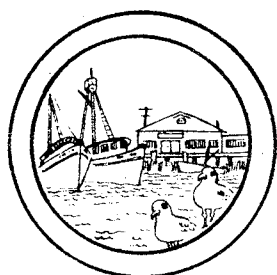


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COASTAL REVIEW

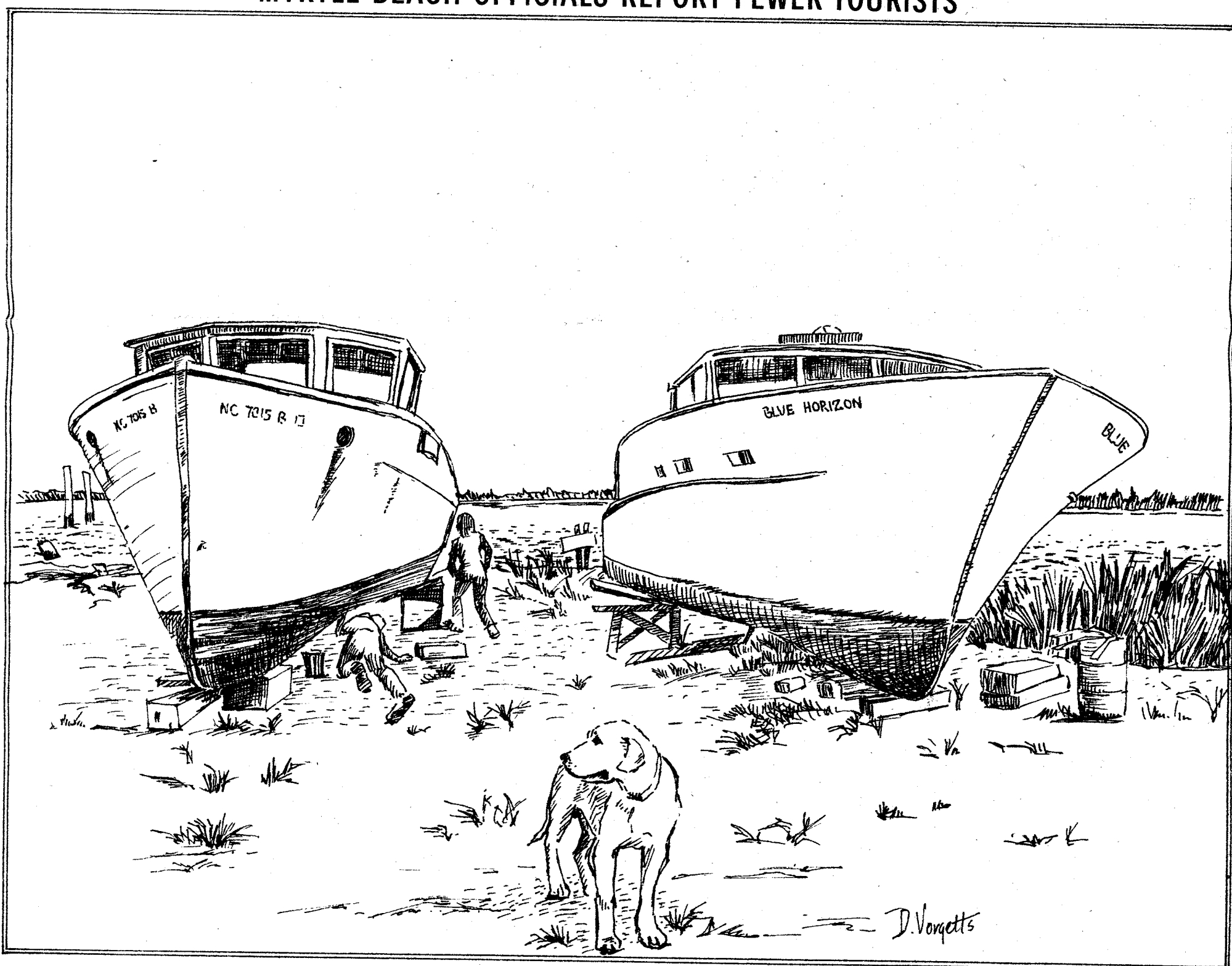


VOL. III, NOS. 3 & 4, WINTER 1985

NEWSLETTER OF THE N.C. COASTAL FEDERATION

PRICE - \$5.00 A YEAR

**FLIM-FLAM ON THE SHORE • YEAR END REPORT • MARINA DEVELOPMENT IN NC
SUIT SEEKS REGULATION OF GROWTH ALONG COAST • STRATEGY FOR BEACH PRESERVATION
FUNDING CONSTRAINTS IMPEDE BEACH ACCESS • CHANNEL BASS PROVE ELUSIVE
MYRTLE BEACH OFFICIALS REPORT FEWER TOURISTS**



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PUBLIC HEARINGS DO HAVE VALUE

OVER TWO HUNDERD people turned out to oppose the development of Permuda Island in Onslow County at a public meeting sponsored by the Division of Environmental Management on November 12. The meeting, which almost was not held, succeeded in reversing the favorable position that the State was about to take on the development of the island.

It seems that until the public hearing the field staff of the Wilmington Office of the Division of Environmental Management had overlooked the water quality impacts of the causeway to the island and whether the existing shellfish uses of Stump Sound could be maintained. Acting on information that had been released by the Wilmington field office of the Division of Environmental Management before an official comment had been made its Director in Raleigh, the Divisions of Marine Fisheries and Health Services concluded that the stormwater controls incorporated into the proposal were adequate.

The Division of Environmental Management had originally scheduled a public hearing and meeting as part of its determination of whether a federally required "401" water quality certification would be issued for the replacement of the bridge to the island. Then the developers, in an attempt to avoid the public hearing, withdrew their request to replace the old bridge to the island. With the federal requirement for a hearing bypassed, the Division decided to cancel the meeting as well.

Citizen protest to the decision was swift. After several days of indecision, the Division rescheduled the public meeting in time to allow it to incorporate any new information about the project that resulted in its comments about the project to the Division of Coastal Management which is responsible for issuing or deny the development permit.

New information that the agency began to consider after the public meeting included the water quality effects of the causeway, the cumulative effect of this type of development on high quality shellfish waters, and whether the developer could assure that the water quality standards would not be violated. On December 18 the permit request was placed on hold because of these considerations.

Over 200 people would now be in the process of bringing a lawsuit against the State if it had not been for this meeting. Based upon the State's new direction after the meeting, it appears likely that the citizens would have won their suit eventually. Instead, the State is using the information presented at the meeting and is representing their interests. This was one public meeting that was well worth the time it took to hold.

CORRECT DECISION ON PEAT MINING

The decision by the Environmental Management Commission to delay all peat mining ventures until the State adopts rules to evaluate such projects is the only way our coastal waters and our fisheries will be adequately protected. The new rules must address critical policy and technical issues that can't be fairly resolved if the basic question of whether large-scale peat mining should be allowed at all has already been answered by premature approval of such projects.

The Commission overcame intense pressure exerted by state and local politicians to allow the 7,700 acre White Tail Farms peat mining project in Hyde County to proceed. The tact taken by the peat miners was that their project should serve as a laboratory to determine the impacts of mining. This argument goes directly against the intent of the Federal Clean Water Act administered by the State which places the burden of proving that a project won't violate water quality standards on the one proposing to discharge waste water prior to any work on a project being allowed to proceed. In essence, by making this argument the peat miners have admitted that further study is needed to determine if their project will violate water quality standards.

