

**Albemarle-Pamlico Estuarine Study
Technical Committee Meeting
April 16, 1992**

Minutes

Call to Order

Co-chair Ernie Carl called the "special call meeting" of the Technical Committee to order. He announced the main purpose of the meeting, to discuss the action plans of the draft Comprehensive Conservation Management Plan (CCMP) and the nature of the budget for the following year. After allowing the representatives of the Technical Committee to introduce themselves, Carl asked for any changes to the agenda. As there were no items, Carl turned the meeting over to Randall Waite, APES Program Director, and his staff members for the Program Report.

Program Report

Waite thanked the committee members for attending on such short notice. He stated that the Policy Committee would meet during the following week and decide whether or not to release the document at this point as an official first draft. He also noted that the study did not consider the present document a complete draft, but rather a stage in producing an official management plan. In addition, he noted that the staff had made significant progress on the CCMP since December and congratulated the staff on their work.

Waite announced that his staff had met with the Citizens' Advisory Committees on the previous Tuesday in order to begin receiving feedback on the action plans recommended in the CCMP. Furthermore, he stated that during the Technical Committee meeting, he would like reaction as to how well the action plans had been spelled out, what technical areas needed to be filled in, what justifications were still needed, and the degree of consensus as to the direction in which the action items and categories were leading.

Waite stated that he recognized that some numerical goals and objectives stated in the action plan had been put forth, and that many numbers were struck down in some reviews. He noted that the Policy Committee members had expressed a desire to see those numbers come back. Consequently, Waite stated that, as the Technical Committee discussed the action plans recommended in the CCMP, he would like the committee to consider setting up some specific subcommittees or task forces to address individual issues. Next, Waite announced that he would ask his staff members to present the main areas of the action plans piece by piece to the Technical Committee, so that he would be able to discuss with the Policy Committee during the following week how much time would be needed to refine the draft management plan.

Next, Waite discussed the budget items. He announced that there was a \$200,000 line item for the development of the CCMP. He stated that he would like the Technical Committee to discuss some projects that would improve the management plan, both in terms of assimilating small technical items, and in terms of consensus building activities.

Fisheries Action Plan

Next, A/P staff member Kristin Rowles reviewed the Fisheries Action Plan of the CCMP and announced the three main areas of the action plan: fish disease and kills, protecting habitats, and fisheries sustainability and productivity.

First of all, Rowles discussed fish kills (from page 15 of the Fisheries Action Plan). She stated that the action plans presented two options: (1) Establish a continuous computer database of information on fish kills and diseases, and recommend an environmental response team to investigate areas where fish kills/diseases have occurred; (2) Where specific activities are determined to be a factor in fish kills/diseases, design strategies to address these issues. Waite noted that the second option is somewhat vague, since causal factors have not yet been identified. He also noted that, though the study recognized the importance of identifying these factors, he felt that the study would be unable to include this information in the plan.

Next, Rowles discussed fish habitats. She began with the first option: designating the protection of SAV (submerged aquatic vegetation) beds, shellfish beds, spawning areas, and additional primary and secondary nursery areas. She stated that APES was recommending that, after the designation of those areas, new water quality standards be established for the protection of those areas and that a water management plan be developed for critical habitat areas. In addition to those layers of protection, the plan recommends state acquisitions or incentive programs for private landowners to implement conservation in areas associated with the critical habitat areas. Finally, APES would recommend restoring critical habitat areas.

A discussion on water quality as a source of fisheries problems in North Carolina ensued. One committee member noted that there existed a strong perception that the study had been ignoring factors such as fishing pressure and lack of management, yet putting strong emphasis on water quality as a source of fish kills and diseases. In addition, the member noted that, where the management plan states that water quality is a problem, the document should provide examples of where the problem exists.

Another committee member, Tom Ellis, noted a similar issue under the second goal of protecting fish habitats (page 16, no. 3). According to Ellis, this section recognizes primary nursery areas and several layers of protection, but then later states that more protection is needed. According to Ellis, the document does not offer sufficient evidence that more protection is needed. Furthermore, he felt that, from a landowner standpoint, this lack of clarification could lead to future requirements for more buffers without any justification that activities presently taking place are destroying more habitat. He concluded that, in the fisheries section of the management plan, activities which are causing water quality problems must be clearly defined. In general, committee members felt that, in creating the management plan, the study must be careful not to exacerbate issues or provide misleading information.

