

MINUTES

ALBEMARLE-PAMLICO ESTUARINE STUDY PAMLICO CITIZENS' ADVISORY COMMITTEE

N.C. AQUARIUM
ROANOKE ISLAND
MANTEO, N.C.
NOVEMBER 9, 1988

ATTENDANCE: See Attachment A

Chairman Carter called the meeting to order at 7:05 P.M. Self-introductions were made by those present, and Chairman Carter entertained a motion for approval of the minutes from the last P-CAC meeting held on August 10, 1988. Motion was made by Rann Carpenter and seconded by Frank Sommerkamp to accept the minutes as written. Motion carried.

PROGRAM STATUS REPORT: Dr. Holman referred the committee to an article in the November 1988 edition of Wildlife in North Carolina magazine entitled, "Can Albemarle and Pamlico Be Saved?" Much discussion ensued pertaining to item 4a of Dr. Holman's report. See Attachment B. The committee felt that the scheduled CAC meetings were too infrequent and that they should meet monthly beginning in December. (NOTE: Chairman Carter later determined January to be a better time to begin the P-CAC monthly meetings.) It was further stated that a central location for CAC meetings should be determined. Motion by Rann Carpenter and seconded by Willy Phillips to convene P-CAC meetings monthly was made. Motion passed. A recommendation was made to use CAC meetings as an educational tool and to include legislators, county commissioners, etc., as attendees.

Dr. Holman interjected that staff will need support in planning the meetings for the accelerated monthly schedule. Dick Leach wondered what it would take to entice public officials to come. Holding the meetings in their areas and designing an agenda with programs to capture their interest were suggestions.

Chairman Carter announced that of the 11 milestones determined by the EPA/NC conference agreement for National Estuary Program designation, only 4 have been completed. See Attachment C.

PUBLIC INVOLVEMENT PLAN: In other discussion, the possibility of appearing on Dr. Bill Friday's TV show on PBS was raised. Mrs. Giordano said that she would look into it and that this was the type of thing needed to be included in the Public Involvement Plan. She further stated that the A/P Study was scheduled to appear on "Carolina Today," WNCT-TV, on December 1st. She asked for comments on the Public Involvement Plan

which was submitted for CAC comment in October. In the interest of time, Chairman Carter suggested that the P-CAC Public Awareness/Government Relations Subcommittee (and any other interested CACs) meet with the corresponding body from the A-CAC, as reported by Mrs. Giordano, on November 18, 1988 at 10:00 A.M. in Washington. Mrs. Giordano agreed to send out a memo to that effect. The intention of the meeting is to further refine the draft PIP and then circulate it to all the CACs for final draft approval.

CALL FOR PROPOSALS REVIEW: See Attachment D. After much discussion, Dr. Holman reported that the actual CFP would be in much greater detail than the document that was being used for discussion purposes that evening. It was decided that the Public Participation Proposals drafted by the Citizens' Affairs Subcommittee of the Technical Committee be used in the CFP when it is sent out. See Attachment E. It was moved by Todd Miller and seconded by Ernie Larkin to add an addendum to the Public Participation CFP so as to be able to include any outcome from the joint Public Involvement Plan meeting mentioned earlier. Motion carried. Much discussion ensued pertaining to the technical proposals, and Dr. Holman answered questions ranging from the proposals to the possibility of entering into agreement with Virginia on an early implementation project.

P-CAC RECOMMENDATIONS ON PRIORITY ACTION PLANNING OPPORTUNITIES: See Attachment F. Chairman Carter initiated discussion on the five resolutions drawn up by the P-CAC. He asked for motions of acceptance on each one. The results were as follows:

- #1. Public Participation and the Human Environment - Motion by Dick Leach, seconded by Willy Phillips. Motion carried.
- #2. Legislative Liaison - Motion by Todd Miller, seconded by Luther Daniels. Motion carried.
- #3. Research Managers' Priorities (NOTE: This resolution is not included in Attachment F.) It was decided to omit this resolution from the group being approved, as it had already been incorporated into the CFP.
- #4. Priority Action Plans - Motion by Luther Daniels, seconded by David O'Neal. Motion passed with dissent (ayes - 9: nays - 2).
- #5. Status & Trends Assessment and Report - Motion by Ernie Larkin, seconded by Rann Carpenter. Discussion ensued pertaining to Dr. B.J. Copeland's/Jim Stewart's pre-proposal on status and trends. See Attachment G.

