### MINUTES

# POLICY COMMITTEE

JUNE 13, 1990

AHOSKIE, NC

# CALL TO ORDER

Mr. Lee DeHihns, Co-chairman of the Policy Committee (PC), called the meeting to order at 8:45 a.m. Attendees list Attachment A.

## CONSIDERATION OF MINUTES

Mr. DeHihns requested that the March 7 PC minutes be amended concerning to the motion that the Information Management budget be reduced (page 4). The wording should be changed to indicate that the Information Management budget "reduction was increased" from \$10,000 to \$30,000. Dr. Bill Queen moved that the minutes be approved as amended; Dr. John Costlow seconded the motion which was approved.

# PROGRAM REPORTS

Mr. Ted Bisterfeld reviewed (Attachment B) the status of the three early demonstration projects; status of land use and land cover classification by CGIA; 1972 land use data is on line; and the data manager will be located in CGIA.

The Status and Trends Report (STR) public review process was put on hold by the PC so that a better presentation of conclusions could be developed. The contributors to the Preliminary STR met to review the conclusions of each section and to identify trends. This work group, chaired by Dr. B. J. Copeland, also commented on some suggested additional conclusions that Mr. Bisterfeld believed necessary. The STR Work Group, consisting of resource managers, then reviewed the conclusions and formulated specific recommendations for the CCMP outline. The Technical Committee (TC) has been asked to recommend the priority order in which the conclusions should appear in a summary document. This task has not been completed.

Mr. Bisterfeld presented draft environmental quality goals (Attachment C) for each major environmental issue identified in the system. The National Estuary Program (NEP) requires that goals be set for correcting each identified problem. The PC deferred action on these goals to the TC. The TC is to present recommendations on the goals to the Policy Committee on August 30. Copies of the Annual Work Plan were distributed. The Work Plan also has been forwarded to OMEP for consideration. This is a requirement before EPA can take grant action on FY 1990 projects. The Work Plan does not include a project for demonstration funding. Dr. Holman and Mr. Bisterfeld negotiated final scopes of work and budgets to meet necessary budget constraints.

Mr. Bisterfeld further reported that the only project that did not have a firm cost right now in the Work Plan document was citizens monitoring program. The budget for that element was revised from \$25,000 to \$35,000 by the PC at the March 7 meeting. In Dr. Holman's deliberations over the requirements to do this work that sum was increased to \$40,000 and that is the sum shown in the work plan and in the final budget. The project director has the prerogative of making small changes to the budget for certain expenditures and that was done. Discussion on how to settle this matter arose. Mr. Bisterfeld suggested consideration during executive session. With the exception of that \$5,000 increase for citizens monitoring, the Work Plan contains the annual budget which the PC approved in March.

Mr. Bisterfeld said he could not report during this meeting on carryover dollars for the program; however, state carryover should be identifiable at the end of June, 1990, and the federal grant carryover dollars after the end of the federal fiscal year, September 30. Mr. Brewster Brown said any carryover funds from the start of the Study (state or federal) should be identified and delegated to fund needed items such as demonstration projects. Funding awards for FY 1990 projects are assured by August 30.

Mr. Bisterfeld attended an excellent CAC workshop in Washington, N.C. on May 4/5 conducted by the North Carolina Coastal Federation (NCCF) to draft recommendations for action items to be considered for inclusion in the CCMP. The PC heard a report on those recommendations later in the meeting.

Mrs. Joan Giordano reported on the status of CAC activities, exhibits, outreach presentations, the status of particular projects, meetings/events attended, newsletter status, and program inquiries (Attachment D).

At a June 5 workshop of the CACs recommendations group it was suggested that 15 to 20 public meetings on the Preliminary STR be held in the coastal region. This was discussed later during the Status and Trends Report.

Mrs. Giordano reported that investigations regarding producing the newsletter externally as opposed to in-house indicated external production would be roughly double (~\$6,400) the current cost of production.

