

ALBEMARLE-PAMLICO ADVOCATE

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

Vol.3 No.2

June 1991

Public awareness is key to effective CCMP

During its first three years the A/P Study focused its attention on research and gathering data about the functions and problems of the Albemarle-Pamlico system. But for the final 18 months of the Study, the emphasis will be on production of the Comprehensive Conservation Management Plan (CCMP).

The CCMP marks the culmination of intense study and the beginning of implementation of management recommendations for the program -- viable, effective, recommendations that will provide long-term protection for the regional environment.

The CCMP will likely recommend stronger regulations in some areas, encourage better enforcement of existing regulations in others, and perhaps propose new regulations in still others. Thus anyone who has an interest in the region and its environmental management should stay aware of what the early drafts of the CCMP do -- or do not -- recommend.

The CCMP phase of the Study is the one most accessible to public input and the one that most requires public awareness. Few people dispute that the Albemarle-Pamlico region is a special place with many resources worth conserving. Deciding how best to protect those resources, however, is where the disagreements begin.

The document itself will be written primarily by A/P Program Director Randall Waite, Technical Coordinator Jennifer Steel, and a

small Steering Committee. There will be considerable input from resource managers and various agency officials during the drafting process. And, of course, review and comments will be sought from the public, scientific community, and

The CCMP is due in November 1992. Randall Waite, A/P Study Program Director, has set the following tentative schedule for completing the plan by that date:

June 1991 -- Policy Committee to approve membership of CCMP Steering Committee, final Status and Trends document, and target environmental quality goals for the sounds.

Summer 1991 -- Initial Steering Committee Scoping Meetings to create framework for CCMP. All committees review.

Oct. 91-Feb. 92 -- Public scoping meetings to identify issues public wants addressed in CCMP. These are key opportunities for public input. All committees review.

February 1992 -- First draft of CCMP. Public review.

March-Aug. 1992 -- Internal revision of CCMP. All committees review.

August 1992 -- Second draft CCMP.

September 1992 -- Additional public meetings on CCMP. All committees review.

November 1992 -- Final document.

different interest groups.

Finding a level of regulation that is acceptable to the regulated and which is also strong enough to ensure protection of the environment has never been a simple task. The CCMP offers the chance to create a plan that assures an equal sharing of responsibility for protecting that which we all want protected -- the Albemarle-Pamlico estuary.



PTRF to assist Study in production of Advocate

Beginning with this issue, the Albemarle-Pamlico Advocate is being produced for the A/P Study by the Pamlico-Tar River Foundation.

Production of the Advocate was contracted to PTRF in order to provide more frequent issues. PTRF has been involved with the Study since 1987 and has conducted several other Study projects.

Future issues of the Advocate will be mailed on a bi-monthly schedule. Tentative mailing dates are: July 15; Sept. 1; Nov. 30; Jan. 31, 1992; March 31; May 30; July 31; Sept. 30.

Contact Tom Stroud at (919) 946-9492; or P.O. Box 1854, Washington, NC, 27889, with comments or questions.

Coming together is a beginning;

Fisheries landings show decline

Landings data recently released by the N.C. Division of Marine Fisheries show significant declines in both total landings and the landings of edible finfish from 1980 to 1990.

According to the data, total commercial fisheries landings -- including ocean-going, estuarine and non-edible species -- fell from an all-time high of over 400 million pounds in 1981 to 174 million

peaked at 91.5 million pounds in 1980. The 1990 total of 41.4 million pounds was 55 percent below that.