Since the two, Dr. Copeland's pre-proposal and the resolution, are related, the committee chose to endorse Dr. Copeland's effort with the following additions:

1. Involve managers as well as researchers on the 6 task forces.
2. Involve CACs on the 6 task forces.
3. Take the P-CAC resolution into consideration.
4. Define clear leadership on the 6 task forces.
5. Bring a draft of finished proposal to the CACs.

Motion carried.

ANNUAL MEETING COMMENTS: Dr. Holman recommended separating the three components of the annual meeting next year. Discussion ensued, with the general consensus being that it probably would work to everyone's advantage if the Researcher's Review, Roundtable meeting of all committees and the Public Meeting were done separately.

VACANCIES: There exist three vacancies on the P-CAC due to the resignations of Buddy Swain, Garvin Hardison, and Bill Paul. Chairman Carter stated that he would accept nominations to fill the vacancies and would then submit any new nominations, along with the slate of nominees proposed in August, to the Policy Committee for its approval on November 29, 1988. Frank Sommerkamp moved that names and biographies (resumes) be submitted to Chairman Carter by 11/23/88 and Ernie Larkin seconded. Motion carried.

In other business, Dr. Rodman distributed a resolution for the committee's approval. See Attachment H. In the interest of time, the resolution was tabled until the next meeting.

There being no further business, the meeting was adjourned at 11:00 P.M.

The next meeting will begin the accelerated (monthly) meeting schedule. It will be in January at a time and place to be arranged.

Attendance

P-CAC

11-9-88

<u>Name</u>	<u>Affiliation</u>
Don Leonard	A/P Study
Dub Carter	
Robert Ashby	A/P Study
John White	A/P Study
Kenn Carpenter	CAC Pamlico
WILL & PHILLIPS	
Lusk Redman	CAC Pamlico
Dick Cook	PCAC
Alton Ballou	PCAC
Eric Farkin	"
Frank Sammelkamp	"
Luther H. Daniels	"
Todd Nulin	NCCF - PCAC
Horace Towford	Stumpy Point
Jeff Funness	Texas Gulf
and McNeal	Farmer

PAMLICO CAC Meeting

November 9, 1988

Program Status Report - Director

- 1) All FY 1988-89 funded projects have been started.
- 2) Annual Meeting was carried out on October 14-15, 1988 in Washington, NC.
 - a) Thank all those who helped make the event possible especially the CAC Ad Hoc Agenda Committee.
 - b) I feel the meeting achieved the three tasks of researcher's review, round table meeting of all committees and informing the public of the study's status.
 - c) The material expenditures to date associated with the Annual Meeting (enclosed list).
- 3) Fair Exhibit (displayed at the Annual Meeting).
 - a) Number of people through the NRCD tent at the State Fair was between 150,000 and 175,000.
 - b) The fair exhibit will be set up for two months at each of the three NC Aquariums starting with the Roanoke Island facility on November 9, 1988 and finish on April 30, 1989 at the Fort Fisher facility.
 - c) Need ideas for next year's fair exhibit.
 - d) Need suggested uses of the exhibit past April 30, 1989.
- 4) A/P Study Annual Schedule (enclosed).
 - a) Discussion of new scheduled events (annual meeting components).
 - b) New dates for meetings set in advance to have a one-year schedule so committee members can plan for meetings.
- 5) Consideration by CAC to form subcommittees on the following topics: local government liaison, public meetings, fair/presentation committees and public education.

NOVEMBER 1, 1988

<u>Date</u>	<u>Event</u>
November 7-9, 1988	CAC Meetings to Review Proposed Project Area Needs
November 10, 1988	Technical Committee Meeting to Review Proposed Project Needs
November 14, 1988	Develop Call for Proposals
November 18, 1988	Issue Call for Proposals
November 29, 1988	Policy Committee Meeting
January 13, 1989	Review of Proposals (submittal due date)
February 7-8, 1989	CAC Meetings to Evaluate Specific Proposals

ALBEMARLE-PAMLICO ESTUARINE STUDY

FIRST ANNUAL MEETING - OCTOBER 14/15, 1988

Material Expenditures to Date* - November 1, 1988

	<u>Costs</u>
1) Building/Equipment Rental and Clean-up	232
2) CAC per diem	600
3) Free-Standing Exhibit	1,954
4) Printing agenda, fact sheet, newsletter abstracts and postage	3,401 - <i>Guess</i>
5) Saturday bag lunch (leftovers)	235
6) Expenses reimbursed to external reviewers	1,533 - <i>Guess</i>
7) Newspaper Ads	250
8) Miscellaneous Materials	<u>96</u> - <i>Guess</i>
Total	\$ 8,301

*Expenses do not include any staff or office costs related to event.



