

ALBEMARLE-PAMLICO ESTUARINE STUDY

MINUTES OF POLICY COMMITTEE

March 7, 1990
Duke Marine Laboratory
Beaufort, NC

CALL TO ORDER

The meeting was called to order at 9:10 a.m. by the Co-chairman of the Policy Committee (PC), Secretary William Cobey. Attendee list Attachment A.

CONSIDERATION OF MINUTES

Dr. William Queen moved that the Policy Committee minutes of November 21, 1989, be approved as distributed. Dr. John Costlow seconded the motion which was unanimously approved.

PROGRAM REPORT

Dr. Robert Holman gave the PC an update on the program (Attachment B). He noted that it is doubtful there will be any demonstration money for FY 1990. He submitted a letter and resolution to the PC Co-chairmen to be given to Paul Wilms who is no longer with the Department. Dr. Bud Cross moved that the resolution be adopted; Ms. Mike Gantt seconded the motion which was unanimously approved. The Committee was also informed that Dr. Parker Chesson has resigned from the Albemarle Citizens' Advisory Committee. A request has been submitted that a representative of the Virginia Division of Inland Fisheries, Mr. Mitchell Norman, be appointed to the Technical Committee. Dr. Bud Cross moved that Mr. Norman be added to the Technical Committee; Ms. Gantt seconded; motion was approved. Dr. Holman asked the PC to approve payments to CAC members to attend the NC Coastal Federation workshops to be held May 4/5 in Greenville with a follow-up meeting on June 5, 1990. Payment would come from the contract now in effect with the NC Coastal Federation and would include transportation, lodging and meals up to a certain amount on May 4/5 and dinner on June 5. Dr. Costlow moved that the PC authorize that expenses for members of the CACs for meetings on May 4/5 and June 5 be reimbursed by the NC Coastal Federation. Ms. Gantt seconded the motion which was unanimously approved.

Ms. Joan Giordano, the public involvement coordinator, gave an update on public participation activities (Attachment C). Ms. Giordano noted that the video shown at the Roundtable meeting on March 6 prepared by Gary Smith is the most recently completed electronic media presentation for the Study. Mr. Cobey suggested that this video be tightened up to 20 minutes. This would make it better for use at civic clubs and other events. He also suggested editing out the phrase "all kinds of people".

Discussion arose regarding the number of newsletters produced by the program and the associated cost. Dr. Holman was instructed to explore contracting out all or part of the newsletter as a possible cost saving alternative.

Mr. Ted Bisterfeld reported that Dr. Tudor Davies, Director of the Office of Marine and Estuarine Protection, visited Region IV in December 1989 to conduct a program overview of the A/P Study. He was pleased with the progress of the Study and encouraged about the Status and Trends work. Mr. Bisterfeld asked Ms. Stephanie Sanzone of OMEP to provide information on the base budget for the A/P Study. Ms. Sanzone indicated the base budget is \$1.2 million for FY 1990. Funding for programs under the National Estuary Program did not decline. New programs received increased funding; the older programs' funding stayed level. Mr. Brewster Brown questioned what happens to money that is not spent from year to year. Dr. Holman said federal money carries forward for two years and state funds that are not encumbered go to the state's general fund. Mr. Lee DeHihns recommended that Dr. Holman and Mr. Bisterfeld provide the Policy Committee a report which will show what has come to the program, what has been spent each year, and what has carried forward or reverted.

STATUS AND TRENDS REPORT

Development of the Preliminary Status and Trends Report (STR), both technical and public versions, was discussed. Mr. Cobey said that it was inappropriate to go to public hearings with a document that contains no conclusions for the public to view. Mr. Brown suggested that resource managers involved with the development of the Status and Trends Report be available at the public hearings. Ms. Gantt suggested the resource managers group be expanded to include citizens who will be affected. Mr. DeHihns recommended that the Technical Document include conclusions or an analysis that indicates conclusions can or cannot be determined. The public has to know what conclusions have been reached as a result of the technical version of the Preliminary STR. Dr. Queen made a motion that the public hearing process be suspended for a time period of time. This would allow the authors of the Technical Version of the Preliminary STR come up with conclusions to be included in a modified draft report to be presented to the Technical Committee for their consideration, and a new preliminary public version draft with conclusions being produced by the Technical Committee and staff. Dr. Costlow seconded the motion. Dr. Holman asked permission to pay per diem to those involved in the rewrite. Dr. Queen amended his motion to include paying per diem to the authors of the Preliminary STR to meet and come up with conclusions. Ms. Gantt urged that someone with agricultural extension review the document with regard to "tone". Mr. DeHihns restated the motion to suspend the current process of going to public hearings; that conclusions be added under the principal supervision of the Co-chairmen of the Technical Committee; that a revised document be provided for public consumption; and that May 9 be the initial deadline for

completing this activity. This process would include the announcement of the document's availability and setting new public meeting dates. Mr. Brown suggested communicating this new process through the newsletter so everyone is aware of the steps being taken. The motion carried unanimously.

REVIEW OF TECHNICAL COMMITTEE RECOMMENDATIONS FOR FY 1990-91 FUNDING AND BUDGET PACKAGE

A motion to approve the FY 1990 budget was made by Dr. Queen and seconded by Mr. DeHihns. Dr. Holman reviewed the public participation projects recommended by the Technical Committee (Attachment D). Mr. Brown amended the motion that the staff follow closely the guidelines set by the Technical Committee on Proposals #431 and #444 and that Proposal #413 be removed from the budget as not being consistent with the public participation aspect of the A/P Study. Mr. DeHihns seconded the motion relative to proposal #413. Without objections the PC accepted the motion on Proposals #431 and #444 that the staff follow closely the guidelines on these set by the Technical Committee. During the discussion on Proposal #413, Dr. Holman indicated that if this project is not funded, the money could be used to help fund early demonstration projects for which there are no funds this year. Currently there are three ongoing early demonstration projects that will not be completed if funds are not available to continue them (agricultural BMPs in Upper Bennett's Creek Watershed; the monitoring effort of urban BMPs; the effectiveness of flash board risers and tide gates). Approximately \$225,000 is needed to continue funding the early demonstration projects. Aspects of the demonstration projects were discussed. Ms. Sanzone explained there has never been any guarantee of early demonstration money.