The whole rule-making process begun by the Commission would have been influenced by a presumption that large-scale peat mining is okay if the White Tail Farms project had been allowed to proceed. By placing a hold on all projects, the Commission has sent a message to its staff and the public that the Commission isn't convinced that large-scale peat mining can be accomplished without unacceptable effects on water quality, fisheries and wildlife. Thus, the state is now set for a complete evaluation of the costs and benefits of large-scale peat mining.

WHAT ABOUT SHELLFISH?

(Reprinted from the Brunswick Free Press, July 24, 1985)

Oysters and clams — they're an integral part of life here along the coast of North Carolina. Some families have depended on shellfish for generations of living. Many people come to the coasts for visits just to get a taste of fresh seafood.

What's going to happen when there aren't any oysters or clams? We'd like a few developers to answer that one.

Through legislative finageling development interests, especially those in Brunswick County, managed to keep House Bill 540 which would have required the Coastal Resources Commission to take water quality into effect when issuing development permits for adjacent land, from ever leaving the Senate Judiciary IV Committee.

We've heard the developers cry out repeatedly over the past few months against any rules which would curtail development even a little bit.

Greed is the correct word to use when describing people like that. House Bill 540 would not have prevented development, it would just have helped to ensure that quality development occurred. Apparently, some of our developers aren't concerned with offering quality development, they just want to get as much built as quickly as possible — sell it and pocket the dough.

Maybe they'll fool enough buyers into thinking that Brunswick County does literally have "miles of unspoiled beaches." Wait until some of those romantic buyers move down here and discover that what they've been told isn't true. The truth is that Brunswick County has the largest percentage of its shellfishing waters closed due to pollution than any other county in the state. Thanks to our local legislators and developers, it looks as if things aren't going to get much better.

We wonder what they'll be telling customers 10 years from now. How does "Welcome to New Jersey" sound?

FLIM-FLAM ON THE SHORE

(Reprinted from the Wilmington Morning Star, August 8, 1985.)

In the past, Florida real estate developers earned a reputation for selling lots in the swamp. North Carolina needs to make sure its developers don't earn a similar reputation for advertising boat slips that don't exist.

The practice has not reached major proportions yet, but it is evident up and down our coast. Two outfits in New Hanover County alone have been touting marinas that might never be built.

You can't build a marina without permission from the state. You aren't supposed to get that permission if the proposed project would destroy marshes or cause other damage to the environment, or if it would obstruct access to public waters.

So if a developer tells buyers there will be boat slips when he hasn't even applied for permission to build them, buyers are deceived. That hurts the reputation of the state's honest developers and makes it harder to keep coastal development under control.

Cheated buyers, understandably, will yell when the state says no to the boat slips they thought they were going to get.

State legislators, all of them anxious to please constituents and some of them hostile to coastal protection efforts, may pressure the Coastal Resources Commission, which depends on the legislature for money and legal tools. The CRC might not be able to withstand that kind of pressure. And if it gives in, the public gets cheated.

COASTAL REVIEW

Newsletter of the North Carolina Coastal Federation
Route 5, Box 603 (Ocean), Newport, NC 28570
Telephone (919) 393-8185

STAFF: Todd Miller of Ocean, Executive Director; Fred Bonner of Raleigh and Aurora, Activities Director; Bennie Bunting of Oak City, Farm Project Director; and Glenn Page, Student Intern. Additional Assistance this quarter received from: John Fussell, Morehead City; Wading Creek Photo, Beaufort; H.O. Golden, Stumpy Point; Bill Rice, Thomas Landing; and numerous people that helped out with our fishing tournament. Artwork by Leslie Vorgetts. Legal Counsel: S. Henri Johnson, New Bern; Steve Levitas and Charles Meeker, Raleigh and John Runkle, Chapel Hill.

The NORTH CAROLINA COASTAL FEDERATION is a nonprofit, 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 and long-term economic, social and environmental interests of coastal North Carolina.

COASTAL REVIEW is published quarterly, a \$5.00 subscription fee provides funds to publish the newsletter and to make special mailings about important coastal issues and events. Larger contributions are needed. All donations are tax-deductible.

SPECIAL THANKS to The Needmor Fund, the Mary Reynolds Babcock Foundation, the Z. Smith Reynolds Foundation, the PNB Foundation and the hundreds of private citizens for their generous financial support.

To The Editor

TO THE EDITOR:

Only a few years ago, tidal flats and saltwater marshes were considered waste lands. The marshes were drained, bulldozed, surrounded by bulkheads and filled. Now there are very strict laws protecting these areas, and for good reason. Consider the following taken from the classic text, "Life and Death of the Salt Marsh," by John and Mildred Teal:

"Two-thirds of the value of the commercial catch of fish and shellfish landed on the east coast of the United States comes from species that live at least part of their life cycle in marsh estuaries... It is estimated by fishing experts that from 80 to 90 percent of the fish gathered to market throughout the world come from shallow coastal waters... Experiments have shown that marsh ponds can produce from 250 to 400 pounds of fish per acre per year, 100 pounds of crabs, and from 300 to 400 pounds of shrimp."

We who live along Bogue Sound and its estuaries have a special obligation to ensure that our valuable salt marshes are not abused or destroyed.

Frank Osborne
Swansboro

(Editor's Note: this letter was submitted as an educational project of the White Oak River chapter of the Izaak Walton League of America.)

TO THE EDITOR:

I recently requested and received a copy of "A Handbook for Development in North Carolina's Coastal Area" which was produced by the Division of Coastal Management. Having grown up along the southeastern North Carolina coast, I am very concerned about efforts being made by the Division of Coastal Management to oversee the development projects which appear to be emerging almost daily for that area. I was impressed that the Division seems to recognize the importance of preserving the "delicate natural balances" of North Carolina's coastal areas, but was dismayed that the main focus of the handbook seems to be to educate developers in ways to destroy this balance.

I challenge the Division to provide more support for those concerned about the preservation of our coastal areas. I would like to propose another publication for the Division to undertake — one that will help concerned citizens who are trying to preserve our natural heritage. It could be entitled "A Handbook for Opponents of Development in Fragile Areas Along North Carolina's Coast." Help us help ourselves by saving these natural areas for future generations to enjoy. I can assure you that this publication would have a more positive impact on the future of North Carolina and be of more long term benefit to North Carolina's citizens than the other handbook will.

Julie Rice
Chapel Hill

TO THE EDITOR:

The environmental degradation caused by inter-agency bickering is unforgiveable. It would seem, that people, in responsible positions, would have the foresight to realize that decisions made today will affect the environment for generations. Yet not only do state and federal agencies fail to communicate effectively, they, at times, would seem to be in direct conflict with the purposes for which they were created. Political and monetary factions appear to be a greater influence than does preservation and enhancement of the environment as a whole.

Government agencies must understand the urgency of providing safeguards for the environment now. Further delay of acting as guardians of the environment will only result in lowering the declining quality of the environment. The maintenance of environmental quality should be foremost in agency policy. Political and developmental pressures should not be yielded to unless it can be done in a manner that is compatible with the surrounding environment.

Promotion of environmental quality can only be achieved, if there is a concerted effort from all hands. The only real legacy we as a people can leave to future generations is an environment that is healthy and enjoyable. Working and planning together is the only way we can assure future generations of the legacy.