State of North Carolina
Department of Natural Resources and Community Development
ALBEMARLE-PAMLICO ESTUARINE STUDY
512 North Salisbury Street • Raleigh, North Carolina 27611

James G. Martin, Governor
S. Thomas Rhodes, Secretary

Robert E. Holman, Director

October 24, 1988

MEMORANDUM

TO: Policy Committee
Technical Committee
Citizens' Advisory Committees

FROM: Technical Review Subcommittee

SUBJECT: Projects to be Considered as Part of the FY 1989-1990
Call for Proposals and Review of the Public Involvement Plan

This memorandum covers program areas that need specific projects to help develop the status and trend report or to prepare early management strategies. In addition, public participation projects are also targeted based on recommendations from the public affairs subcommittee and external reviewers. These projects include the following recommendations:

A. INFORMATION/STRATEGIES

- 1) Create a current land use map of the entire study area that is compatible with Land Resources Information Service computer format and USGS land use map developed in the early 1970s.
- 2) Define what is a critical area to the program. Then determine the location and size of these areas.
- 3) Determine the nutrient budgets (nitrogen and phosphorus) for all major tributaries leading into the two Sounds.
- 4) Evaluate the toxic issue by compiling all existing data on this subject for the entire study area.
- 5) Develop management plans for small areas (e.g., Currituck Sound/Back Bay) to be utilized as a forerunner to the comprehensive conservation management plan (CCMP).
- 6) Direct early implementation funds towards BMP's for urban settings and not just for agriculture. Greenville or Nags Head may be two likely candidates.

P.O. Box 27687, Raleigh, North Carolina 27611-7687 Telephone 919-733-0314

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- 7) Earmark funds to be set aside and utilized to follow up the status and trends scoping work (Fall 1989), if funded. This would be needed in order to complete the major milestones and develop specific strategies for the CCMP.
- 8) Determine recreational harvest of all major fishery species and quantify commercial by-catch and its economic value.

B. PUBLIC PARTICIPATION

- 1) Fund social science projects that evaluate the public response to various education, incentive and regulation programs; measure citizens' attitudes toward management alternatives and the cost/benefit associated with each alternative.
- 2) Develop workshops or other related activities to assist the public participation coordinator in developing better communications with local governments.
- 3) Conduct public meetings to generate discussion in a wide range of locations convenient to the public in the study area. Assist staff in setting up annual meeting into three separate events.
- 4) Create a series of regularly scheduled radio programs (one-half hour in length) specific to environmental issues in the study area.
- 5) Create secondary education programs (within the schools) addressing environmental issues specific to the study area.

Please review these recommended project areas and be prepared to discuss them, as well as any others, at your next meeting. Since the Call for Proposal package will be sent out the week of November 14, all Policy Committee members are encouraged to submit their comments to the program office by November 10, 1988.

The Public Involvement Plan developed by our public participation coordinator is also enclosed for your review. Please examine the plan and be prepared to discuss it at your next meeting. This plan provides a focus and overall strategy for the public participation component of the program.

REH:kn

Enclosures

DRAFT

DRAFT

DRAFT

ATTACHMENT E

In 1989, the program is particularly interested in proposals that address the ability of citizens to provide their ideas, input and advice to the program. Proposals will be entertained on the following specific topics, in addition to any proposals that facilitate public participation in APES:

- 1) The development of increased interaction between APES activities and local governments in the APES area;
- 2) Public meetings, the principal objectives of which would be a) to generate discussion in a wide range of locations convenient to the public in the APES area, and b) to obtain input from the public in the earliest stages of the development of the status and trends and Comprehensive Conservation & Management Plan documents;
- 3) 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 APES area;
- 4) The development of secondary education programs specific to environmental issues in the APES area; and
- 5) 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 APES area.

