

COASTAL REVIEW

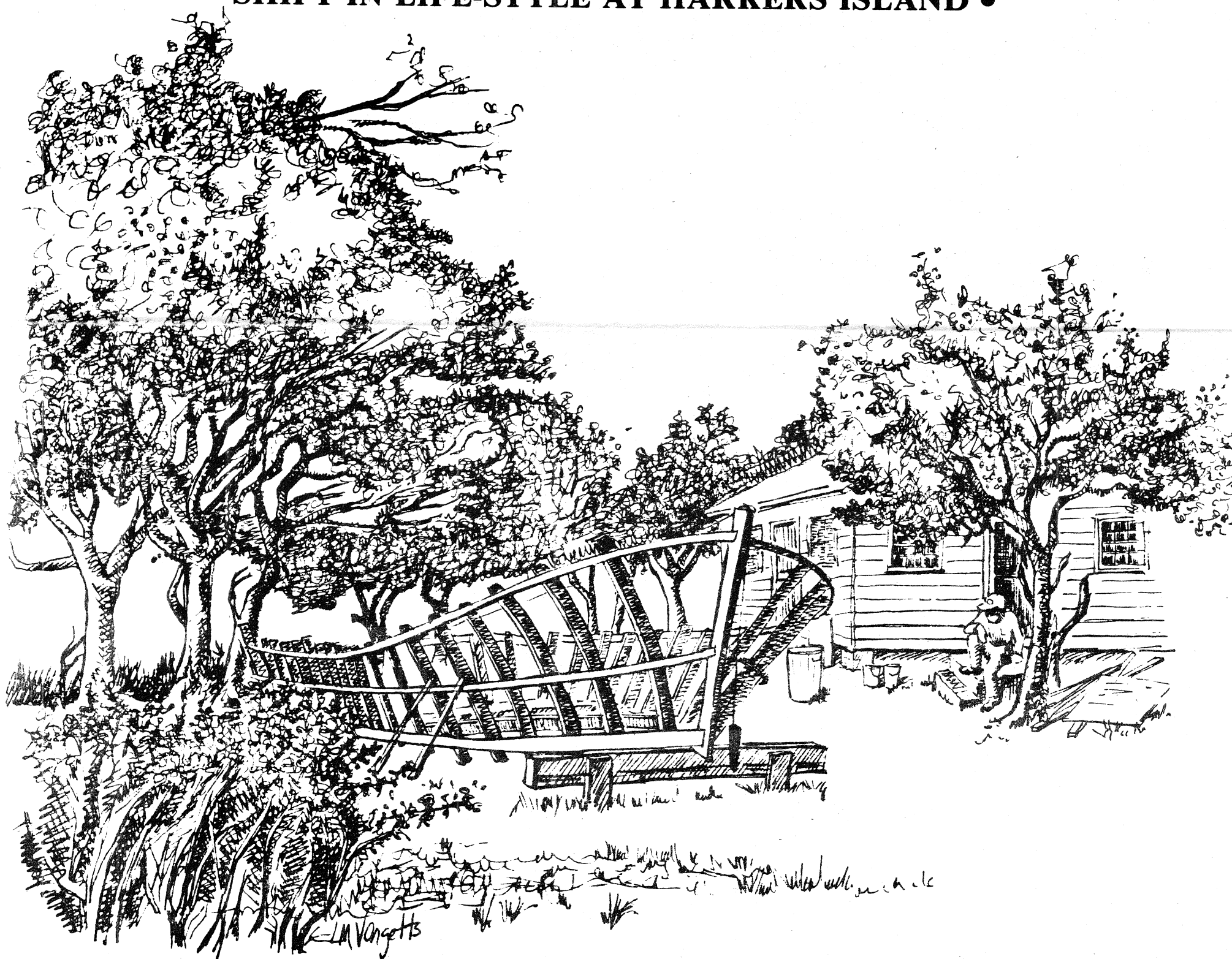


VOL. 1, NO. 2 AUGUST, 1983

NEWSLETTER OF THE NC COASTAL FEDERATION

PRICE - \$5.00 A YEAR

**STREAM WATCH IN COASTAL N.C. • PEAT MINING UPDATE •
COASTAL FORUM • CROSSROADS DEFEATS AMMONIA •
SHACKLEFORD • CONFLICT ALONG THE CAROLINA COAST •
TIME BOMB AT TEXASGULF • NC HUMANITIES COMMITTEE •
SHIFT IN LIFE-STYLE AT HARKERS ISLAND •**



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Editor:
Todd Miller
North Carolina Coastal
Federation, Inc.
Rt. 5, Box 603 (Ocean)
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(919-393-8185)

The North Carolina Coastal Federation would like to have you as a member. The Federation is a non-profit, tax-exempt organization seeking to involve citizens in decisions about how coastal resources should be managed. Its aim is to share technical information and resources to better represent present and long-term economic, social and environmental interests of coastal residents.

Membership is \$5.00 with larger contributions encouraged. Funds are used to publish this newsletter and to make special mailings about important coastal issues and meetings. All donations are tax-deductible.

HATS OFF TO STREAM WATCH

The North Carolina Coastal Federation applauds our state government and the Z. Smith Reynolds Foundation for promoting citizen involvement in protecting water resources by initiating the Stream Watch Program.

In particular, the Federation is pleased that differences in opinion between citizen groups and state government over how to manage our coastal waters has not resulted in bias decisions about who could participate in the program and receive its funds.

Partial funding for this newsletter was provided by the Stream Watch Program. The willingness of our state officials to support citizen participation without stipulating unquestioning support of their programs is highly commendable.

Because of the diversity of groups participating in Stream Watch, the Federation believes that it will help foster the democratic process needed to manage water resources for the benefit of future generations.

A NEW AGE DAWNS

It may be difficult to fully appreciate as of yet. But something dramatic is happening in coastal North Carolina.

On April 20, 1983, six hundred residents of Dare, Hyde and Beaufort counties packed the gym at Mattamuskeet High School to tell state officials and corporate developers interested in mining peat bogs that such land use is incompatible with their lifestyles and environment.

On June 20, 1983, by a unanimous vote the Carteret County Commissioners denied Texasgulf Chemicals Company permission to build a \$10 million ammonia storage facility on Radio Island because of public health and environmental concerns.

In New Hanover County, members of a public interest group which in the late 1970s fought an oil refinery on the Cape Fear River are now county commissioners, planning board members and in other ways have assumed control of the county's growth management programs.

Crabbers and fishermen living on the Pungo River near Belhaven recently formed a group to safeguard the river's water quality. Several television stations labeled the Pungo River Association an environment group. But its founders would more accurately describe their organization as a trade association which is attempting to protect an industry which supports over 2,000 people around Belhaven.

From Corolla to Calabash people realize that the environment which has provided them their livelihoods is in trouble. And now, instead of just sitting back and complaining these folks are actively engaged in efforts to protect their way of life. Their efforts are beginning to pay off in many instances.

In fact, the recent survey conducted by the Federation reveals broadbased public support for regulations that will protect the coastal environment. (See related story this issue.) Our government tends to be most responsive to those that work hardest to influence it. This fact has not been lost on the people who reside in the fishing, farming and resort communities in coastal North Carolina.

Letters to the Editor COASTAL FORUM

Moratorium Urged on High Density Development

To the Editor:

The Onslow County Conservation Group has joined with other conservationists and local fishermen to prevent high density development of Permuda Island which is located in Stump Sound, a primary nursery area for shellfish. The development proposed is for 383-3 bedroom units to be built on this small island at West Onslow Beach.

Our county commissioners recently approved a rezoning request to high density for the new owner of Permuda Island. This decision was incongruous in view of the fact that public opinion was overwhelmingly against rezoning and legal counsel for the collective group presented abundant evidence that rezoning was not in the best interest of the general public and rezoning could lead to the loss of our shellfish industry. The rezoning decision has been challenged and a suit is now pending in the Civil Superior Court in Onslow County.