Dr. Holman reviewed the technical information acquisition proposals recommended for funding by the Technical Committee (Attachment E). A motion to delete Proposal #447 was made by Dr. Costlow; seconded by Dr. Cross. Dr. William Hogarth noted that the Division of Marine Fisheries has received a \$220,000 grant from SK to look at trawls and gear development. Dr. Costlow moved to defer consideration of Proposals #465, #467, #468 until the Technical Committee has had an opportunity for further reviews, particularly by physical oceanographers. If the Technical Committee is satisfied by these additional reviews, then these proposals stand approved, and if not, the proposals be resubmitted for consideration by the Policy Committee. Dr. Queen seconded the motion which was unanimously approved. Mr. DeHihns questioned the appropriateness of the A/P Study funding Proposal #437 (kraft mill effluent) when perhaps this is something the State should be funding. Dr. Queen moved that Proposal #437 be deleted from consideration. Mr. DeHihns seconded the motion. Mr. Cobey recommended that for future funding considerations the Policy Committee be provided the ranking order of projects as determined by the Technical Committee.

Dr. Holman reported on the Administrative budget for the program. Dr. Carl was asked to look into the cost assessed for regional office space. Dr. Holman noted that the administrative budget is lower than the previous year primarily due to shifting the data manager position to the Information Management budget. The Information Management budget is essentially the same as last year except for the addition of the software specialist and applications specialist positions. There was discussion regarding items in the Information Management budget. Dr. Costlow asked that Karen Siderelis give an update to the Policy Committee at the next meeting. Mr. Brown moved that the budget for Information Management be reduced from \$10,000 to \$30,000; Mr. Don Bryan seconded the motion.

The priority early demonstration projects ranked by the Technical Committee were Urban Removal by a Demonstration Urban BMP and Upper Bennett's Creek Watershed BMP. Dr. Holman was given authority to renegotiate the costs of the recommended projects to aid in obtaining money to fund these early demonstration projects.

The original motion to approve the budget as presented was amended by Dr. Queen to include the two recommended demonstration projects in the budget package and that Dr. Holman reduce the budget through negotiations with researchers. Mr. Dan Ashe seconded the motion. The motion was unanimously approved.

The motion regarding reducing the Information Management budget from \$10,000 to \$30,000 was approved.

The motion regarding deleting Proposal #413 (Estuarine Resource Center) was considered. Mr. Bryan spoke in support of including this proposal in the budget. He said to have an organization trying to get the public to provide money is the best possible way of getting public support and getting people involved in the program. The motion to delete Proposal #413 failed.

A motion to delete from the budget Proposal #437 (Biomarkers for Kraft Mill Effluent) was considered. The motion passed to delete Proposal #437 from the budget. Dr. Costlow abstained in the voting.

A motion to delete Proposal #447 (Effect from Trawling) from the budget was considered. Dr. Queen abstained. Dr. Cross pointed out that this was among the top ranked priorities of the Call for Proposals. The citizens groups had a large input into getting this topic in the call and it is a very controversial subject. Mr. Brown expressed concern that the CACs are going to look at the final budget and see that items they felt were not needed were funded and items they felt important were deleted. He was concerned about the message this would convey. Mr. Ashe suggested that someone from Marine Fisheries go to the next CAC meetings to explain what research is being done in areas the CACs felt necessary. Dr. Hogarth agreed to participate in this

effort. The motion to delete Proposal #447 from the budget was approved.

The Citizens Monitoring Project funding was increased to \$35,000.

Mr. Cobey said the original budget of \$1,700,000 now came to approximately \$1,780,000. Dr. Holman indicated that through negotiations with researchers the budget could be balanced.

Dr. Holman reviewed the budget revisions:

- (1) Administrative Budget unchanged
- (2) Information Management Budget - reduced by \$30,000
- (3) Information Acquisition: delete #437, #447; add two demonstration projects; Citizens' Monitoring to be funded at \$35,000
- (4) Additional reviews solicited on #465, #467, #468.

The motion to adopt the budget as amended was unanimously approved (Attachment F).

Mr. Ashe raised a question regarding the potential for an early demonstration project if funds become available from EPA.

Ms. Sanzone said the concept was for projects to be selected on a competitive basis; not necessarily one project per program and the range would be \$50,000. Ms. Sanzone also stated OMEP would be providing guidelines regarding what types of projects they are interested in funding. The consensus was when the guidelines are provided by OMEP the Co-chairs of the the Technical Committee will decide which early demonstration project to submit to OMEP.

MEETING SCHEDULE UPDATE

Dr. Holman reviewed the schedule (Attachment G). Mr. Bryan suggested a meeting should take place before August. Dr. Cross also noted that a meeting was proposed for June last year but was cancelled. Mr. Cobey recommended a June meeting that would include (1) a presentation on the GIS system by Karen Siderelis; (2) a presentation on the monitoring program; and (3) a field trip. Dr. Costlow moved that a June meeting be held to include those items; Ms. Gantt seconded the motion. Dr. Queen suggested holding the meeting in Greenville. The Policy Committee decided to hold a site visit and a retreat on the afternoon of June 12 and a formal meeting on June 13. Mr. Brown requested an updated budget for the coming year that reflects the new figures and any carry-over funds. The Policy Committee also decided to discuss the pros and cons of contracting out the newsletter; an informal legislative liaison effort; and the submission of a letter from the Policy Committee to OMEP regarding delaying the milestone on completion of the CCMP.