RESOLUTION

PAMLICO CITIZENS' ADVISORY COMMITTEE
ALBEMARLE PAMLICO ESTUARINE STUDY

PUBLIC PARTICIPATION AND THE HUMAN ENVIRONMENT

Public awareness and involvement is critical to the ultimate success of the Albemarle Pamlico Estuarine Study and to the adoption and implementation of a Comprehensive Conservation and Management Plan. Research on public attitudes toward management alternatives and public response to education, incentive, and regulation programs is essential to structure and implement an effective public involvement program. Currently, ten percent of annual program funds are earmarked for public participation and approximately ~~ten~~⁴⁵ percent for research on the human environment. As the program enters its third year, no proposals for research to examine public attitudes and responses to various management alternatives have been funded.

THE PAMLICO CITIZENS' ADVISORY COMMITTEE RESOLVES that the Policy Committee amend the Albemarle Pamlico Estuarine Study Work Plan to earmark twenty percent of annual program funds for public participation projects. The existing allocation of ten percent of annual program funds for research on the human environment should be retained. The PCAC further resolves that the Policy Committee direct the Citizens' Advisory Committees to prioritize and recommend for funding within available funds proposals for public participation and for research on the human environment subject to the review of the ~~Public~~ Affairs Subcommittee of the Technical Committee.

Citizens

ADOPTED THIS 9TH DAY OF NOVEMBER, 1988.

Derb S. Carter, Jr.
Chair, Pamlico Citizens' Advisory Committee

RESOLUTION

PAMLICO CITIZENS' ADVISORY COMMITTEE
ALBEMARLE PAMLICO ESTUARINE STUDY

LEGISLATIVE LIASON

The support of the General Assembly of North Carolina is necessary both for the on-going research and programs of the Albemarle Pamlico Estuarine Study and for the implementation of the Comprehensive Conservation and Management Plan. It is critical to the success of the program that a structured liason with the General Assembly be developed as soon as possible.

THE PAMLICO CITIZENS' ADVISORY COMMITTEE RESOLVES that the Policy Committee be requested to explore the development of a formal liason with the North Carolina General Assembly. Alternatives include formation of a Legislative Liason Committee composed of local citizens and elected officials from the study area and the establishment or continuation of special study committees by the General Assembly.

ADOPTED THIS 9TH DAY OF NOVEMBER, 1988.

Derb S. Carter, Jr.
Chair, Pamlico Citizens' Advisory Committee

RESOLUTION

PAMLICO CITIZENS' ADVISORY COMMITTEE ALBEMARLE PAMLICO ESTUARINE STUDY

PRIORITY ACTION PLANS

The Policy Committee of the Albemarle Pamlico Estuarine Study has resolved that the principal goal of the APES is to provide the scientific knowledge and public awareness needed to make rational management decisions so that the Albemarle-Pamlico estuarine system can continue to supply citizens with natural resources, recreational opportunities, and aesthetic enjoyment. In some areas, adequate scientific knowledge and public awareness exists to support specific actions to maintain, and where necessary restore, the chemical, physical, and biological integrity of the estuary, the wildlife habitat of the estuary, and the production levels of recreational and commercial fisheries of the estuary.

The Environmental Protection Agency in administering the National Estuary Program provides funding to designated programs for implementation of Priority Action Plans prior to the development and adoption of a final Comprehensive Conservation and Management Plan. The Technical Review Subcommittee of the Technical Committee has recommended that management plans for small areas be developed and utilized as forerunners to the comprehensive plan. Although some specific early implementation projects have been outlined, the APES has not adopted a Priority Action Plan to date.

THE PAMLICO CITIZENS' ADVISORY COMMITTEE RESOLVES that the Policy and Technical Committees consider and adopt and seek necessary early implementation funds to implement the following Priority Action Plans. The Committee further resolves that the representatives of the PCAC on the Policy and Technical Committees submit this resolution for consideration at the next meeting of the respective committees.

1. **TAR-PAMLICO RIVER NUTRIENT CONTROL PLAN.** The APES should develop in concert with the Division of Environmental Management and the Environmental Management Commission a nutrient control plan for the Pamlico and Tar Rivers. The plan should include the designation of the rivers as nutrient sensitive waters and the control of both point and non-point sources of phosphorous and nitrogen.

2. CURRITUCK SOUND/BACK BAY AND LAKE MATTAMUSKEET/HYDE COUNTY LAND AND WATER MANAGEMENT PLANS. The APES should develop and implement comprehensive land and water management plans for the waters and adjacent basins of Currituck Sound/Back Bay and Lake Mattamuskeet/Hyde County. A comprehensive plan currently exists for Back Bay and a proposed early implementation project has been proposed for Hyde County. The comprehensive plans should implement protection of productive agricultural lands and wetlands and implementation of water management and other land management practices necessary to maintain and where necessary restore the quality and productivity of estuarine waters.