The word is out, all the way from Onslow County to the bankers in New York - "There are no land use controls in Onslow County"; good judgment, proper planning, and concern for what our county will look like in the future has been replaced by crisis like decisions and rubber stamp operations.

I wonder what motivates educated, elected officials to ignore the history and the folly of high density and poorly planned development on our barrier islands. This certainly is not progress and I'm afraid that instead of new revenues, our taxpayers will again carry the burden for the profit of a few. In addition, renewable natural resources would be lost to us forever.

The citizens of Onslow County are frustrated. We feel that our state's coastal resources policies are not strong enough to protect us from the loss of our natural resources and prevent West Onslow Beach and surrounding inland waters from becoming contaminated. Sound discouraged and emotional? Well, from our point of view, we are losing our coastal values -- our commercial area fishing, our recreation areas, and the increasing loss of revenues for our fishermen, many whose families have made their living along the coast for generations.

It is not and never has been our intent to interfere with the

property rights of others. The general public however, has an absolute right in matters of rezoning, a right we use with discretion and caution, and in this case, based on good evidence and scientific advice.

We need help to prevent Permuda Island and all the rest of the islands and land masses in and around the sounds and waterways from becoming high density development areas. Developing the islands in our sounds is a new concept. This is a time for caution and not a time for piecemeal approval of one project at a time. I strongly recommend a moratorium on high density development in Stump Sound until a complete environmental impact assessment can be completed on the effect it would have on our fish and shellfish areas.

Thomas J. Caulfield, Jr.
 President, Onslow County Conservation Group
 347-2445

Reader Wants More!

To the Editor:

The North Carolina Coastal Federation is to be heartily congratulated on a superb annual meeting. It was stimulating, timely, entertaining and most definitely useful to all concerned. As more people appreciate the human side of the problems of coastal population growth, it will

be easier to enact beneficial legislation and ease up on other useless and overly restrictive regulations.

I came away with the following ideas: (1) The human side of the issues are important and need to be analyzed from philosophic, historic, political and economic points of view; (2) We need to bring together the scientific, technical and political practitioners with the analysts of the more liberal arts in a larger symposium directed to a larger audience; (3) The scientific information needed to help move toward consensus between opposing factions is very much of the basic variety; (4) We need to mix scientific and human values for the kinds of solutions that will probably be most lasting, most popular and best appreciated by all those concerned; and (5) We need to move forward toward a consortium of coastal science which would provide an independent source of data for decision-makers. The crucial evidence is that not one full-time coastal geologist is working on the problem of North Carolina's coast and only a few work part-time and from a descriptive, regional point of view.

So, I came away with my mind full of new things, reeling with new approaches and glowing with optimism. From a beginning of embittered withdrawal, I would say the meeting had a most salubrious effect on me. The sum of these individual effects can only be a positive one for the problem in general. The Federation can feel it has done well, but don't stop now.

A. Conrad Neumann
 Professor of Marine Sciences
 UNC

PUBLIC NOTICE
Peat Mining Meeting
Belhaven Civic Center
Wednesday, August 17, 1983 at 7:00 p.m.
For more information, call (919) 393-8185

STREAM WATCHING IN COASTAL NORTH CAROLINA

By Meg Kerr

Federal, state and local governments charged with the protection and management of natural resources face difficult problems in the decade to come. Budgetary cutbacks threaten the future of existing environmental programs at the same time that pollution problems become more complex requiring new, more sophisticated programs.

Non-point pollution, the runoff from urban, residential and agricultural areas, carries sediment, nutrients, pesticides and other pollutants to our surface waters. Reduction of these non-point pollutants to our surface point pollutants can best be achieved through careful land management practices.

It is important that citizens throughout the state learn how their activities affect the pollutant loading of runoff from private lands. Public education is an essential part of the fight to control pollution. The continued maintenance and expansion of environmental programs in North Carolina depends on strong public support.

North Carolina's Department of Natural Resources and Community Development has developed a new program called Stream Watch which is designed to encourage advocacy groups which are informed and committed to the support and improvement of environmental programs. If it is successful, the program will build a working relationship between concerned citizens, local industries and municipalities and the state government.

The fundamental concept behind Stream Watch is "Adopt-a-Stream." Citizen groups are asked to identify a stream, river, estuary or other body of water that is of particular interest to them. With assistance from state personnel, they learn about the adopted area, discovering land uses, industrial developments and municipal facilities that affect the area's water resources.

Once a body of water has been adopted, Stream Watch groups receive educational materials describing activities they can sponsor to improve their waterway. The program has been given a tremendous boost by a \$30,000 grant from the Z. Smith Reynolds Foundation. This money is given to Stream Watch groups in increments of up to \$1,000 to fund specific improvement projects and educational programs.

Since the program was officially announced during the North Carolina Outdoor Expo on March 24-27 in Raleigh, the response has been very encouraging. More than 30 groups have joined the program with adoptions in all regions of the state. Local communities have chosen small creeks running past their houses, organized river basin associations have adopted larger rivers, and coastal groups have adopted large estuaries. A range of projects have been proposed including water quality surveys, newsletter publications, a telephone hotline, stream bank restorations, clean-ups and production of a Water Quality Symposium.

As North Carolina approaches the year 2000, it faces the difficult challenge of orderly growth and development proceeding in a clean environment. Demands on the State's natural resources will increase. It is essential that all segments of the State's population work together to see that these valuable resources are managed properly. It is hoped that Stream Watch will begin to open up communications between citizens, industries, government agencies, and all others concerned with water resources in North Carolina.

Meg Kerr is Stream Watch Coordinator. She can be contacted by writing the Division of Environmental Management, P.O. Box 27687, Raleigh, NC 27611 (733-5083).

CROSSROADS DEFEATS AMMONIA

State environmental agencies told them they were too late. "You should have commented earlier. The permits are already granted."

And when Carteret County Crossroads, a nonprofit citizens group, started warning of the dangers of ammonia in the fall of 1982 most people asked, "What ammonia facility?"

By June 20, 1983 almost everyone knew about ammonia. On that day the county commissioners unanimously voted to deny Texasgulf Chemicals Company, a French-owned phosphate mining and chemical concern located near Aurora, a special use permit to construct the storage terminal on Radio Island.

Crossroads' success in preventing the construction of the terminal results from work that began long before the ammonia issue. The group began five years ago to develop public support toward regulating new land uses incompatible with existing development in the county.

The organization's effectiveness illustrates the working relationship that can be developed between citizen groups, businesses and government. It shows just how important it is for citizens not to wait for a crisis to become concerned, but rather to take part in the everyday decision-making process.

Like many groups of its kind, Crossroads formed as a result of a single major issue. It's members first fought a proposal to construct a potentially explosive liquid natural gas storage facility. The group later became deeply involved in debates over whether an oil refinery and coal export facility should be built in the county.

Crossroads would not have defeated the ammonia facility had it not been for previous efforts to get the county to adopt a tough zoning ordinance for Radio Island. In 1981 the Coastal Resources Commission found itself having to decide about whether the land classification for Radio Island should be changed to allow a 20 million ton coal export facility.

Local governments normally have the power to change their land classifications which are designated in their Coastal Area Management Act land use plan. But Carteret County had not adopted its plan, and thus the authority rested with the state commission.

After Crossroads' members packed a stormy public hearing in June of 1981, the Coastal Resources Commission advised that a special task force be appointed to investigate the problems associated with developing the island. Throughout the task force meetings that followed Crossroads was there.

With the structure provided by the Coastal Resources Commission, the development of Radio Island received intensive public review. While members of Crossroads were the most vocal of citizens involved in the meetings, groups like the Carteret County Chamber of Commerce began to speak out against land uses that would disrupt existing businesses.

One result of the task force was that the county commissioners decided to adopt their Coastal Area Management Act land use plan so that they would be responsible for making local decisions. The county commissioners then adopted an ordinance to require a special use permit for any industry wanting to locate on the island that could threaten the environment or public health and safety.