Terry Pratt
President
Albemarle Protection Organization

Tar Heels Support Environmental Programs

(Reprinted from Currents of the Pamlico-Tar River Foundation, Summer 1985)

A recent survey of N.C. citizen's attitudes on the environment supports a longstanding contention that Tar Heels overwhelmingly support measures to control pollution and protect natural resources.

The Office of State Budget and Management conducted the survey, Titled "North Carolina's Environment: A Review of Public Opinion From 1979 to 1984." The report provides an overview of recent and historical data from the N.C. Citizen Survey, a scientific statewide study conducted since 1976.

In general, the report shows strong concern for environmental quality in the state and grassroots support for conservation.

North Carolinians are willing to trade off economic considerations for a clean environment. Given a hypothetical choice, more than eight of 10 would prefer the state to adopt more costly, but environmentally sound, programs over lower-cost programs with the potential for environmental damage.

Almost half the state's citizens feel that current state programs for environmental protection need to be strengthened. More than four out of five believe state government should make up any deficits caused by cuts in federal environmental programs. Both the U.S. and N.C. governments are seen as having

important roles in environmental protection.

N.C. citizens are also willing to shoulder a direct, personal burden. About 90 percent reported a willingness to contribute to environmental protection through actions such as switching to non-phosphate detergents to help control pollution.

The report also shows that North Carolinians place a high value on environmental quality and consider the state's environment to be good.

Waste disposal is seen as the primary environmental threat, with toxic and hazardous materials eliciting the most concern.

Disposal of industrial plant wastes and solid waste are seen as significant problems, especially for surface water. Sewage disposal is also a problem, and a third of N.C. residents believe their community will face a pollution problem caused by wastewater treatment within five years.

About 20 percent of adults believe their community is facing or will soon face a shortage of clean drinking water. A majority support state funding to help local governments pay for water and sewer improvements.

"All of this tends to support what we've been saying all along," PTRF Executive Director Jonathan Phillips said. "North Carolina people support a clean environment and are willing to do

what's necessary to clean up our water and conserve our resources."

Phillips said news media and public officials often seem to perceive the typical N.C. citizen as placing economic considerations above environmental concerns, and as being reluctant to have government involved in land and water use issues.

"These data show this attitude is completely false. Our citizens realize that one of government's roles is to protect our environment, and they fully support efforts for the government to get in there and do just that, even if it costs them something," he said.

Phillips said there was one aspect of the survey that indicated the PTRF has alot more work to do.

According to the report, beach erosion is seen as the most serious issue facing the N.C. coast, with coastal water quality a distant second.

While recognizing the environmental management problems posed by beach erosion, Phillips said the PTRF and other groups, such as the N.C. Coastal Federation, consider coastal water quality the top priority.

"Beach erosion is something that, over the long term, we can't stop," Phillips said. "But we can have clean water. And we need to do something now, because our coastal waters are in bad shape. I think this underscores the need for us to get out and let people know the water quality problems we have on our coast."

Copies of the report are available for \$2 from: Citizen Survey Publications, N.C. Office of State Budget and Management, 116 W. Jones St., Raleigh, N.C. 27611

Bob Jamieson, the regional director of the N.C. Department of Natural Resources and Community Development, does not like this. Neither do consumer protection lawyers in the N.C. Attorney General's office. Neither should any of us.

To protect the state's reputation and the integrity of its coastal protection program, the attorney general ought to warn erring developers politely. And if they don't take the hint, he should go after them.

WHY STAND ALONE?



NORTH CAROLINA COASTAL FEDERATION



Made Strong By Thousands Representing the Coasts Interests
Fishing - Farming - Tourism - Small Business - Clean Industry
Serving Old Timers, Newcomers
Former Residents and Frequent Guests

Federation Members:

- ★ receive Coastal Review - news, features, research, studies, surveys and more
- ★ receive notice of critical public meetings, permit appeals, educational forums and workshops, as well as Federation's annual convention and surf-fishing tournament
- ★ support the Federation's computerized communications center-set up to supply its members with contacts and to stimulate the exchange of information and ideas
- ★ help watchdog the use and management of coastal resources
- ★ may request Federation assistance when issues come along in their own communities
- ★ elect the Federation's board of directors and serve as its officers

MEMBERSHIP APPLICATION

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

OCCUPATION/ AFFILIATION _____

AREA OF SPECIAL INTEREST _____

DUES (TAX DEDUCTIBLE)

Minimum _____ \$5

Sustainer _____ \$25

_____ \$50

_____ \$100

Government Agency _____ \$10

Group Membership _____ \$25

Larger Donations
are Requested \$ _____

(Memberships Make Great Gifts)

Fussell's New Book Is A Birder's Delight

By J. SHARPE WILLIAMS, JR.



county, because those were also the best times to ride the waves.

In the summer of 1971, though, a slight medical problem, swimmer's ear, side-tracked his interest in surfing and allowed him to devote his full time to bird watching.

Now an independent biology consultant, Mr. Fussell said it was about 10 years ago when he first considered writing a book on bird watching in coastal North Carolina. As he began compiling research, he decided to

PTRF Begins Farm Conservation Program

The Pamlico-Tar River Foundation is leading an effort to get agriculture and environmental groups to work together in North Carolina for soil and water conservation.

The first step is a move toward eventual statewide institution of cost-sharing for institution of "Best Management Practices" (BMP's) on farms to reduce nonpoint source pollution and soil erosion (see separate story).

"Many of the goals of farmers and

PTRF also addressed some misconceptions agriculture has about conservation groups.

Some farmers believe that environmental groups have a powerful presence in Raleigh, but Besse pointed out that there is only one registered environmental lobbyist in the entire state. He said that the impression that conservation groups often operate on emotion rather than information is false.

"We may not always be right, and most of our people may be amateurs, but

YEAR END REPORT



Coastal Federation Given \$60,000 To Fund Water Quality Program



OCEAN, N.C. - The Mary Reynolds Babcock Foundation and the Z. Smith Reynolds Foundation recently announced awards of \$30,000 each to the North Carolina Coastal Federation. The funds will support work with citizens to protect existing uses of coastal waters by seeking to maintain and enhance coastal water quality. The Federation, a nonprofit corporation, assists a wide variety of individuals and community groups participate in public policy decisions affecting coastal North Carolina.

The Federation serves as an educational and advocacy clearinghouse

technical and legal assistance to citizens interested in working on water quality issues. The funds will also enable the Federation to hire student interns to conduct special research projects.

Continued financial support and volunteer help by individuals is also sought by the Federation. Tax-deductible contributions are enabling the Federation to develop a solid base of support among coastal citizens. Members receive a newsletter and special mailings on important coastal events.

The Mary Reynolds Babcock Foundation traditionally provides funds

The Z. Smith Reynolds Foundation was established in 1936 as a memorial to the youngest son of the founder of R.J. Reynolds Tobacco Company. It has now made 1,927 grants totalling more than \$124 million to more than 945 recipients. Major attention has been given to education and health care, with increased interest in recent years in improving the criminal justice system in North Carolina, in strengthening grassroots advocacy groups and in youth programs, family planning, cultural activities, rural life, the handicapped, minority and women's issues, and some 20 other fields of concern. This is the

State Revokes Clean Water Certificate
For Proposed Atlantic Station Marina

by Brad Rich
(Reprinted from Coastal Carolina News-
Times Oct 11, 1985)

Court of Appeals. The court has not yet
ruled.
later on June 12, 1985.