3. CRITICAL AREAS PROTECTION PLANS FOR WETLANDS AND PRIMARY NURSERY AREAS. The APES should designate wetlands and primary nursery areas as critical areas and develop and implement protection plans for these areas. Primary nursery areas are currently defined, identified, and mapped by the North Carolina Division of Marine Fisheries. Wetlands are currently identified and mapped by the U.S. Fish and Wildlife Service under the National Wetland Inventory and regulated by the Environmental Protection Agency and Corps of Engineers under Section 404 of the Clean Water Act.

The Critical Area Protection Plan for Wetlands should include a clear declaration that wetlands are waters of the State and the adoption and implementation of standards to protect wetlands under the existing water quality standards program. In adopting State standards to protect wetlands, the Environmental Management Commission should consider adoption by reference of the EPA guidelines for evaluating wetland fills and implementation of declassification procedures for activities which result in the loss of wetlands outside the current permitting process under Section 404 of the Clean Water Act.

The Critical Area Protection Plan for Primary Nursery Areas should include the designation of all primary nursery areas as outstanding resource waters and the adoption and implementation of a no water quality degradation standard through the existing water quality standards program. Additional plans to restore designated or potential primary nursery areas currently impacted by runoff or pollutants should be developed and implemented on a site-specific basis.

4. POINT SOURCE MANAGEMENT PLAN. The APES should develop and implement an integrated point source management and compliance plan for the study area. This plan should examine compliance with final effluent guidelines and water quality standards, monitoring, pretreatment programs, and enforcement with respect to all major and minor municipal and non-municipal dischargers in the study area and implement necessary corrective actions.

ADOPTED THIS 9TH DAY OF NOVEMBER, 1988.

Derb S. Carter, Jr.
Chair, Pamlico Citizens' Advisory Committee

RESOLUTION

PAMLICO CITIZENS' ADVISORY COMMITTEE ALBEMARLE PAMLICO ESTUARINE STUDY

STATUS AND TRENDS ASSESSMENT AND REPORT

The State/EPA Conference Agreement for National Estuary Program designation under the Water Quality Act of 1987 commits the APES to products and schedules which include a report assessing the status and trends of priority environmental concerns. Priority environmental concerns identified in the existing APES Work Plan include declines in fisheries productivity, ulcerative sore diseases, eutrophication, habitat loss, shellfish closures, and toxicant effects. The Conference Agreement requires that the Policy Committee identify the probable causes of the trends in environmental concerns by June of 1989, seven months from this date. This identification of the probable causes of environmental concerns is to be derived from the assessment of the status and trends of identified environmental concerns.

If the Policy Committee is to identify the probable causes of environmental problems and if the program is to meet its obligations under the State/EPA Conference Agreement, it is critical that an assessment of the status and trends of priority environmental concerns be initiated immediately and expeditiously completed.

THE PAMLICO CITIZENS' ADVISORY COMMITTEE RESOLVES that existing cooperative agreements be utilized, in combination, to develop a status and trends assessment of each of the identified priority environmental concerns. The APES has existing cooperative agreements with institutions for research and data assimilation for each of the identified priority environmental concerns (e.g., NMFS and DMF on fisheries productivity and habitat loss, USGS on water quality trends). To avoid duplication and to secure the necessary assessment in the most expeditious manner, the EPA or APES should contract under these existing cooperative agreements for status and trends assessments for each of the identified priority environmental concerns. A contract should also be executed with an appropriate institution or individual for editing and publishing of the draft and final report. Alternatively, program staff could edit and publish the report.

The status and trends assessment and report should as described in the Conference Agreement "assess trends in water quality, natural resources, and uses of the estuary." Assessment of the status and trends of information management and public participation, while of interest, should not be a part of the required assessment and report under the Conference Agreement.

It should be recognized that the value of assessing the status and trends of priority environmental concerns and the identification of probable causes of environmental problems lies as much with the process as with the publication of the report. It is important that this process begin immediately and proceed with the full and active involvement of all APES committees.

ADOPTED THIS 9TH DAY OF NOVEMBER, 1988.