Rowles continued with the Fisheries Action Plans recommendation. She noted that under bycatch reduction, cost sharing would be added. She also noted the recommendation of increasing the enforcement staff by 50%. Waite noted the need for an introductory statement which would distinguish between remedial and preventive measures. Another issue addressed was the categorizing of strategies by species.

Human Environment

Next, Margaret Scully discussed the Human Environment Action Plan. She stated that the major thrust of the section was to develop local land and water use plans for all jurisdictions in the A/P region, and to promote natural area preservation and conservation, considering the individual and cumulative environmental impacts on such areas. She also noted that a great concern with this recommendation was what kind of structure or guidance should be set up.

A discussion on state mandated land use planning ensued. While committee member Michael Orbach felt that it was essential that the management plan insist on land use planning, Tom Ellis commented that, while he did not oppose planning, he feared that state mandated planning would cause the program to lose

local support for other recommendations. In response, Orbach noted that, whenever a landowner is asked to heed an authority outside of his or her local area, there will be a reaction, especially in the issues of property rights and wetlands. Yet he noted that the CCMP was simply stating that the more comprehensive planning the state can have for the resources and human uses that are all interconnected, the better off the state is likely to be. In addition, Jennifer Steel noted that the CCMP is simply meant to be a guiding and instructional document, instead of an intrusive authority. Committee members also discussed the possibility of providing additional economic assistance to areas, such as Tyrell and Hyde County, which have been especially constrained by environmental protection activities. In response, Waite suggested setting up an economic task force to research the economic impact of the recommendations provided in the CCMP.

Critical Areas

Next, Scully discussed critical areas. She defined critical areas as wetlands, rare plant and animal species habitats, and rare natural communities. She noted that the goals of the Critical Areas Action Plan have been essentially to protect those areas.

Scully discussed management action 1 (p. 12, Critical Areas): developing a statewide comprehensive wetlands protection program for coastal and inland wetlands; avoiding, minimizing, or compensating for wetlands loss, and developing a complete and usable set of maps of wetlands. One committee member suggested purchasing land for the purposes of protecting rare habitat communities. Scully noted that the Citizens' Advisory Committees had suggested prioritization for the acquisition of wetlands areas. Yet, as Ann Brooks pointed out, acquisition is quite expensive. Thus, Waite concluded that an economics impact task force could better research these issues. Technical Committee members also concluded that the management plan should more clearly define and distinguish between wetlands and critical areas.

Water Quality

Next, APES staff member Jennifer Steel discussed the Water Quality Action Plan of the draft CCMP. The primary issue committee members discussed in this section was the extent of the water quality problem in the A/P region. Committee members agreed that the study should avoid wording the section in such a way that the reader generalizes that water quality either has worsened or is in perfect condition. Instead, the document should state that, even though water quality in the A/P system is good, there still exist individual areas with problems. In addition, the study should be able to clearly state to the public what actions have been taken, and whether or not the study has measured success or will measure success of those actions.

A discussion on the septic tanks section ensued. Carl pointed out that the document seemed to indicate that septic tanks were the primary contributors of nutrients in the estuarine system, and he questioned the validity of that perception. He also noted that a septic tank, if properly installed and permitted, can be a very effective long-term treatment method. In response, Steel mentioned that the CACs had recommended changing the section to place particular emphasis on the elimination of failing or noncompliant package plants and septic tanks.

Next, Steel discussed the last recommendation in the Water Quality section, which deals with on-site sewage treatment facilities. The plan recommends an increase in monitoring and reporting, and increased education of operators to ensure better operation maintenance. The plan also recommends revision of the Best Available Technology for Publicly Owned Treatment Works. As there were no major comments from this section, Steel asked the committee members to submit in writing or by telephone any concerns from the Water Quality section that were not addressed at this meeting.