SUIT SEEKS REGULATION OF GROWTH
ALONG COAST

Strategy For Beach Preservation

(Reprinted from GEOTIMES, Dec. 1985, v.30, no. 12, p. 15-19)

Sea level is rising and the American shoreline is retreating. We face economic and environmental realities that leave us 2 choices: Plan a strategic retreat now, or undertake a vastly expensive program of armoring the coastline and, as required, retreating through a series of unpredictable disasters.

For the first 2 or more centuries of America's history our principal national economic goal was the development of our industrial and economic base, and growth, without regard for environmental impacts. This growth and expansion depended greatly on developing harbors and exploiting our navigable rivers and coastal resources. Frequently, this involved dredging and deepening rivers and coastal inlets and the construction of jetty systems or other protective structures. These structures often led to unpredicted erosion and other adverse effects on adjacent coastal beaches and shorelines. Our ports and navigation systems must still play and important part in our national economy, but we cannot ignore increasingly expensive shoreline problems.

In this century, population pressures, general affluence, the attraction of our beautiful coastal beaches and demands for increased recreation have accelerated the exploitation of our beaches, the less accessible coastal lands and the barrier islands. As construction along open ocean and Gulf beaches intensifies, the shoreline continues to recede, and protecting development becomes more complex and more costly. Costs that run into millions of dollars a mile have been accompanied by serious environmental consequences, economic dilemmas for federal, state and local treasuries, and often by loss of the very property for whose preservation the battle is being fought. As we face the largest and most rapidly growing federal budget deficits in history, Americans have begun reassessing many national priorities and the role of government itself. Few policies so clearly need rethinking as management of our Gulf and ocean beaches.

A generally accelerating sea-level rise, coupled with a diminishing supply of sand and frequent storms, underlies our Gulf and Atlantic shoreline problems. Since it is difficult to measure this rise precisely, its consequences are often assigned to other forces such as storms, ocean currents, and shifting dunes. What may seem to be a new record to the inland reach and destructive magnitude of these forces often results from the relatively small rise in sea level extending their power across a much greater land area. Greater development in the danger zone also sets the stage for increased destruction.

Pacific and Great Lakes shores are generally retreating as well. On the Pacific coast factors such as storm frequency, durability of shoreline cliffs, and bluffs plus the reduction of beach sand supplied by dams on rivers are perhaps more important than sea-level rise in determining erosion rates. Large seasonal natural changes in the width of sand beaches are common and are particularly prevalent on the Pacific coast. Great Lakes shoreline erosion problems are directly related to fluctuating lake level; the higher levels, the greater the problems.

Historically, Americans have responded to shoreline retreat by

The beginning of this century saw a greatmarked change in willingness to risk large investments along beaches. The belief that human ingenuity could tame any natural force led individuals and developers in many communities to build closer and closer to the ocean and to respond to danger by confrontation. In many places the confrontation has led quickly to huge and desperate protective measures. Typical defense structures include groins, jetties, sea walls, revetments, and bulkheads, known as 'hard' stabilization. It is now clear that halting the receding shoreline with protective structures benefits only a few and seriously degrades or destroys the natural beach and the value it holds for the majority. Protective structures divert the ocean's energy temporarily from private properties, but usually refocuses that energy on the adjacent natural beaches. Many interrupt the natural sand flow in coastal currents, robbing many beaches of vital sand replacement.

The present most acceptable approach to beach stabilization is beach nourishment, the addition of large quantities of compatible sand to rebuild beaches seaward. (Some sands may be too coarse or too fine to stay in place or suit local needs.) Not only does nourishment improve beach quality, it also provides some storm protection. These projects have provided benefits over only short time periods in some cases. In others, for example the Miami Beach project, the nourished beach has been remarkably stable. In most areas where beaches erode rapidly, a substantial part of the eroded sand undoubtedly is transported along the shore, thereby benefitting adjacent beaches.

The costs of beach nourishment are relatively high, and frequently serious environmental issues must be resolved. The availability of suitable off-shore sand may also limit a project's value. Beach nourishment is most viable economically in areas of dense development, large available sand supplies, relatively low wave energy, and reconcilable environmental issues. However, very few localities are fortunate to have all of the factors that justify this approach to a long-range solution. Florida, however, has recently announced plans to spend \$300 million over 10 years to replenish retreating beaches around the state.

Individual property owners usually prevail upon the community at large, through local, state or national government's tax powers, to bear most of the cost of protection. Many studies have shown that rational economic behavior does not govern individual responses to natural hazards. Public policy and spending are usually dictated by property owners in trouble and by the empathy their situation generates. The staggering costs of irrational decisions to fortify the beaches have forced many beach communities to depend on federal subsidies. The economic and environmental interests of the vast majority of Americans strongly justify an entirely new approach to beach management, a new national shoreline policy.

To reverse our losses, we must learn how to retreat from the shoreline. Where development already confronts the ocean, we must adopt corrective measures that are sure and fair. Where beaches are relatively undeveloped, we must apply preventive measures. A commitment to retreat as a guide to public policy and private investment would achieve the goals: 1. Reduce the loss of property and lives by replacing present high-risk development with stable, safe development in suitable locations away from the open beaches. 2. Meet increasing demand for public beaches by improving public access to natural beaches. 3. Develop a more stable economic future for coastal communities. 4. Eliminate unessential government spending and move coastal investment closer to a market-place mechanism where economic decisions include realistic risk and cost without the benefit of direct or indirect government subsidies. 5. Facilitate removal of many of the defensive structures and developments that now magnify the effects of erosion and the costs of disasters.

Sea-level rising worldwide underlies the U.S. Gulf and Atlantic shoreline erosion problem and is also a factor in erosion along the Pacific shoreline. The present rate of relative risk is perhaps 1 ft. a century, but task forces assembled by both the Environmental Protection Agency, and the National Academy of Sciences have estimated that the rate of rise not only will continue but will accelerate in the immediate future. EPA predicts that by

the year 2100 sea level will probably stand 4 ft above the present level.

The greenhouse effect (excess production of carbon dioxide from burning fossil fuels), deforestation, and other human actions combined with natural phenomena warm the atmosphere and are primarily responsible for rising ocean levels. The warming atmosphere poses a double threat: the melting of glaciers and the vast West Antarctic ice sheet as well as the physical expansion of warmer ocean waters.

The most serious and persistent erosion occurs on low sandy beaches of the Atlantic and Gulf coasts. On these gently sloping coastal lands a small rise in sea level will increase the horizontal inland reach of the sea by many times its vertical measure. The average rate of long-term shoreline erosion varies greatly, but measured on an annual basis, it probably averages 2 to 3 ft. a year. In some cases, it averages over 10 ft. a year. Even if a precise measure of the rise of sea level can be argued, there is no doubt that most of the American shoreline is receding and the sea is advancing.

Seasoned shoreline residents accepted the consequences of erosion and planned for it. In the 1950s lots sold in South Nags Head, N.C. (where the erosion rate is 6 ft a year), were 600 ft deep, which allowed moving threatened buildings back from the beach. Today, competition for space, over-confidence in new building techniques, subsidized insurance, and absence of great Atlantic storms for 25 years, ignorance and the temptation of great profits have erased the lessons of experience and history. In Myrtle Beach, S.C., high-rise condominiums are being built near the surf zone. In Texas a new beach-front condo has been built at the west end of the Galveston sea wall where the erosion rate is 15 ft a year. Some states have taken steps to discourage impractical and dangerous development, the most common measure being to increase the building setback line. Although preferable to no action, the setback solution simply postpones the erosion problem for a few years.