ADJOURNMENT

At 2 p.m. Dr. Costlow moved that the meeting be adjourned. Dr. Queen seconded the motion which was approved.

6
ATTENDANCE LIST

Attachment A

POLICY MEETING
March 7, 1990NAMEAFFILIATION

Marcia Huttis	Virginian - Pilot
Ernie Carl	Tech Committee - APES
Tommy	PCA
Bob Rich	Carteret News-Times
David W Engel	NMFS, Beaufort
Randy Ferguson	NMFS, Beaufort
Ted Bisterfeld	EPA, ATLANTA
Heane Schultz	Albemarle Commission
Boo Crum	EPA
Ann With Eades	VA Division of Environmental Mgmt
George Everett	Division of Environmental Mgmt - NC
Taan Giordano	APES Staff
Lee Dettlins	U.S. EPA
Bill Coby	N.C. EHR
John D. Costlow	Duke Univ. Mar. Lab, Beaufort
William H. Queen	East Carolina University

ATTENDANCE LIST

POLICY MEETING

March 7, 1990

NAME

AFFILIATION

Mike Gault	US Fish & Wildlife Service
FORD CROSS	NOAA
DAN ASHE	U.S. CONGRESS
DOD BRYAN	Town of Nags Head
Brewster Brown	A.C.A.C
Bob Holman	A/P Staff
Stephanie Sanzone	EPA Office of Marine & Estuarine Protection
Joe Holbeck	Albemarle County Commissioners
Bill Cole	US Fish & Wildlife
Bill Hogarth	Marine Fisheries

ALBEMARLE-PAMLICO ESTUARINE STUDY

DIRECTOR'S REPORT

POLICY COMMITTEE

MARCH 7, 1990

1) EARLY DEMONSTRATION PROJECTS

a) The program currently has 3 agricultural BMP projects from 1988 funding and 1 urban BMP project from 1989 funding.

(1) Urban BMP project - design complete; process of land acquisition; completion of structure set for October 1990

(2) Agriculture BMP projects

(a) Merchants Millpond Watershed - >40 BMP contracts signed (e.g., lagoons, broiler storage, filters, solid set)

(b) Solid Set - 3 sites
--Bertie site 35% in place
--Currituck site 90% in place
--Washington site - moved to Tidewater Research Station 90% in place

(c) VA Animal Waste Management
-- 1 of 6 new waste system designs complete (entire system)
-- 12 of 19 nutrient mgmt. plans complete (pump down)

2) INFORMATION MANAGEMENT

- A) LRIS (now Center for Geographic Information and Analysis [CGIA]) proceeding with land use and land cover classification for entire study area; due in August 1990
- B) First pilot area for land use mapping will be the Currituck Drainage Basin
- C) Old 1970-73 U. S. Geological Survey LUDA data is on line and CGIA is providing county statistics for each county within the study area
- D) CGIA will take over the data manager position by hiring a software specialist and GIS specialist

3) TECHNICAL COMMITTEE

A) Technical Review and Citizens' Affairs Subcommittees have been busy reviewing the FY 1990-91 proposals. The meetings to finalize their recommendations to the Technical Committee were February 14-15 and February 9, respectively. The Subcommittee's recommendations were submitted to the TC on February 20, for review.

B) Provide committee members with copies of:

- Preliminary Status and Trends Report (Technical version)
- Scoping of Water-Column and Bottom Sediments
- Analysis of Fringe Wetlands
- Fish Stock Assessment

4) MEETINGS

- A) Nov. 14 - OMEP annual audit of files - 93% complete (Raleigh)
- B) Nov. 22 - Fourth year call for proposals sent out (Raleigh)
- C) Dec. 4-8 - OMEP second annual technology transfer meeting (New Orleans)
- D) Jan. 18 - VA/NC interaction meeting (Chesapeake, VA)
- E) Feb. 16 - Presentation to Surface Water and Environmental Review Legislative Research Commission Study

5) FY 1990-91 PROPOSED PROJECTS

A) Total 74 projects consisting of:

Early Demonstration (8)	Human Environment (7)
Fisheries (5)	Resource Crit. Area (5)
Water Quality (20)	Public Participation (29)

B) Review Procedure

Albemarle Tech. (Peer Review)
CAC 1/31 Review 2/14-15

		Technical Committee	Policy Committee
Pamlico Citizens (Peer Review)		2/20	3/7
CAC 1/29 Affairs 2/9			

6) PUBLIC PARTICIPATION

Joan Giordano's Report

117

STATUS AND TRENDS REPORT

- A) Both Preliminary reports (public and technical versions) delivered to project office on January 16, 1990
- B) Public meeting scheduled at 5 locations throughout the state (March - April)
- C) Status/Trends Review Group - resource managers. organizational/meeting January 30, to develop recommendations and conclusions to report
- D) Technical version sent out for peer reviewer comments
- E) Final version due to OMEP October 1990

Public Involvement Coordinator's Report
 Policy Committee
 March 7, 1990

1. Citizens' Advisory Committees (CACs)
 - continue to meet quarterly
 - meeting notices sent to public officials, interested citizens and newspapers in meeting area
 - 2 CAC representatives attended Citizen Monitoring Conference in New Orleans in December (see attached)
 - vacancies exist: P-CAC (1); A-CAC (6)

