Albemarle Pamlico Estuarine Study Policy Committee Meeting March 15, 1989 Raleigh, NC

The meeting began at 10:15 a.m. chaired by Mr. Bill Cobey, N.C. DNRCD.

Corrections were made to the minutes, inserting a statement that "the Policy Committee and members of the audience raised questions on LRIS present and proposed work in conjunction with APES objectives. Explanations were requested on what their funding would include." Correction was made on the spelling of Dr. Chesson. Derb Carter moved to approve the minutes. Budd Cross seconded. Ayes carried the motion.

I. <u>Early Implementation</u>

Jim Turner gave a presentation on early implementation projects (Attachment A). This included five new proposals and two continuations. The attachment shows the ranking by committees of all proposals. The Greenville BMP project was the highest ranked proposal. Funding amounts by EPA are not yet It is understood that there is \$1.8 million for 12 estuaries, with probably \$300,000 available for A/P. Derb Carter said that the Pamlico CAC had ranked the bay scallop project number one in terms of fisheries and resources. Carter noted that remarks in Attachment A should show this project as covering a broader study area that shown to include the Core as well as Bogue Sound. All proposal applications are prepared to match OMEP will review all implementation projects. with 25% funding. Bob Holman suggested sending OMEP the projects with APES final ranking and an explanation of why selected.

Tom Ellis said that the animal waste project went through CAC and Technical Monitoring Subcommittee with good reviews. After a brief discussion with the Technical Committee it also received good marks. Tom Ellis urged the PC to give the animal waste project a higher priority than noted. Dan Ashe agreed that the project incorporates the political objective of the program and warrants a higher priority. Bruce Barrett said the project is important, but that the fisheries and other interest groups are key to the project as well. Mike Gantt noted that the animal waste issue is receiving high visibility in trade journals, that it is highly implementable and that it should probably receive a higher priority. Bill Cobey asked if the project must include every county noted in the proposal or if funding could be reduced

by eliminating the number of counties. Bill Hogarth said there are a number of parameters to consider and that it would be looked at for any cost reduction.

Bill Hogarth noted that the marsh grass project is good but it will be difficult to implement due to obtaining permits. For this reason he suggested changing the ranking of the marsh grass project.

Budd Cross noted that while scallops are important to the Sound, that oysters are more economically important. In addition the red-tide has had a great effect on oysters and it should therefore receive a higher priority than the scallop project.

Dr. Bill Queen arrived at the meeting and was introduced as a new member of the PC.

Motion: Parker Chesson motioned that the PC recommend to EPA to accept the APES priority order of implementation projects as: 1. Greenville; 2. Animal Waste; 3. Oyster Success; 4. Bay Scallops; 5. Marsh Grass. Bob Holman should be allowed to negotiate the funding for the purpose of allowing the funding of as many of the projects as possible. Budd Cross seconded. Discussion followed. Derb Carter asked to add a qualifier to the motion, that is, that the marsh grass project should first be considered, reviewed, and qualified in terms of permit acquisition. If the permitting can be worked out, then the project can be submitted for funding in the order stated above. The projects should be submitted to EPA for funding all three top priority projects with the anticipation of negotiating down. Ayes carried the motion.

Motion: Mike Gantt motioned for approval of the resolution at Attachment B. Derb Carter seconded the motion. The ayes carried.

II. <u>LRIS</u>

Karen Siderelis gave an overview of LRIS in terms of APES. This included background on early TC/PC decisions for APES to develop a GIS. She distributed a budget history and projection (Attachment C). APES had originally intended for earlier hiring of the data management coordinator and as a first task to conduct a users needs survey. In the interim, LRIS, in addition to entering GIS data and providing user interface, has spent 1000 hours conducting the survey at the request of Bob Holman, who currently instructs LRIS on priority projects. Karen explained that LRIS is providing a dial-in access for users and they can use it at no charge. APES will be charged if LRIS is asked to analyze the data. The communication network will allow users to access APES data after the Study is completed. Karen noted that



LRIS currently has \$50,000 earmarked from APES for system hardware which could be redirected and possibly used for other things. Bill Cobey complimented Karen for an excellent presentation and asked if she could be available for possible additional questioning.

III. Public Involvement Plan

Joan Giordano summarized the daft included as Attachment D outlining the public involvement plan. Lee DeHihns said the section on local participation/liaison needs expansion. Joan also reviewed the time-line for the plan included in the attachment.

IV. BUDGET

Bob Holman presented the proposed APES budget for consideration (Attachment E). In keeping to realistic funding of categories, he suggested moving items in the Administration Budget (items 6 d & e regarding status and trends report) to the technical information acquisition budget. This will more accurately reflect its proper funding category.

Dan Ashe asked for an executive session of the PC to discuss personnel aspects of the administrative budget.

Motion: Lee DeHihns motioned to move into executive session. Parker Chesson seconded. Ayes carried.

After the executive session, discussion continued on other aspects of the budget. Bill Queen asked what alternatives are being considered for doing area surveys. Bob Holman noted that the program is presently converting data going back to 1970 including not only a wide area in NC but also including Virginia. Bob said he will talk to researchers to determine where costs can be cut, however he does not anticipate much of a reduction in land-use money. He noted that the TC has determined this to be valuable in preparation of the Status and Trends Report.

Supplemental money for monitoring is not anticipated from EPA this year. The TC believes monitoring is critical to the program but is opposed to funding money out of the base budget. Because EPA made supplemental money available to APES in the past, decisions were made for funding projects and for rearranging programs within the NC-DNRCD. Since the NC Legislature was requested to provide \$300,000 in expansion money to APES, the TC is recommending that the PC request this money for monitoring. Many of the APES technical projects are currently tied into the monitoring program and without a long range commitment (usually a minimum of 3 years monitoring) the already funded projects may lose significance.

Mike Gantt noted that Larry Minnock, Virginia TC representative, had offered to host meetings on lessons learned from the Chesapeake Bay. Perhaps a monitoring session should be requested to ensure APES is on the proper track.

Dan Ashe noted that last year he did not vote for the monitoring project because he saw no long-term commitment in terms of funding. However, since it was done, he has talked to other programs and is suggesting adopting his resolution regarding a comprehensive monitoring program (Attachment F).

Motion: Dan Ashe motioned to adopt the resolution (Attachment F). Gantt seconded. The ayes carried.

<u>Motion</u>: Lee DeHihns motioned to adopt a resolution regarding obligating monitoring money (Attachment G). Derb Carter seconded. The ayes carried.

Bob Holman presented a resolution regarding the administration of the expansion budget of \$300,000. The language was reworked as presented in Attachment H.

<u>Motion</u>: Budd Cross motioned to approve the resolution as reworked (shown in Attachment H). Dan Ashe seconded. The ayes carried.

Budd Cross stated that if money should become available by EPA for monitoring, then the TC should be able to decide where the expansion budget should be spent.

Motion: Dan Ashe motioned to adopt the APES budget as presented by Bob Holman. Bill Queen seconded. Before voting Secretary Cobey said the presented budget includes moving section 6 d & e of the Administrative Budget to the Technical Acquisition category. He also asked Dan to read the amendment to the main budget and decided in the executive session (included as Attachment I). Ayes carried the motion.

The money removed from the administrative budget (attachment I) of \$26,514 should be applied to the baseline monitoring projects. The mechanism for doing this will be through LRIS, who will in turn give to the TC for baseline monitoring.

Motion: Dan Ashe motioned to transfer the \$26, 407 into project #343 with the understanding that the LRIS project be modified to include technical information. The \$48,000 LRIS carry over money will go back to the TC for their consideration. Mike Gantt seconded the motion. The Ayes carried.