Older shoreline developments have been protected by various hardening and sand-trapping devices. This practice has yielded indisputable evidence that hard stabilization eventually degrades

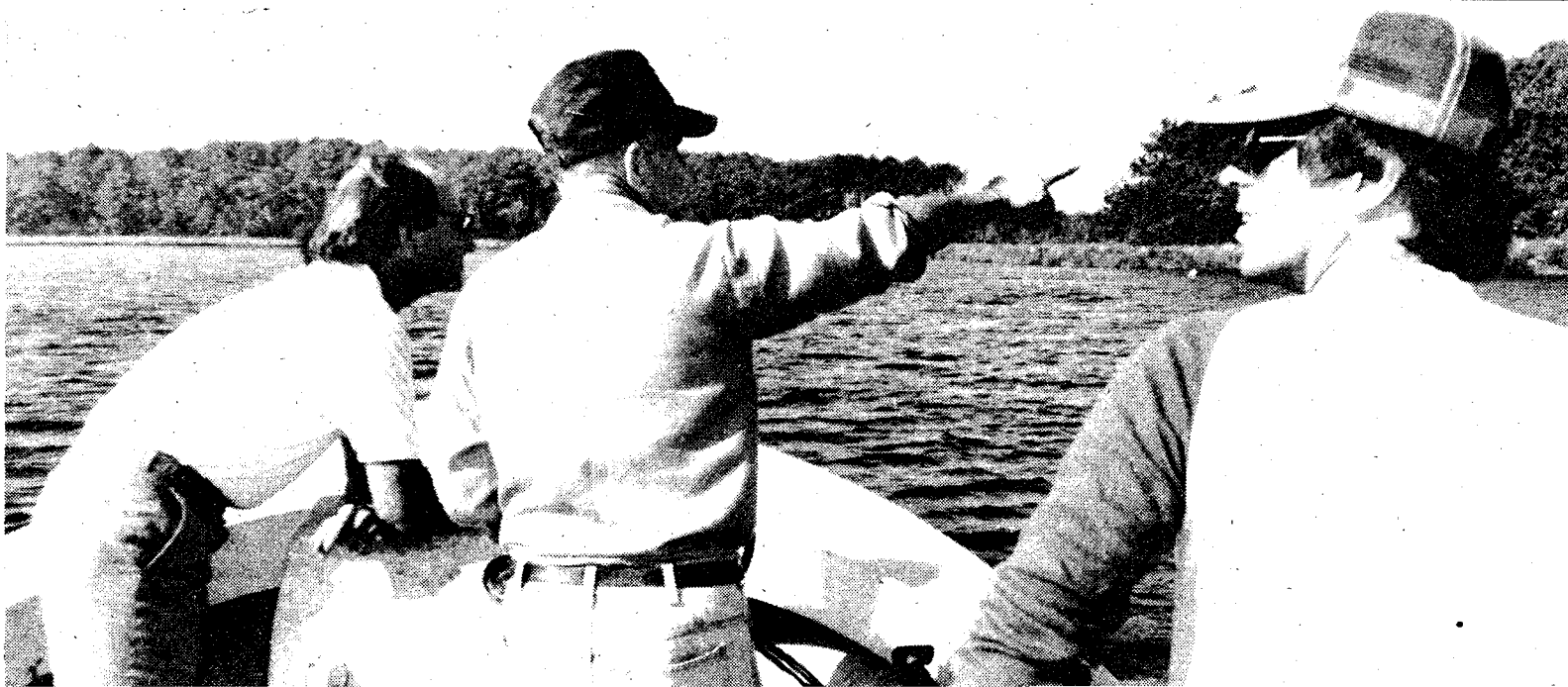
the beaches. Many miles of beach, including such famous shorefronts as Daytona Beach, Fla.; Myrtle Beach, S.C.; Ocean City, Md.; and Atlantic City are now much narrower than they were or would have been in their natural states. In some long-developed and long-stabilized communities like Monmouth Beach, N.J., or Galveston, Tex., the beaches have essentially disappeared. Impassioned arguments for protective measures, we often hear estimates of the great economic value of the property that might be saved. After the 1984 Thanksgiving Day storm hit eastern Florida, such arguments resulted in permit applications for several miles of structural stabilization.

Current development practices and government policies do not require private enterprise to accept the risks as well as the profits. Nor do they consider that in a free market, investors, knowing and bearing all the costs of their decisions, most likely would build where their investments are secure - out of the ocean-front danger zones. History shows that entrepreneurs who want to profit from coastal attractions can find handsome profits in safe areas. Motels, amusement parks, restaurants and retail stores can prosper well back from open ocean beaches.

While many people testify about the benefits of growth and development in public hearings on beach management, we seldom hear estimates of the economic value of natural beaches - the natural resource values and values of recreation opportunities. However, that value can be measured. It is expressed in the number of days people spend at the beach and the amount of money people spend for beach recreation. It is expressed in the popularity of bond issues for antipollution measures and park acquisition. It is also expressed directly when beach users are asked what a day at the beach is worth to them or by their willingness to spend transportation money and pay entrance fees to get on beaches. That public value has only rarely been weighed during emotional pleas for protection of threatened private development.

The beach has been the source of development and wealth for ocean-front communities. In general, the more

Continued on Page 16





Large scale land clearing to develop new corporate farm land through peat mining will have to wait for the EMC.

Environmental Management Commission Places A Hold On Peat Mining

The North Carolina Environmental Management Commission, despite pressure from Secretary Rhodes and local politicians to allow the White Tail Farms' peat mining project to proceed, voted to delay all peat mining ventures until it adopts statewide peat mining regulations at its meeting December 12 in Raleigh.

Sam J. Esposito, the president of S.J.E. Investments that is attempting to put together the peat mining project on 7,700 acres owned by John Hancock Life Insurance Company, told the commission that he has pledged \$1 million to Duke University to start a research center that would use his project as a laboratory to study mining

and other impacts of coastal wetlands development. Earlier, Esposito acknowledged that his pledge was contingent upon his being able to mine peat.

The Director of the Division of Environmental Management, Paul Wilms, told the Commission that he might be willing to give Esposito the go-ahead since he has agreed to give the state the option of imposing additional restrictions later.

But Jim Wallace, following the recommendation his NPDES Committee made a month earlier, moved that all peat mining projects be kept on hold until water management rules are enacted. His motion passed by two votes.

Warning of Developing Problems on Coast Sounded at EMC Hearing

(Reprinted from the Eastern Weekly, September 25, 1985.)

A note of warning was struck during the public hearing held by the Environmental Management Commission. "A lot of parallels can be drawn between what's happening in the Chesapeake Bay region and what's happening here," was the way Jonathan Phillips of the Pamlico-Tar River Foundation put it.

Dr. Arthur Butt came down from Old Dominion University to bring a warning to people concerned about the North Carolina coast. "I've seen what's happened to the Chesapeake Bay," he said.

"Over the years many fisheries have declined dramatically," he continued. "What's happened there can be prevented."

According to Dr. Butt, the federal Environmental Protection Agency has noted three effects of the upland development around the Chesapeake Bay. There has been a loss of submerged aquatic vegetation, an increase in toxic chemicals from both point and nonpoint source pollutions and a nutrient enrichment of the waters.