Texasgulf had already received its permits from the state when it applied to the county for a special use permit. The county planning board recommended that the county commissioners approve the terminal, but requested more environmental data after Crossroads listed errors and

omissions in the environmental assessment submitted by the company.

The county proceeded to gather information about the facility. One review of the proposed terminal was submitted by the U.S. Coast Guard which said, "In general, the assessment is of limited value. Despite the size of the document, there is very little useful information presented. For example, the hazards associated with anhydrous ammonia as

stated in Section IV of this assessment are grossly understated and misleading. The discussion in Section V on suspended aerosols is too complex to be of any value. The most important issue, that of public safety, is glossed over and underdeveloped."

A public hearing required by the zoning ordinance was held on June 1, 1983. The District Courtroom was packed by 150 Crossroads members. Except for

representatives of Texasgulf, and the State Departments of Agriculture and Commerce, almost everyone spoke against the facility.

Carteret County would not have been in a position to stop the ammonia terminal had it not been for five years of work by Crossroads. The fact that state environmental agencies approved the project indicates that their decisions must become more public. The ammonia vote shows

that once citizens become informed and involved, our governmental structure devised for protecting public welfare can be made to work.

(Crossroads is currently working on phosphate air emissions, a proposed phosphate exporting facility, policy issues in the county land use plan, and the Davis duck impoundment. Contact Ann Hooper, P.O. Box 155, Beaufort, NC for more information.)

DON'T WAIT UNTIL ITS TOO LATE



HELP PROTECT IT NOW

THE NORTH CAROLINA COASTAL FEDERATION, INC. IS A NON-PROFIT CITIZENS ORGANIZATION WHICH IS ACTIVELY PROMOTING THE ORDERLY AND BALANCED USE AND PRESERVATION OF OUR FRAGILE COASTAL RESOURCES.

REGULAR MEMBERSHIP = \$5.00

Larger Contributions are Needed. All Donations Tax Deductible.

APPLICATION FOR MEMBERSHIP

Please complete and return to:

**North Carolina Coastal Federation, Inc.
Rt. 5, Box 603 (Ocean)
Newport, North Carolina 28570**

NAME _____

ADDRESS _____

CITY _____ **STATE** _____ **ZIP** _____

OCCUPATION or AFFILIATION _____

SPECIAL AREA OF INTEREST _____

MAKE CHECKS PAYABLE TO THE NORTH CAROLINA COASTAL FEDERATION, INC.

Members will receive the North Carolina Coastal Federation newsletter, periodic mailings concerning important coastal happenings, and notices of Federation meetings and outings.

CHOWAN GROUP KEEPS WATCH ON ANNUAL ALGAE RITE

By Jerry Allegood

(The following story was reprinted with permission from the July 5, 1983 issue of The News and Observer.)

ARROWHEAD BEACH - The fibers appeared first, tiny green threadlike strands floating in the dark water. Next came small clumps accompanied by irregular shaped blobs just below the surface. Then there were large, slimy mats streaked with bright bands of turquoise.

The Chowan River was in bloom again.

Alfred M. Howard knows the signs well. From his home on the riverbank at Arrowhead Beach, he regularly watches the river for evidence of the algae growth that has become a common sight in warm weather.

"It forms a slick and moves down the river like a barge," he said.

Howard, a retired Navy captain, is not the only one watching the scenic northeastern North Carolina river. He is one of several volunteers who are working with state scientists in a program designed to help clean the river and help people plan commercial and recreational activities.

Observations by the group are used by the N.C. Department of Natural Resources and Community Development to develop an "algal index," which rates the condition of the river from zero to 10 based on algal growth.

The higher the index rating, the more algae and more potential for interference with swimming, boating, fishing and wildlife.

Last week, the river was rated at 7, a designation that means surface mats of algae are scattered with heavy accumulations in some areas. There are some problems with odor and some interference with recreational and fishing. Although the growth is not considered as bad as blooms in the 1970s, it is the most extensive in the past two years and has drawn attention to potential problems along the river.

Usually, the volunteers at various points along the river

check the water Monday afternoon during the heat of the day when the algae is likely to be at its worst. Dipping up a sample in a glass jar, they gauge how clear the water is and look for signs of algae on the river's surface.

NRCD officials say the observations are considered with factors such as the amount of chlorophyll in the water and weather conditions.

Biologists say the blooms are caused by a buildup of nutrients in the water and that conditions are worse during hot days when there is little wind. Besides nutrients from farms, industries and municipalities, the blooms are stimulated by sunlight, warm weather and periods of calm winds.

As temperatures rise this summer, bringing a threat of more severe blooms, another monitoring system will supplement the volunteer program.

Residents of the Arrowhead Beach Subdivision, a 1,700-lot development north of Edenton, will begin monitoring the river this summer as part of a stream watch program operated by the NRCD. With money provided by the Z. Smith Reynolds Foundation, the group will buy about \$500 worth of equipment to test the water for concentrations of phosphate and nitrogen - elements conducive to algal growth.

But the people on the river already know algae's telltale effects, ranging from a nuisance to economic hardship.

Some people say the fibers, borne ashore on gusty winds, taint clothes drying on clotheslines.

The algae residue causes a buildup of scum on boats and piers, and the floating plants will stain anything in the water green, including ducks and children.

When boats pass through patches of algae, the white foamy wake turns pea-green. In creeks along the river, the bases of cypress trees that poke out of the dark water are rimmed with blue-green water lines.

Fishermen blame the algae for a decline in herring and perch catches and a consequent decline in commercial fishing operations. Fishing tournaments have relocated because of the algae blooms, and some people say the condition of the river has hurt real estate and operations based on recreation.

Association members said the subdivision had felt the impact because people use the area less for recreation, and farmers who had supplemented their income through herring fishing have had to sell out.

Despite the ill-effects, Howard said progress toward restoring the river had been made. He cited the tightening of controls on waste discharges into the river, the shutdown of the CF Industries Inc. fertilizer plant at Tunis, development of land application systems for wastewater by eight municipalities and efforts by farmers to reduce runoff of nutrients and chemicals.

Milan J. Muzinich, a spokesman for the NRCD in Washington, N.C., said the attention on the river may help other areas of the state avoid similar problems in rivers and lakes. He said, for example, Jordan Lake in the Triangle area could become "another Chowan River" unless runoff and nutrients are controlled.

"It's going to make people more aware that they have to do something to protect our waters," Muzinich said.

A graphic example of the alternative was displayed last week during a meeting of the 920-member Arrowhead Beach Property Owners Association. Howard, the organization's president, showed other members a jar of foul-smelling green water he had collected near his home Sunday. On that day, the condition of the river had forced a catfish to gasp for air on the surface, he said.

Association member David Lapham looked at the jar and said, "If it will kill a catfish, it will kill anything."



photo by Clint Schemmer
Storm drain carrying rainwater mixed with raw sewage empties into King's Creek, Holly Ridge, Onslow County.

STATE GROUP WATCHES STREAMS

The Conservation Council of North Carolina has received a grant from the state Stream Watch program to send out a newsletter to river and estuarine groups interested in water quality and conservation. Anyone interested in receiving this publication should contact the Council's office.

One of the topics to be discussed in the Newsletter is the recent session of the state legislature. "Environmentalists can count this session of the General Assembly as one of the better ones in recent years," says John Runkle, Executive Coordinator for the Council. The Coastal Area Management Act was not gutted as its enemies hoped and the Office of Coastal Management received funds for the next couple of years. Special thanks are due to Council lobbyist, Bill Holman, and

Rep. Bruce Ethridge of Swansboro who chaired the House Natural and Economic Resources Committee.

Runkle also notes that the newsletter will explain a contract that the Council signed with the Alternative Energy Corporation to assist it in spreading information on finding new sources of energy - alternative sources as well as conservation. His group is collecting ideas on how the Corporation can help local citizen groups and individuals with projects. For example, a neighborhood organization in New Bern would like to establish a revolving low-interest loan to be used for home insulation.