Dan Ashe asked what the Federal consistency review is and why such a project is being funded if other Federal programs do this as a matter of routine.

Motion: Dan Ashe motioned to amend the motion which approved the APES budget with the correction that item 4, 1 under Technical Information be reconsidered. In particular, the Division of Coastal Management should be consulted if they can work at a reduced cost. Mike Gantt seconded the motion. The Ayes carried.

Motion: Lee DeHihns motioned to adopt the 1989 Workplan as presented by Bob Holman subject to minor editing. Budd Cross seconded. Ayes carried.

The next meeting is scheduled for August 31, 1989. It was determined that a meeting is needed before then-possibly June.

Bill Queen motioned to adjourn the meeting. Budd Cross seconded. Ayes carried. Meeting adjourned at 3:40 p.m.



Policy Connittee Morel 15, 1989

Organization. Thone Done (404)347-4727 U.S. EPA Lee Deflihus (919) 733-498 N.C. Det ONRCD Bill Cobe 856-4520 FWS Mike Guth Cong. Walter Jones (202) 226-246C Dan Ashe (919)728-8724 FORD CROSS NOAA Kaven Siderelis 919 - 733-201 LRIS (NRCD Alex Chester NOAA StevenVell NRED/DEM 919 - 733-5083 0545 JERAD BALES JIM TURNER NC Dept of Agriculture Tom Ellis DIP Study Karty Terri USGS Jon Gelmer Marcia Stutte Oyuan Missidano A) P Study PCAC Jam Lucy Randy Wate KPA EPD III Biel Hospich DMF Bûl Dueen FCW. Concultant Darquerte Beeffey 301-849-5815

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EARLY IMPLEMENTATION PROPOSALS 1989-90

\$165,000 - Urban Best Management Practices - Greenville

- Urban Best Management Practices - Manteo

140,000 - Animal Waste Management - Hyde, Tyrell, Beaufort, Washington, Currituck, Pasquotank, Chowan, Perquimans - N.C. Association of Soil & Water Conservation

54,000 - Marsh Grass Protection - Rogers, NCSU, Sea Grant

58,000 - Mitigation of Bay Scallops - Peterson, UNC

145,000 - Animal Waste Management Proposal - Chowan - Va. Water Control Board

RANKING OF EARLY IMPLEMENTATION PROPOSALS

| | | Monitoring and Technical Review <u>Subcommittees</u> | Pamlico CAC | Albemarle CAC |
|-----|------------------------------|--|-------------|---------------|
| 0 | Greenville | 1 | 2 × % | 1 |
| (5) | Marsh Grass | 2 | | |
| 9 | Bay Scallops | 3 | | *3 |
| (3) | Oyster Success | 4 | | |
| 9 | Animal Waste | · | 1 | 2 |
| | Manteo | | | |
| | | | | |
| | Acquisition of Critical Area | | 3 | |

Both CAC's recommended substituting "Primary Nursery Areas" with "Agricultural ... BMP's in Va./N.C."

Early Implementation Proposals - 1989-90 (Summary of Evaluation by Technical Review and Monitoring Subcommittees)

| Project | Cost | Objective | <u>Remarks</u> |
|---|--------------------------|---|--|
| City of Greenville Urban BMP | \$165,000 | To rectify existing stormwater problem by implementing water quality sensitive stormwater technology (retrofit an existing detention pond); to monitor effectiveness; to provide passive recreation area. | Design problems; need to monitor SOC's and flows; final document should be design manual and systematic approach to implementation city wide. |
| Marsh Grass Protection Breakwater | \$ 54,158 | To increase marsh area in estuary; to decrease sediment loading to estuaries; to lower cost erosion control for property owners; to create a design guide for landowners and marine contractors. | Application for Currituck Sound; problem with possible permitting (underwater structuressafety); How to evaluate? |
| Mitigation of Losses of Bay Scallops | \$ 25,000 (\$ 58,406) | To test and implement methods to mitigate (in kind) for the losses (biological and economic) of bay scallops; to complete mapping of the bay scallop resource in N.C. | Bay scallops only found in Carl and Bogue Sound (limited in study area) but important resource. Hogarth will work with researcher on proposal. |
| Oyster Success | \$ 65,010 | Researcher to work with Division of Marine Fisheries to maximize the oyster yields from their replanting program. | Needs to be written as implementation proposal. Hogarth to work with researcher on proposal. |

| Project | | | | | |
|---------|-------|------------|--|--|--|
| Animal | Waste | Management | | | |
| | | | | | |
| | | | | | |
| 8. | | | | | |
| | | | | | |
| 75 | | | | | |

Cost

\$140,000

Objective

To test and implement innovative approaches to improve water quality through implementation of "solid-set waste management systems" (SSWMS) on 8 additional

sites (Hyde, Tyrrell, Beaufort, Washington, Currituck, Pasquotank. Chowan, and Perquimans Counties) to test effectiveness under a variety of soil types and vegetative conditions; to provide tech-

nical assistance to landowners in planning, installation and management of the systems (landowners to

provide 25% of cost).

Remarks

Do not fund; same as demonstrations projects funded in Chowan Basin last year. Nothing new.

Not enough information to rank.

Town of Manteo

RESOLUTION: Be it resolved by the Policy Committee that the Technical Committee should: (1) develop Priority Action Plans to guide early implementation projects and that those Plans should provide the direction for the development of proposed implementation projects; (2) provide notification that project proposals are being accepted by the Technical Committee for review; and (3) develop criteria by which proposed implementation projects will be evaluated and ranked.

Me. Foring Committee

Albemarle Pamlico Estuarine Study Data Management Budget Summary

| ITEM | PLANNING | FY-87/88 | FY-88/89 | FY-89/90 | FY-90/91 |
|--|---|---|---|--|--|
| Hardware/Software Maintenance Communications Design/Programming Data Entry/Analysis Supplies | 14,800 1,500 2,200 60,000 50,000 2,500 | 60,000 21,000 35,000 50,000 0 22,000 | 40,000 22,000 40,000 10,000 50,000 2,000 | 40,000 23,000 45,000 5,000 50,000 2,000 | 40,000 24,000 45,000 5,000 50,000 2,000 |
| TOTAL | 131,000 | 188,000 | 164,000 | 165,000 | 166,000 |

May, 1987

Albemarle Pamlico Estuarine Study Planning Year and FY-87/88 Budget Status

| ITEM | Budgeted | Spent | Carried Fwd |
|--|---|--|--|
| Hardware/Software Maintenance Communications Design/Programming Data Entry/Analysis Supplies | 74,800 22,500 37,200 110,000 50,000 24,500 | 74,758 17,904 0 0 29,348 10,500 | 42 4,596 37,200 110,000 20,652 14,000 |
| TOTAL | 319,000 | 132,510 | 186,490 |

March, 1989

Albemarle Pamlico Estuarine Study FY-88/89 Budget Status

| ITEM | Brought Forward | Budgeted | Total Avail. | Spent of Mar '89 | Project. To Spend | Carry Forward |
|---|--|----------|-----------------------------|----------------------------|----------------------|--|
| | | | | | | |
| Hardware/Software Maintenance Communications Design/Programming Data Entry/Analysis Supplies | 42 4,596 37,200 110,000 20,652 14,000 | 50,000 | 77,200 120,000 70,652 | 0 0 45,000 65,328 | | 526 8,692 47,200 15,000 (22,676) |
| TOTAL | 186,490 | 164,000 | 350,490 | 110,328 | 191,420 | 48,742 |

March, 1989

Draft II
January 3, 1989

PUBLIC INVOLVEMENT PLAN

I. INTRODUCTION

Background and Purposes

The Albemarle-Pamlico is one of the most imposing estuarine systems in the U.S. Physically dominating the North Carolina coast, it includes 2900 sq. miles of protected inshore waters and extensive areas of boarding habitats such as beaches, marshes and swamp forests.