2. Exhibits
 - portable exhibit used in New Orleans
 - portable exhibit recently returned after use in Atlanta at EPA Region IV
 - State Fair Exhibit (Nursery Area Model) was used at APES Annual Meeting in November in Edenton
 - Nursery Area Model presently on display at PTRF's resource center in Washington, NC
 - Nursery Area Model will be used on April 7 & 8 at WRAL's Coastal Celebration in Raleigh and April 22 at River Park North in Greenville
 - Exhibits are available for use in study area at any time

3. Outreach
 - Educational presentations:
 - * White Oak School PTA - Chowan Co.
 - * Elizabeth City State University
 - * Albemarle Womens's Network - Elizabeth City
 - * Girls' Club - Elizabeth City
 - * Soil & Water Area 5 Supervisors' meeting
 - * Press Conference in Raleigh - December 19, 1989
 - with Secretary Cobey and DPI Superintendent Bobby Etheridge
 - * Distribution of environmental education materials to 459 schools in APES Area, ECU, environmental groups, individuals
 - Local Government Liaison:
 - County Commissions:
 Hyde, Hertford, Camden, Currituck, Gates, Perquimans, Pasquotank, Chowan, Bertie, Craven, Beaufort, Pitt, Pamlico, Martin, Tyrrell, Washington
 - Municipalities:
 Gatesville, Hertford, Winfall, Edenton, Manteo, Kitty Hawk, Bath, Kill Devil Hills, Elizabeth City, Farmville, Greenville, Plymouth, Jamesville

Interest level varied from little to great.

4. ProjectsPrint:

- Poster series/bumper stickers - completed, being distributed
- calendar - completed and distributed
- "Guide to Estuaries"- completed, distributed and going to reprint
- "Where Rivers Meet the Sea"- being distributed to schools as part of December packet; additional copies being printed for public distribution
- Status & Trends (public version) - completed; distribution ongoing

Electronic:

- Video PSAs - completed; distributed
- Video/Slide Show - completed; will be shown at Roundtable, 3/6, in Beaufort
- Radio Talk Show - 1st of 6 scripts completed and approved; will begin airing in March
 - March 4 - WRDU - 6:30-7:00 AM
 - March 9 - WELS - 8:00 AM
 - March 12 - WBTB - 8:30 AM
 - WJNC - 9:00 AM
 - March 28 - WELS - 8:00 AM

Public Meetings:

- Workshops on Water Quality - scheduled for March 6, 7, 14 & 15
- Forum on Management Needs for Protecting Estuarine Resources in A/P System - 2 of 4 completed
- APES Annual Meeting - completed - November 4, 1989 (Edenton)
- Assisting CACs with Estuarine Management Recommendations - planning stage; scheduled for May 4 & 5 in Greenville
- Press Tour - scheduled for late spring

All 3rd cycle projects are completed or nearing completion

5. Meetings & Events

- Citizens' Monitoring Conference - New Orleans - December 5-8, 1989
- ECU Chancellor's Forum on Economics & the Environment - January 3 & 4, 1990
- State Fair
- Roundtable & Policy Committee March 6 & 7 - Beaufort
- Status & Trends Public Meetings (5) across state in late March & early April
- Workshops on Water Quality - March 6, 7, 14 & 15
- Public Forum on Management Needs for Protecting Estuarine Natural Resources in the A/P System - February 21 & 27

6. Newsletters

- January edition is out
- next edition in April
- expanded mailing list to 17,000
- responses are very favorable
- negotiation of the new contract and new layout arrangements caused delay

7. Inquiries to Program

- receive almost daily response to newsletter, T.V. from educators, press, students and business
- inquiry log is kept, average response time is 2-3 days
- requests for publications are very popular

REPORT TO THE A/P STUDY ON THE EPA CITIZEN MONITORING CONFERENCE

NEW ORLEANS, DECEMBER, 1989

The conference gave participants an opportunity to learn what's going on in the world of citizen monitoring across the country. Presenters represented states north, east, south and west and offered two days of panel discussions on their programs. As a result of these discussions, I feel that the Citizen Monitoring effort funded by the A/P Study is one of the most thorough, cost-effective, and safe programs in the country.

Programs in northern states must put away their test tubes in winter as lakes and streams freeze over. Other programs test only one parameter, such as turbidity. Still other programs require monitors to use boats for testing. A/P Citizen Monitoring has the advantage of testing year round because of reasonable weather conditions, the program tests several parameters, and convenience and safety of volunteers are primary considerations. All participants agreed, however, that good quality control and close cooperation with state officials were crucial to the success of all programs.

If we are to continue this valuable data collection and public education program beyond the five-year A/P Study, efforts should begin now to set up a means of sustaining it financially. A non-profit foundation, modeled after the Chesapeake Bay Foundation, partially supported by regional donations and partially supported by federal/state governments, would give volunteer citizen monitoring an identity of its own yet maintain the necessary close ties with state agencies. I would urge that solid groundwork be laid in the next two years for the formation of such an entity.

Respectfully submitted,

Carolyn Hess *CH*

2nd National Citizens Volunteer Monitoring Conference

"The Role of Citizen Volunteers in Environmental Monitoring"

December 5 - 9, 1989

New Orleans, LA

Sponsored by the EPA Office of Marine & Estuarine Protection, and the Office of Water Regulations & Standards; and the Gulf of Mexico Program.

About 150 Citizen Volunteers, scientists, government officials, representatives of industry and others, all united by a common concern for the environment, met recently in New Orleans. Their mission was to take a hard look at how Citizen Volunteers involved in environmental monitoring are being used, how effective are they, should their use be expanded in the future, and if so, how?