# OMEP REQUEST FOR EARLY DEMONSTRATION PROJECTS FY 1990-91

Mr. Crum said the TC Co-chairmen were authorized to select early demonstration projects should money become available from OMEP. OMEP requested in March, that by June 20, a "single" best proposal be submitted for consideration. The TC Co-chairmen selected for nomination "Marsh Grass Protection with Low-Cost Breakwaters -Shoreline Erosion Control Demonstration" submitted by Spencer Rogers, Jr. with the UNC Sea Grant College Program at NCSU. Mr. Bisterfeld reviewed the objectives of the selected project. The proposal meets all the OMEP criteria for early demonstration The Annual Work Plan would be amended if this project projects. receives funding from OMEP. A motion that the Policy Committee approved submitting this early demonstration proposal to OMEP was made by Mr. Don Bryan and seconded by Dr. Bud Cross. Discussion regarding obtaining (CAMA) permits to conduct this work and the A/P Study retaining the funds should the permits not be obtained resulted. Mr. DeHihns said there were provisions for retaining the funds for the Study for other projects. The motion to submit the proposed early demonstration project to OMEP passed unanimously.

# OVERVIEW OF HYDROLOGICAL MODELING PROJECTS

Mr. Crum reviewed the concerns previously raised on three proposals submitted by USGS on hydrological modeling. The proposals were submitted to three scientists for additional review as recommended by the PC. These additional reviews supported continuation of the present direction and that there were no fatal flaws in these proposals. The TC established an overview committee to provide coordination among the principal investigators and to ensure that the hydrologic work remains on track (Attachment E). Dr. Carl said that the file on these additional reviews is available to the PC.

### STATUS AND TRENDS REPORT UPDATE

Mr. DeHihns stated that feedback received on the Preliminary STR Summary Document on March 7 prompted the PC to instruct the TC to reconvene the necessary groups to develop conclusions in a document prior to soliciting public input. Mr. Bisterfeld restated the process undertaken to develop the conclusions (see Program Reports). The TC has been asked to respond to these conclusions in priority order. The Standard Operating Procedures Subcommittee is to finalize this information and report back to the TC. Lengthy discussion took place on the method to be undertaken to complete the Preliminary STR so that it will be ready to go before the public. The PC instructed the TC co-chairmen, Mr. Bisterfeld, and Mrs. Giordano to develop the process for completing the technical work and setting schedules and locations for holding meetings to obtain public input. The PC is to receive a report on these activities at the August 30 meeting.

# UPDATE OF GIS ACTIVITIES

Karen Siderelis gave a status report on the data management activities (data, software, hardware, and user support and products) as originally conceived by the A/P Study.

Ms. Siderelis said plans are to make the A/P Study database available to remote users (i.e., county officials, A/P Study committees, DEHNR divisions, etc.). Ms. Siderelis said CGIA is getting data relatively automatically from projects producing map data (e.g., SAV mapping project). Projects that are producing reports as final products will be referenced in a Bibliography database. It was not a built-in requirement that that data from projects be provided on a schedule however they are working to make sure project results and data are included.

Ms. Siderelis said an appropriate application of GIS would be to implement predicted models as requested. Dr. Costlow suggested a public workshop be conducted at which Ms. Siderelis would make a presentation to attendees on how they can predict future developments if particular determinants are applied to their particular areas.

Ms. Siderelis said that when the A/P Study is completed, the database will need to be maintained (funded) and this should be under consideration now.

### OVERVIEW OF BASELINE MONITORING

Mr. Bisterfeld said the goal of the April 1988 Baseline Water Quality Monitoring Plan is to develop, by November 1992, a monitoring plan designed to continue into the implementation phase of the A/P Study, with the capability of documenting changes that come about in the system as a result of improved management strategies. Components include the citizens' monitoring program, emergency response ability, continuous monitoring data points established, augmenting existing quarterly monitoring programs in the state, focus on toxicants in fish tissue, and several other elements.