Human use in the area, which stems from a growth rate of 18,360 inhabitants per year since 1970, has greatly increased. Increases in the number of wastewater treatment plants and industrial dischargers are a direct consequence of that growth. Harvested agricultural land which increased in the 1970s by about 50%, has decreased about 10% since 1980 to about 2.3 million acres. Total forest area is being reduced by about 20,000 acres annually. Landings of major finfish and blue crabs, which reached historical peaks in the early 1980s, have been declining ever since and the steady decline of anadromous fish harvests since the 1970s is apparent.

The relationship between changing human use patterns and productivity of the Albemarle-Pamlico region are not fully understood, but there is growing concern that the natural integrity and productivity of estuaries are affected by the activities of man. Therefore, the purpose of the Albemarle-Pamlico Estuarine Study (A/P Study), is to enable resource managers to better preserve the natural productivity of the estuarine area by expanding relevant knowledge about the impact of human uses upon its physical, biological and social systems.

Organizational Structure

The A/P Study, a five-year effort, began in the summer of 1986 under the National Estuary Program. It is funded by Section 320 of the Clean Water Bill and administered through the U. S. Environmental Protection Agency and the State of North Carolina. The program is administered by four committees, the Policy, Technical and two Citizens' Advisory Committees that have been appointed to encourage widespread public input into the planning process and to promote the public awareness of important environmental issues.

Importance/Role of Public Participation

Public participation is essential to the development and implementation of the Comprehensive Conservation Management Plan (CCMP) which is the ultimate program document scheduled to be produced in 1992.

The CCMP will be the result of a collaborative problem-solving process in which key members of the public will participate. 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.

II. GOALS AND OBJECTIVES OF THE PUBLIC PARTICIPATION PROGRAM

Goal

The goal of public participation is to establish the public consensus that will ensure long-term support and implementation of the CCMP. Consensus signifies substantive agreement among four component groups: elected officials, environmental managers, scientists and the public. Those 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.

Objectives

The broad goal of public participation suggests several specific objectives. They are:

- 1) to provide adequate, timely information about the Sounds, the problems and opportunities North Carolina faces in managing them, and progress being made in the Albemarle-Pamlico Estuarine Study;
- 2) to expand educational programs to inform the public, especially the adult population, about the values of the Albemarle-Pamlico system and the importance of good management;
- opportunity to participate in the policy-making process related to the Sounds, especially in the development of the CCMP; and
- 4) to initiate a process for involving local elected officials in the A/P Study program.

The tasks briefly described in Section IV are designed to help the A/P Study meet these objectives. This plan will e reviewed annually by the Citizens' Advisory Committees and the staff of the program to evaluate its implementation. Modifications will be based on that annual review.

III. STAFFING AND PROGRAM PROCEDURES

One full-time staff person, Joan Giordano, is assigned to manage the public participation activities. Her office is located in Washington, North Carolina. Part-time secretarial support is planned to be added in 1989. A large volume of the work of the A/P Study has been, and will continue to be, accomplished through cooperative agreements with a variety of qualified universities, private citizens' organizations and other entities outside of EPA and state agencies. Annually the program prepares and issues a "Call for Proposals" to solicit the work which the committees feel is necessary to fulfill the objectives of the A/P Study.

The "Call for Proposals" includes the area of public involvement. In 1989, the A/P Study is looking for public participation proposals that fall into one or more of the following categories:

- o the development of increased interaction between A/P Study activities and local governments in the A/P Study area
- o public meetings, the principal objectives of which would be:
 - to generate discussion in a wide range of locations convenient to the public in the 'A/P Study area; and
 - b) to obtain input from the public in the earliest stages of development of the Status and Trends and Comprehensive Conservation Management Plan documents
- o a series of regularly scheduled radio programs of at least one-half hour in length in a "talk show" format, aired on a radio station or stations with a broad listening audience in the A/P Study area
- o the increased involvement of the public in the development of future scenarios for, and evaluation of, the costs and benefits in various management options in the A/P Study area.

One of the challenges of this public involvement plan is to develop a coherent process for integrating the work accomplished by the contractors with that to be done by the public participation coordinator and Citizens' Advisory Committees. In the following section we note how that will occur. Because the Policy Committee recently voted an increase in the proportion of program funds that can potentially be dedicated to public participation projects, the challenge of managing an integrating these activities will likely become even greater than it was before. The plan recognizes the constraints of very limited staff and therefore attempts to prioritize tasks according to their importance to the overall program.

IV. TASKS

This section of the plan lists the tasks to be accomplished and defines the three broad categories (Education and Information, Public Participation and Local Government Liaison) into which they fall.

A. Education and Information - includes activities designed to increase general public awareness of the values of the Sounds and the consequences of human activities in the watershed and to provide specific information on programs, projects and decisions related to the Sounds.

1. Printed Materials

- Newsletter -- The newsletter is the primary program tool for providing information about the progress of the A/P Study. The newsletter is produced by the public participation coordinator on a quarterly basis. Present circulation is 10,000 and will likely increase over the next three years. The newsletter provides information about the program, summaries of projects, synopses of the views of the CACs, notices of upcoming meetings and contributed articles by individuals involved in the A/P Study. Cost per copy is approximately 12.5 cents each on a 10,000 copy basis.
- b) Brochure -- A glossy, full color bi-fold brochure is in the final stages of planning by staff. Text has been written and edited and photographs are being collected. It will be an invaluable tool for educating the general public, as it answers questions about what the A/P Study is; what an estuary is; what

problems exist in the estuary; why another study is being undertaken; and what the public can do to help. The brochure will be widely distributed through the North Carolina Aquariums, libraries, coastal welcome centers and Chambers of Commerce throughout the study area. Cost will depend on printing, but will probably be in the range of 32-35 cents each for 25,000 copies.

Fact Sheet -- One fact sheet has been prepared for general distribution and was used at the annual meeting in October. It briefly describes the A/P Study, history, structure, goals, miscellaneous facts pertaining to the A/P Study area and includes a map highlighting the study region. Ten thousand copies were prepared for approximately 2.5 cents each.

Other fact sheets should be produced. A format resembling that used by the Alliance for the Chesapeake Bay is a good example and could possibly be accomplished under cooperative agreement locally. This one-page (both sides) glossy production is done in two colors and highlights particular rivers in the area. Examples are on file in the Public Participation Office in Washington.

- d) Press Releases -- These are done on an "as need" basis when newsworthy information is generated by the program. They are a function of the staff. A media listing of 17 newspapers ensures adequate, balanced distribution throughout the A/P Study area. The issuance of press releases will accelerate now that the first technical projects are coming to fruition. Cost includes staff time and postage.
- e) State of the Estuary Booklet -- This is a first-year endeavor to be accomplished under cooperative agreement with Melva Okun, UNC-CH and Frank Tursi, Winston-Salem Journal. The text has been written and edited. It is presently being reviewed by the Publications Review Subcommittee of the Technical Committee. The body of the booklet will contain approximately 8,000 words with five side-bars totaling about 2,760 words. Also included is a 1,660 word glossary of terms.

The initial printing of this booklet will be 500 copies. More are anticipated. Distribution of the booklet will be to secondary schools, municipal governments and libraries. The cost of the project, including the writing, is \$9,732.