Tudor Davies, of EPA's Office of Marine Estuarine Protection set the up-beat tone of the conference in his opening statement that there are now 20,000 citizen volunteers involved in environmental monitoring, and the number is increasing daily. He admitted that state and other agencies were originally sceptical in respect to the accuracy and acceptability of the data provided by citizen volunteers, but they have now become true believers and are enthusiastically recognizing the large and expanding roles that trained volunteers can fill. This becomes especially important in the current climate of shrinking Federal and State budgets, and our huge national deficit.

Tudor Davies posed the sobering question: "Where are we going to obtain the money we'll need to protect our estuaries?" In his answer, he stressed the importance of obtaining a consensus to achieve this and emphasized that citizen volunteers can be the "heroes" in this, by galvanizing action through stirring up grass roots support.

North Carolina's Dr. John Costlow of Duke Marine Laboratory, and TV personality/actor Dennis Weaver of The American Oceans Campaign each delivered stimulating keynote addresses.

Dr. Costlow urged the implementation of estuarine or other water improvement management action based on the reliable knowledge we have already collected. In many situations, we already have sufficient information to allow us to get started, and don't have to collect more data.

He emphasized the extreme importance of communications in our water improvement efforts; communications between all the concerned parties. This includes the property owners, the fishermen, the sportsmen, the concerned organizations, the environmental groups, the bureaucrats; the government, starting with municipal, county and state and including federal.

Dennis Weaver told us that we are now paying the bill for the Industrial Revolution, and claims that ignorance is our most serious problem. However he believes that we are seeing a real change in environmental consciousness today, and that constitutes our greatest hope for the future.

Contrary to what some environmental critics have claimed, he is convinced that we are not over-reacting to our environmental problems; instead, our scientific community tells us that we are under-reacting, badly.

In the three days of conference sessions, we heard from 27 speakers that were on the published program. All of them had something of real interest to contribute. Conferees added many ideas and thought-provoking questions.

Here are some notes on what this conferee learned. Some of these items are, or could be applicable to our citizen volunteer monitoring efforts in the Albemarle-Pamlico estuaries.

1. Before starting new environmental monitoring programs, we must check carefully to be certain that the information being sought isn't being provided by programs already in existence. There is a great risk of re-inventing the wheel; especially when "turf battles" and inter-agency rivalrys are allowed to creep in.
2. An effective data base, and master data collection system available to all users is an essential ingredient of all environmental monitoring programs.
3. A program to guarantee quality assurance and quality control for citizen Volunteer environmental monitoring is another essential ingredient. To date, the volunteer programs now in effect have ranked high in this - - as North Carolina's Paul Wilms stated at the conference, "I haven't had a single problem yet with the accuracy of the data provided by citizen monitors." Other speakers also confirmed the high technical quality of the data being produced by volunteers.
4. A successful citizen environmental monitoring program must include good communications in all directions, such as between monitor, and feed-back of the significance of the data after it has been analysed. The data should be communicated to your federal, state, county and local regulators, to technical institutions, to local politicians. Communications with your media is especially important.
5. If you set up a worthwhile citizen volunteer program to collect data, keep the program going. The value of the data increases with the length of time over which it is collected. And be sure the data is utilized.
6. Be innovative in finding new ways in which citizen volunteers can be utilized in environmental monitoring. The following is a partial list of projects already in operation that were mentioned at the conference:

6. (continued)

- Freshwater and Saltwater (by both chemical and biological means)
- Fish
- Sediment
- Shellfish
- Nearshore habitat
- Marine mammals
- Birds
- Conductivity
- Weed census
- Chlorophyll
- Algae
- Acid rain
- Weather
- Marine debris
- Fish tagging

7. Emphasizing again the importance of assuring that monitoring programs once initiated are kept going, their value was stressed as a means of recording observed trends resulting from the effects of additional pollution, as well as verifying the results of management actions to improve water quality.

8. Of special importance to programs built around the use of citizen volunteers who perform their functions on a part time and intermittent basis is the requirement that written procedures, "protocols", or written check lists be developed and used for every function. Such "protocols" can serve as major ingredients for the training programs for citizen volunteers.

9. Training programs for citizen volunteers are viewed as essential. The expressed theme was that no volunteer should be allowed to perform his function without completing a training program and satisfying his coordinator that he can do the job correctly. (He means either "he" or "she", of course!)

10. Several conferees expressed a need for more toxics monitoring, and asked that the practicality of utilizing citizen volunteers for such work be looked at.

11. The need to seek diverse sources of funds for the support of citizen volunteer monitoring received considerable attention. One conferee told of collecting "lay monitoring costs" of the citizen volunteers, (including the theoretical value of time that the volunteers donated), and crediting this into their matching fund applications. While the manpower portion of the cost of environmental monitoring is reduced or eliminated with the use of qualified volunteers, equipment and other costs still have to be faced, and support from organizations, agencies, grants etc. must be found. Innovation in fund raising will be a continuing requirement

12. Environmental monitoring programs must include a rapid response procedure whereby episodic or catastrophic events that are

detected by the citizen volunteers can be immediately channeled to the appropriate agency for further official action, (as in North Carolina Stream Watch, Coastal Management etc.)

13. Several attendees asked what the EPA or other agency could do to satisfy the apparent lack of liability insurance for citizen volunteers involved in accidents while doing environmental monitoring, particularly those doing their work from boats. No satisfactory answer to this potential concern was heard, other than that the organization providing the monitors, (if an organization be involved), might have insurance protection against liability claims arising from an accident.

14. Several organizations represented at the conference, and many attendees announced their firm conviction that we have plenty of good environmental legislation on the books, but that not nearly enough is being done to assure compliance and enforcement. Two major groups said that they are concentrating their efforts this year on urging improved enforcement of environmental laws on the local - "grass roots" level instead of lobbying for new laws at their state capitol or in Washington.