Derb S. Carter, Jr.
Chair, Pamlico Citizens' Advisory Committee

STATUS AND TRENDS OF ALBEMARLE/PAMLICO SOUND

Development of Work Groups and Publication

by

James M. Stewart
Water Resources Research Institute
University of North Carolina

and

B. J. Copeland
Sea Grant College
University of North Carolina

Introduction

Estuarine management is the responsibility of all, but the actual management requires good technical information and an informed public that understands the system, its problems and issues. Such understanding forms the basis for long-term commitment and development of support for specific management strategies. Considerable technical knowledge about estuaries exists in publications, reports and the scientific community of state, federal and private organizations. In addition, new information is being generated by studies supported by the Albemarle-Pamlico Estuarine Study. Only limited efforts have been undertaken to synthesize and integrate this knowledge into a comprehensive report.

Background

The APES Policy Committee (15 August 1986) resolved that:

The goal of the Albemarle-Pamlico Project will be to provide the scientific knowledge and public awareness needed to make rational management decisions so that the Albemarle-Pamlico estuarine system can continue to supply citizens with natural resources, recreational opportunities, and aesthetic enjoyment.

The objectives of the project will include, but are not limited to, generating understanding of what is needed to maintain, and where necessary restore, the chemical, physical, and biological integrity of the estuary, the wildlife habitat of the estuary, the production levels of recreational and commercial fisheries of the estuary.

This proposed exercise will provide the precursor for achieving the resolution stated above.

Proposed Work

The overall goal of this project will be to provide agencies, scientists and interested publics with an integrated packet of information describing the state of knowledge of the system. It is intended that two publications will result from the exercise described below, using the best expertise available. Specific objectives, therefore, are:

1. Develop an outline for each of the key issues (i.e. Critical Areas, Water Quality, Fisheries Dynamics, Human Environment, Data Management and Public Participation) and set up a mechanism for analysis and summarization.
2. Organize and assemble work groups for each of the six key areas and challenge them to develop a consensus of the status of each.
3. Develop a narrative of the status and trends of the six key areas and test the conclusions against technical experts, organizations and leaders of public opinion, with responsibilities for the APES system.
4. Publish the current information in a general interest format.

We plan to approach the exercise through a series of work sessions with the first being held to assemble the work teams, develop each outline and challenge the teams to achieve the goal. This will be followed by a series of activities whereby investigators holding APES projects and/or working on related projects funded by other state and federal agencies (e.g., Sea Grant, WRRRI, NOAA, EPA, etc.) will present findings to the team. After the process of gathering data and brainstorming about the issues, the team will receive writing assignments for developing the technical narrative. A Communications Specialist will edit the technical report and develop a general interest document with illustrations and graphics.

We anticipate that the process will occur during January to June 1989. The technical report will reflect a compilation of findings and conclusions as determined by each work team. The general interest document will reflect a distillation of the technical findings and conclusions along with graphics and illustrations.

Tentative Work Teams are:

- I. Critical Areas: Dave Adams (NCSU) captain --
Roger Rulifson (ECU), Mark Brinson (ECU),
Mike Gantt (USFWS), Charles Roe (NRCD)

- II. Water Quality: B.J. Copeland (Sea Grant) captain --
 Hans Paerl (UNC-CH), Ed Kuenzler (UNC-CH),
 George Everette (DEM), Jerad Bales (USGS),
 Don Stanley (ECU)
- III. Fisheries Dynamics: Bill Hogarth (DMF) captain --
 Ed Noga (NCSU), Pete Peterson (UNC-CH),
 John Miller (NCSU), Don Hoss (NMFS)
- IV. The Human Environment: Ray Burby (UNC-CH) captain --
 Milton Heath (Inst of Gov), Kerry Smith (NCSU),
 Jeff Johnson (ECU), Dave Owens (DCM)
- V. Data Management: Jim Turner (USGS) captain --
 Karen Siderelis (NRCD), Steve Walsh (UNC-CH),
 Alan Klimek (DEM), EPA representative
- VI. Public Participation: Joe Phillips (NCSU) captain --
 Richard Andrews (UNC-CH), Mike Orbach (ECU),
 Jim Stewart (WRI), Steve Benton (DCM),
 Lundie Spence (Sea Grant), Tom Ellis (NCDA)

BUDGET

Writer/Editor	15,000
Travel	10,000
Consultants	12,000
Supplies	1,000
Secretarial	6,000
Publication & Related Material	10,000
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Direct Costs	54,000
Indirect @ 26.5%	14,310
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Total Costs	68,310