For more information, contact John Runkle at 307 Granville Road, Chapel Hill, NC 27514 (942-7935).

BIOLOGY CLUB JOINS STREAM WATCH

By Steven Karl

High school students in the biology club at Edenton-Chowan County John A. Holmes school are studying Edenton Bay to determine what factors affect water quality.

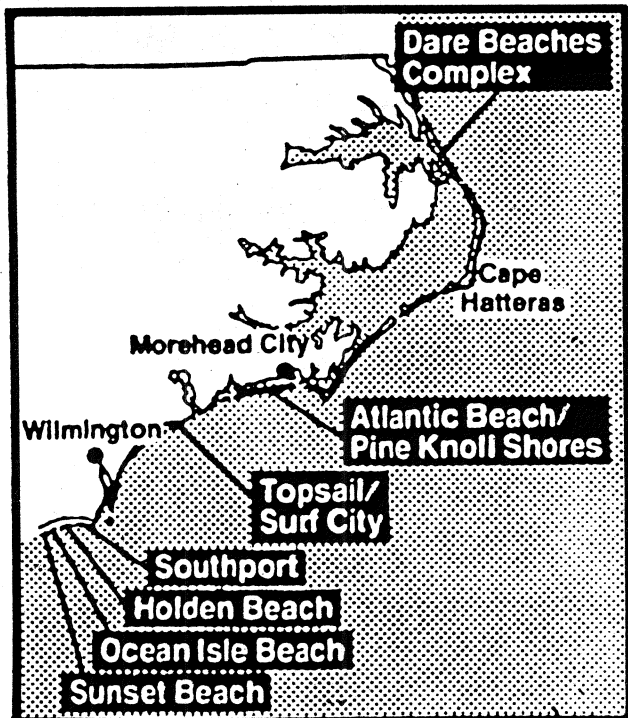
Edenton borders part of the bay and can be the cause of residential and industrial pollution. Several streams, especially Pembroke Creek and Queen Anns Creek empty into the bay. Agricultural lands completely surround these creeks and are sources of nutrients and pesticides.

Edenton Bay is located at the junction of the Chowan River and Albemarle Sound. The Bay is affected by environmental conditions such as tidal action and water quality that occur in the sound and water. The annual algal bloom that occurs in the Chowan River also occurs in the bay.

The club plans to use the NC Stream Watch Program to help educate and inform high school students and local civic groups about the importance of protecting the states rivers and coastal waters.

Hearings in August

COASTAL SEWAGE PLANS MAY RESULT IN MORE POLLUTION



After three years of study, the Environmental Protection Agency has concluded that major sewage plants serving the barrier islands could accelerate development along the coast, increasing the potential for water pollution.

The agency will hold hearings August 23 at the Brunswick County Complex in Bolivia, August 24 at the NC Marine Resources Center at Pine Knoll Shores and August 25 at the NC Marine Resources Center near Manteo. All

the hearings will begin at 8 p.m.

A draft environmental impact statement released last month said the 15 coastal towns (see map) to be served by the regional wastewater plants did not adequately consider alternatives, such as septic tanks or small treatment plants.

Septic tanks have been blamed for polluting the state's coastal waters. But the study found that "existing data did not support this position. Non-point mainland

surface runoff, not septic tanks, appeared to be the problem."

The agency has placed a moratorium on sewerage projects on the barrier islands pending completion of the environmental impact statement. EPA provides 75 percent of construction costs for such projects. Two of the proposed treatment systems would discharge sewage into the Atlantic Ocean.

DEPARTMENT OF NATURAL RESOURCES AND COMMUNITY DEVELOPMENT

UNDERSTANDING STATE GOVERNMENT

With this issue of Coastal Review, the Federation begins a series of articles that explain the governmental structures that influence land and water management in coastal North Carolina. The focus of this article is the North Carolina Department of Natural Resources and Community Development which has primary responsibility for managing and protecting the state's natural resources.

Natural Resources Planning and Assessment

This office has department-wide responsibilities to provide centralized natural resources planning and assessment support and interagency policy coordination. Services include permit information and assistance, environmental assessment and project reviews, economic assessment, Administrative Procedures Act coordination, and conducting special studies. The office is an excellent "first contact" for citizens attempting to obtain more information on state control of issues affecting their communities. (919-733-6376)

Division of Environmental Management

The division is responsible for comprehensive planning and management of the state's water and air resources. Permits, monitoring, and enforcement are major elements of the management capability. The division has delegated authority for the Environmental Protection Agency's water and air quality programs. (919-733-7015)

Division of Land Resources

The division is responsible for programs which survey, evaluate, conserve, protect, and plan the use of the state's land, mineral, and related resources. Regulatory functions include the administration and enforcement of mining, sedimentation pollution control, dam safety, and oil and gas conservation laws. (919-733-3822)

Office of Coastal Management

The office is responsible for developing and implementing a coastal management program based on state and federal regulations. The program oversees land use planning activities by local governments in

the 20-county coastal area, designates areas of environmental concern, administers regulatory programs, prepares the state management plan, and coordinates and simplifies permit processes in the coastal area. (919-733-2293)

Division of Parks and Recreation

The division serves as the focal point for parks and recreation activities in North Carolina. It operates and maintains state parks, natural areas, natural and scenic rivers, lakes, trails, and recreation areas; develops and maintains the planning and research program that supports the statewide recreation plan; and provides an advisory and consultation service to government, private and commercial recreation organizations. (919-733-4181)

Office of Water Resources

Planning for and managing the

state's water resources is the focus of this office. Special emphasis is placed on assisting local governments in developing new water supplies, providing a mechanism for river basin management, and developing a statewide program for flood damage reduction. (919-733-4064)

Division of Marine Fisheries

The division manages the state's marine and estuarine fishery resources for use by all citizens and promotes a viable commercial fishing industry. In this effort, a primary thrust is the protection and enhancement of the long-term productivity of these resources. (919-726-7021)

Division of Forest Resources

The program of the division is designed to develop and maintain on a perpetual basis the maximum productivity of several natural resources of the state's forests.

The major forest resources include timber, watersheds, wildlife habitat, soils, and outdoor recreation. Technical, administrative, and management assistance is provided by the division. (919-733-2162)

Division of Soil and Water Conservation

The division is responsible for conservation of the soil and water resources of the state. It works through the 93 local soil and water districts to control and prevent soil erosion, prevent flood and sediment damages, further water and land conservation, and develop the soil and water resources of the districts. (919-733-2302)

Office of Legal Affairs

The office administers, in conjunction with the appropriate divisions and the Attorney General's Office, the enforcement program for the department's