15. "Emphasize the positive" was the theme of several speakers. Few if any estuarine homeowners, developers, or marina operators will fail to say yes when we ask if they are in favor of improving the quality of our waters. So right at the start we have an area of agreement from which we can start working out acceptable programs to make our waters better. Then, it takes communication, education and facts. These facts are something that we can expect reliable monitoring to provide.

16. Raising public awareness of environmental problems is one of the key benefits of citizen volunteer monitoring. But to take full advantage of this, good communications must exist. A further factor is that the citizen volunteers who are aware of the problem generally become involved in its solution.

17. To be truly effective, estuarine water monitoring programs must extend into the entire watershed area and not be restricted to the estuary. This point was stressed particularly by scientists of the Chesapeake Bay and other major programs.

Cal Yaggy

Calvin D. Yaggy

1/28/90

PC
3/8/90

RECOMMENDED PROPOSALS FOR FUNDING

Individual Review*

PUBLIC PARTICIPATION

NUMBER	PROPOSAL TITLE	INVESTIGATOR	COMMENTS
403	Water Quality Awards Program	Burn (ARC)	*coordinates effort only *development criteria for judgement *recommendations to be made from a A/P Study committee
407	Assisting with Annual Meeting, 10 facts sheets, 5 Educational Pamphlets, and reprint Citizen's Guide	Tursi (NCCF)	*drop 5 educational pamphlets *extensive revision of Citizen's Guide *reduce cost to \$40,000 *10 fact sheets will be significant project synopsis
408	Radio Outreach Program	Cleary (BF)	*length of each segment should be from 3 to 5 minutes *scripts need close review by staff and publication review
409	Public Education Outreach in Albemarle Sound Area	Powers (AEA)	*continuation of good effort *coordinate closely with staff and and Public outreach
411	Five Fact Sheets for Albemarle Sound Area	Powers (AEA)	*is this enough money? *distribution plan needed
412	"Precious Waters" Display at Atlantic Beach Aquarium	Conoley (NCAS)	*excellent coverage by first display *reduce cost to \$30,000 and have investigator find private funding sources *possibility of expanding display to surrounding area of aquarium grounds
413	Feasibility Study for a Estuarine Resource Center Inland	McNaught (PTFF)	*reduce cost to \$12,000 with match necessary from other sources *study will not be site specific but will explore all possible sites *strictly a planning effort
431	Public Education Outreach in S.E. Virginia	Carlock (SEVPD)	*on going project *reduce cost to \$21,000 *clearly define what program is receiving for this cost
439	Commercial TV Video "Yes In Your Backyard"	Willard (WF)	*remove pamphlet element *needs a distribution plan *reduce cost to \$30,000

*This is proprietary information provided solely to the Policy Committee members to aid in their review process

444 Model Education Curriculum for Elizabeth City/Paquatan County School System

Schultz (EC/PCS)

- *contract directly with school system
- *coordinate with regional education center
- *present curriculum to other school systems in area
- *final written evaluation needed

474 Public Education Outreach in Pamlico Sound Area

Stroud (PTRF)

- *continuation of good effort
- *need to continue local govt. outreach component
- *need staff/publication review of news articles
- *clarify all elements of proposal

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128

RECOMMENDED PROPOSALS FOR FUNDING

Individual Review*

TECHNICAL INFORMATION

NUMBER	PROPOSAL TITLE	INVESTIGATOR	COMMENTS
401	Regional Inventory of Critical Natural Areas	Roe (DPR)	*continued good effort into final upland phase *check travel budget *be sure regional characteristics are defined
416	Delineation of SAV in Currituck, Albemarle, and Pamlico Sounds	Ferguson (NOAA)	*work needs to continue on this valuable element *costs are in line
	Citizen's Monitoring Network		*effort needs to continue *needs supervision/oversight organization *need an annual publication of work *project not a full man year of work at this stage of development
437	Utilizing a Fish/Shellfish as a Biomarker for Kraft Mill Effluent	Dighe (Duke)	*tie this to other toxicants (EPA lab) *reduce cost to \$70,000 *review methods section closely
435	Develop Point & Nonpoint Nutrient Budgets for Major Tributaries	Dodd (RTI)	*effort ties to A/P Study milestone *DEM fully supports project *evaluate individual storm events
	Mgmt. Plan for Currituck Sound Watershed (Modeling)		*reduce cost to \$30,000 *model is unverified 1983 effort *little W.Q. data exist but stations from other sources are being established
461	Evaluating Crab Hemocyanin as an Indicator of Stress	Engel/Brower/Hoga (NMFS, Duke, NCSU)	*limited funding provided \$5,000 to date *reduce cost to \$20,000 *what will the answer provide the Study?
465	Continuous Monitoring of the Open Sounds	Bales (USGS)	*baseline data needed (continuation project) *May-Oct. a critical time period *how is the data provided? *how are these stations tied to Flow/Flow Pattern Study
467	Flow/Hydrodynamic Modeling of Albemarle Sound	Bales (USGS)	*need fund level for entire project and time frame *\$175,000 additional funds to be provided by SBB/COE *project is needed

*This is Proprietary information provided solely to the Policy Committee members to aid in their review process

