

MINUTES

ALBEMARLE-PAMLICO ESTUARINE STUDY (APES)

POLICY COMMITTEE

National Marine Fisheries Center (NOAA)
Beaufort, N.C.
June 9, 1988

At 1:25 p.m. EPA Region IV Deputy Administrator, Lee DeHihns called the meeting to order and along with Budd Cross, NOAA, welcomed the committee members and guests (list of attendees Attachment A).

Mr. DeHihns announced that Regional Administrator C. Tidwell Greer has requested that Lee DeHihns officially serve as Policy Committee Co-Chairman along with the Secretary of N.C. Dept. of Natural Resources and Community Development, Tommy Rhodes.

Bob Holman was introduced as the new Program Director for APES, beginning April 12, 1988.

A. Director's Report

Bob Holman said that he has met with key State, EPA and APES committee members as an orientation to the program. Additionally he reported on the following.

1. Attended the EPA Office of Marine and Estuarine Protection (OMEP) Technology Transfer Meeting for Regional Estuary Programs, in Annapolis, Md. on June 7th.
2. Met with Mark Alderson, EPA/OMEP to discuss the next budget review cycle and the need to begin that review by October to allow APES adequate preparation time.
3. Attended the Pamlico Citizens Advisory Committee (CAC) meeting along with Secretary Rhodes.
4. Attended the Albemarle CAC meeting along with Ernie Carl and Lee DeHines.
5. Attended the Coastal Federation Media Tour from April 26 to 29, 1988.
6. The subcommittees established by the Technical Committee (TC) are working very well and are enhancing the smooth running of full committee meetings.
7. He has challenged the CAC's to put together an APES exhibit at the State Fair in October and has suggested an annual review to be hosted by the CAC's in November.
8. A publications subcommittee was formed at the last TC meeting for assisting in reviewing APES documents, (e.g., the Newsletter and the Red Tide Report). Chairmen of the other subcommittees will make up the new subcommittee. Holman is

preparing a draft standard form for the subcommittee's use in reviewing publications.

9. The North Carolina Sea Grant Publication list, containing 13,000, names will be used for the first mailing of the newsletter. The PC was encouraged to send additional names, lists, etc.

10. The State of the Estuary Booklet will be completed by this Fall by Okun/Tursi.

11. APES is presently recruiting a Data Management Coordinator. LRIS staff and Holman have met with Region IV staff in reviewing their Geographic Information Systems (GIS). They will also meet with the Chesapeake Bay Program to discuss their GIS, to build upon their successes and to avoid their mistakes. APES is using the USGS 1:1000,000 Rocky Mountain quad as a model in developing the GIS for APES.

12. A group consisting of T. Bisterfeld, J. Costlow, M. Orbach, and B. Holman, will meet with OMEP to request supplemental funds for monitoring on June 30th. Preliminary conversations with OMEP indicate that APES might receive an additional \$300,000 earmarked for monitoring.

Mr. DeHihns asked Holman to discuss early implementation projects and to elaborate on the monitoring efforts.

B. Early Implementation Projects

Holman reported that he had requested information from all APES committee members, State offices and Ted Bisterfeld from EPA divisions, on implementation projects that would benefit the Sounds and that would be worth funding. Five projects were then approved by the TC and forwarded to EPA/OMEP. Two projects (Attachment B) were selected by EPA for matching funding.

Mike Gantt, U.S. FWS, cautioned against using the names of specific areas in the primary nursery area and asked that reference to a specific area be removed from any release. Her concern was twofold: (1) that unnecessary alarm might arise from the public to the term implementation and (2) possible legal problems. She noted that U.S. FWS has legal rights in the areas proposed and has taken on a water project in the proposed project area with results to be released this year. She also noted that a project similar to that proposed was recommended by the Governor's Coastal Water Task Force and said she cautioned the Technical Committee to seek legal review. Dirk Frankenberg said that the project is a good one and that Gantt's comments are important and that those concerns can be worked out.

C. Monitoring

Bob Holman reported that the TC approved a baseline monitoring program with some revisions. Dan Ashe asked how the

monitoring will work to avoid duplication. Holman said they are aware of some duplication but the subcommittee is to meet to work out the redundancies and differences. Bruce Barrett explained that the Technical Subcommittee had recommended monitoring (1) to expand the statewide system; (2) to conduct for a synoptic monitoring study; (3) to continue with water quality (WQ) monitoring (e.g, pH, temp, salinity); (4) for fish tissue analysis (primarily toxic chemicals); and (5) for citizens monitoring. Barrett said the subcommittee will be meeting to discuss where cuts are needed to meet the budget. Holman noted that there is not much monitoring in the open waters and attention is needed in that area. Paul Wilms' subcommittee supported a citizens monitoring program, however, not necessarily the one submitted.