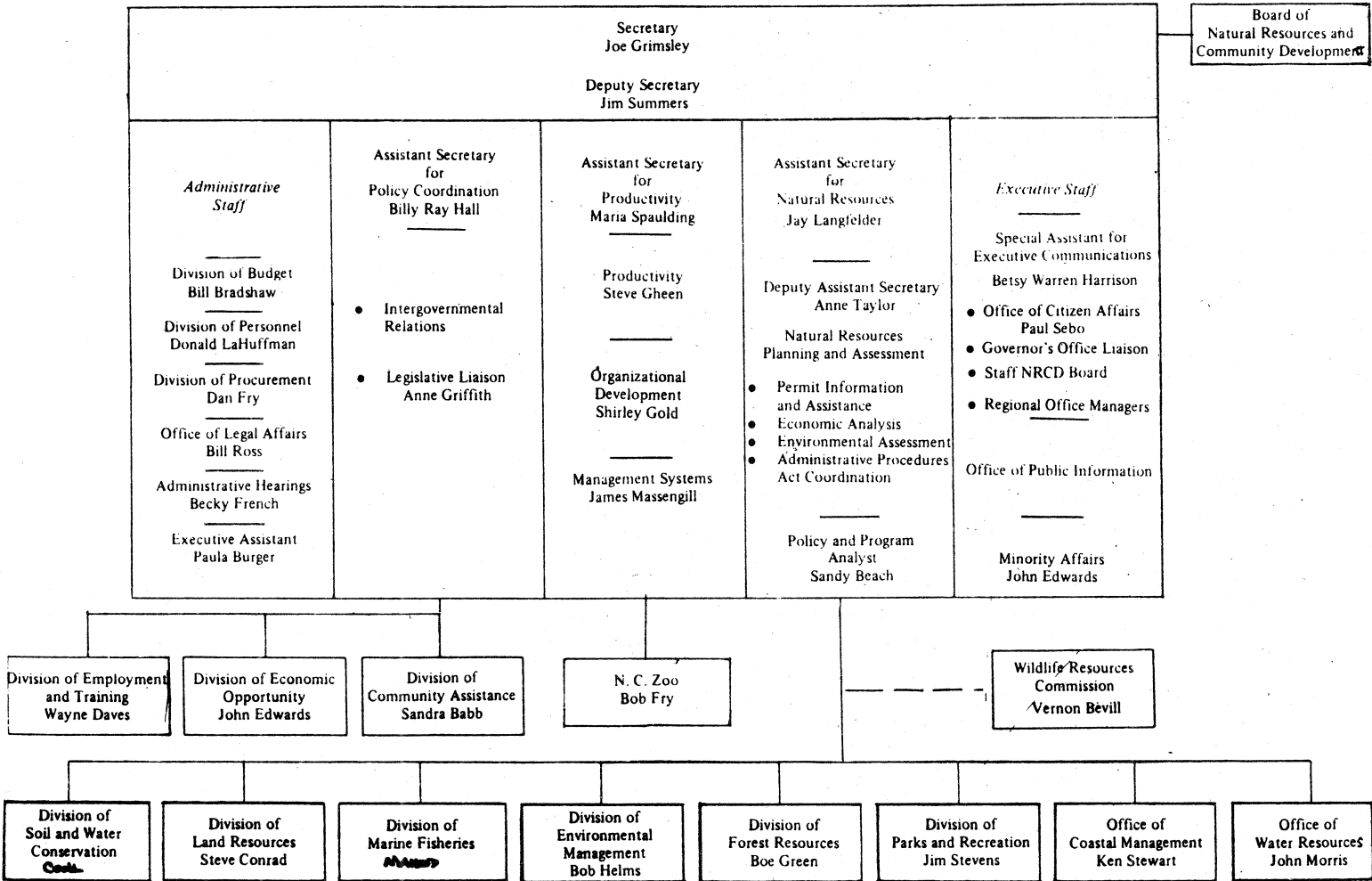
environmental protection laws. Activities include representing the department at hearings and providing legal advice to respective divisions regarding program actions. (919-733-7247)

Office of Administrative Hearings

The office is responsible for holding all hearings involving the department's programs. Contested cases involving civil penalties and/or conditions of permits are also heard by the office. (919-733-6926)

Wildlife Resources Commission

The Commission is responsible for managing, developing, protecting, and regulating the wildlife resources and gamelands of the state. It administers laws relating to game animals, freshwater fishes, and other wildlife resources. (919-733-3391)



STREAM WATCH GROUPS IN COASTAL NC

The North Carolina Coastal Federation has adopted the entire coastal region under the State's Stream Watch program. Many different community groups are participating in the program by their adoption of rivers and estuaries along the coast. Each of these groups welcomes increased public involvement in their activities.

Lower Cape Fear Stream Watch: Elmer Iberg, 814 Cape Harbor Drive, Southport, NC 28461 (457-5729). Interested in monitoring the lower Cape Fear. **Smith Creek Stream Watch:** Ellen McKeithan, Cape Fear Group Sierra Club, 4801 Cedar Avenue, Wilmington, NC 28403 (791-6183). Sediment from runoff will be a real problem in the future with the construction of a proposed Smith Creek Parkway. **Edenton Bay Stream Watch:** Stephen Karl, John A. Holms High School Biology Club, Woodard Street, Edenton, NC 27932 (482-7153). The Biology Club is performing a preliminary study of Edenton Bay.

Chowan River Stream Watch: Alfred Howard, Arrowhead Property Owners Association, P.O. Box 43, Tyner, NC 27980 (221-4977). Actively concerned about the blue-green algae blooms on the Chowan. **Neuse River**

Foundation: Jamie King, P.O. Box 5451, New Bern, NC 28560 (633-4915). Has taken the responsibility for the entire Neuse River Basin. Concerned about the deterioration of the river's water quality. **Albemarle Sound Stream Watch:** Mike Carter, Albemarle Chub Chasers, P.O. Box 363, Elizabeth City, NC 27909 (338-1148). Community education about protecting and analyzing the sound's waters.

Southern Shores Stream Watch: David Bakken, Southern Shores Waterway Study Commission, 75 Wild Swan Lane, Southern Shores, Kitty Hawk, NC 27949 (919-261-2877). Studying erosion along the waterways, establishing "low wake" zones to help protect from erosion, and concerned about potential pollution from septic tanks. **Pamlico-Tar River**

Foundation: Dick Leach, P.O. Box 1854, Washington, NC 27889 (946-5497). Involved in activities to address agricultural run-off, municipal and industrial point source discharges, phosphate mining, peat mining, etc. **White Oak River Stream Watch:** William Tower, 252 Star Hill Drive, Swansboro, NC 28584 (326-8135). Concerned about sediment accumulation in river.



Beaufort Harbor by Duke Lab

photo by Clint Schemmer

CONFLICT ALONG THE CAROLINA COAST DITCHED, DRAINED, DRIED, DESTROYED

SAN FRANCISCO, CA -- Something is happening in North Carolina's coastal sounds.

Oyster beds are failing, shrimp catches are declining and commercial fishermen say their striped bass catches have plummeted. Overfishing, natural fluctuation in fish productivity and weather all play a part in the complex interrelationship which affects fish population.

But according to the May OCEANS magazine, the factor producing the most anxiety among fishermen is one they can least control: draining and clearing of coastal wetlands regulated by the U.S. Army Corps of Engineers for peat mining and farming.

Published by the Oceanic Society -- a national marine conservation organization -- the article carried University of North Carolina Professor Frank Schwartz's warning of a "huge change" in the vast estuarine system behind the Outer Banks during the next ten years. Recent years have brought to the Albemarle, Pamlico and associated smaller sounds of the coast:

- * the near elimination of once rich oyster fisheries of the southern peninsula around Rose Bay and Swanquarter;
- * a decline in shrimp landings to the lowest levels since 1958; and
- * plummeting commercial striped bass catches which have hit levels of the 1930s.

To forestall further change, Professor Schwartz called for a moratorium on draining coastal wetlands and called for a massive study launched to determine what is happening to North Carolina's coastal sounds.

But the chief federal regulator of draining wetlands -- the U.S. Army Corps of Engineers -- has been a "reluctant regulator" of massive clearing operations which have surfaced along North Carolina's coast, according to OCEANS author Carol Polsgrove in her article "Conflict Along the Carolina Coast."

In research supported by the Fund for Investigative Reporting in Washington, D.C., Polsgrove found correspondence from Corps Colonel Robert Hughes admitting the agency has been "exceedingly lenient in the application of the law and regulations" toward two major corporate developers on the Albemarle-Pamlico Peninsula, First Colony and Prulean farms.

"Both areas involved violations of federal law subject to court action, substantial fines and even restoration of the areas involved," the then District Engineer in Wilmington wrote in reference to two particular tracts on Prulean Farm property.

Despite the objections of the U.S. Fish and Wildlife Service -- but with the assent of the Environmental Protection Agency -- the Corps approved clearing and draining of 3,000 acres. "We also decided to expedite this

processing, including abbreviation of many steps required by the law and regulations," Colonel Hughes wrote later.

The EPA's decision not to object to these "after the fact" permits which were granted after work had begun was, an EPA official wrote, due to "the number of this type of violations occurring and anticipated in Hyde, Tyrrell and Dare counties."