Dianne Reid presented an overview of DEM's efforts in conjunction with the Baseline Monitoring Proposal for 1989. There were four components to their project: 1) a fish tissue survey; 2) sediment oxygen demand (SOD) set-up and sampling; 3) a synoptic survey of the entire A/P area; and 4) expansion of DEM's ambient water quality network. All four parts of the project are completed with reports in preparation for the fish tissue survey and the synoptic study. Five SOD stations were sampled in the A/P area. Two of the sites are included in the report "North Carolina Coastal Marinas: Water Quality Assessment". Sampling of the expanded ambient water quality network is continuing into 1990. As a result of data collected during the synoptic study and at the request of the A/P Technical Committee, three additional stations have been added for 1990. The stations are located at USGS continuous monitors in the Pamlico and Roanoke Sounds. USGS will be collecting nutrient, phytoplanton, chlorophyll-a and turbidity samples once a month at these sites during their regular maintenance runs and DEM's laboratory will be analyzing the samples. Several preliminary conclusions were stated. Presently, one-third of DEM's statewide ambient monitoring effort is within the A/P area.

### (EXECUTIVE SESSION)

Dr. Bill Queen moved that the PC go into executive session to discuss the search for a new program director and a personnel matter involving a particular project. Mr. Bryan seconded the motion which was approved unanimously.

Following the executive session, discussion on the nominees to fill the vacancies on the Albemarle CAC resulted in a motion to accept the nominees as recommended (Attachment F). The motion was unanimously approved.

Mr. DeHihns reported that during executive session the PC agreed for the Co-chairmen to continue negotiations with two of the candidates for which applications had been received.

The Co-chairmen neglected to report on the results of a topic discussed during Executive Session. The Policy Committee discussed the management capabilities of the John Muir Foundation. The result of that discussion was that the program will seek an additional proposal to carry on the management of the Citizens Monitoring program. The Policy Committee is steadfast in its support for a continued citizens monitoring network.

### LEGISLATIVE LIAISON

Dr. John Costlow stated that in the next few years management recommendations regarding the Albemarle/Pamlico could require legislative action. Dr. Costlow suggested a legislative liaison effort be organized to educate key legislators before legislation is required. Mr. DeHihns suggested that this effort should begin after August 30 which is when the PC is to review the environmental goals and additional STR conclusions being developed by the TC. The staff should develop specific points for each goal which will be used during meetings with legislators. Also the new project director should accompany any PC member in their discussions with legislators.

# CAC'S MANAGEMENT RECOMMENDATIONS

Neil Armingeon, project director for the NCCF, gave an overview on a grant received from the A/P Study to assist the CAC members in drafting recommendations to be considered for inclusion in the CCMP. Workshops were held on May 4/5 in Washington to provide



interaction among CAC members, resource managers, and out-of-staters (e.g., Fran Flanigan with the Alliance for Chesapeake Bay who through experience could assist and guide the CAC's in the development of their recommendations). The CACs developed 90 recommendations which were prioritized and revised to the current ~40 recommendations (Attachment G). Further meetings will be held to finalize recommendations for CAC review and comment before the next meetings in August. Mr. DeHihns suggested this be a topic for discussion at the August 29 round table meeting.

### IMPLEMENTATION FINANCING

Mr. Bisterfeld suggested that the CACs consider adding to their membership representatives from the financial community since questions regarding costs will eventually become a factor in the Study.

Mr. Bisterfeld distributed to the PC an EPA publication entitled "Financing Marine and Estuarine Programs: A Guide to Resources". He said that OMEP has resources available to the estuary studies to provide orientation on financial planning and implementation. He recommended that the A/P Study request information on a seminar on financial planning from EPA Headquarters. He also suggested that the PC recommend that the TC create a subcommittee to deal with the problem of implementation financing and set up seminars though cooperation with EPA Headquarters. The PC asked the Co-chairmen of the TC to investigate creating a financial subcommittee for implementation and report back to the PC in August.

### UPDATE MEETING SCHEDULE

The schedule for the remaining year was reviewed. The Annual Meeting is October 6 (not October 5). It was suggested that the round table meeting (August 29/30) be held in Greenville. The PC suggested the November 27 PC meeting be held in Oriental.

### PUBLIC COMMENT

Dr. Costlow moved that the PC adopt a resolution thanking Dr. Robert Holman for his leadership of the program. Mrs. Giordano was asked to develop the resolution which will be signed by the PC Co-chairmen. Secretary Cobey seconded the motion which was unanimously passed.

# ADJOURNMENT

The meeting adjourned at 1:30 p.m.

