeting).

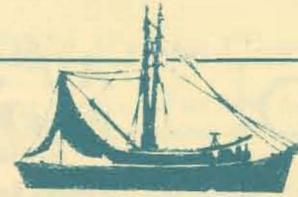
** Extensively discussed format for presenting CCMP. Two methods of presenting action plans have been proposed. Staff will consider combining methods and give recommendations in next draft.

** Called for a special meeting of the PC on October 11 in conjunction with Annual Meeting. Primary topics of discussion will be: to further consider CCMP format; to consider creating a "flow chart" of dates, agencies, and public input opportunities involved in producing CCMP; and to pick up tabled discussion of "Summit for the Sounds" conference proposed by Rep. Walter B. Jones for Fall 1992. Jones, who helped get the A-P included in the National Estuary Program, views the Summit as a convening of citizens and local officials who will create a "Save Our Sounds" agreement based on draft of CCMP. The agreement would be presented to the PC for final approval.

Working together is success.

Sound Bites

news, notes and information about the A/P Study



ANNUAL MEETING OCTOBER 12

The 4th Annual Meeting of the Albemarle-Pamlico Estuarine Study will be held Saturday, October 12, in Manteo. A street festival with entertainment and children's activities will accompany information sessions on estuarine issues.

The Annual Researcher's Review with presentations on research conducted for the A/P Study will take place on Friday, October 11 in Manteo.

REPORTS AVAILABLE

Reports on research projects of the A/P Study can be obtained free of charge by contacting Joan Giordano, (919) 946-6481; POB 1507, Washington, NC, 27889. Reports available include:

"Regional Inventory for Critical Natural Areas of the Albemarle-Pamlico Estuarine Region: Phase I." Cecil Frost, N.C. Natural Heritage Program. (See p.3) #90-01

"Executive Summary of the Status and Trends Report of the A/P Estuarine Study." A/P Study staff.

"Evaluation of State Environmental Management and Resource Protection Programs." Rob Nichols, Research Triangle Institute. #90-02

"Fish Tissue Baseline Study" (metals). Vince Schneider, Div. Environmental Management. #91-05

PUBLIC OPINION SOUGHT ON CZMA

The NC Division of Coastal Management (DCM) will hold three meetings in October to receive public input on critical coastal issues. The meetings will help DCM identify major public interests related to the federal Coastal Zone Management Act (CZMA).

The meeting schedule is:

Tues., Oct. 15, Manteo, NC Aquarium, 7-9 p.m.

Tues., Oct. 22, Beaufort, Maritime Museum, 7-9 p.m.

Tues., Oct. 29, Wilmington, SB Bldg., UNC-W, 7-9 p.m.

Direct questions or written comments to Dr. Jim Wuenschel, DCM, POB 27687, Raleigh, NC, 27611-7687. Or phone (919) 733-2293.

TO GET ON ADVOCATE MAILING LIST

To get on or off the mailing list, write to Advocate, POB 1507, Washington, NC, 27889.

COMMITTEE MEETING DATES OCT.-NOV.

Citizens Advisory: Oct. 29, Washington, 7pm

Technical: Nov. 6, Raleigh, 10am

Policy: Oct. 11, Manteo, 7pm (called meeting)

The public is welcome at all Study meetings. Please call (919) 946-6481 for specifics on meeting agenda and location.

THE ADVOCATE...

is the newsletter of the Albemarle-Pamlico Estuarine Study, a five-year project funded jointly by the US EPA and the State of North Carolina, intended to develop an environmental management plan for the Albemarle-Pamlico estuarine system. The Study, which will conclude in 1992, is part of the EPA's National Estuary Program. It is being conducted within the N.C. Dept. of Environment, Health, and Natural Resources, POB 27687, Raleigh, NC, 27611-7687.

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