Dr. Hans Paerl of the UNC Institute for Marine Studies spoke earlier in the morning about what nutrient enrichments can do to an estuary system. If there are too much nutrients in the system, he said, "the blue-green algal will go to town and out-compete the desirable algae."

There have been blue-green algae blooms in the Neuse River, but Dr. Paerl said the algae is present whether or not it blooms. The algae had "distinct food-chain impacts which appear to be on the whole negative," he testified.

The tiny animals, which provide the food for the larger animals which people like to catch and eat, feed on the other kinds of algae which the blue-greens push out. For these small animals, eating the blue-greens is "almost like eating play dough," Dr. Paerl said.

"The only solution to this in terms of management is chemical input," Dr. Paerl said. The chemicals which serve as nutrients are nitrogen, phosphates and ammonia.

Especially in the case of the Neuse River, which has an overabundance of chemical nutrients, "high productivity doesn't necessarily mean desirable productivity," Dr. Paerl said.

Dr. Butt alluded to the problems of cleanup after the situation has gotten out of hand. The industry in the area, which he implied was a source of pollution, is now worth much more than the fisheries.

Even if the political problems can be solved, cleanup is "a very costly and difficult procedure," he said. To give some sense of just how costly, he noted that \$10 million a year is now being spent, "but most of the money gets caught in the bureaucracy." Another problem is absence of what Dr. Joe Ramus called good baseline data. "We're not really sure what is normal for the bay," Dr. Butt said.

It should be no surprise that the primary nursery areas (PNA's) around the Chesapeake Bay "have declined drastically from 1965-1980," as Dr. Butt testified. The North Carolina EMC is proposing regulations and a classification system for PNA's on our coast.

Dr. Butt warned that just setting up a classification system for presently functioning PNA's is not enough. If the surrounding waters become polluted, the pollution will spread to the PNA's.

According to Dr. Butt, the destruction on one acre of transitional vegetation will cause the destruction of three acres of submerged vegetation. "The more the change in the uplands, the greater the change in the lowlands," he cautioned.

"People migrate to the coast because of its aesthetic beauties," he said in closing, "but the inherently destroy it. Be very careful and very prudent."

Senator Soles Keeps Water Quality Bill In Committee

(Reprinted from The Brunswick Free Press, June 26, 1985.)

It appears that Brunswick County concerns may succeed in keeping legislation designed to protect water quality from coastal development from ever seeing the light outside of the Senate Judiciary IV Committee.

House Bill 540, which passed by only one vote in the House in May, has been stalled in the Judiciary IV Committee, chaired by Sen. R.C. Soles, Jr., since its passage by the House.

From all indications the bill will never be heard in that committee, and the full Senate will not get the chance to vote on it.

The bill, introduced in mid-April by Rep. Bruce Ethridge (D-Onslow), would require the Coastal Resources Commission to consider the prior use of adjacent waters "including sport and commercial fishing, shellfishing, swimming and water supply" before issuing a CAMA development permit.

It would also require the CRC to solicit comments from both the public and various state government agencies about the impact of the development before granting a CAMA permit.

Senator Soles said late last week that he "seriously doubted" that the bill would ever come before the committee for a vote.

"There are about 40 major bills pending in that Committee, and it's pretty near the bottom of the pile," he stated.

When asked why the bill was in that position, Senator Soles replied, "Rep. Redwine (D-Brunswick) wants it there."

Rep. Redwine led the House floor fight against the bill. At the time he said he was "adamantly" opposed to it.

Senator Soles said he has received little comment about the bill from his constituents in Brunswick County. He added that "what little" comment he had received came from the Onslow-Carteret County area.

"I can't take it up, or I cannot take it up," he concluded. "It's up to me, and I don't have it scheduled yet."

Rep. Redwine said Monday afternoon that he had asked Senator Soles to "take a long look" at House Bill 540 after it passed the House on May 17.

But, he added that Senator Soles could "do with it (House Bill 540) as he pleases."

Rep. Redwine said his opposition to the bill was based on the premise that "we don't need it."

He said that the Coastal Resources Commission and the Environmental Management Commission were already taking water quality subjects into question before issuing CAMA permits.

Despite Rep. Redwine's contention, the full Coastal Resources Commission passed a resolution last month urging the legislature to pass House Bill 540. The Marine Fisheries Commission followed suit with a similar resolution in mid-June. Redwine was critical of Rep. Ethridge's handling of the bill. He contends that the representative from Onslow County has "tried to stir up trouble over this bill in my area."

"Quite frankly, I don't appreciate that kind of politics, and I've told him that, too," Rep. Redwine added.

"I'm not anti-environmental," he said.

He said that most of the favorable comments he had heard about House Bill 540 from his constituency were from people who had recently moved to the area.

Asserting that "literal" interpretations of the bill could "stop development" Rep. Redwine added, "If we had had that mentality 20 years ago, then a lot of them wouldn't be here now."

Rep. Redwine said he didn't feel that the support for the bill was "that strong" in the Legislature. "He (Rep. Ethridge) is the only one that wants it that badly," he concluded.

But Rep. Ethridge said in a phone interview Monday that the support for the bill is there, if it can ever be gotten out of committee.

He blasted the Brunswick County delegation's actions.

"As I see it, Brunswick County doesn't want it because most of their water is polluted already," he said. "If that's what Brunswick County wants, then that's okay, but it's a shame that the whole state will have to pay."

Rep. Ethridge said the bill is not designed to halt development. "This legislation doesn't stop developers; it does ensure that development is consistent with this fragile environment."

He termed Senator Soles' action "Inexcusable... and unbelievable." He said that Senator Soles told him the bill would not be taken up until mid-August, long after the legislators have gone home.

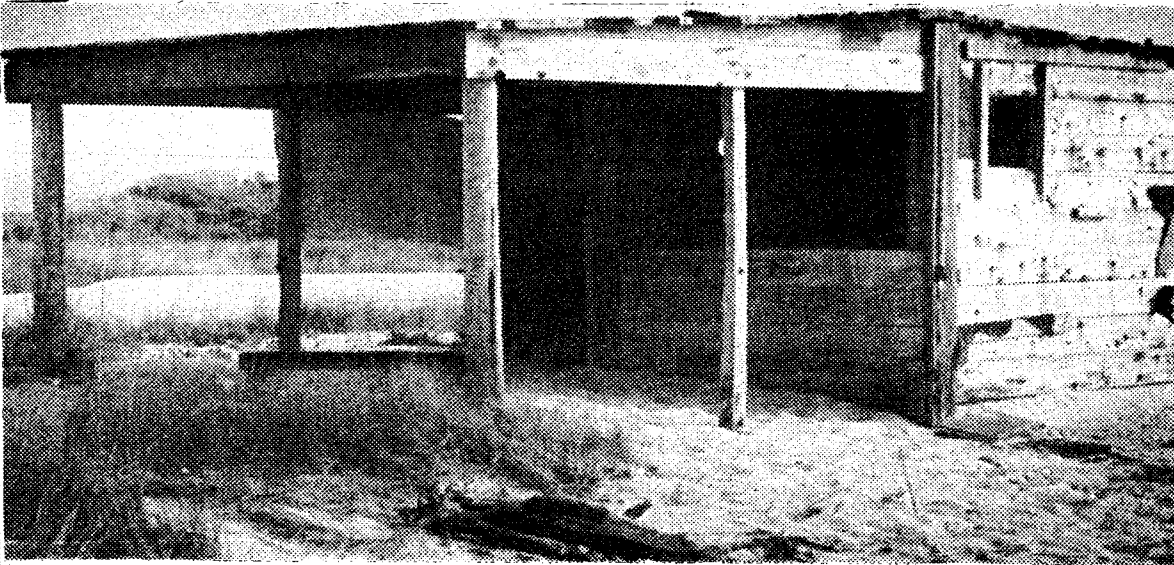
Rep. Ethridge contended that the "only hope" for getting the bill out of Soles' committee is to "get the lieutenant governor interested."