Bob Holman explained that the emergency response (fish kills) was dropped from funding because DNRCD has set up a special team to cover this area. Cross was concerned that DNRCD funding may not be adequate in the area of WQ monitoring. Dr. Carl explained that APES has allowed for some WQ monitoring and that only the emergency response effort was left out. Budd Cross suggests that the same quality assurance (QA) standards be incorporated into monitoring as studies such as the Jones Bay study of fish liver lesions and the histopathology study of oysters (mussel watch). DeHihns noted that since Don Hoss, NOAA, was involved in developing the monitoring program, that he assumes that level of QA was included. Cross is to verify this with Hoss. Ashe then said that, between the work in Gantt's and Cross' organizations, some WQ projects could be coordinated and possibly eliminated. Derb Carter asked if the monitoring would be a one-time or yearly process. Dr. Carl stated that this a temporary monitoring effort for this study. Ashe suggested that monitoring efforts be better designed to allow long-term monitoring and to ask if monitored yearly, what will be the long-range benefit. Ashe said he has problems with the funding package and the proportion of funding for monitoring. Barrett noted that the monitoring money is separate funding, earmarked by EPA/OMEP specifically for monitoring. Dr. Frankenberg stated that the TC was given decision making responsibility and that the subcommittee is both responsible and knowledgeable. He said that the TC had reasons for their selections and that while PC concerns should be stated, concerns should be brought to the attention of the TC with further discussion left to the TC subcommittee.

Derb Carter said that the Pamlico and Albemarle CAC's reviewed the PTRF monitoring proposal and the CAC endorsed the concept. The CAC believes that citizens monitoring must begin with good monitoring proposals and high level quality control. He noted that adequate time should be provided to organizations asked to submit monitoring proposals and encouraged APES to make proper time available.

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C. Budget

Holman presented the FY88/89 budget (Attachment C) as approved by the TC. He noted that the exact APES budget is still not final, citing that EPA/OMEP has earmarked \$200,000 to \$500,000 for monitoring and U.S.G.S. money can only be matched with State (not Federal) money. Holman has scheduled a June 30th meeting with OMEP to present a monitoring package. These factors make the total APES budget uncertain for the moment. Lee DeHihns noted that next year estuary funding will go directly to the Regions and should make funding easier to handle. The added money to the Administrative Budget was due to CAC's requests. Dr. Frankenberg complemented the TC for keeping close to the percentages recommended by the PC.

DeHihns noted that the funding breakout was close to the amounts from last year. He said he understood that projects were discussed indepth by the TC and suggested that the PC not redo that process. He requested that Bruce Barrett provide explanation where necessary. Barrett complemented the subcommittee for the long hours spent reviewing the proposals and said he and the TC feel very comfortable with the decisions of the CAC and TC subcommittees.

Carter indicated that certain proposals appeared to be overlooked in the review process, specifically, the Human Environment. Carter said that the TC thought these were citizens related and the CAC's thought they were technical. Hence, each left the proposals for the other to review. Derb noted that the short-time span in soliciting proposals factored into the poor and sometimes confusing quality of proposals. To avoid this happening again, he requested more time for proposal preparation the next funding cycle. Dr. Frankenbrg recommended that APES start now to prepare a timely report on which projects have transpired and on what needs to get done and to allow adequate time for soliciting proposals. Bob Holman noted that the review subcommittees found many gaps in the proposed human environment projects and that the Technical Committee expressed timing concerns as well.

Dr. Costlow reminded the PC of a requirement (passed at a previous PC meeting) for all contractors, prior to final funding, to submit a two to three page abstract summarizing their findings.

Holman explained that the projects as shown on page five are approved for funding by the TC, subject to negotiated costs with contractors. He explained that if any projects need to be cut to meet the allocated budget, that the cuts will begin with the subcommittees ranked list of proposals.

Dr. Carl noted item D.1.1 on page 5 and requested that Holman check with the Soil Conservation Service about matching funds.