- f) Guide to Streamwalking: An Estuarine Companion -- This is a second-year funded project through cooperative agreement with the Pamlico-Tar River Foundation (PTRF). This publication is a revision of Streamwatch's, "A Guide to Streamwalking", which makes the booklet relevant for use in estuarine areas. Ιt will create an effective avenue fro dissemination of information about estuarine system and the work of the A/P Study. The cost of the project is \$17,140 and includes provision for the publication of 500 copies. Distribution of the booklet will be the responsibility of the A/P Study.
- g) Educational Calendar: Year 1990 -- This is a second-year funded project through cooperative agreement with the Pamlico-Tar River Foundation (PTRF) and Paul Nurnberg, photographer. The spiral bound calendar, which will convey clear information about estuaries, the ecology and the A/P Study, will be 12" x 12" in size, with 13 appropriate full color photographs of the area. It will be designed for the year 1990 and 5,000 copies will be distributed by July 1989. The cost of the project is \$14,550.
- h) Merchandising Effort -- The development of our logo enables us to consider a whole range of merchandise for the A/P Study. Tee-shirts, buttons, bumper stickers, etc. can be produced to keep the study in the forefront of public consciousness. This project can be a joint staff and CAC effort. The cost would depend on the types of products developed. Proceeds from sales could be funneled back to the program through the formation of a foundation or other receiving entity.

2. Non-print Media

- Film, Videos and Slides -- A video production of 30 minutes duration and a dual dissolve slide show of 30 minutes duration are being accomplished under cooperative agreement with Gary Smith, East Carolina University. products will be used for presentation to citizens' organizations, civic clubs, schools, etc. for the purpose of educating those audiences to existing problems in estuaries and to the A/P Study and its work. The cost of the project, which is slated for completion in March, 1989, is \$11,500. Distribution of the products will be the responsibility of the public participation coordinator and the Citizens' Advisory Committee members.
- (d CAC Slide Show -- A 30 minute presentation with approximately 70 slides which graphically defines problems existing in the A/P Study area and the measures necessary for correcting them. The show includes a script which ensures consistency of presentation, but which also can be tailored to particular audiences. The writing and production of the show was the responsibility of selected members of the Albemarle-CAC Public Awareness subcommittee with assistance by staff. The slide show is being used at civic clubs, schools and by Drs. Carson and Powers (Elizabeth City State University) in helping with their Teacher Environmental Workshops project for the A/P Study. It was also used at the A/P Study annual meeting. Cost of the project was limited to volunteer time provided by the CACs, staff time and approximately \$80 for duplication of slides. There are four copies available for use with projector and screen.
- Campaign -- This is a second-year funded project being done by Lib Willard of Lisabeth Willard Productions. The campaign consists of five 30-second T. V. public service announcements scheduled to run over a 12-month period. Focusing on general education, the

A/P Study itself, and citizen involvement the messages to be conveyed are:

<u>Planet</u>: introduction to the problems; <u>An Estuary</u>: information about the problems;

Man & Water: development of issue;
Stress Signals: development of issue;
We are Responsible: action.

Distribution of the PSAs is being aided by John Green, President, North Carolina Association of Broadcasters and Corporate Manager of WRAL-TV in Raleigh and WJFY-TV in Charlotte. The cost of the project is \$30,275.

- d1) T.V. -- A seven minute segment on the WNCT-TV show "Carolina Today" was done in December, 1988. The program (script-writing and appearance) was done by staff and consisted of general information about the A/P Study and existing areas of concern in the estuaries. The program has a viewing audience of 30,000 households in eastern North Carolina. The cost of delivery was limited to staff time. Future appearances can be arranged as the A/P Study develops.
- d2) Public Broadcasting Service -- CAC recommendation for a slot on Dr. Bill Friday's T. V. show has been voiced. Staff is pursuing the request and will report on findings.
- d3) Public Service Announcements -- Four 30-second videó PSAs were produced as a first year project under cooperative agreement with Melva Okun, UNC-CH. Staff has distributed them to nine commercial T. V. stations from Wilmington to Norfolk, Virginia and inland to Raleigh and Durham during the first week of December, 1988. We are awaiting "approval" by the stations before airing can begin. It expected they will begin running in January, 1989. All four PSAs were previewed at the annual meeting and deal with interviews of local coastal residents describing their perceptions of the problems in the Sounds. Cost of the project is \$10,021.

- el) Radio -- A proposal consisting of a series of regularly scheduled radio programs, one-half hour in duration, with a "talk show" format has been solicited for in the third cycle "Call for Proposals". It is anticipated that the program will be widely broadcast on radio in the A/P Study area and will yield good results in generating public interest and support for the study.
- e2) Radio -- A five minute radio program, "North Carolina Living" produced by the North Carolina Department of Natural Resources and Community Development was aired in July, 1988, on WPTF radio. The script was written and delivered on the air by staff. Future efforts are planned as the A/P Study progresses. Cost is limited to staff time.
- Radio -- A series of 10 short radio pieces, e3) 30-60 seconds in duration, for distribution to commercial radio stations in North Carolina, first-year project undertaken cooperative agreement with Melva Okun, UNC-CH. Four longer pieces, in the four-minute range will also be produced to National Public Radio member stations in New Bern, Wilmington and Chapel Hill. The radio pieces are in the review stage with examples being sent to the Publications Review Subcommittee of Technical Committee for approval. The purpose of using electronic media efforts is to further the understanding of all the residents in the eastern third of the State of North Carolina concerning the resources of Sounds, signs of deterioration and how the public can be involved. The cost of the project is included in the video PSAs done by Ms. Okun, the total of which is \$10,021.
- groups, schools and at public meetings held for the purpose of publicizing the A/P Study, have been done. They are the effort of staff and the CACs. The slide show, current publications and project findings are available for these events and can be obtained by contacting the public participation coordinator. Cost will vary according to staff time, travel and printing of materials.

- Community Educational Outreach -- This is a g) second-year funded project through cooperative agreement with the Pamlico-Tar River Foundation (PTRF). It consists of inventory of existing educational materials (booklets, maps, posters, etc.) which will greatly assist with public education of estuaries and their management. A speakers bureau catalogue is also anticipated. Presentation of these materials is the main portion of this project. They will be made available to school children in Pitt Beaufort Counties as well as to civic organizations, youth and scout groups citizens' organizations. Presentations will the ecology and resources of the cover estuaries and the problems of estuarine management, including the A/P Study and its work. The presentations will be delivered by PTRF volunteers. The cost of the project is \$21,540.
- Permanent Exhibit From Sound to Sea: Journey h) of the Striped Bass -- This exhibit is a permanent feature of the North Carolina Aquarium on Roanoke Island. The life history of the striped bass is described and related to environmental stresses which are affecting the natural migratory cycle of these fish. The importance of salt marsh nursery areas is emphasized. While this extensive exhibit is sponsored by the North Carolina Aquarium Society, the A/P Study is a primary contributor. Information about the A/P Study is featured within the display. The cost of the project, which was accomplished under cooperative agreement with the Aguarium, \$18,000.
- i) Teacher Environmental Education Program This is a second-year funded project through cooperative agreement with Elizabeth City State University's Drs. John Carson and Maury Powers. The project consists of a two-phase effort, the first of which is the development of a slide presentation for viewing by public school faculties. AT that time applications for workshop participation (the second phase of the project) by the teachers, will be solicited. The teacher workshops will conducted on Saturdays from 9 A. M. to 4 P. M. four area locations, Elizabeth City, Edenton, Plymouth and Manteo. The workshops will be divided into two sessions. morning, devoted to a basic

39)

understanding of the aquatic environment and its management, and the afternoon session, which will see participants divided smaller groups. Consultants who will lead the small group discussions will deal with the integration of the subject into particular classroom environments, the development of class projects and the development of lesson plans. A wrap-up session will follow with discussion general of techniques strategies for presentation of aquatic environmental information in the classroom. Teachers will receive one unit of certificate renewal credit and a \$20 stipend participation. They will be responsible for submitting a lesson plan and project to the workshop instructor for satisfactory completion of their participation. The cost of the project, which can adequately involve 40 teachers at each location, is \$13,293.

j) Secondary Education Programs -- A proposal consisting of the development of secondary education programs specific to environmental issues in the A/P Study area has been solicited in the third "Call for Proposals". The purpose of any projects submitted will be educational in nature and may be accomplished through teacher workshops or be directly implemented in the classroom.