He said he was unsure whether Lt. Governor Bob Jordan was indeed, interested in the bill. "We can hope," he concluded.

Rep. Ethridge said he found it "interesting" that legislators from Brunswick County were the lead opponents of the bill. "They've got the most closed shellfishing waters there," he said.

His comments were confirmed by George Gilbert, who is with the State Shellfish Sanitation Division in Morehead city. Gilbert said Monday that Brunswick does hold the dubious distinction of being the coastal county with the largest percentage of shellfishing waters closed to harvesting due to pollution.

Shacks, Trash Show Man's Passage



This Masonboro Island shack holds a host of memories for fishermen.

(Reprinted from the Wilmington Morning Star, July 14, 1985.)

MASONBORO ISLAND—A bag of charcoal, a towel, dishwashing liquid and a chair are among the modern comforts a visitor to this island can find in an old fishing shack here.

The wooden shelter apparently has been a favorite spot for years. Records of fish catches are etched on the walls. Three other shacks — none so accommodating as the first — are scattered along the coastline.

These structures are the only ones on Masonboro — an eight-mile barrier island between Wrightsville and Carolina beaches. Efforts in the last two years to keep it undeveloped have been unsuccessful.

The Society for Masonboro Island was formed in the fall of 1983 to keep the island from developers who had begun eyeing its fragile shores. More than 350 people attended a public hearing a year

later to ask that the island be preserved for their children.

The federal government pitched in, awarding the state \$786,850 in October 1984 to buy the island and make it an estuarine sanctuary. The state General Assembly added another \$100,000 to the pot.

The New Hanover County Commissioners made the first donation of land — 15 acres — to the state, which is surveying the island and negotiating with landowners to purchase their parcels.

The buyout will be a long process. Hundreds of heirs hold title to parts of the land. The state will focus on buying the 618 acres that lie above mean high tide. The vast majority of the island — 4,428 acres — is marsh and undevelopable.

Yaupon and wax myrtle cover a good portion of the island. In addition to being a nesting place for giant loggerhead turtles, the island is a favorite spot for the brown pelican, oyster catcher, osprey, Ipswich sparrow and other waterbirds.

Biologist David Webster has found tracks of rabbits and foxes along the dunes and has spotted raccoons and mink.

Biologist Anne McCrary has found a rare shrimp-like creature left over from the Paleozoic area in the sand flats behind the island.

Although it sounds like an estuarine paradise, the island is marred by trash and tracks left by its visitors.

Soda cans and bottles, styrofoam are scattered along the beach. Four-wheel-drive vehicles have run down some of the dunes, destroying sea oats and the island's natural erosion protection system. New Hanover County Commissioners passed an ordinance this spring prohibiting use of vehicles on the island without permission from the county managers office. The sheriff's department recently acquired a four-wheel vehicle to patrol the island and the northern end of Carolina and Wrightsville beaches.

Funding Constraints Impede Beach Access Goal

By REID HINSON

With over 300 miles of ocean beaches, 23 inlets, and 4000 miles of estuarine shoreline, North Carolina possesses coastal resources unmatched by any other state on the east coast. For years, coastal residents and visitors have freely used and enjoyed North Carolina's beaches; however, recent development trends and increasing land values threaten this tradition. Getting to the beach is difficult, and despite efforts of state administrators responsible for shorefront access, this problem is becoming worse.

"Funding is the key," remarked Julie Shambaugh, Shorefront Access Coordinator for the N.C. Department of Natural Resources and Community Development, (DNRCD). "Access needs are growing," she said, "but the price of oceanfront property and development pressures make acquiring good sites difficult, and very expensive."

Created in 1981, the N.C. Coastal and Estuarine Water Beach Access Program is administered by the Coastal Resources Commission (CRC) and DNRCD's Division of Coastal Management. As required by the statute, the CRC has formulated policies and goals for acquiring coastal land for public access sites. These policies include acquiring local, neighborhood, and regional accessways and identifying and maintaining access sites already in public ownership.

Another alternative for obtaining an accessway is to purchase an easement, or to prove in court that an accessway has been used traditionally by the public without the landowner's consent. Easements, however, usually provide only a walkway to the beach; building restroom and parking facilities requires larger tracts of land. Another disadvantage of easements is the expense involved, either in purchasing the easement or in litigation expenses incurred in proving an easement by prescription.

If the public is to have more access to the beach the legislature will have to appropriate additional funds. Rep. Ethridge states that he had a developer "stick a finger in his face" and tell him that "if the State wanted beach access, the State should buy it." "For now, we can at least buy enough signs to mark the access areas so people will know they exist," Owens said. "Perhaps in two or three years we will receive additional appropriations, but I wouldn't hold my breath."

Since the program's inception, numerous beach access sites have been developed, both with money appropriated by the legislature and through matching federal funds and donations. In 1981, \$1 million was appropriated by the N.C. General Assembly for beach access. In 1983,

only \$200,000 was appropriated. According to David Owens, Director of the Division of Coastal Management, \$250,000 is expected this year.

"This amount of money will not enable us to meet our goals," Owens stated, "so we must concentrate on improving the sites we now own." Ms. Shambaugh pointed out as an example that land acquisition and development of one regional accessway (a facility accessible to handicapped persons and providing 25-60 parking places, a dune crossover, footshowers and trash receptacles) costs between \$200,000 and \$500,000. "Obviously, that doesn't leave us much of a margin for acquiring other sites," she said, "and rising land prices will soon make obtaining oceanfront property unrealistic."

One of the CRC's goals is to develop one regional accessway for every city or county with ocean or estuarine shoreline, or one every ten miles, whichever is greater. In addition, sites are needed for public access at North Carolina's 23 inlets. A total of 16 regional ocean access areas, 400 estuarine access areas, and 26 inlet access areas are required. Currently, only four public inlet access areas and ten regional access areas with parking and restroom facilities exist. Approximately \$9.42 million per year for ten years would be required to meet CRC goals.

Funding is not the only problem. Some communities are opposed to public access at their beaches, moreover, they may give priority to other funding requirements such as water and sewage systems. "Some towns feel that people using an accessway will not have a stake in the community," Shambaugh stated, "and fear increased traffic, noise, litter, and public nuisance."

Actually, beach access sites can add to the overall attractiveness of a coastal community and can draw increased revenues from tourists using the sites. According to Ms. Shambaugh, if constructed properly and maintained, beach access sites can be enjoyed by residents as well as visitors. "Once local government sees how nice an accessway can be, and understand the value of increased tourist use of the area, they are less reluctant."

Some local residents resent giving access to the public. The attitude seems to be "I've bought my piece of paradise, you buy yours." "We have worked hard to overcome the attitude that those wishing to use the beach should buy a house or rent a condo," Shambaugh stated, "but this issue can be a very emotional one."