Mike Gantt was alarmed that the public perception survey was omitted from funding. She requested that the record show that

surveys like the the public perception survey, not recommended by TC for funding, should be done early in the program and not put off until year three. She further requested that should funds be available, that the public perception survey receive this year funding.

Carter asked where monies are for items allocated for funding by last year's budget but not spent (i.e., the data management coordinator). He moved that should carryover money be available, that it should go to Human Environment projects.

Action: Barrett recommended that Bob Holman determine (1) how much lapsed money is available; (2) if money is available, that Turner's subcommittee should solicit proposals in the Human Environment area; and (3) if proposals are highly received and money is available, that they should be funded. Gantt concurred with the recommendation and asked that Holman follow through.

Gantt questioned the decision to discontinue funding on-going projects such as the aerial survey of SAV. Barrett explained that the TC thought this project was costly, with minimum management benefits and that the pictures were focused on the eastern and not western (where needed) end of the sound. Ashe asked how the excluded project could be approved last year for funding and then dropped mid-study. DeHihns and Rhodes reminded the PC that they were to accept TC decision-making and that the TC made a thorough review resulting in responsible and knowledgeable decisions.

Motion: Rhodes motioned that the PC approve the budget (attachment C). Parker seconded with the exception that possible carry-over funds within the confines of the budget go toward human environment projects. Hearing no reservations a vote of eight for and one against carried.

Gantt stated that it behooves the PC to look at program goals and that in the future that discussions such as the one just held, should be viewed as necessary and helpful to program direction. DeHihns agreed. Ashe stated that in the future, the PC must receive budgets in advance so that adequate consideration can be given.

D. CAC Travel

Holman said that the CAC members who attend PC and TC meetings are not being reimbursed for travel expenses. There appears to be a need to approve reimbursement expenses as CAC members have been led to believe it is inappropriate to submit travel vouchers. In most cases, travel money is taken from the CAC' member's personal account. DeHihns asked if there are any state or Federal restrictions. Gantt replied that this issues had been previously looked into and that an emergency travel fund was established for this purpose.

DeHihns directed Holman, along with the two CAC's, and Mike Gantt, to search previous APES policy and to determine APES procedures on this subject.

E. Technical Committee Nomination

Budd Cross recommended that Willard (Bill) Cole be appointed as a member of the Technical Committee. Mr. Cole has been with Fish and Wildlife Service (FWS) for two years. In addition to being a striped bass expert, Mr. Cole has attended many TC meetings and is aware of pertinent issues. FWS is not currently represented on the TC.

Motion: Cross motioned to appoint Bill Cole to the Technical Committee. Costlow seconded. The motion unanimously carried.

F. Resolution Commending Doug Rader

Secretary Rhodes read a resolution (Attachement E) commending the outstanding service of Doug Rader.

Motion: Parker motioned to approve the resolution. Gantt seconded. The motion unanimously carried.

G. Corps of Engineers

Discussion ensued on why the Corps of Engineers dropped out of the APES program and the fact that the Corps had been appropriated program money in FY 87. DeHihns indicated that Dr. Costlow and Dr. Rhodes had received a letter stating that the money had been spent in North Carolina. Bob Holman asked if representatives from APES should visit the Corps and discuss their position. Gantt replied affirmatively and emphasized the need for their involvement from a land-use perspective. There was some concern on whether they should be represented on the TC or PC. Ashe reiterated the need to solicit Corps involvement.

H. Next Meeting

Bob Holman suggested that upcoming meetings and possible agendas be planned several meetings in advance to allow planning time. The following meetings were agreed upon:

Tuesday, August 30, 1988 in Raleigh, N.C. a Policy Committee Meeting is scheduled to outline the agenda for the first annual program review meeting on November 14th. Costlow reminded the PC of their decision (previous meeting) to invite respective Federal, state, and private programs involved in APES related projects to participate in a forum. Rhodes recommended that these groups be included in the November annual meeting.

The CAC's are to host, not plan, the annual meeting. Money is allocated in the budget for this meeting.

There was discussion on whether to discuss long-range projects and budget guidelines at the August meeting. It was agreed that the budget/project planning should be on the TC agenda since it falls within their responsibility.

I. Minutes Approved

Motion: Ashe motioned that the minutes from the March 16, 1988 Policy Meeting be approved with the addition of his name to the list of attendees. Gantt seconded. The motion unanimously carried.

J. Executive Session

The meeting concluded at 4:10 p.m. with Mike Gantt requesting an Executive Session to immediately follow.