According to Polsgrove, Corps officials say frankly that they try to let people do what they want to do with the least environmental impact possible. "We try to get them to do their projects so that it doesn't hurt the environment," Colonel Hughes said. In fact, he added, the Corps tries to let them know how they can carry out their projects without even needing a permit.

Under Section 404 of the 1972 Clean Water Act, anyone who wants to drain or fill wetlands must obtain a permit from the U.S. Army Corps of Engineers. But environmental groups had to file a federal suit to force the Corps to enforce Section 404.

"Was Section 404 designed to let people do what they want to do with wetlands with the least impact possible?" Polsgrove asks in the OCEANS article. "Or was the Corps to act as trustee, to protect the Public good?"



Headwaters of the Tar River.

photo by Ric Carter

THE PAMLICO- TAR RIVER FOUNDATION

Group education and individual action are the key in Stream Watch activities of the Pamlico-Tar River Foundation.

As there is heavy recreational and professional fishing use of our river system, many members are frequently on the river. They have been urged to be alert for unusual circumstances or occurrences. These may vary from fish kills to activity in our small bald eagle population.

Individuals are asked to report matters requiring immediate attention to Foundation officers for referral to appropriate authorities. Events of less pressing importance are relayed to members through "Currents of the Pamlico-Tar River Foundation," our groups quarterly newsletter.

"Currents" is an educational forum of diverse information. Interested persons are encour-

aged to submit articles and commentary. It has recently moved from a mimeographed to off-set format incorporating graphics and photographs and articles ranging from scientific reports to poetry.

A spring canoe trip along the lower portion of the Tar River was led by Carolina Wetlands Project biologist Mike Cocoran. Some forty persons learned more about the workings of the ecosystem, making them more able to analyze observations of the river.

The Foundation's latest project is the assembly of a slide production outlining the river's ecology, geography, history and benefits. Threats to the system are discussed along with potential solutions to them. The program will be available to schools and civic groups.

FUNDING AVAILABLE

Stream Watch groups and other citizen organizations interested in holding programs to examine the cultural significance of the land and water they oversee should consider contacting the North Carolina Humanities Committee.

The mission of the North Carolina Humanities Committee is expressed in the general theme "The Humanities and Modern Life." Under this theme, the Committee encourages and supports programs that draw upon the humanities and teachers in the humanities to examine and to illuminate problems and dimensions of life, culture and society. The Committee's overall purpose is to develop within the general public and among academics an appreciation of the humanities as an essential resource in human life, both private and public.

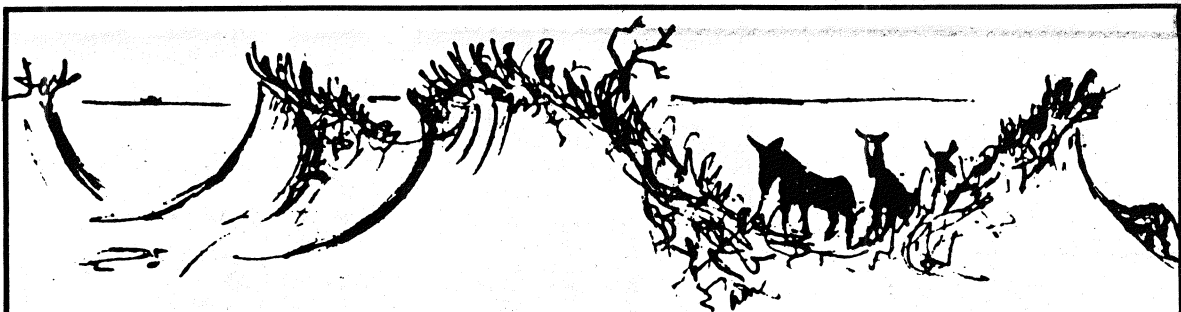
Utilizing federal monies made available by the National Endowment of the Humanities and gifts from private sources in North Carolina, the Committee makes grants to non-profit organizations for programs. Each sponsoring organization receiving assistance from the Committee is expected to match dollar-for-dollar the award either with cash or with donated services in-kind.

The Committee is composed of 24 citizens who serve without pay and a small staff. The Committee's office is located in 112 Foust Building on the campus of UNC-Greensboro (27412). The telephone number is (919) 379-5325.

Neuse River Foundation FOCUS ON WATER QUALITY

An all day water quality symposium is planned for September 15 at Fairfield Harbor near New Bern by the Neuse River Foundation. Topics to be discussed include the ground-water classifications proposed for the state, Neuse River Nutrient Management Plan and a phosphate ban for detergents. The proceedings from the meeting will be published with a grant from the Stream Watch program.

Susan King, one of the organizers of the meeting, says that the organization expects good representation from the state legislature. Conference registration is \$10.00 which includes lunch. For more information contact Susan at 919-633-4915 or write P.O. Box 5451, New Bern, NC 28560.



Shackleford

Along the long, low Outer Banks
where the sea becomes weary with the land
And has with times both gentle and in wrath
Swept patient sand in bulwarks
finger thin
All the way from Currituck to Salter Path,

Sea born islands with ribbons of sea wrack
in their hair
are cradled in the arms
of wind and swaying sea.

In one brief afternoon
I've seen the veldt
And glimpsed the Serengeti
Felt the pangs of grief
for whalers lost
and mothers buried
Long before their time.

Please keep this fragile island place
In limbo with the wild
Leave time there hung like Spanish moss
between the early and the old.

Go there alone
Nurse the essence of its long low dunes and hours
Nourish there the thin and fragile in your soul.

A. Conrad Neumann

WATER QUALITY TREAT TIME BOMB AT TEXASGULF

The dike around a slime pond which contains unconsolidated clays up to 25 feet deep that were excavated from Texasgulf Chemicals Company's phosphate mine is in danger of being breeched by the next major tropical storm or hurricane.

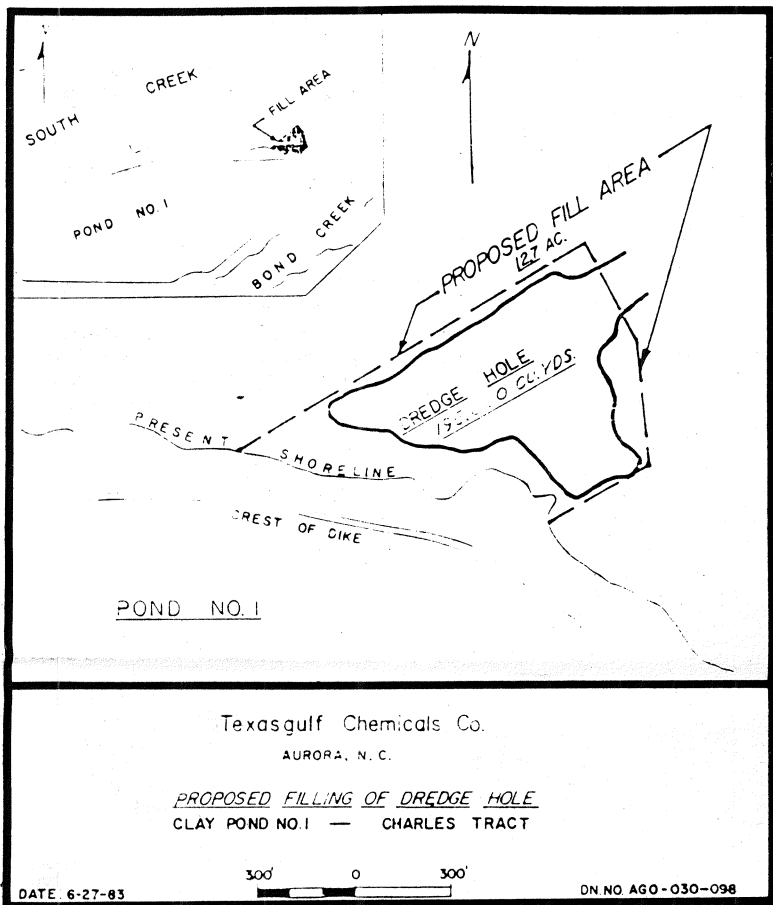
Located at the junction of South and Bond creeks just off the Pamlico River, the pond will take a minimum of 30 years to solidify before the danger of its contents flowing into the river has passed.