468	Determine Flow/Flow Pattern for Pamlico and Newuse River Systems	Bales (USGS)	<ul style="list-style-type: none"> *continuation project- *model to be run this year *this would be final year of funding *project supported by DEM
	Inventory of Available Toxicant Information		<ul style="list-style-type: none"> *project is needed *reduce cost to \$20,000 *much of the information in the 305L list of N.C.
473	Baseline W.Q. Monitoring	Tedder (DEM)	<ul style="list-style-type: none"> *tied to #465 *expansion of DEM existing ambient stations (<i>continuation project</i>) *reduce cost to \$50,000 *only fund ambient monitoring efforts
434	Examination of Blue Crab Fishery (Pamlico Sound)	McKenna (DMF)	<ul style="list-style-type: none"> *will be looking at bycatch *is catch data available? *why can't DMF conduct this study themselves?
447	Study the Effects of Trawling Utilizing Bottom Organisms as Indicators	Ambrose/West (ECU)	<ul style="list-style-type: none"> *problem with variability transects *compare with different areas *do not fund the evaluation of data 20 years ago
454	Water Quality and Ulcerative Mycosis Relationship Utilizing Menhaden	Noga (NCSU)	<ul style="list-style-type: none"> *continuation of tank study to narrow W.Q. parameter *need for better statistical design *evaluate other W.Q. data sources besides own data
415	Public Attitudes Toward Different Management Strategies	Hoban/Clifford (NCSU)	<ul style="list-style-type: none"> *continuation effort needed *review direct costs
430	Evaluate Environmental Management strategies from Other Sources Outside the A/P Study	Bartholomew (CPN)	<ul style="list-style-type: none"> *project needed *investigators have background dealing with other estuarine programs
452	Evaluation Federal Programs	Nichols (RTI)	<ul style="list-style-type: none"> *similar to state program evaluation he is conducting <i>now</i> *some specific programs need to be included *needed study for evaluation of all <i>existing programs</i>

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Attachment F

ALBEMARLE-PAMLICO ESTUARINE STUDY -- RECOMMENDED BUDGET: FY 1990-91

I. BASE BUDGET BREAKDOWN

ITEM	GUIDELINE	PERCENTAGE	COSTS
ADMINISTRATION	15%	13.07%	\$222,109
INFORMATION MANAGEMENT	15%	10.94%	\$186,000
PUBLIC PARTICIPATION	10%-20%	17.10%	\$290,784
TECHNICAL INFO ACQUISITION	60%	63.51%	\$1,079,703
TOTAL		104.62%	* \$1,778,596

II. EXISTING FUNDING SOURCES

EPA FY 1990 Clean Water Act Section 320 Funds	\$1,200,000
State of North Carolina Appropriated Funds	\$500,000
Total (Base Budget)	\$1,700,000

*API REVED PROJECTS WILL BE NEGOTIATED WITH RESEARCHERS TO BALANCE FY 1990 BUDGET

III. OTHER COMMITTED FUNDS

Army Corps of Engineers	** \$135,000
N.C. Striped Bass Study Management Board	** \$40,000
	\$175,000

**funds used to support Proposal #467

BUDGET BREAKDOWN

A. ADMINISTRATION

PERSONNEL (5% COST OF LIVING INCREASE ABOVE 1989 WAGES)

Project Director	\$50,250
Administrative Asst. (Clerk/Steno IV)	\$24,280
Clerk/Typist III	\$15,763
Public Involvement Coordinator	\$26,006
Clerk/Typist III (Part-time)	\$7,881

\$124,180

FRINGE BENEFITS

Social Security Contr (7.65%)	\$9,500
Retirement Contr (11.74%)	\$14,579
Longevity Pay (Project Director/Admin. Asst.)	\$1,800
Indirect Costs (7.5% for Personnel)	\$9,314

\$35,192

TRAVEL

Project Director/Staff	\$10,000
Citizens' Advisory Committees	\$5,000
National Estuary Program Participation	\$3,000

\$18,000

EQUIPMENT

Desk/chair/filing cabinet/bookcases	\$2,000
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\$2,000

OFFICE SUPPLIES/FILM

\$5,000

\$5,000

OTHER

Advertising	\$550
Telephone	\$3,200
Postage	\$6,000
Printing	\$14,000
Photocopying	\$4,000
Photo/Graphic Services	\$2,000
Books/publications	\$400
Express Freight	\$550
Room Rental	\$537
Data Processing Service	\$500
Other Services (repairs, emp. training, equip. rental, srv./maintenance contracts, insurance & bonding, refreshments at meetings, etc.)	\$2,500
Regional Office Space Rental (2 staff positions)	\$3,500

\$37,737

TOTAL ADMINISTRATION

\$222,109

132

INFORMATION MANAGEMENT

HARDWARE

\$30,000

The cost to continue payments for financing the computer system upgrade that is required to support A/P Study data management activities.

~~SOFTWARE~~

~~=== \$10,000 ===~~

~~Contingency funds to pay additional software if needed by A/P Study.~~

MAINTENANCE

\$24,000

The costs for maintenance contracts on hardware and software purchased for A/P Study.

~~COMMUNICATIONS~~

~~=== \$20,000 ===~~

~~Fixed Costs~~

~~The costs of installing hardware and software to place the CGIA system on an established network, and the fixed fees associated with a network.~~

COMMUNICATIONS

\$25,000

Variable Costs

The costs of using a data communications network. Costs will vary according to usage levels.

Items 5 & 6 are awaiting completion of the data needs study and the user requirements study.

DESIGN/PROGRAMMING

\$5,000

Costs associated with refining the design of the A/P Study database and for refining the design of the front-end software.

DATA ENTRY AND ANALYSIS

\$50,000

CGIA charges for entering and analyzing data.

SUPPLIES

\$2,000

Miscellaneous supplies, e.g., maps, mylar, data tapes (VA. 100k's), etc.