Attachments

PRIMARY NURSERY AREA PROTECTION: An Implementation Pilot Project

Where: Along the northern and western shores of Pamlico Sound lie some of the most productive primary nursery areas in the world. Highly productive farms and forests dominate the watershed. To operate the farms and forests, water must be drained from the land. The drainage threatens the primary nursery areas. There are several canals from drainage districts entering the Sound along the shore.

Why: Water, in terms of both quantity and quality, is the determining factor in these systems. Water management on the watershed is crucial in reducing the potential conflict. The protection of certain salinity regimes in the estuarine waters is vital for the production of young fish and shellfish.

A recent study revealed that the impact of freshwater drainage on primary nurseries was highly-dependent upon the physical situation in the estuary. Wind forces completely dominate the distribution of estuarine waters. During onshore winds, the water level is relatively high and freshwater draining into the estuary is diluted over a large area and does not significantly impact the salinity. On the other hand, during opposite winds, drainage can have large impacts on the salinity. A major conclusion was that if drainage could be regulated by water level controls, the potential impact of freshwater drainage could potentially be minimized.

This proposal is to pilot a water management scheme on one canal adjacent to a primary nursery on Pamlico Sound to test the feasibility of regulating drainage to coincide with optimum receiving conditions. The project, if implemented, would achieve the following goals:

1. Reduce the potential impact of drainage on primary nursery areas, a major goal of the APES program.
2. Eliminate flushing of primary nurseries during low water levels, simultaneously allowing land activities to proceed.
3. Demonstrate water management techniques applicable to similar situations in other Southeastern states, achieving resource protection and enhancement.
4. Protect wetlands fish and wildlife habitat, a major goal of wildlife resources interests.

What: To achieve these goals, an engineered water-gate will be installed in a major canal (Waupoppin is an optimum candidate). Water management structures (e.g., flashboard risers) will be utilized as needed in major and tributary canals. The water-gate will be engineered to a water level sensing device that will automatically raise and lower the gate in response to low and high water sets; thus, achieving a release of fresh water during proper physical conditions.

Who: Several agencies will be involved in carrying out the pilot project:
Hyde County Soil and Water District Supervisors
N. C. Division of Soil and Water Conservation
USDA Soil Conservation Service
N. C. Division of Marine Fisheries
N. C. Department of Agriculture
NCSU Agriculture Extension Service
UNC Sea Grant College Program

How: This will be an interagency cooperative effort relying on local sponsorship by the Hyde County Soil and Water Conservation District Supervisors. Construction and monitoring of results should be complete in two years. Monitoring will include the flows, salinity, nutrients and biological assemblages in the primary nursery area. The estimated cost is \$200,000.

<u>Name</u>	<u>Organization</u>	<u>Address</u>	<u>Phone</u>
Ernie Paul	NRCO	Raleigh	919 733-4984
Emmie Barrett	EPA	Atlanta	404 241-4450
Dirk Frankenberg	UNC-CH	Chapel Hill	919 + 962-1252
John D. Colwell	DOMH	Beaufort	919 728-2111
Dub Carter		Raleigh	919 833 4859
Ford Cross	NOAA	Beaufort	FTS-670-9724 919 728-8724
Banker Cleson	Alt-CAC	Elizabeth City	919-335-0821
Mike Gantt	FWS	Raleigh	919 856-4520
Dan Ashe	U.S. Congress	Wash. DC	202-226-2460
Bob Holman	NRCO-APES	Raleigh	919-733-0314
Lee Dethinas	EPA-Region IV	Atlanta	
Tommy Rhodes	NRCO-APES	Raleigh	
Marquette Buffin	SCI	Chapel Hill	301-757-6660
NEAL LEWIS	CART. CO. CHAMBER & PAC		726-6832
Ron Sechler	NMFS		728-5090
Todd Nullen	NC COASTAL FEDERATION		393-8185
Randy G. Jarvis	APES		926-535
FRANK REDMOND	EPA-ATLANTA		404 347 2126
Gordon Thayer	NMFS-Beaufort		728-874-
Randy Ferguson	NMFS-Beaufort		728-874
Patti McElhenny - Murren	NMFS-Beaufort		728 8734
Lisa Wood	NMFS-Bft		728-8744
Ernie Parkin	Pamlico CAC		551-4495
Dick Leach	Pamlico CAC		946-5497
Dan H. Parks	ECU		752-4286
Marcia Stults	Virginia. Pilot		332-4043
Randy Cheek	NMFS		728-5090
John Merriner	NMFS		728 8708
MIKE ORSBACH	APES TRCH. COMM		757-688-