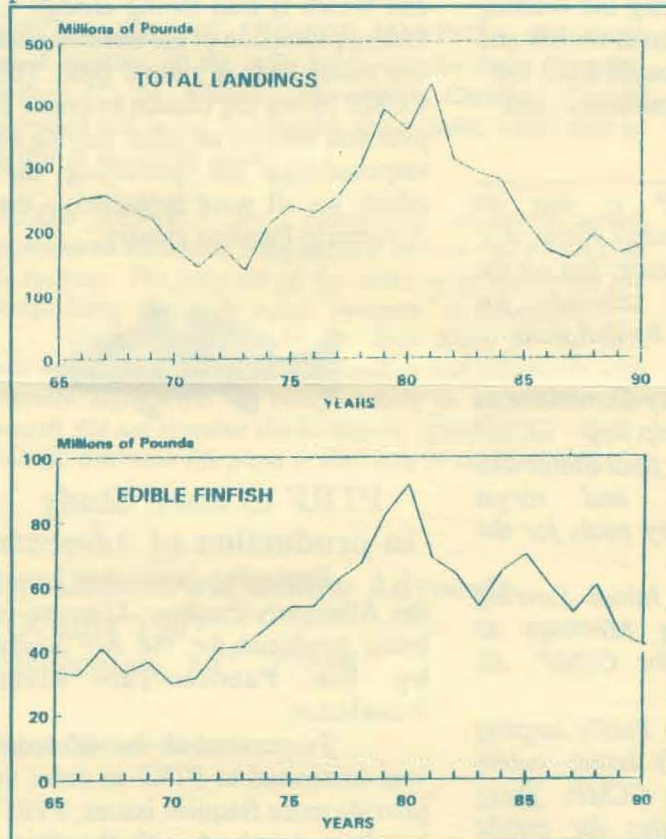
The decline is most prevalent among estuarine-dependent finfish. Flounder, grey trout, spot and croaker landings are not only in long-term decline, but also show few large adults in their catches. River herring landings fell to a record-low in 1990, and oyster and

bay scallop landings continue to reel from recent diseases.

Along with disease, DMF attributes the declining landings to a combination of overharvesting, poor water quality in some areas, severe weather events, and loss of habitat.

Another factor may be reduced effort, since commercial licenses have fallen from over 26,000 in 1982 to 20,000 last year.

DMF notes that landings are often not a good measure of



pounds in 1990. A major part of the landings decline is attributed to reduced demand for "industrial" species such as menhaden.

The landings for edible finfish alone also declined over the same period though they were not accompanied by a fall-off in demand. Landings had climbed steadily through the 1970s and

general abundance since market conditions, regulations, or other factors may limit effort. The lower harvests may also mean higher prices for fishermen, and can be a long-term benefit by allowing populations to regenerate.

Data and graphic from April 1991 issue of *Tar Heel Coast*, the newsletter of DMF.

Citizen's Monitoring program progresses

The Citizens' Water Quality Monitoring Program (CWQMP) of the A/P Study has made changes in recent months which should help give the program more utility, says program director Robbie Blinkoff.

Among the changes is increased coordination between the CWQMP and the statewide Streamwatch program. The programs have similar purposes, and meshing their data bases will provide an extensive record of water quality throughout the state.

The CWQMP will also revive its fecal coliform monitoring efforts. Fecal monitoring can help identify waters where sewage contamination is a problem.

The CWQMP, now in its fourth year, is being operated out of the ECU Institute for Coastal and Marine Resources.

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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The *Advocate* is produced for the A/P Study by the Pamlico-Tar River Foundation, POB 1854, Washington, NC. (919) 946-9492. Tom Stroud, Editor.

Keeping together is progress;



A/P STUDY RESEARCH FOCUS

Project: "The Potential for Eutrophication and Nuisance Algal Blooms in the Lower Neuse River Estuary"

Lead Researcher: Dr. Hans Paerl, UNC Institute of Marine Sciences Research Period: 1988-90

Point of Research -- Help determine whether nutrient levels in the western fringes of the estuary are reaching problem levels, and which nutrients are of most concern.

Summary of Findings -- Analysis of fresh and estuarine waters of the lower Neuse has discovered symptoms of nutrient enrichment. Though symptoms are fairly mild at this point, it is possible that the estuary is in early stages of "accelerated eutrophication", or frequent nuisance algal growth caused by nutrient enrichment.

Problem Nutrients -- Nitrogen (N) and phosphorus (P). N is a determining factor in algal blooms at all times of the year (i.e., the more N present in the water, the more likely a bloom is to occur). P levels are less important, though P may play a "co-stimulatory" role in Spring. Most research prior to this had discounted P as a factor in the appearance of algal blooms in this region.

Sources of Nutrient Enrichment -- Agriculture and other anthropogenic inputs (including sewage effluent) and nutrient-enriched precipitation. Most of these sources are prevalent in upstream regions, thus many of the nutrients they add to rivers are taken up before reaching the estuary. Precipitation, however, adds nutrients directly to the estuary.

The Role of Precipitation -- Industrial and automotive air pollution can contain large amounts of nitrogen-bearing particles. These are absorbed into rainfall (creating acid rain) or other airborne particulates which can drift many miles before falling back to earth, whereupon the N becomes a usable nutrient.