3. Special Events

- Exhibits -- The A/P Study exhibit used at the annual meeting has been further utilized as an educational tool at the three North Carolina Aquariums (Roanoke Island, Pine Knoll Shores and Fort Fisher). Staff has scheduled the exhibit for viewing in two-month increments beginning in November, 1988, and running until April, 1989. The exhibit is accompanied by literature on the A/P Study which outlines how people can become involved with the program. The cost of the exhibit, which will also be used at festivals and area libraries, is \$1,954. The exhibit is a project of staff design.
- b) Annual Meeting -- This meeting was held in October, 1988. It is anticipated that this will be a yearly event, however, it may occur as separate meetings rather than the "super meeting" which was originally held. The effort was a function of staff with CAC

March 158 mts.

State of North Carolina Department of Natural Resources and Community Development

512 North Salisbury Street • Raleigh, North Carolina 27611

James G. Martin, Governor

William W. Cobey, Jr., Secretary

May 25, 1989

MEMORANDUM

TO:

Policy Committee Members

Dan Ashe
Don Bryan
Derb Carter
Parker Chesson

John Costlow Bud Cross Mike Gantt William Queen

FROM:

William W. Cobey, Jr.

Policy Committee Co-Chairman

Robert E. Holman, Program Director Albemarle-Pamlico Estuarine Study

SUBJECT: Proposed Policy Meeting for June, 1989

Bob Holman has conferred with Lee DeHihns and other members of the Albemarle-Pamlico Estuarine Study's Policy Committee about the meeting proposed for June, 1989. At this point, it does not appear warranted for several reasons. These reasons include not enough topics to include on the agenda to call a special meeting; period of the year when many members will be taking some time off from work; and the next established meeting will be in August, 1989. Therefore, Lee and I feel that our next meeting should not occur before our regularly scheduled meeting which is to convene on August 31, 1989.

I have asked Bob Holman to prepare the enclosed status report of the Study for your information. If you have any questions or comments about this memorandum or the status report, please give Bob a call at (919) 733-0314.

WWC:BH:kn

Enclosures

cc: Lee DeHihns

Technical Committee

CACs

Joan Giordano Ted Bisterfeld

ALBEMARLE-PAMLICO ESTUARINE STUDY

DIRECTOR'S REPORT TO POLICY COMMITTEE

MAY 25, 1989

1) FY 1989 BUDGET

- a) March 29 Citizen Involvement Subcommittee discussed public participation projects with 9 proposed authors
- b) April 3 Technical Review Subcommittee discussed information acquisition projects with 15 proposed researchers
- c) Completing cooperative agreement packages the week of May 22
- d) Annual Work Plan for OMEP tentatively approved and funds being transferred to EPA Region IV Office

2) EARLY DEMONSTRATION PROJECTS

- a) All five proposed projects have been revised based on April 3 review and follow-up conversations
- b) Projects submitted to OMEP on April 21 for review and no formal word heard from OMEP as of May 25

3) WRAL COASTAL CELEBRATION

- a) Celebration occurred on April 8-9, 1989 at the NC State Fairgrounds (Kerr Scott Building)
- b) Joan Giordano manned exhibit April 8 (Saturday); Bob Holman manned it April 9 (Sunday)
- c) Events were traditional entertainment, crafts, seafood and coastal education exhibits
- d) Approximately 10,000 people visited Celebration during the two-day event
- e) Our new pamphlet (enclosed) was first available for this event

4) DATA MANAGEMENT

- a) Data manager (A/P Study GIS Coordinator) is Chuck Nilsson who started March 27, 1989
- b) Chuck has already talked with some researchers about integrating their data into the system (Riggs; Perlic)
- c) He is adding a follow-up document to the User's Needs Assessment Report (Functional Description) and is working on four other needed documents
- d) Karen Siderelis (LRIS) gave a short presentation on results of the User's Needs Assessment Report at May 10 Technical Committee meeting
- e) Bob Holman showed a map product of LRIS on population trends from 1970 to 1980 in study area based on census data to CACs during their meetings (ACAC 5/2; PCAC 4/19)

5) STATUS AND TRENDS SCOPING REPORT

- a) Project was funded April 1, 1989, and to be completed October 30, 1989
- b) First meeting of the four team leaders took place April 27 and a follow-up meeting with all team members occurred on May 15 and 16
- c) Four areas being evaluated are: Critical Habitats (lead by Dave Adams); Water Quality (lead by B. J. Copeland); Fisheries (lead by Bill Hogarth); and Human Environment (lead by Dave Brower)
- d) Draft Status and Trends Document will be available in late July, 1989, for review

6) 1989 PROGRESS REPORT

- a) Sent report to all committee members and researchers first week of April
- b) Format this year based on comments from OMEP at June 22, 1988, presentation in Washington, D.C.

7) RESEARCHER REVIEW WORKSHOP

- a) Workshop will be held in Washington, NC on September 14, 1989
- b) Social and Dinner to be held the evening before the workshop (September 13)
- c) State/Federal Interaction and Monitoring Workshop will take place in Washington, NC on September 13, 1989

REVISED*

ALBEMARLE-PAMLICO ESTUARINE STUDY SCHEDULE - 1989

| Dates for 1989 | <u>Event</u> |
|----------------|--|
| January 13 | Review of Proposals (submittal due date) |
| February 7/9 | CAC Meetings to Evaluate Specific Proposals |
| February 21 | Technical Committee Meeting to Consider Subcommittees' Proposal Recommendations |
| February 27 | Roundtable Meeting of All Committees |
| February 28 | Policy Meeting to Consider Technical Committee's Proposals and Annual Budget Recommendations |
| March 3 | Return Selected Proposals to Authors for Revisions |
| March 17 | Revised Proposals to Director/Subcommittees |
| April 7 | Final Proposals to EPA for Approval |
| April 24/26 | CAC Meetings |
| May 10 | Technical Committee Meeting |
| July 1 | Projected EPA Award of Funding |
| August 7/9 | CAC Meetings |
| August 22 | Technical Committee Meeting |
| August 30 | Roundtable Meeting of All Committees |
| August 31 | Policy Committee Meeting |
| September 14 | Annual Researchers Review Workshop |
| September 19 | Technical Review Subcommittee Meeting |
| October 6 | Annual Public Meeting |
| *November 6/10 | CAC Meetings |
| *November 21 | Technical Committee Meeting |
| *November 28 | Policy Committee Meeting |

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assistance. The purpose of the annual meeting was threefold, to hold a researchers' review, to engage all four management committees in meaningful dialogue and to inform the public of the study's status. It is felt that all three objectives were accomplished. annual meeting was also a learning experience resulting in some mid-course correction for the A/P Study. The cost of the meeting was \$8,301. Subsequent meetings may need to be "contracted out".