AGENDA

Albemarle-Pamlico Estuarine Study
Policy Committee

Time: 1 p.m., June 9, 1988
Location: National Marine Fisheries Center/NOAA
Beaufort Laboratory
Beaufort, North Carolina

- 1:00 - 1:05 Call To Order Lee DeHihns/Thomas Rhodes
- 1:05 - 1:15 Consideration of Minutes
- 1:15 - 1:30 Director's Report Bob Holman
- 1:30 - 2:30 Review the Recommendations of the
Technical Committee Concerning
1988-89 Budget
- 2:30 - 2:45 Consideration of Citizen Advisory
Committee Travel Reimbursement
- 2:45 - 3:00 Review Future Meeting Schedule
- 3:00 - ? Executive Session (if needed)

MERCHANTS MILLPOND STATE PARK: INSTALLATION OF
AGRICULTURAL BEST MANAGEMENT PRACTICES (BMPs)

Why: Merchants Millpond is a state park in northeastern North Carolina in the Albemarle-Pamlico Estuarine Study (APES) area. The park receives heavy recreational use throughout the year. In the past several years, excessive aquatic macrophytes have severely impaired fishing and canoeing. The millpond receives excessive nutrients from agricultural land use. This millpond drains to the Chowan River whose watershed has been declared Nutrient Sensitive Waters by North Carolina and is proposed for a similar designation by Virginia. The millpond's watershed has also been nominated as a targeted nonpoint source watershed for the state nonpoint source (Section 319) program. North Carolina has an active Agricultural Cost Share Program which provides matching funds for voluntary installation and maintenance of agricultural BMPs - some work has been done in the watershed but funds are very limited. This project would greatly expand the ongoing effort to control agricultural nutrients in the watershed. A total of \$500,000 is requested over three years. An existing master plan for the state park and other state and federal reports for the area (including the "Governor's Coastal Water Management Task Force Final Report [1982]" and the Gates Soil and Water Conservation District Strategy Plan) will be used for the management plan.

Who: The Gates District will administer the program under the same rules and regulations established in NCAC Title 15, Chapter 6, Section 6E and Article 21 of Chapter 143 of the North Carolina General Statutes. Funds will be held in account with the NC Department of Natural Resources and Community Development and administered by the Division of Soil and Water Conservation, Nonpoint Source Control Section. Administrative and technical assistance funds will be made available to the Gates District to hire two people to administer, plan and install the program.

What: The specific environmental objective is to reduce the loss of nutrients from agricultural fields and animal operations within the watershed. DEM plans to conduct intensive in-kind support for monitoring of nutrients, macrophytes and phytoplankton in the pond this spring. These data can be used to measure the success of the project when compared to monitoring taken after BMPs are installed. Also, the number (or acreage) of agricultural BMPs which are installed in the watershed will be accurately tracked.

Whereas: The project will be carried out throughout the watershed, which encompasses about 79 square miles, at strategic locations determined to be important in terms of nutrient loss.

When: After project approval, a committee of agency representatives, listed in the WAO section, will determine locations for BMP installation and then allocate appropriate funds. The State Agricultural Cost Share Program operates under a 75:25 cost sharing arrangement and this same ratio would be utilized for this project but the \$15,000 annual maximum will be waived to expedite installation of the BMPs. The entire process should take no more than three years. DEM will monitor the water quality of the millpond.

How: The Gates County Soil and Water Conservation District, assisted by DEM and Soil and Water Conservation, will establish contacts with relevant government agencies (local, State and Federal), identify which agricultural BMPs are needed for individual sites, contact specific individuals and oversee the installation of the BMPs.

ALBEMARLE-PAMLICO ESTUARINE STUDY

Budget: FY 1988-89

Review and General Breakdown

I. Existing Funding Sources

\$ 700,000	EPA FY 1988-89 Funds
225,000	EPA FY 1987 Supplemental Funds
<u>500,000</u>	State of North Carolina Funds
\$1,425,000	Total

II. Possible Supplemental Funding Sources

\$ 400,000	EPA FY 1988 Possible Supplemental Funds (Monitoring Effort)
<u>400,000</u>	EPA FY 1988 Possible Early Implementation Funds
\$ 800,000	Total

(Due to 75%/25% State match APES can only utilize \$575,000 of extra EPA matching funds which would result in a maximum budget of \$2,000,000)