Even then, natural erosion eating into the edge of the pond will contribute elevated levels of sediments to the river creating problems for marine life.

approximately 12 acres of public trust waters. They also plan to fill a dredge hole that is concentrating wave energy on a portion of the pond.

Future beach nourishment covering more public trust areas will be needed to maintain the new beach and expand it along 6000 feet of dike as erosion continues. The company has been ordered by the North Carolina Division of Land Resources to submit a plan to provide protection for the pond by October 1, 1983.

Regulatory officials are deeply concerned that protection plans proposed by Texasgulf are only temporary in nature, and that the



At a regulatory conference held periodically by the U.S. Army Corps of Engineers in Morehead City on July 14, state and federal regulatory officials discussed what could be done to protect the river.

Texasgulf officials have asked permission to construct a beach along the dike that will cover

problem will remain for future generations. As Preston Pate of the North Carolina Office of Coastal Management states, "Any permits issued should be contingent upon a commitment for long-term erosion control." Many people are wondering who will maintain the dikes once Texasgulf closes its doors.

PEAT MINING UPDATE

Since 600 people attended the April 20 forum on peat mining organized by the North Carolina Coastal Federation, significant new approaches for addressing public concerns about peat mining have been proposed in the permit applications submitted by Peat Methanol Associates (PMA). The company plans to convert 15,000 acres of eastern North Carolina's peat bogs to methanol fuel using \$465 million in federal price and loan guarantees drew intense criticism at the April meeting.

But Derb Carter, Director of the Carolina Wetlands Project in Raleigh, claims that the company's attempts to address certain concerns raises serious new issues.

"The project is like a fly in a spiderweb," Carter notes. "When it tries to free itself it only succeeds in getting more tangled."

In response to active opposition to the project by citizen groups throughout the state and

commercial fishing interests, PMA proposed to handle problems caused by freshwater runoff by building lagoons and a central lake to increase evaporation, retention time, and management capabilities for the drainage. Carter says this proposal raises the following unresolved issues:

- Will it work? What happens to the system during major storm events?
- Is the existing rate of runoff from a site that has already been ditched an acceptable standard for the company's claims that it will not increase freshwater runoff above natural levels?
- How will these permanent hydrological modifications affect water quality? Will toxic metals or other contaminants be concentrated in the lagoons and lake? Will the lake discharge comply with water quality standards?
- Who will be liable for maintaining costly pumping that must go on forever? What

MAJORITY OF COASTAL RESIDENTS SAY CORPORATE SUPERFARMS HURT ECONOMY AND ENVIRONMENT

(Ocean) Farmers and fishermen in five coastal counties agree that corporate superfarms that own vast tracts of the state's eastern low country have damaged the environment as well as their industries.

An opinion survey reveals that only 22 percent of the residents of Hyde, Tyrrell, Washington, Dare and Carteret counties would like to see more corporate farms locating in the area. Only 32 percent would be opposed to a law to stop corporations from buying farmland in North Carolina.

"The seafood industry wants a moratorium on the destruction of our coastal freshwater wetlands," says Mike Taylor, manager of a crab picking plant in Belhaven. "This survey shows that even the farming community wants a comprehensive look at what effect massive land clearing projects have on our coastal economy and environment. This has not been done in the past. And now with current peat mining proposals the state is again hurrying through the permitting process for the sake of a corporate balance sheet and not safeguarding the welfare of the people in eastern North Carolina."

Three of every five residents surveyed believe big drainage projects on corporate farms harm the state's fishing industry, and corporate farms should be made to compensate fishermen for pollution their drainage causes.

And though most of those surveyed believe big farms help the economy by providing jobs, most do not believe that they personally have benefited from the trend toward corporate farming.

Of those residents surveyed, 45 percent agree that "corporate farms are causing family farmers

to lose money because of overproduction of farm products." Only 22 percent disagreed, and 34 percent are not sure.

The sentiment that corporate farms hurt family farms is even stronger among farmers in the survey group, 50.9 percent of whom believe crop overproduction by corporations is costing them income. Less than 25 percent of the farmers surveyed disagreed, and 25 percent were not sure about the impact of corporate farms.

In the survey conducted by the University of North Carolina journalism department for the North Carolina Coastal Federation, residents of the five coastal counties also expressed strong misgivings over plans to mine huge tracts of peat bogs owned by corporate superfarms.

Forty-four percent of those responding say they favor peat mining, while only 33 percent oppose it. But 73 percent agreed that "if peat mining causes water pollution, I think it should be banned in North Carolina."

As Peat Methanol Associates and other developers pursue plans to mine peat, environmental and fishing interests have warned of hazards such mining will pose to the water table, fishery nursery areas, air quality and public health.

Peat Methanol, a private partnership of investors from outside the state, plans to convert 15,000 acres of peat in Washington and Hyde counties to methanol fuel. The company also holds options on an additional 100,000 acres of peat deposits.

The partnership has secured \$465 million in loan and price guarantees from the federal government. It has received state

water-use and air quality permits and is awaiting state approval of several other environmental permits, including the actual mining permit. Construction on the plant has already begun even though the company has not received its operating permits.

Asked whether they favor "using federal dollars to support the conversion of peat into methanol fuel," 55 percent of the coastal residents surveyed say they do not.

Only 28 percent say they either favor or strongly favor public subsidies of peat mining and 17 percent are undecided.

A second major land conversion proposal in the area is Prudential's plans to convert 20,000 acres of wetlands into corn and soybean fields.

The project is now under review by the U.S. Army Corps of Engineers and the Environmental Protection Agency, which jointly regulate development of national wetlands.

Of those surveyed, only 17 percent of the farmers want to see more corporate farm development in the region.

Fifty-three percent of all respondents say the government should regulate corporate farms, 25 percent disagree, and 22 percent are undecided.

The scientific survey, conducted this spring, was supported by a grant from the Mary Reynolds Babcock Foundation in Winston-Salem.

A survey sample of 700 was chosen from voter registration lists in the five counties. The survey questionnaire was answered by 465 of the 700, said Todd Miller, president of the North Carolina Coastal Federation.



photo by Clint Schemmer

Peat Methanol Associates broke ground on its proposed plant Dec. 31, 1982 to qualify for a federal energy tax credit.

will result if the scheme is abandoned? Recommendation 16 of the State Peat Mining Task Force Report states, "In addition to hydrological questions, perpetual pumping raises legal and institutional questions which must be resolved before a permit should be issued which involves perpetual pumping."

The application for a water discharge permit contains new information on the presence and level of mercury in water at the mine site. Mercury levels 240

times state water quality standards have been found by the company. The highest mercury levels are near a reclaimed experimental peat mine. These findings tend to support the conclusion that mercury in surface waters at the peat mine are associated with the disturbance of organic peat soils, which are a heavy metal sink in a saturated natural condition. PMA is seeking to establish the mercury levels found in ditches in the peat bogs as "natural."

Other issues still not addressed include the impacts and levels of other toxic metals, pH, BOD; and nutrients, herbicides, and pesticides from agricultural reclamation of the mine, states Carter.

Public hearings on the project's permits are planned for later this summer and fall. To receive public notices about each of these hearings write Bob Helms, Division of Environmental Management, P.O. Box 27687, Raleigh, NC 27611.



photo by Leslie Vorgetts

Tourist officials along with the State of North Carolina have raised objections to the dumping of obsolete nuclear submarines off the North Carolina Coast.

OCEANIC SOCIETY OPPOSES DUMPING NUCLEAR SUBMARINES

WASHINGTON, D.C. -- More than 100 conservation and citizen groups across the country have joined in opposing ocean dumping of obsolete nuclear submarines through comments filed here with the Navy June 30.