HHAChment H

Policy Committee 6-13-98 Attendees

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William H. Queer rsolt Nagy Karen Sidgelis mie Call. marcio Auts DOLAD BALES Dian Miker Jimmie Quertos Bo CRUM

NEIL ARMINGEON Ver Disterfell Astry Deris

Haenc eyp Stoff DUMH, Beaufort NOBA / NM F. EHNR Town of Nags Head ACAC East Carolin University NC CGIA CGIA DEHNR Virginian - Vilot USGS DEM WQ DEM WQ EPA, Regim IV NC COASTAL FEDERATION ETA, Atlanta A/P Study

# ALBEMARLE-PAMLICO ESTUARINE STUDY

# DIRECTOR'S REPORT Policy Committee TECHNICAL COMMITTEE June 13, 1980 MAY 9, 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 72 BMP contracts signed utilizing 10 practices (e.g., waste lagoons, water control structures, sediment control practices, livestock exclusion from streams and solid set).
    - (b) Solid Set 3 sites --Bertie site 85% in place (Aulander) --Currituck site completed (Knotts Island) --Washington site - moved to Tidewater (Plymouth) Research Station 90% in place
    - (c) VA Animal Waste Management
      - -- 3 of 5 new waste system designs complete (entire system)
      - --15 of 21 nutrient mgmt. plans complete (pump down)
        - 6 test/demonstration plots (mineral fertilizer/manure application)

# 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 utilizing landsat TM 1987-88 imagery which is due in September, 1990.
- B) First pilot area for land use mapping will be the Currituck Drainage Basin. Maps indicating the 1972 land use for Currituck, Camden, Dave, Virginia Beach, and Chesapeake City have been sent out for review to the 5 counties in the drainage basin.

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- C) U. S. Geological Survey LUDA data (1970-73) is on line and CGIA is providing county statistics for each county within the study area (The map before you is a composite of eight 1:250,000 scale quads. of study area).
- D) CGIA will take over the data manager position by hiring a software specialist and GIS specialist. However, due to the budget constraints CGIA can only hire temporary positions until July 1, 1990.

# 3) STATUS AND TREND REPORT (STR)

- A) Public meetings to obtain comments concerning the STR have been delayed by the Policy Committee. They felt the delay was needed to modify the conclusions of the technical version and change the format and add conclusions to the public version.
- B) The original group created by Dr. B.J. Copeland to develop the Preliminary Status and Trend Report met on April 25, 1990. This group reviewed their conclusions and identified trends for each section of the report.
- C) The STR Review Group had their second meeting on May 1, 1990. This group reviewed the additional comments provided by Dr. B.J. Copeland's work groups and develop specific recommendations for the CCMP outline.
- D) All of these comments have been incorporated into the STR Conclusions/Comments and CCMP Recommendations before you. Please review this information and provide the program office with your comments by May 25, 1990. This information will be presented to the Policy Committee for their input at their June 12, 1990 meeting.

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Httachment C Bistorial or (13) 3190

# ENVIRONMENTAL QUALITY GOALS FOR THE ALBEMARLE - PAMLICO ESTUARINE STUDY

#### Declines in Fisheries Productivity PRIORITY CONCERN:

GOALS: Ensure adequate quantity and quality of primary and secondary nursery areas to support increasing fisheries harvest demand.

Maintain harvests within sustainable yields.

Increase the catches per unit effort for target species by commercial and recreational fisherman.

Restoration of Roanoke River striped bass stocks to levels of reproductive success and juvenile abundance recorded during the 1960 through 1974 time period.

#### Health of Aquatic Resources PRIORITY CONCERN:

Determine cause(s) of ulcerative mycosis in finfish GOALS: and shell disease in blue crabs; reduce prevalence and incidence of these diseases.

> Eliminate occurrence of pollutants present in toxic concentrations within the water and sediments.

Maintain water quality standards in all areas important to the survival of estuarine dependent fish species.

#### PRIORITY CONCERN: Eutrophication

GOALS: Achieve nutrient reduction goals prescribed in management strategies for tributary drainage basins designated as Nutrient Sensitive Waters (NSW)

> Adhere to anti-degradation requirements of the Clean Water Act for nutrients within all tributary drainage basins not presently subject to NSW management stategies.