- c) Press Conferences -- Although none have been held to date (12/88), the staff anticipates holding one in January or February, 1989, for the purpose of revealing the findings several technical projects which are coming to fruition. The press conference will be held the Public Participation Office North Carolina Washington, and will attended by media reps from the study area, some researchers and staff. Cost is limited to staff time and reproducing costs of materials.
- Festival -- This concept was generated at the d) annual meeting. The idea holding/participating in a festival can be accomplished in either of two ways, staging our own or "piggybacking" on other festival events. The latter is by far the more easily accomplished of the two. This should be a project undertaken by the CACs and delivered in multiple fashion at festivals throughout the A/P Study region. It will afford good opportunity for publicizing the study research findings and for garnering the invaluable grassroots public support only word-of-mouth can generate. To accomplish this in a non-technical atmosphere is also beneficial. A merchandising effort, tee-shirts, bumper stickers, buttons, beach bags, etc. could be developed. Cost will depend on the scope of the effort.
- e) Concluding Program Event -- This is, course, somewhat down the road, but the notion is to develop a series of events which will, in escalating fashion, culminate with the unveiling of the CCMP. The festival approach over the next two/three years can accomplish this, or altering the format of the annual

meeting is also a suggestion. These events, too, should be a series of projects undertaken by the CACs. Cost will vary according to the events.

4. Mailing List

This is constantly being updated. We presently have 8,000 names on computer which represents a purging of Sea Grant's mailing list and the addition of: Coastal Resources Commission and CRAC

Environmental Management Commission
North Carolina Aquariums
Marine Fisheries Commission
Mid-East Commission
Other Estuary Programs
North Carolina State Legislators
County officials in 32 counties of the study area
Municipal officials in 32 counties of study area
Schools
Principal Investigators
Members of public present at Valentine's Day meeting (1987); Annual Meeting (1988); and other interested people
Media reps

Other names and organizations will be added such as those mentioned in the first draft of this plan. Maintaining the mailing list is a staff function with support in the form of suggested input, being provided by CAC members. The mailing list will soon be coded to enable soliciting by geographic location 'and interest group. The \$150 charge associated with obtaining the original mailing list reflects a one-time charge paid to Sea Grant.

5. Elementary and Secondary School Projects

Youth projects, such as planting sea grasses, clean-up campaigns and competitions are a good educational tool for school children. The utility of such involvement is magnified when students involve their parents in the planning and execution of such events. This effort could be coordinated by the CACs and would provide an outlet for the valuable expertise on those committees. Contact with the children could be on an ongoing basis so that long-term data and trends would be documented and evaluated. Cost would probably be minimal. Materials and travel provided by the CACs would need to be reimbursed by the A/P Study.

- B. <u>Public Participation and Hands On</u> activities designed to involve individuals in project to learn about or improve the estuaries such as public meetings and workshops and also hands-on activities such as field trips, monitoring and stream clean-up.
 - -- A proposal, the 1. Public Meetings principal objective of which would be a) to generate discussion in a wide range of locations convenient to the public in the A/P Study area and b) to attain input from the public in the earliest stages of the development of the Status and Trends and Comprehensive Conservation Management documents, has been solicited through the third cycle "Call for Proposals". This form of public participation is essential if the ground swell of for public support necessary drafting implementing the above mentioned documents is to occur. Spreading this effort over time to correspond to the then current status of the study is a good idea. It will keep the public up-to-date on the changes needed as the program matures. Cost will depend on what is submitted in the proposals.
 - 2. Workshops -- A series of four workshops, the first evening of which covered topics on Water Quality Standards, Coastal Area Management Act (CAMA), Section 404 Dredge and Fill Regulations Sediment and Erosion Control Regulations, were presented by the North Carolina Coastal Federation as a first-year funded project. The second evening of each of the workshops was dedicated discussing ways that citizens could effectively communicate their concerns to environmental agencies.' The cost of this project was \$25,125 which included the production of an 82-page publication entitled "A Citizen's Guide to Coastal Water Resource Management." The final component of the project was field trips which were designed to look at how regulatory decisions are made in the The series of workshops and field trips field. were designed to help citizens effectively participate in the implementation of Coastal laws and in managing our Management coastal resources. Approximately 200 people attended the workshops.
 - 3. Media Tour -- The North Carolina Coastal Federation in conjunction with Duke University Marine Lab organized a three-day press tour in April, 1988. Travelling by bus, stops were made in several coastal locations to view first hand that which was being reported upon by scientists and resource

managers riding the bus. On-site programs were also delivered. Eighteen reporters and media people participated. The objectives of generating publicity about the A/P Study, developing indepth understanding of coastal issues and providing a project that a broad range of interests could come together to accomplish were met. The cost of the project was \$5,550.

- CAC Meetings -- CAC meetings are held quarterly and 4. will soon be held monthly (beginning in January 1989) on the Pamlico side. The main objective of CAC meetings is to afford members a forum to express their concerns and ideas relative to the estuaries and to advise the program of those views as well as those of the general public with whom they interact. CAC meetings should also, serve as an educational tool through the delivery of programs intended to address the existing problems of the estuaries. Another feature of CAC meetings is the opportunity, weather permitting, for field trips to view first-hand the work being done by the A/P Study. CAC members are thusly encouraged to report to their constituencies on study progress. The meetings are planned and organized by the committee chairs and staff. Public notice in area newspapers of meetings has attracted audiences from the general public. Cost for CAC meetings is limited to volunteer and staff time.
- Citizens' Monitoring -- An extensive monitoring 5. program is underway which is a function of the Pamlico-Tar River Foundation (PTRF), through a cooperative agreement with the A/P Study. The citizens' monitoring program to date includes 65 people and features 33 sampling stations extending from the Neuse River south of New Bern to the Perquimans River. The groups test for pH, temperature, salinity, turbidity, dissolved oxygen, nitrogen and phosphorus. A broad of directors has been selected to administer the program and a coordinator has been hired. The cost of the project was covered by supplemental EPA funds in the amount of \$53,900. This expanded monitoring program is an outgrowth of a first-cycle funded pilot program also done by PTRF.
- C. <u>Local Government Liaison</u> -- Activities designed to promote dialogue among units of government and concerned or affected parties prior to decision-making.

- County Commissioner Meetings -- An excellent 1. outlet for publicizing the A/P Study and its work exists through participation at County Commissioner meetings. CACS and staff can be utilized to accomplish this task. Perhaps a cadre of CACs could be trained to deliver a concise program on the A/P Study and to answer appropriate questions posed by commissioners. Training would ensure consistency of presentation. Cost of developing such an effort would be confined to staff time, volunteer time and travel reimbursement for CACs.
- <u>Councils of Governments (COGs) -- The same idea</u> described in #1 could be implemented with COGs. 2. The added advantage of impacting more than one unit of government at a time and the ensuing interaction which is sure to follow is inviting.
- A proposal for the development of increased 3. interaction between the A/P Study activities and local governments in the A/P Study area has been solicited through the third cycle "Call for Proposals." The League of Women Voters or the League of Municipalities may be good choices for bidding on this.
- Legislative Liaison -- Potential for interaction between the State Legislature and NRCD (A/P Study) exists in the form of NRCD legislative liaison person, Sandy Duke. Staff will pursue this connection and work to develop a plan, along with the CACs, for keeping the legislators informed of A/P Study progress.