"From California to the Carolinas and Connecticut to the Oregon coast, opposition to the Navy's ocean dumping plans has spread from a nucleus of conservation and disarmament groups to include commercial fishermen, shoreline business interests, coastal residents, local leaders, state officials and members of Congress," Oceanic Society President Christopher Roosevelt said. "We have started to build a national constituency to speak for the oceans in the nuclear waste debate."

"The breadth and diversity of this support reflects growing public opposition to dumping radioactive wastes in the ocean," Center for Law and Social Policy Attorney Clifton Curtis said. "The more people learn about these plans, the stronger opposition becomes to the Navy's proposals for scuttling more than 100 radioactive submarines in the sea."

Coordinated by the Oceanic Society and the Center for Law and Social Policy, opposition to sea disposal of nuclear submarines ranges from national conservation groups -- including the Sierra Club, National Audubon Society, Friends of the Earth, Wilderness Society, Natural Resources Defense Council and Greenpeace -- to organizations such as the Oregon Shores Conservation Coalition, Pacific Coast Federation

of Fisherman's Associations, Atlantic Center for Environment, Amherst Disarmament Coalition, the Fund for Animals and the United Methodist General Board of Church and Society.

The "Joint Comments of National, State and Local Organizations Opposing Ocean Dumping of Obsolete Nuclear Submarines" are based on a detailed assessment of the Navy's proposal as described in a December, 1982 Draft Environmental Impact Statement (DEIS). The public comment period for the Navy DEIS ended June 30th. "Our oceans are too important to endanger as experimental dumping grounds for nuclear wastes," the groups cite in the joint comments. "Nor can we afford to repeat at sea the waste management mistakes we have already made on land by acting prematurely based on inadequate information."

"The marine environment is an essential element of our planet's life support system," the groups continue. "We cannot afford to risk persistent radioactive contamination of this 'common heritage for all mankind.'"

Prime concerns cited in the comments include unanswered questions about deepsea ecology, inadequate plans and techniques for monitoring deep ocean nuclear waste disposal sites, the irretrievability of subs scuttled in 4000 m of water, and the Navy's failure to consider the cumulative effect of manmade radioactivity on the marine environment.

A government sponsored report by the Rand Corporation supports many of the scientific concerns

raised by opponents of the Navy plan. The Rand report documented improvements in science and monitoring equipment which are needed before researchers can accurately assess deepsea life, let alone monitor release of radioactivity from sunken nuclear submarines.

One marine scientist has called the Navy's biological assessment of a site off Cape Hatteras, NC "woefully inadequate" while California's Attorney General has warned of a dramatic decline in consumer demand for state fisherman's catches if the Navy sinks radioactive submarines off Cape Mendocino, CA. Press reports of radioactivity leaking from an old ocean disposal site off San Francisco triggered a 50 percent drop in demand for one species of fish caught in that area.

The Oceanic Society is a national marine conservation organization with 70,000 members which publishes OCEANS magazine and maintains offices in Stamford, CT and San Francisco, CA. The Center for Law and Social Policy is a non-profit public interest law firm located in Washington, D.C. For a copy of the joint comments or additional information on the sea disposal issue, contact: Thomas C. Jackson, Vice President, the Oceanic Society, Stamford Marine Center, Stamford, CT 06902, telephone (203) 327-9786; or Thomas Lieber, Law student intern, Center for Law and Social Policy, 1751 N Street, N.W., Washington, D.C. 20036, telephone (202) 872-0670.

NEW COASTAL RESIDENTS BRING SHIFT IN LIFE-STYLE

By Mark Davis

Reprinted with permission from the May 23, 1983 edition of the New Bern Sun Journal.

SWANSBORO - The influx of new residents to Harkers Island and other traditionally isolated coastal villages is having a profound impact on those areas, a researcher who spent two years on Harkers Island believes.

In fact, the change is so profound that a few more years' passage will alter those areas almost completely, said Marcus Hepburn, an anthropological researcher.

Hepburn, speaking at a seminar sponsored by the N.C. Coastal Federation, said several areas of coastal life are changing almost daily as increasing numbers of newcomers move to the coast.

The seminar was entitled "Conference on Navigating Coastal Values" and focused on the cultural, economic and social changes that have come to the coast in the past few decades.

A former instructor at East Carolina University, Hepburn highlighted Harkers Island as a good example of the changing social climate throughout coastal North Carolina.

Harkers Island, located in eastern Carteret County, for years was almost isolated from the mainland. Accessible by poor roads and located on Core Sound, the island was a home for residents distinct in speech and mores from other areas of coastal North Carolina.

Other areas were similar to Harkers Island - and they also are feeling the changes brought by newcomers, Hepburn said.

"It is a microcosm of what is happening...time and time again," he said.

Changes started in the 1960s and accelerated in the 1970s, Hepburn said.

More affluent people have moved to the island, driving up land prices, he said.

"There's a simple economic fact: Land doesn't grow," Hepburn said. As land prices increase, more potential buyers are forced out of the market, he said.

Long-time residents "literally cannot compete to buy land on the island," he said.

The values of the newcomers also are different, he added. "This is where the main clash is coming from," Hepburn said.

Older coastal residents have different attitudes and approaches to solving problems than the newcomers, he said. Many newcomers prefer to solve problems quickly, relying on a police force, deputy or other authority figure to deal with problems, he said.

But long-time residents prefer settling differences and problems in a slower, more personal way, he said.

Both systems work - only one is much slower than the other, he said.

Dealing with problems slowly - talking with neighbors, trying to determine the best way to solve a problem - is too slow for newcomers, he said.

"Most of us would get frustrated with this form of solving community problems; we want action," Hepburn said.

Newcomers also are altering younger coastal residents' career plans, he said.

As the coastal area of North Carolina has boomed, a service trade - hotel and motel business, convenience stores and related tourism concerns - also has boomed, Hepburn said.

"This means less and less young people are turning to fishing for a living," he said.

As fewer young people go to the sea for a living, the face of the island will alter considerably, Hepburn said.

The influx of people "will be the thing that will really change the island," he said.

As more newcomers settle at the coast and more young coastal residents look elsewhere for a living, the maritime nature of Harkers Island and similar areas will change forever, he said.

"We'll lose the flavor of the maritime village," he said.

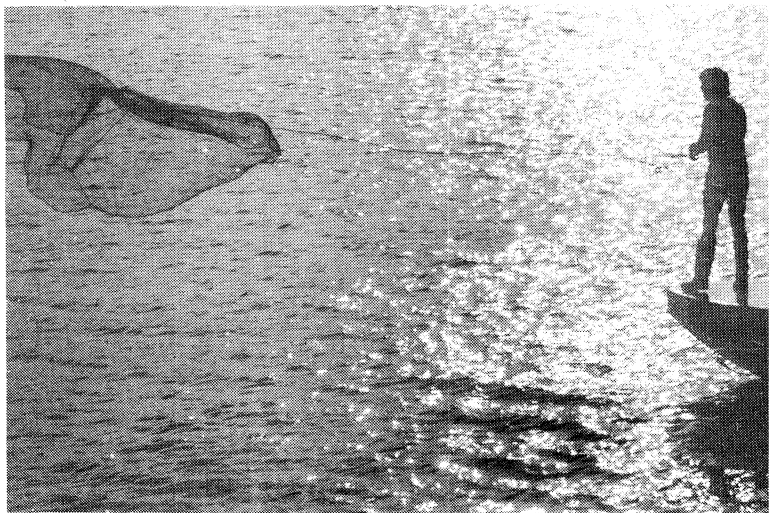


photo by Ric Carter

New fishing methods are but one dramatic change confronting coastal North Carolina.

CONTRIBUTE TO COASTAL REVIEW

Articles about coastal events, groups and people are accepted. Also, write the editor to express your views. Contact the North Carolina Coastal Federation, Route 5, Box 603 (Ocean), Newport, N.C. 28570.

DONATIONS ARE TAX DEDUCTIBLE