#### Impairment of Nursery Area Function PRIORITY CONCERN:

Maintain optimal water quality conditions within areas GOALS: functioning as estuarine nursery areas.

> Maintain structural integrity of fringe wetlands for optimum function in the estuarine food web.



## PRIORITY CONCERN: Anoxia - Related Fish Kills

GOALS: Maintain water quality standards in all areas shown to experience high incidence of fish kills.

Achieve measurable reductions in the incidence and severity of fish kills.

# PRIORITY CONCERN: Habitat Loss

\* \*

GOALS: Halt losses of special fisheries habitat areas which are necessary for the reproduction and rearing of commercially and recreationally important species.

Limit losses of unique and sensitive barrier island wetlands and terrestrial habitats.

Maintain areal status of all wetland types.

PRIORITY CONCERN: Closure of Shellfish Waters

GOALS: Restoration of all shellfishing areas to "open" status.

Restoration or maintenance of acceptable pathogen levels in potentially viable shellfishing areas.

# PRIORITY CONCERN: <u>Changes in Distribution Patterns of</u> Benthic Organisms

GOALS: Establishment of additional optimal oyster substrate/ habitat to maintain or surpass recent harvest levels during 1980 through 1988.

> Maintain water quality necessary for productive shellfishing uses in currently active areas and in areas identified for potential development of shellfishing.

Maintain water quality necessary for survival and growth of brackish water submerged aquatic vegetation where they exist and where new growth may occur.

Httachment D

Public Involvement Coordinator's Report Policy Committee June 13, 1990

- 1. Citizens' Advisory Committees (CACs)
  - Continue to meet quarterly
  - Meeting notices sent to public officials, interested citizens and newspapers in meeting area
  - Vacancies exist: P-CAC (2); A-CAC (6)
  - Committee members continue to share APES information with community, civic and educational organizations

# 2. Exhibits

- · State Fair Exhibit (Nursery Area Model) was used at:
  - \* WRAL's Coastal Celebration in Raleigh 4/7 & 8
  - \* Earth Day Celebration in Greenville on 4/22
  - \* Environmental Awareness Field Days sponsored by the Assoc. of Soil & Water Conservation Districts -Northampton, Gates, Camden and Martin Counties -(400 students) on April 24, 25 & 26
  - \* W.H. Robinson (700 students) & So. Greenville School (520 students) in Greenville - 5/11 & 5/18
- Nursery Area Model is on semi-permanent
- display at PTRF's resource center in Washington, NC
   Exhibits are available for use in study area at any
  time.
- 3. Outreach

- Educational Presentations:

- \* Northeastern High School Pasquotank Co. March
- \* Currituck Co. High School April
- \* Bath Ruritan Club April
- \* Windsor Rotary April
- \* Earth Day Observance Elizabeth City & Greenville - April
- \* Bertie Co. High School Gates April
- \* P.S. Jones Jr. High Washington April
- \* 3rd Street School Pitt County April
- \* A.G. Cox Pitt County April
- \* Welcome Middle School Pitt County April
- \* Grifton Elementary Pitt County April
- \* Sadie Saulter Pitt County April
- \* Stokes School Pitt County April
- \* Elm City School Wilson April
- \* Speight Middle School Wilson April
  - \* Belhaven Elementary April
  - \* ECU Teaching Fellows April
  - \* Gates Co. High School April
  - \* Chowan Co. High School May
  - \* Camden Co. High School May
  - \* W.H. Robinson School Pitt Co. May
- \* So. Greenville School Pitt Co. May
- \* Gatesville Women's Group May

- \* Riverside Readers Book Club Washington May
- \* Falkland Elementary Pitt Co. May
- \* Snug Harbor Ext. Group May
- \* Arrowhead Beach 4-H Group May
- \* Williamston Rotary May
- \* Weeksville Middle School Pasquotank Co. May
- \* Edgecombe-Tar River Assoc. Tarboro- May
- \* Chocowinity Sr. Citizens May
- \* Eastern Elementary Washington May
- \* John Small Elementary Washington May
- \* Belvoir Elementary Pitt County May
- \* Elizabeth City Jaycees June

Approximately 3000 individuals were reached through presentations in the Pamlico area and 750 through presentations in the Albemarle Area.