Nitrogen-bearing pollution from the Midwest, Piedmont N.C., and even local industries and automobiles, arrives in weather fronts and is deposited here by rainfall and "dryfall". Since research in the Chesapeake Bay has shown that 20-30 percent of its N loading is atmospheric in origin, this source is likely an important factor in the A-P system as well.

Management Implications -- (1) Nutrient enrichment, long a concern in rivers, may be starting to affect the estuary as well. (2) Phosphorus levels may need more control, especially in late winter/spring. (3) And with most estimates showing that airborne nitrogen will increase considerably in the next few decades, nitrogen levels in A-P waterways could escalate even if larger sources within the region are controlled.

These findings must be considered in developing estuarine management plans. While local nutrient sources can be curtailed, limiting nutrient rainfall which is generated miles away is much more difficult.

A/P Committee News

Citizens Advisory Comm.

Met: April 25, Edenton (joint)

Attending: 23 of 60

Discussed:

** Appointments to CCMP Steering Committee and Financial Planning Committee. Members urge that existing Study committees be involved as much as possible. Keeping local officials and legislators involved also urged.

** Possible support for amendment of Section 320 of Clean Water Act. Amendment would create funding for estuarine management plans.

** Having newsletter sent bi-monthly rather than monthly. Majority vote approves plan for six 4-page newsletters to be sent in 91-92.

Next Meeting: Early August

Technical Committee

Met: May 8, Raleigh

Attending: 16 of 23

Discussed:

** Status and Trends Report. Fisheries section to be updated with new landings data. Approves use of Executive Summary for public report.

** CCMP Steering Committee. TC urges that main writing committee be only 5-10 members, but that all members of A/P committees be reviewers.

** Approved Target Environmental Quality Goals.

Next Meeting: Aug. 20, Raleigh

Policy Committee

** Will meet June 11 in Chesapeake, VA, to expand involvement with Virginia natural resource agencies.

Working together is success

Sound Bites

notes, events, and other information on the A/P Study



FINANCIAL PLANNING SEMINAR - A seminar on financial planning strategies for implementing the Comprehensive Conservation Management Plan will be held Wednesday, June 12, at the Hilton Inn, Greenville. The meeting, which is open to the public, will focus on potential funding options (user fees, etc.) in today's budgetary climate.

Contact Joan Giordano, (919) 946-6481, to make a reservation. The meeting will last from 9:30 a.m. to 3 p.m.

ANNUAL MEETING SET FOR MANTEO - The fourth annual meeting of the A/P Study will be held Saturday, October 12, in Manteo. The North Carolina Coastal Federation will assist in planning the agenda, which will be detailed in upcoming issues.

METALS ASSAY - The "biotoxicity" of heavy metal-contaminated sediments from the A/P system will be assayed this summer. The purpose of the assay is to determine the damage being caused by metal "hotspots" in the estuary.

Studies conducted by Dr. Stan Riggs for the A/P Study found areas in the Neuse, Pamlico and Albemarle with extremely high levels of heavy metals in sediments. The research did not examine the biological effects of the metals, however. Sediment life plays a vital role in the food web.

1991-92 GRANTS APPROVED - 26 grants totalling nearly \$1.3 million have been approved by the Policy Committee for the final year of the A/P Study pending successful application to EPA. The breakdown is:

16 Information Acquisition projects, \$905,000.

7 Public Participation projects, \$277,000

3 Demonstration projects, \$100,000.

STUDY REPORTS AVAILABLE - The results of several recently-completed A/P research projects are now in print and available to the public:

** Reduction of Nutrient Loading, Dr. Edward Kuenzler, UNC-CH.

** Potential for Eutrophication and Nuisance Algal Blooms in the A/P, Dr. Hans Paerl, UNC Institute of Marine Sciences.

** Educational Handbook for Non-Point Source Pollution, Dr. Tom Hoban, NCSU.

** Public Attitudes Survey Toward Water Quality and Management Alternatives, Dr. Tom Hoban, NCSU.

** Animal Waste Management, Jim Lewis, Virginia Soil and Water Conservation Service.

To obtain these or other A/P Study reports, or to get on the Advocate mailing list, contact Joan Giordano, (919) 946-6481.

The Albemarle-Pamlico Advocate
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