PUBLIC INVOLVEMENT PLAN TIME LINE

| PRODUCT/EFFORT/EVENT | 1987-'88 | 1988-189 | 1989-190 | 1990-191 | 1991-'92 |
|--------------------------------|----------|----------|----------|----------|------------|
| Newsletter | | | | | |
| Program Brochure | | | | | |
| Fact Sheet | | | | | |
| Press Releases | | | | | |
| State of the Estuary Booklet | | | | | |
| Guide to Streamwalking | | | | i i | |
| Educational Calendar | | | , | 1 | |
| Merchandising | | · | | | |
| Video | | | | | |
| Slide Show | | | | | (3) |
| CAC Slide Show | | | | | |
| State of the Estuary T.V. Cam. | | | | | |
| T.V. Shows | | | | | |
| P.B.S. T.V. Appearance | | | | | × . |
| PSAs | | | | | |
| Radio Show (Talk-Show Format) | | | | | |
| Radio Show (Staff) | | <u> </u> | | | |
| Radio PSAs | | | | | |
| Oral Presentations | | | <u> </u> | | |
| • | | · | | | ' . |
| | | | | | |
| | | : | | | |

| PRODUCT/EFFORT/EVENT | 1987-'88 | 1988-'89 | 1989-'90 | 1990-'91 | 1991-'92 |
|--|----------|----------|----------|----------|----------------|
| Community Ed. Outreach | | | | | |
| Exhibit (Striped Bass Perm) | - | | | | |
| Teacher Environmental Ed. | | | | | |
| Secondary Ed. Programs | | | | · | |
| Exhibit (Staff) | | | | | |
| Annual Meetings/Events/Programs | | | | | |
| Press Conferences | | | <u> </u> | | |
| Festival | | | | | |
| Mailing List | | | | | |
| Elem. & Sec. School Projects | | - | | | |
| Public Meetings | | | | | |
| Workshops/Media Tour | | | ~ ~ | | |
| CAC Meetings | | | | | |
| Citizens' Monitoring (Pilot & Exp*) | | | | | 8 |
| Local Gov't. Liaison | | | <u></u> | | |
| Legislative Liaison | | | | | |
| | | | | | |
| | | | , | | |
| *Accomplished with EPA Supplemental funding | | | | | ; |
| | | | | | |
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| And the state of t | | | | | ·· / *: |

Table 4

ALBEMARLE-PAMLICO ESTUARINE STUDY

Proposed Budget: FY 1989

I. Existing Funding Sources

\$1,200,000 EPA FY 1989 Funds

500,000 State of North Carolina Funds*

\$1,700,000 Total

II. Possible Supplemental Funding Sources

~350,000 EPA FY 1989 Possible Early Implementation Funds*

~\$ 350,000 Total

III. General Budget Breakdown

[FY 1988-\$1,568,763]

| <u>Item</u> ; | Cost | Percent | Guideline |
|--------------------------------|------------|---------|-----------|
| A. Administration | \$ 377,317 | 22.2 | (15) |
| B. Information Management | 165,000 | 9.7 | (15) |
| C. Public Participation | 234,527 | 13.8 | (10-20) |
| D. Technical Info. Acquisition | 916,749 | 54.0 | (60) |
| E. Monitoring | (0) | (0) | |
| | | | |

Difference \$

FY 1989

99.7

100.0

*State of North Carolina through the Department of Natural Resources and Community Development will provide the 25 percent matching funds through the state appropriations except in the case of early implementation projects in which the grant recipient will provide the 25 percent matching funds.

Total \$1,693,593

6,407

Available \$1,700,000

| TTT DUDGER I | 20574204 | | | |
|--------------|----------------------------------|--|----------------|-----------|
| III. BUDGET | | सम्बंधित है कि भी में में में में | DV 1000 | PV 1000 |
| | VISTRATION | • | <u>FY 1988</u> | FY 1989 |
| | Personnel a. Project Director | (4.5% Cost of Living Increase | \$45,796 | \$ 47,857 |
| | b. Clerk/Steno IV | Above 1988 Wages) | 22,198 | 23,197 |
| | c. Data Mgmt. C∞rdinator | Move 1900 Hagesy | ~28,000 | 32,320 |
| | d. Public Involv. Coordina | tor | 23,701 | 24,768 |
| | e. Clerk-Typist III (Part- | | 15,000 | 7,688 |
| | f. Environmental Specialis | | 10,000 | 25,000 |
| | g. Administrative Assistan | • | | 23,500 |
| | g. Additistrative assistan | | 134,695 | \$184,330 |
| 2. | Fringe Benefits (Administr | ation & Public Participation) | | |
| | a. 19.00% of Wages (18.75 | | 25,255 | 35,023 |
| | b. Longevity Pay for Proje | ct Director & Clerk/Steno IV | 1,000 | 1,300 |
| | c. Indirect Cost (7.5% for | Personnel) (5.08/1988) | 6,843 | 13,825 |
| | | | 33,098* | 50,148* |
| 3. | Travel | | | • |
| | a. Project Director/Staff | | 8,000 | 10,000 |
| | b. Citizens' Advisory Com | nittees | 2,000 | 3,000 |
| | c. Emergency Travel Fund | : | 3,000 | |
| | d. National Estuary Progra | am Participation | | 3,000 |
| | | | 13,000 | 16,000 |
| 4. | Equipment | | | |
| | a. Computer Software | • | 1,500 | |
| | b. Projectors (2), Slide | Screens (2) | 1,000 | |
| | c. Camera/Tape Recorder | | 400 | |
| | d. Folding Table | | 100 | |
| | e. Portable Computer | | | 3,000 |
| | f. Desks and Chairs (3) | | | 2,000 |
| | g. Books/Publications | | 1,000 | 500 |
| | | | 4,000 | 5,500 |
| 5. | Office Supplies/Film | | 3,000 | 3,000 |
| 6. | Contracted Services | , | | |
| | a. Marguerite Duffy (Tech | nnical Writing/Coordination of Meetings) | 19,300 | 20,000 |
| | b. Newsletter | | 12,000 | |
| | c. Reserve for Contract V | Nork | 10,000 | |
| | d. Meetings/Workshops/Co | | | 20,000 |
| | e. Status and Trend Fina | l Document/CCMP Planning (Details) | | 50,000 |
| 7. | Other | | 41,300 | 90,000 |
| /. | a. Advertising | | 500 | 400 |
| | b. Telephone | | 2,000 | 2,500 |
| • | c. Postage | · | 2,500 | 3,000 |
| | d. Printing | | 11,157 | 14,000 |
| | e. Photocopying | | 2,000 | 3,000 |
| | f. Express Freight | | 500 | 500 |
| | g. Room Rental | | 750 | 500 |
| | h. Data Processing Servi | Ce | 500 | 439 |
| | i. Other Services | · | 1,000 | 1,000 |
| | | e (Public Involv. Coordinator/Part-Time Secretary) | -, | 3,000 |
| | j. nogronar orrive opace | 1) | 20,907 | 28,339 |
| | | TOTAL | \$250,000 | \$377,317 |
| | | | 1 / | 1/ |