- Local Government Liaison
  - \* Belhaven Town Council
  - \* Jones County Commissioners
- 4. Projects
  - Print
    - \* Poster series/bumper stickers 4500 of 5000 distributed
    - \* calendar 4900 of 5000 distributed
    - \* "Guide to Estuaries" distributed and being reprinted
    - \* "Where the Rivers Meet the Sea" 600 distributed to schools in APES area; additional 900 copies being printed for public distribution
    - \* Status & Trends (public version) being revised to include conclusions
  - Electronic
    - \* video PSAs being utilized on WRAL-TV
    - \* video/slide show completed; shown at Roundtable 3/6 & 7 in Beaufort - video is also being shortened to 20 minutes for use at meetings requiring an abbreviated program
    - \* radio talk show 2nd (Wetlands) of 6 scripts completed and being approved; will begin airing in May - Subsequent topics include Human Environment and Water Quality
  - Public Meetings
    - \* Workshops on Water Quality done by NCSU Ag. Extension March 6,7,14 & 15 were very well attended - 275 to 300 people - Report on proceedings mid-late July
    - \* Forum on Management Needs for Protecting Estuarine Resources in A/P System - all 4 completed - fair to good attendance ~175 people - <u>draft</u> write-up on proceedings by end of June

- \* Assisting CACs with Estuarine Management Recommendations - May 4 & 5 in Washington - well attended 33 Of 54 CACs - Final workshop - June 5 in Williamston
- \* Press Tour scheduled for June 6-8 in Albemarle region is nearing finalization

All 3rd cycle projects are completed or nearing completion

- 5. Other Meetings & Events
  - Status & Trends Public Meetings (5) across state rescheduled due to revision of S & T Document (Public Version) will probably occur late summer
  - COG presentations in Va. April 3
  - Va. Beach Public Participation Workshops held April 3
     & 18 not very well attended, but were aired live on Public T.V.
  - State Fair Oct 12-21, 1990 Dept. theme is Waste Management and Recycling - Planning continues

# 6. Newsletter

- 2nd Quarter edition out May 16th

- Mailing list is constantly updated 17,200+
- responses are very favorable
- 7. Inquiries to Program
  - receive almost daily response to newsletter, T.V. and exhibits from educators, press, students and business
  - inquiry log is kept, average response time is 2-3 days
  - requests for publications are very popular

Attachment E

# SUBJECT: Hydrologic Data Collection and Modeling

Concerns were raised about the approach being taken by the A/P Study for predicting the hydrologic regime in areas presently under study, the lower Neuse and Pamlico Rivers, and about proposed new investigations within Albemarle and Currituck Sounds.

An additional peer review was conducted on three proposals from USGS to perform data collection and mathematical model development. Review comments were favorable and supported continuation of the present direction.

To provide a mechanism for coordination amongst the three principal investigators and to ensure that the hydrologic work remains on track, the Technical Committee established a new review group.

### MEMBERSHIP

Mr. Larry Saunders, Corps of Engineers (Chairman)

Dr. Steve McCutcheon, EPA, Environmental Res. Lab, Athens Mr. Trevor Clements, DEM

Dr. Peter Hamilton, Science Applications Int'l. Corp.

Dr. Marjorie Overton, NC State University (P.I.)

Dr. Jerad Bales, USGS (P.I.)

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Dr. Leonard Pietrafesa, NC State University (P.I.)

AHachment +

# Albemarle CAC

Proposed nominees for 6 existing vacancies.