STAFF

\$50,000

Software specialist (\$25,000)
Applications specialist (\$25,000)

\$216,000
- \$30,000

TOTAL INFORMATION MANAGEMENT

133

\$186,000

PC
3/7/83

PUBLIC PARTICIPATION

Newsletter & Postage		\$25,000
Water Quality Awards Program	Burns (ARC)	\$9,450
407 Assisting A/P CACs in Organizing an Annual Meeting & Produce 10 Fact Sheets, & Revise Citizen's Guide	Tursi (NCCF)	\$40,000
408 Radio Outreach Program	Cleary (BF)	\$11,679
409 Public Education Program in the Albemarle Sound Area	Powers (AEA)	\$17,150
411 Five Fact Sheets	Powers (AEA)	\$4,875
412 Precious Waters Display	Conoley (NCAS)	\$30,000
413 Estuarine Resources Center	McNaught (PTRF)	\$12,000
431 Institutional Enhancement for SE VA	Carlock (SEVPD)	\$21,000
439 Yes, In Your Backyard: TV PSA	Willard (WP)	\$30,000
444 Model Education Curriculum	Schultz (EC/PCS)	\$54,430
474 Community Education Outreach III (C)	Stroud (PTRF)	\$35,200
TOTAL PUBLICATION PARTICIPATION		\$290,784

134

TECHNICAL INFORMATION ACQUISITION

Resource Critical Area

401 Regional Inventory (C)	Roe (DPR)	\$60,000	
416 Delineation of SAV (C)	Ferguson (NOAA)	\$64,578	
			\$124,578

Water Quality

417 Citizens' Monitoring (C)	Perlic (SC)	\$35,000	
437 Biomarkers for Kraft Mill Effluent	DiGirollo (Duke)	\$70,000	
453 Nutrient Budgets	Dodd (RTI)	\$69,759	
458 Mgmt. Plan: Currituck Sound (C)	Overton/Adams (NCSU)	\$30,000	
461 Blue Crab-Hemocyanin Concentrations	Engel/Brouwer/Noga NMFS/Duke/NCSU	\$20,000	
465 Open Sound Monitoring (C)	Bales (USGS)	\$89,300	
467 Flows/Hydrodynamics in Albemarle Sd.	Bales (USGS)	\$60,000	
468 Determine Flows/Flow Patterns (C)	Bales (USGS)	\$91,300	
472 Toxicant Inventory	Thorpe (DEM)	\$20,000	
473 Baseline WQ Monitoring (C)	Tedder (DEM)	\$43,946	
		\$529,305	
		-\$70,000	
			\$459,305

Fisheries

Blue Crab Fishery (Pamlico)	McKenna (DMF)	\$34,475	
Effects of Trawling	Andrews/West (ECU)	\$37,697	
45 Ulcerative Mycosis (Menhaden) (C)	Noga (NCSU)	\$56,501	
		\$128,673	
		-\$37,697	
			\$90,976

Human Environment

415 Public Attitudes Toward WQ/Mgmt. (C)	Hoban/Clifford(NCSU)	\$79,695	
430 Environmental Mgmt. Strategies	Bartholomew (CPN)	\$38,196	
452 Federal Programs (C)	Nichols (RTI)	\$32,834	
		\$150,725	
			\$150,725

Early Demonstration

Urban BMP Effectiveness	Stanley/Bales (ECU/USGS)	\$74,092	
Merchants Mill Pond	Cummings (DSW)	\$132,027	
		\$206,119	
			\$206,119

Others

CCMP Draft Document		\$48,000	
			\$48,000

TOTAL TECHNICAL INFO. ACQUISITION

\$1,079,703

Continuation Projects from FY 1989

OF SELECTED PROJECTS WILL BE NEGOTIATED TO BALANCE FY 1990 BUDGET

135

REVISED*

ALBEMARLE-PAMLICO ESTUARINE STUDY - 1990

<u>DATES FOR 1990</u>	<u>EVENT</u>
JANUARY 12	REVIEW CALL FOR PROPOSALS (SUBMITTAL DUE DATE)
JANUARY 29/31	CAC MEETINGS TO EVALUATE SPECIFIC PROPOSALS
FEBRUARY 20	TECHNICAL COMMITTEE MEETING TO CONSIDER SUBCOMMITTEES' PROPOSAL RECOMMENDATIONS
MARCH 6	ROUNDTABLE MEETING OF ALL COMMITTEES
MARCH 7	POLICY MEETING TO CONSIDER TECHNICAL COMMITTEES' PROPOSALS AND ANNUAL BUDGET RECOMMENDATIONS
MARCH 8	RETURN SELECTED PROPOSALS TO AUTHORS FOR REVISIONS
MARCH 23	REVISED PROPOSALS TO DIRECTOR/SUBCOMMITTEES
APRIL 13	FINAL COOPERATIVE AGREEMENT PACKAGES
APRIL 23/27	CAC MEETINGS
MAY 9	TECHNICAL COMMITTEE MEETING
AUGUST 1	PROJECTED EPA AWARD OF FUNDING
AUGUST 6/10	CAC MEETINGS
AUGUST 21	TECHNICAL COMMITTEE MEETING
AUGUST 29	ROUNDTABLE MEETING OF ALL COMMITTEES
AUGUST 30	POLICY COMMITTEE MEETING
SEPTEMBER 13	ANNUAL RESEARCHERS' REVIEW WORKSHOP
SEPTEMBER 18	TECHNICAL REVIEW SUBCOMMITTEE MEETING
OCTOBER 5	ANNUAL PUBLIC MEETING
*OCT. 29-NOV. 2	CAC MEETINGS
*NOVEMBER 13	TECHNICAL COMMITTEE MEETING
NOVEMBER 27	POLICY COMMITTEE MEETING
NOVEMBER 28	CALL FOR PROPOSALS SENT OUT

(Revised 2/2/90)