(53)



| В. І | NFORMATION MANAGEMENT | | FY 1989 |
|------|---|-----------------------|-----------|
| 1 | . Hardware | | 30,000 |
| | The costs to continue payments for financing the computer system upgrade that was required to support APES data management activities. | | |
| | . Software | | 10,000 |
| | Contingency funds to pay for additional software if needed by APES. | | |
| | 3. Maintenance | | 22,000 |
| | The costs for maintenance contracts on hardware and software purchased for APES. | | |
| | i. Communications | | 20,000 |
| | Fixed Costs | | |
| | The costs of installing hardware and software to place the LRIS system on an established network; and the fixed fees associated with a network. | | |
| | 5. Communications Variable Costs | | 20,000 |
| | The costs of using a data communications network. Costs will vary according to usage level. | | |
| | (Items 5 & 6 are awaiting completion of the data needs study and the user requirements study) | | |
| | 6. Design/Programming | | 10,000 |
| | Costs associated with refining the design of the APES data base and for refining the design of the "front end" software. | | |
| | 7. Data Entry and Analysis | | 50,000 |
| | LRIS charges for entering and analyzing data. | S4 | |
| | 8. Supplies | | 3,000 |
| | Miscellaneous supplies, e.g., maps, mylar, data tapes (VA. 100K's), etc. | | • |
| | 10pt (200m 0// 000. | [FY 1988 - \$164,000] | \$165,000 |



| | | | | | • | | |
|---------------------|--------|--------------------------------|---|---|------------|------------------|--|
| | С. | PUBLIC PA | ARTICIPATION . | | Ī | FY 1989 | |
| | | Contract Services (Newsletter) | | | | 20,000 | |
| | | | | Š | ubtotal \$ | 20,000 | |
| | Rank | No. | Project Title | Researcher | | Cost | |
| | 1 | 352 | A Public Forum on Mangement Needs for Protecting the Estuarine Natural Resources in the A/P System | Shaw (DCM) | | 13,410 | |
| | 2 | 325 | Institutional Enhancement & Public Involvement Program for Southeastern Virginia | VA Planning District Commission | | 28,000 | |
| | 3 | 351 | Leadership Development Workshops on Water Quality Impacts of Nonpoint Source Pollution | Hoban/NCSU | | 6,200 | |
| | 4 | 310 | Community Education Outreach II (Continuation) | Stroud (PTRF) | | 31,602 | |
| | 5 | 329 | Assisting A/P CACs in Conducting A Press Tour, Organizing an Annual Meeting, & Preparing Estuarine Mgmt. Recommendations for Protecting A/P Sounds | Kenndey (NCCF) | | 35,000* (46,817) | |
| | 6 | 332 | Vital Issues of Protecting Water Quality- Teacher Training & Curriculum Implementation | Okun (UNC) | | (42,615)* | |
| | 7 | 312 | Public Education Program in the Albemarle Sound Area | Carson/Hess | | 17,100 | |
| | 8 | 328 | Poster Series/Bumper Stickers | Nurnberg (PTRF) | | 15,600 | |
| 9 **322 10 **337 | | **322 | Albemarle-Pamlico Public Participation: Raising Public Awareness & Involvement/ Radio Broadcasts | Foder/Rancer (NCSU) | | 25,000* | |
| | | **337 | A/P Study Public Participation Facilitation Project | Cleary (Business Forum) | | | |
| | | | • | •. • • • • • • • • • • • • • • • • • • • | Subtotal | \$214,527 | |
| | 4 | | | [FY 1988-\$168,698] | TOTAL | \$234,527 | |
| | *Negot | lable | | | | ÷ | |



**Fund Only One

D. TECHNICAL INFORMATION ACQUISITION

| 1. | Resource | FY 1989 | | | | | |
|----|----------|-------------|------------------------------------|---------------------|----------|-----------|-----------|
| | Rank | №. | Project Title | Researcher | | Cost | |
| | 1 | 335 | Hyde County Soil Survey | Gagnon/Tant | | 10,000 | |
| | 2 | 343 | Mapping & GIS Land Cover | Khorram/Siderelis | | 100,000* | (166,588) |
| | 3 | 301 | Regional Inventory | Roe | | 75,000 | |
| | | | | | Subtotal | 185,000 | |
| 2. | Water Qu | uality | | | | | |
| | Rank | No. | Project Title | Researcher | | Cost | |
| | 1 | 305 | Eutrophic/Nuisance Algal Blooms | Paerl | | 53,106 | |
| | 2 | 311 | Citizens' Monitoring | Perlic | | 55,286 | |
| | 3 | 344 | Heavy Metal Pollutants | Riggs | | 44,985 | |
| | 4 | 318 | Evaluation Off-Site Ag. BMPs | Bales | | 83,500 | |
| | 5 | 333 | Nutrient Load/Coastal Swamps | Kuenzler | | 70,988 | |
| | 6 | 317 | Determine Flows/Flow Patterns | Bales | | 100,000* | (122,500) |
| | | | | • | Subtotal | 407,865 | |
| 3. | Fisheri | es | | | | | |
| | Rank | No. | Project Title | Researcher | | Cost | |
| | 1 | 315 | Food/Feed Larval Fish | Rulifson | | 46,666 | |
| | 2 | 339 | Shell Disease Blue Crab | Noga | | 64,420 | |
| | 3 | 314 | Abund/Viability/Ciriped Bass | Rulifson | | 19,626 | |
| | | | | | Subtotal | 130,712 | |
| 4. | Human E | Environm | ent | | | | |
| | Rank | <u> Мо.</u> | Project Title | Researcher | | Cost | |
| | 1 | 358 | Federal Consistency | Nichols | | 12,501 | |
| | 2 | 350 | Public Attitudes Toward WQ & Mgmt. | Hoban/Clifford | | 76,974 | |
| | 3 | 353 | Environ. Mgmt. Currituck | Adams | | 35,697 | |
| | | | | | Subtotal | 125,172 | |
| 5. | Other | | | | | | |
| | Rank | No. | Project Title | Researcher | | Cost | |
| | | , | Ctatus C Mand Deslining | C) - wle | ٠, | C0. 200 | |
| | | | Status & Trend Preliminary | Clark | | 68,000 | |
| | | | | | | | |
| | | | | [FY 1988-\$986,065] | TOTAL | \$916,749 | |

RESOLUTION

Albemarle-Pamlico Estuary Comprehensive Monitoring Program

The Policy Committee directs that the Program Director, working with the Technical Committee and Citizens Advisory

Committees, develop a comprehensive monitoring program for the study area. This program shall integrate all existing monitoring efforts within the study area including federal, state and local efforts. It shall also incorporate efforts for a Citizens

Monitoring Program. It shall provide for standard procedures for sampling, quality control, and data management. In developing this program, the Program Director shall convene a meeting, at the earliest convenience, of all parties currently conducting monitoring in the study area. The Director shall report on the status of this effort at the next meeting of the Policy Committee.



MONITORING

That baseline monitoring program be reexamined under the direction of the Program Director to find additional sources of funding and that the monitoring program be reformed to reflect the funding sources available.

9/0/90

Attachment H

ALBEMARLE-PAMLICO ESTUARINE STUDY

RESOLUTION

WHEREAS, the Albemarle-Pamlico Estuarine Study (A/P Study) is a joint effort between the State of North Carolina and the Environmental Protection Agency to develop a management strategy for this valuable estuarine resource; and

WHEREAS, the A/P Study is administered by four administrative boards. The Policy Committee is one of these boards and is made up of ten members; and

WHEREAS, the A/P Study has requested through the Department of Natural Resources and Community Development an expansion budget of \$300,000.

NOW, THEREFORE, BE IT RESOLVED:

- Currently inadequate funds are being provided for the monitoring effort.
- 2. That the amount of this expansion budget will be totally utilized for the monitoring effort this year and in subsequent years.
- 3. That the Policy Committee urges the Appropriations Subcommittee for Natural and Economic Resources and the entire Legislative Body to grant the governor's expansion request for \$300,000.

Adopted this 15th day of March, 1989.

William W. Cobey Secretary of NRCD Co-Chairman of the Policy Committee



RESOLUTION

The Policy Committee resolves that consistent with the executive session discussion regarding personnel costs, that the total 1989 budget for personnel and contracted services shall be limited to no more than \$185,000. Within this amount, the Program Director shall have discretion to fund any or all of the items specified in those two categories.