Public Education and Involvement

Next, APES Public Involvement Coordinator Joan Giordano discussed the Public Education and Involvement Plan of the draft CCMP. She noted that the staff had broken down this section into two large sections, one for education, and one for involvement. She noted that the education section addressed the education of school children, public officials, and the general public. Giordano began with page 2 of the action plan and discussed the recommendations for primary and secondary schools. She stated that the basic recommendation was to begin by teaching the teacher, influencing the course work and requirements that are necessary in teacher training institutes.

A discussion on public advocacy ensued. One committee member noted the Chesapeake Bay Program as a model, which does not attempt to advocate certain positions on issues, but creates forums for citizen involvement. He cited Recommendation 3 on page 7 as a reference to such an approach: Create a non-profit organization which will provide a mechanism for funding from the private sector and support public involvement activities. He also noted that advice from programs around the country indicated a preference for a membership organization which includes industry-related user groups. In addition, he felt that, in order to distinguish between advocacy and involvement, the organization should not promote a specific position.

Giordano discussed the recommendation for educating public officials. This recommendation suggests quarterly meetings with public officials which focus on environmental issues. The plan also suggests that, in an effort to promote communication, DEHNR's office of Environmental Education, in cooperation with other organizations such as the U. S. Fish and Wildlife Service, the Water Resources Commission, and the Dept. of Water Resources, publish a bi-monthly report in the APES newsletter for widespread distribution to public officials. She stated that APES should provide sufficient staff support to answer questions and to direct specific questions to appropriate agencies.

Giordano called attention to Recommendation 4 under educating the general public: support the development of education facilities within the APES region. She noted that all Technical Committee members had been sent a letter from Orbach relative to a Citizens Involvement Subcommittee, and she asked Orbach to discuss the recommendation. He noted that APES had funded a project through the Pamlico-Tar River Foundation that conducted a feasibility analysis of the establishment of a resources and education center in the A/P region. He stated that the report had been completed and was available. He also noted that the report, which evaluates a number of locations in eastern North Carolina where such a facility could be housed, did not recommend a specific location.

Next, Giordano discussed public involvement in environmental policy. The draft CCMP recommends that state and local programs be coordinated and expanded through centralized entities, such as the DEHNR Office of Environmental Education. The next recommendation calls for encouraging cooperation and communication between environmental advocacy groups and private industry in public involvement areas. The third recommendation calls for creating a non-profit A/P foundation to provide mechanisms to attract funding from the private sector. Orbach noted that APES was currently discussing with other environmental organizations the possibility of setting up a freestanding foundation which would continue after the completion of the APES project; the goal of such a foundation would be to funnel non-public sector financial involvement into all of the study's activities.

Giordano discussed the plan's recommendation for the Citizens' Water Quality Monitoring program. She recommended that the program be expanded to encompass more environmental monitoring. Waite mentioned that he had discussed with the Monitoring Subcommittee how citizens' monitoring could be blended more closely with the Division of Environmental Management and U. S. Geological Survey's monitoring function, such that citizens feel they are actually collecting some parameters which the state

would use directly. He noted that a similar approach could be taken in areas beyond water quality, such as in fisheries surveys, where APES could utilize citizens with minimal training to aid in fisheries survey efforts. In response, Brooks cautioned the committee to consider prioritizing these measures and to take into account what measures are likely to succeed and which are not.

Recommendation and Vote on the Draft CCMP

Carl congratulated Waite and his staff on putting together the draft CCMP, and he noted that obviously much work had been put into the document, which he felt was well written and very comprehensive. Waite noted that, though he recognized that the staff had put a lot of work into writing the document, he felt that the document was not ready for release to the public at that point. In addition, Steel noted that, on a basic level, the CCMP was missing an introduction, implementation strategies, some program reviews, and several other supporting sections that were necessary to provide background information for the document. A motion was made to recommend to the Policy Committee that the CCMP not be released to the public until investigations could be continued, additional materials could be collected, and the Technical Committee could meet again in a few months to discuss and approve the changes; thus, the public would receive a more refined draft with all its components, including an implementation plan and financial plan. The motion was seconded and approved unanimously.