III. General Budget Breakdown

<u>Item</u>	<u>Cost</u>	<u>Percent</u>	<u>Page</u>
A. Administration	\$ 250,000	17.5	2
B. Information Management	164,000	11.5	3
C. Public Participation	150,000	10.5	4
D. Technical Information Acquisition	<u>861,000</u>	<u>60.5</u>	5
Total	\$1,425,000	100.0	

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ALBEMARLE-PAMLICO ESTUARINE STUDY
BUDGET: FY 1988-89

III. BUDGET BREAKDOWN

A. ADMINISTRATION

1.	Personnel		
	a. Project Director	(4.5% Cost of	\$45,796
	b. Clerk/Steno IV	Living Increase	22,198
	c. Public Involve. Coordinator	Above 1987 Wages)	23,701
	d. Data Mgmt. Coordinator		28,000
	*e. Part-time Secretaries (2)		<u>15,000</u>
		Total	134,695
2.	Fringe Benefits		
	a. 18.75% of Wages & Hospitalization		25,255
	b. Longevity Bonus for Project Director and Clerk/Steno IV		<u>1,000</u>
	<i>c. Indirect Costs</i>	Total	26,255
3.	Travel		
	a. Project Director/Staff		8,000
	*b. Non-State Personnel		2,000
	c. Emergency Travel Fund		<u>3,000</u>
		Total	13,000
4.	Equipment		
	a. Computer Software		1,500
	*b. Projectors (2), Slide Screens (2)		1,000
	c. Books/Publications		1,000
	*d. Camera/Tape Recorder		400
	e. Folding Table		<u>100</u>
		Total	4,000
5.	Office Supplies/Film	Total	3,000
6.	Contracted Services		
	a. SCI Data Systems Inc. (Technical/ Coordination of Meetings)	<i>Writing</i>	19,300
	*b. Newsletter (publish)		12,000
	*c. Reserve for Contract Work		<u>16,000</u>
		Total	47,300
7.	Other		
	a. Advertising		500
	b. Telephone		2,000
	c. Postage		2,500
	*d. Printing		12,000
	e. Photocopying		2,000
	f. Express Freight		500
	g. Room Rental		750
	h. Data Processing Service		500
	i. Other Services		<u>1,000</u>
		Total	21,750
		Grand Total	\$250,000

*Additional funds for Citizens' Advisory Committee Activities

B. INFORMATION MANAGEMENT

1. Hardware	\$ 30,000
<p>The costs to continue payments for financing the computer system upgrade that was required to support APES data management activities.</p>	
2. Software	10,000
<p>Contingency funds to pay for additional software if needed by APES.</p>	
3. Maintenance	22,000
<p>The costs for maintenance contracts on hardware and software purchased for APES.</p>	
4. Communications Fixed Costs	20,000
<p>The costs of installing hardware and software to place the LRIS system on an established network; and the fixed fees associated with a network.</p>	
5. Communications Variable Costs	20,000
<p>The costs of using a data communications network. Costs will vary according to usage level.</p> <p>(Items 5 & 6 are awaiting completion of the data needs study and the user requirements study)</p>	
6. Design/Programming	10,000
<p>Costs associated with refining the design of the APES data base and for refining the design of the "front end" software. The major design/programming expenses will be handled with FY '87 funds.</p>	
7. Data Entry and Analysis	50,000
<p>LRIS charges for entering and analyzing data.</p>	
8. Supplies	2,000
<p>Miscellaneous supplies, e.g., maps, mylar, data tapes (VA. 100K's), etc.</p>	
Grand Total	\$164,000

C. PUBLIC PARTICIPATION

<u>No.</u>	<u>Proposal Title</u>	<u>Researcher</u>	<u>Cost</u>
1. 209	Striped Bass	Conoley-Office of Marine Affairs	\$18,000 [39,500]
2. 224	Guide to Streams	McNaught-PTRF	20,140 [13,140]
3. 225	Community Outreach	McNaught-PTRF	18,540 [25,540]
4. 226	Calendar	McNaught-PTRF	14,550
5. 240	Teacher Environmental Education	Carson-ECSU	13,293
6. 266	State of Estuary-TV	Willard-Private	30,275
7. ---	Water Quality Monitoring Project	To be determined at a later date	<u>50,000</u>
		*Total	\$164,798

*Project costs will be negotiated when contracts are drawn up.