<u>NAME</u> Jeanne Meiggs	ADDRESS Shawboro, NC 27986	<u>SLOT</u> Educator
Shelia Smith	1049 Vanderploeg Dr. Chesapeake, Va 23320	Va. Rep. (At Large)
Melvin Daniels, Jr.	1618 Rochelle Dr. Elizabeth City, NC 27909	Engineering
Phillip Hinton	Rt. 1 Box 287-B Sunbury, NC 27979	At Large
Clyde Hughes	POB 367 Colerain, NC 27924	At Large
Thomas Holland, Jr.	West Sound Shore Dr Edenton, NC 27932	At Large

# Distribution of CAC Slots

	Originally	Presently
Educator	1	Q
Industry	1	1
Public Official	2	3
Tourism	1	3.
Developer	1	1
Commercial Fishing	· <u>1</u>	1
Recreational Fishing	1	0
Agriculture	1	. 6
Engineer/Surveyor	1	1
Environmental Group	1	3
Private Citizen (At Large)	1.9	
Total	30	2.4

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Draft Copy for meeting 6/5/90

HIGHEST RANKED RECOMMENDATIONS (Based upon the numerical survey)

## SPECIFIC RECOMMENDATIONS

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Critical Habitat Protection

- (1) All agencies should review and up-date existing protection plans for SAV beds, shellfish resources waters, primary nursery areas, and anadromous spawning areas
- (3) Require vegetated buffers zones to protect critical areas from disruptive management practices.
- (4) Evaluate the impacts of fishing on critical area resources.
- (6) Require that land-use planning include water-use planning.
- (9) Determine the efficacy of current set-back regulations on water quality.
- (9) Strengthen stormwater regulations effecting critical areas.

The Division of Marine fisheries (DMF) and the Wildlife resources Commission (WRC) should complete habitat inventories for critical areas.

Educate the public regarding the importance of critical areas.

Point Source Discharges: NPDES

- (2) DEM should consider the cumulative basin-wide effects of each NPDES Permit proposal.
- (7) Develop and publicize specific nutrient-reduction targets for each basin.
- (9) Enforce SOC and JOC violations.

Wetland Protection

(3) Develop standards for permissible uses of wetlands.

Reevaluate efficacy of the Coastal Area Management Act (CAMA) in protecting wetlands.

Determine an <u>accurate</u> estimate of wetland loss in the study area.

Reduce the impacts of unavoidable disturbances and, when necessary, rely on equitable mitigation schemes.



# Agricultural/Forestry Practices

- (4) Drainage ditches in commercial forestry sites should be modified to control sediment and runoff.
- (5) Division of Soil and Water Conservation (DSWC) should grant cost-share monies on the critical needs of the entire watershed.
- (6) Shift the focus of BMPs from erosion control to water quality.
- (8) Determine whether large animal operations constitute a point source discharge thereby requiring an NPDES permit.

The DSWC should evaluate the effects of the cost-share program on water quality.

### Marinas and Marine Waste Disposal

- (7) DEM should require all marinas to have pump-out facilities.
- (8) Determine the extent of the marine sanitation problem.
- (9) DEM should determine the carrying capacity for all coastal waters.

The Division of Coastal Management should consider the cumulative impacts of smaller docks and developments and boat operation and maintenance in marine siting decisions. Establish leasing fees to compensate the public for loss of the use of public trust waters

### On-Site Treatment: Small Systems

(10) Provide local sanitarians adequate training and time to effectively oversee septic systems.

Division of Environmental Health (DEH) should develop special siting criteria for critical areas, e.g., near primary nursery areas, SA, or ORW waters.

DEH should work with local agencies to develop stronger incentives and educational materials to promote proper operation and maintenance of on-site systems.

### On-Site Treatment: Large Systems

Dem and DEH should develop consistent monitoring and reporting requirements to facilitate local enforcement.

Stormwater management

(10) Require BMPs for <u>all</u> agricultural and forestry practices.

Incorporate impact fees and inspection schedules in the stormwater regulations.

Comprehensive Conservation Management Plan Development

(8) Formalize the CCMP process to ensure broad participation and communication.

## GENERAL RECOMMENDATIONS

### Resource Management

- (7) Evaluate land uses and determine correlation between uses and water quality problems.
- (8) Develop a basin-wide resource management plan that:
  - (1) includes problem assessment, baseline data for monitoring, carrying capacity, and objectives;
  - (2) is consistent with adjacent basins management plans.

Classify all areas within the basin.

Funding and Staffing

Increase funds to implement water quality and resource management programs, via: user fees, impact fees, special taxes, economic incentives, multi year budgets (more stable financing), "pay as you go" development, monies reallocated from one program to another.

Require funding sources with any recommendation.