Budget Report

Randall Waite discussed the budget for the following year. He noted that \$200,000 had been included in the budget for CCMP development; these funds would be used for filling in technical holes and for conducting different types of workshops for consensus building on the CCMP. He also noted that the study was funding a buffer strip literature review and would like to have additional library research conducted on groundwater quality effects.

Task Forces

Waite announced that he was convening specific work groups to discuss particular areas for which APES lacked detailed information. He suggested that the committees include:

- Agricultural controls: John Stallings, Tom Ellis, David Sides, Cecil Settle, George Everett
- Forestry practices: Fred White, Stan Adams, Joe Stutts, Roger Lyons
- Land/water use: Roger Schechter, Sybil Basnight, Michael Orbach, Robert Holman, Walter Clark, Ann Brooks, Tom Ellis
- Water quality standards: George Everett and staff, Lawrence Saunders, Don Hoss
- Buffer strips: Cecil Settle, Jim Everett, Roger Schechter, David Sides
- Water quality problems: Ernie Larkin, George Everett, Jimmie Overton, Pat Cunningham, Michael Orbach, Robbie Blinkoff, Jared Bales, Don Stanley, Don Hoss, Bill Cole
- Runoff modeling: Robert Holman, Michael Orbach, Randall Dodd, Zsolt Nagy
- Economics: Michael Orbach, Tom Ellis, Don Hoss, Bill Hogarth
- Wetlands: George Everett, Fred White, Roger Schechter, David Sides, Patty Valentine,
- Septic tanks: George Everett (septic tanks experts from a state agency and a soil expert would be added later)

Public Comments

Carl noted that the Policy Committee would meet during the following week and vote on these recommendations. Next he welcomed public comments; as there were no comments, he adjourned the meeting.

ALBEMARLE-PAMLICO ESTUARINE STUDY PUBLICATIONS LIST
November 1992

I	Information Acquisitions Documents Executive Summaries are available for all Informations Documents
P	Public Participation/Program Documents
*	Not an A/P Study document, but material is related to the Study

<u>No.</u>	<u>Abbreviated Title</u>	<u>Author/Editor</u>	<u>Status</u>
86-01(I)	Existing Management Programs	Brower (UNC)	Available
87-01(P)	Source Document	Rader et al. (A/P Study)	Available
87-02(P)	Five Year Workplan	Rader et al. (A/P Study)	Available
87-03(I)	Proceedings: Modeling Workshop	Stewart/Duffy (WRR/SCI)	Available
87-04(I)	Proceedings: Remote Sensing Workshop	Stewart (WRR)	Available
87-05(I)	Proceedings: Fish Disease Workshop	Stewart (WRR)	Available
87-06(P)	Citizens' Monitoring Pilot	Lekson (PTRF)	Available
88-01/02(P)	Baseline Monitoring Network	Rader/Holman et al. (A/P Study)	Available
88-03 (P)	A Citizen's Guide to Coastal Water Resource Management	Kennedy (NCCF)	File Copy Only
88-04(P)	Status Report: March 1988	Rader (A/P Study)	Available
88-05(P)*	Beaufort County Magazine	Rader (A/P Study)	File Copy Only
88-06(I)	Water Quality/Hydrology Bibliography	Bales (USGS)	Available

<u>No.</u>	<u>Abbreviated Title</u>	<u>Author/Editor</u>	<u>Status</u>
88-07(I)	Trawl Excluder Device	Pearce/Street (Mariners' Marine/DMF)	Available
88-08(P)	Project Abstracts for the Period 1987-89	Holman, et al. (A/P Study)	Available
88-09(I)	Red Tide Persistence	Tyler (Versar)	Available
88-10(I)	Submerged Aquatic Vegetation (Eastern)	Ferguson (NOAA)	Available
88-11(P)*	Can Albemarle and Pamlico Be Saved?	Taylor (Wildlife of NC)	Available
88-12(I)	Obstructions to Anadromous Fish Migration	Collier/Odom (USF&WS)	Available
88-13(I)	Value of Recreational Fishing A/P Estuaries	K. Smith (NCSU)	Available
88-14(I)	Analysis of Fringe Wetlands in A/P Sounds	Brinson (ECU)	Available
89-01(P)	Progress Report for 1989	Holman (A/P Study)	Available
89-02(I)	Fish Stock Assessment	Phalen (DMF)	Available
89-03(I)	Baseline Demographic Trends	Tschetter (ECU)	Available
89-04(P)	Public Involvement Plan 1989	Giordano (A/P Study)	Available
89-05(I)	Scoping of Water-Column and Bottom Sediments	Wells (UNC)	Available
89-06(I)	Heavy Metal/Mud Pollutants in Pamlico River Estuary	Riggs (ECU)	Available
89-07(P)	State & Federal Interrelated Programs To The A/P Study	Holman, et al. (A/P Study)	Available
89-08(P)	Project Abstracts For The Period 1989-1990	Holman, et al. (A/P Study)	Available