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D. TECHNICAL INFORMATION ACQUISITION

1. Continuation of Project

<u>No.</u>	<u>Proposal Title</u>	<u>Researcher</u>	<u>Cost</u>
a. 205	Eutrophication & Algal Bloom	Paerl-UNC	\$ 52,416
b. 206	Offsite Effects of BMP	Bales-USGS	87,000
c. 207	Analysis Hydrologic & W.Q. Data	Bales-USGS	30,000
d. 208	Flow Patterns in Neuse & Pamlico	Bales-USGS	120,000
e. 213	Reduction of Nutrients	Kuenzler-UNC	75,193
f. 226	Function of Fringe Swamps	Brinson-ECU	--
g. 227	Heavy Metal/Organic-Rich Mud Pollutants	Riggs-ECU	34,885
h. 235	Nursery Area Data	Noble/DMF	3,720
i. 236	Fisheries Stock Assessment	Phalen-DMF	--
j. 260	Oyster Bed Success	Sutherland/Duke	68,430
k. 269	Roanoke Striped Bass Egg Abundance & Viability	Rulifson-ECU	17,700
l. 274	Hyde Co. Soil Survey	Soil Survey-SCS	10,000
m. (278)	Roanoke Striped Bass Egg-Larvae Monitoring	Rulifson-ECU	20,130
n. (279)	Evaluation of Resource Protection Programs	Nichols-RTI	<u>32,657</u>
		*Total	\$552,131

*Project costs will be negotiated when contracts are drawn up.

2. New Projects

	<u>No.</u>	<u>Proposal Title</u>	<u>Researcher</u>	<u>Cost</u>
a.	203	Inventory/Natural Area	Roe-NRCD	\$ 59,500
b.	232	Coupling Study of Sounds	Pietrafesa-NCSU	62,624
c.	242	Managing Multiple Use	Clark-NCSU	53,301
d.	250	Shell Disease/Blue Crab	Noga-NCSU	64,420
e.	256	Water Management vs Water Quality	Skaggs-NCSU	66,179
f.	270	Larval Fish/Roanoke & Albemarle	Rulifson-ECU	38,300
g.	272	Losses of Bay Scallops	Peterson-UNC	<u>32,000</u> [64,927]
			*Total	\$376,324

3. Other Projects Needed If Funds Are Available

a.	218	Microbial Indicators	Sobsey-UNC	\$117,028
b.	233	Circulation Model	Janowitz-NCSU	66,364
c.	---	Land Use Mapping	When Funding Is Available	
d.	---	Wetlands Workshop	Subcontracted In Near Future	
e.	---	Management Plan for Currituck Sound	Proposal Needs To Be More Specific In Scope	
f.	---	Public Perception Survey	Proposal Needs To Be More Specific In Scope	

*Project costs will be negotiated when contracts are drawn up.

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DISTRIBUTION OF FUNDING

<u>Work Plan Category</u>	<u>Target %</u>	<u>FY 88-89%</u>	<u>Continuing</u>	<u>Proposed New</u>	<u>Total</u>
Water Quality	40	50	\$399,494	\$ 66,179	\$465,673
Resource Critical Area	25	26	78,430	160,424	238,854
Fisheries	20	15	41,550	96,420	137,970
Human Environment	15	9	<u>32,657</u>	<u>53,301</u>	<u>85,958</u>
			\$552,131	\$376,324	\$928,455

RESOLUTION

WHEREAS, the Albemarle-Pamlico Estuarine Study (APES) is a joint effort between the State of North Carolina and the Environmental Protection Agency; and

WHEREAS, the APES is administered by four administrative boards. The Policy Committee is one of these boards and is made up of nine members; and

WHEREAS, the first project director of the APES, Douglas N. Rader, Ph.D., occupied this position for a 16-month period.

NOW, THEREFORE, BE IT RESOLVED:

1. That the Policy Committee recognizes the outstanding service Dr. Rader performed as the first APES Project Director.
2. That his foresight and diligent efforts on the behalf of the APES will be long remembered after successful management strategies are implemented in the Albemarle-Pamlico Estuarine System.
3. That the Policy Committee wishes him well in his new endeavors.

Adopted this 9th day of June, 1988.

S. Thomas Rhodes, Co-chairman
Policy Committee
Albemarle-Pamlico Estuarine Study

Lee DeHihns, Co-Chairman
Policy Committee
Albemarle-Pamlico Estuarine Study