<u>No.</u>	<u>Abbreviated Title</u>	<u>Author/Editor</u>	<u>Status</u>
89-09(I)	Evaluation of Nursery Area Data	Noble (DMF)	Available
89-10(I)	Submersed Aquatic Vegetation	Davis (ECU)	Available
89-11(I)	Water Quality Trends	Harned (USGS)	***
89-12(P)	Where the River Meets the Sea	Okun (UNC)	Available (\$3/copy)
89-13B(I)	Albemarle-Pamlico Estuarine System: <u>Preliminary</u> Technical Analysis of the Status and Trends (Public Document)	Copeland, et al. (Sea Grant)	Available OUT OF PRINT
00-00(P)	A Guide to Estuaries	Gale (PTRF)	Available (\$1/copy)
90-01(I)	Inventory of Natural Areas	Roe (Natural Herit.)	Available
90-02(I)	Evaluation of Environmental Management and Resource Protection Programs in the A/P Region	Nichols (RTI)	Available
90-03(I)	Abundance and Viability of Striped Bass Eggs Spawned in the Roanoke River, N.C. in 1988	Rulifson (ECU)	Available
90-03 (DEM)	Synoptic Survey (WQ)	NC Div. Env. Management	Available
90-04(P)	Coastal Satellite Scene	National Geographic KRS	Available (\$10/copy)
90-05(P)	Progress Report for 1990	Holman (A/P Study)	Available
90-06(I)	Data Management and Analysis System	Siderelis (CGIA)	Available
90-07(I)	Heavy Metals-Neuse River	Riggs (ECU)	Available

*** To obtain report 89-11, contact: US Geological Survey, Books and Open-File Reports, Federal Center, Building 810, Box 25425, Denver, CO 80225.

<u>No.</u>	<u>Abbreviated Title</u>	<u>Author/Editor</u>	<u>Status</u>
90-08(I)	Oyster Recruitment & Growth in Pamlico	Ortega (DUMI)	Available
90-09(I)	Effects of Water Mgmt. and Land Use Practices on Hydrology and W.Q. in the A/P Region	Chescheir (NCSU)	Available
90-10(I)	A Pilot Study for Managing Multiple Use in the State's Public Trust Waters	Clark (UNC Sea Grant)	OUT OF PRINT
90-11(I)	Abundance and Viability of Striped Bass Eggs Spawmed in the Roanoke River, N.C. in 1989	Rulifson (ECU)	Available
90-12(I)	WQ as a Function of Discharge From The Roanoke River Reservoir During Hydropower Generation	Rulifson (ECU)	Available
90-13(I)	A-P Coupling Study	Pietrafesa (NCSU)	Available
90-14(I)	Reduction of Nutrient Loading	Kuenzler (UNC)	Available
90-15(I)	Eutrophication and Nutrients Algal Blooms	Paerl (UNC)	Available
90-16(I)	Food/Feeding Larval Fishes	Rulifson (ECU)	Unavailable
90-17(I)	Heavy Metals...Albemarle	Riggs (ECU)	Draft Due
90-18(P)	Project Abstracts FY 89 & 90	Holman (A/P Study)	Available
90-19(I)	A Comprehensive Env. Mgmt. Plan...Currituck Sound Drainage Basin	Rideout (NCSU)	Available
90-20(I)	Federal Consistency Review for the A/P Study Area	Duffin (RTI)	Available
90-21(I)	Functional Description Document	Siderelis (CGIA)	Available

<u>No.</u>	<u>Abbreviated Title</u>	<u>Author/Editor</u>	<u>Status</u>
90-22(I)	Shell Disease in Blue Crab (NCSU)	Noga	Available
90-23(I)	Animal Waste Management	Lewis (VASWCS)	Available
90-24(P)	Educational Handbook For Nonpoint-Source Pollution	Hoban (NCSU)	Available
90-25(P)	Teacher Training in WQ Issues	Okun (UNC)	Available
90-26(P)	Blueprint for Action A/P Citizens Advisory Committees	Albemarle/ Pamlico CACs/ Armingeon(NCCF)	Available
90-27(I)	Public Attitudes Regarding WQ Phase I	Hoban (NCSU)	Available
90-28	Data Inventory	Siderellis (CGIA)	Available
90-29	Anemic Blue Crabs (Interim Report)	Brouwer (UNC)	Available
91-00	APES Projects Funded	Steel (APES)	Available
91-01(I)	Albemarle-Pamlico Estuarine System: Technical Analysis of the Status and Trends (Technical Document)	Steel (APES)	Available
91-02(I)	Albemarle-Pamlico Estuarine System: Technical Analysis of the Status and Trends (Executive Summary)	Steel (APES)	Available
91-03(I)	Abundance and Viability of Striped Bass Eggs Spawned in the Roanoke River, NC 1990	Rulifson (ECU)	Draft Due
91-05	APES Fish Tissue Baseline Study 1989	Tedder (DEM)	Available

<u>No.</u>	<u>Abbreviated Title</u>	<u>Author/Editor</u>	<u>Status</u>
91-06	W.Q. Data/Pamlico Neuse 89-90	Garrett/ Bales (USGS)	Available
91-07	Estuarine Resource Center	McNaught (PTRF)	Available
91-08	GIS Development Land Use and Land Cover Categories	Siderellis/ Khorrn (CGIA/NCSU)	Available
91-09	1991 Annual Report	Steel	Available
91-10	Water Quality Data Report	Garrett	Available
92-01	Environmental Management Strategies	(UGS) Bartholomew/ Ridgeway	Available
92-01 (DEM)	Albemarle-Pamlico Baseline Water Quality Monitoring Data Quality Section Summary: 1988-1991	NC DEM - Water	Available
92-02	Citizens W.Q. Monitoring Program	Blinkoff	Printing
92-03	URBAN BMPs: A Stormwater Demonstration Project	Belk/City of Greenville	Available
92-04	Toxicants Survey	Cunningham	OUT FOR REVIEW
92-05	Fishing Practices	Cunningham	OUT FOR REVIEW
92-06	Sed. Tox. Report		OUT FOR REVIEW
92-07	Regional Inventory for Critical Natural Areas, Wetland Ecosystems, and Endangered Species Habitats of the Albemarle-Pamlico Estuarine Study Region: Phase 2	Legrand, et al.	OUT FOR REVIEW
92-08		McKenna	OUT FOR REVIEW
92-09		Engel	OUT FOR REVIEW
92-10	Watershed Planning in the A/P System: Annual Average Nutrient Budgets	Dodd, et al. (RTI)	AVAILABLE
92-11		Meiggs	OUT FOR REVIEW

92-12	Interim Report on Flows in the Lower Roanoke River, and Water Quality Hydrodynamics of Albemarle-Pamlico	Bales, Strickland, Garrett (GIS)	OUT FOR REVIEW
92-13	Public Attitudes Toward Water Quality and Management Alternatives in the A/P Estuarine System (Phase II Report)	Hoban, Clifford (NCSU)	AVAILABLE
92-14	Hydrologic and Water Quality Data from Three Agricultural Basins in Hyde County, Three Agricultural Basins in Beaufort County and Campbell Creek, NC	USGS	UNAVAILABLE
92-15		Noga	
92-16		Cunningham	
92-17		Holman	

Additional Publications

*	<i>Fact Sheets (Albemarle Region)</i>	<i>AEA</i>
*	<i>Fact Sheets (Pamlico Region)</i>	<i>PTRF</i>
*	<i>Educational Poster (Human Impact) on A/P Estuary</i>	<i>PTRF</i>

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