Coastal developers' attitudes

regarding beach use varies. Although some developers have been very cooperative in planning for and providing accessways, most developers are opposed to using land for public access which could otherwise be used for more profitable ventures. "Accessways may be required for developers as a condition for granting a CAMA permit," Owens stated, "but this is not always successful." Using methods other than the direct purchase of coastal property may stretch the limited funds the State is generally unwilling to forgo access through condemnation proceedings.

"Condemnation may be available but is viewed very negatively," Shambaugh said. In comparison to other DCM activities such as CAMA permitting procedures, the beach access program has enjoyed a positive reputation, and DCM wants this trend to continue. "Because condemnation is so controversial we have attempted to find other solutions," Shambaugh stated, "such as encouraging donations through tax credits and informing local governments of the funding sources available."

Beach Access Lawsuits Loom in the Region WHEN THE COAST ISN'T CLEAR TO THE COAST

by James Brooke

(Reprinted from the New York Times, Aug. 11, 1985)

GREENWICH, Conn. — Standing guard at the Greenwich checkpoint, Rick Allegrini has seen it all: borrowed passes, attempted bribes, and most recently, two people trying to sneak past by hiding in the trunk of a car. The more people try to get to the beach, the more the people who own the land along the shore try to keep them out.

The number of people living near the shore in the northeastern states and the number who own a small piece of it go up each year, but the amount of sand available has been shrinking because of erosion, according to geologists. In Greenwich, as in towns up and down the coast, the result is disputes over beach access.

On one side are local residents with their memories of empty beaches, in the days before so many fought so hard to get onto them. These are sometimes fortified by escalating beachfront real estate values that make beach privacy as much a financial consideration as an aesthetic one. On the other side, out-of-town beachgoers rally behind the banner of public access.

"In the past 15 years there have been 150 beach access cases," said Donald J. Connors, a Boston environmental lawyer. "I don't think there were 10 in the previous 70 years."

The pressure on beaches won't go away after Labor Day. In 1970, about half the people in the United States lived within 150 miles of the coast. That proportion will rise to three-fourths by the 2000 if present trends continue. With an eye on those trends, state officials in the region have generally embraced the goal of widening public access to the shore.

"Public access has become like motherhood," said John R. Weingart, director of New Jersey's Division of Coastal Resources. "The general direction of state government, and I hope of the courts, is to open the beaches." New Jersey already has more of its shoreline, about 42 percent, open to the public than any other state in the northeast.

Public Money, Public Sand

States hold two levers to use to open the beaches, money and legal action. In New Jersey, voters approved a \$50 million bond issue in 1983 for beach restoration. In the northern part of the state, where beaches are private, much of the shoreline has suffered heavy erosion and needs expensive restoration. The state has received requests for \$100 million in aid, but the money will go only to replenish beaches that allow public access, said Mr. Weingart. "If we are going to pump 50 feet of sand onto a beach, that 50 feet is going to be open to the public," he said.

Massachusetts passed a \$160 million bond issue last year to buy open space, which includes private beaches. It also requires that large new developments provide public access to the shore. Gary Clayton, assistant director of the state office of Coastal Zone Management, said the population of some coastal communities nearly tripled between 1970 and 1980.

States generally control the area from the water's edge out to three miles offshore, but whether public ownership begins at the high- or the low-tide mark depends on the state. In Connecticut, New York and New Jersey, private ownership stops at the hightide line. Maine and Massachusetts base their laws on colonial ordinances designed to promote the building of wharves. Those who own waterfront land there own all the way to the low-tide line. The wet area beyond that line — the ocean, a sound, a bay or a river — belongs to the public, and those who can reach it are free to use it. Connecticut has made it easier for people to reach the beach in a few places by removing fences that blocked the way or by placing ladders over sea walls. But it limits public access to its beaches more than any other state in the region. A combination of local ordinances, fees and parking regulations insure that there are only seven miles of beach, all of it in state parks, open to all comers along the state's 253 miles of shoreline. The rest is either in private hands or owned by towns, for the most part for use by town residents.

"That's the worst access problem I have seen," said Orrin H. Pikey, a geologist at Duke University who is co-editing a 23-volume series about the shores of states that border the oceans and the Great Lakes. "The people in Connecticut are worried about the masses pouring out of the city and invading their beach."

Town officials in Greenwich say that their 144-acre beach park at Greenwich Point routinely fills up on weekends during the summer with card-holding residents. There were 16,144 last Sunday. "We live 30 minutes from one of the biggest metropolises in the world," said First Selectman Roger J. Pearson. "I don't think it's incumbent on our community to accommodate throngs of beachgoers from across the border."

To protest Connecticut's closed beaches, one state activist, Ned Coll, staged landings on private beaches in 1976. Almost a decade later, the restrictive policies are virtually the same, and now Mr. Coll is preparing to file a class action suit against several towns. "There is a whole class of people who are denied access," he said. "Connecticut's largest natural resource is blocked from the people who need it the most."

The New Jersey Supreme Court ruled in 1978 that the shoreline is public and that the public must have access to it. The state also has cracked down on parking regulations and beach fees that discriminate against out-of-towners.

Long Island, with 220 miles of saltwater shoreline, eliminated the potential for conflict between residents and outsiders by establishing a system of county beaches, open to everyone, to complement the more restricted town beaches, according to Lee E. Koppelman, executive director of the Long Island Regional Planning Board. "It's a non-issue here," he said. "The best beaches, in terms of parking, picnicking and swimming, are all county, state or federal facilities."

Ocean, Not Gore Sets Property Lines At Sunset

By LOU HOPCHAS

(Reprinted from Brunswick Free Press, Sept. 4, 1985)

A rumor that Sunset Beach Developer Ed Gore might one day claim accreted oceanfront property may be laid to rest by a legal brief prepared by the Sunset Beach Taxpayers Association's law firm of Maxwell, Freeman and Beeson of Durham, N.C.

The law firm, in a brief prepared for a meeting of the taxpayers association, stated that "it would seem that the deeded property owners along the Atlantic Ocean at Sunset Boulevard are entitled to ownership of their lots to wherever the ocean may come, now or in the future, and there is no 'retained' right by Mr. Gore (Ed), his predecessors or heirs to accreted lands."

In short, the land possibly in question is deeded to the "water's edge," in the legal opinion of the taxpayer's law firm.

According to the brief, there are usually three methods of conveying oceanfront property (1) a designation from the street to a high water or low water mark or to the Atlantic Ocean; (2) transferring by reference to a Block and Lot number from a plat on record, with that description referring specifically by reference to a recorded plat or (3) by metes and bounds, although this method is seldom, if ever, used according to the law firm.

In the brief, the law firm said it reviewed a recorded plat of Sunset Beach that shows "a series of oceanfront lots 'squared off' at the Atlantic Ocean."

However, the brief notes "there are no distances from the Main Street to the ocean on the plat for each lot."

The original plat was rerecorded twice, and has references to the oceanside boundary as the "high water mark approximately" and shows the Atlantic Ocean as the natural boundary.

Maxwell, Freeman and Beeson, in their brief, state that the legal issue of ownership of accreted lands (or eroded lands) along oceanfront and other water boundaries "is not a particularly novel one in North Carolina. Historically, in this nation many properties were deeded by the use of a river bed, creek or the ocean and the courts throughout this country have been called upon to interpret the meaning of those deeds. As an initial proposition, it should be noted that in North Carolina (and in most other states), when there is erosion and the ocean infringes upon ownership, the state of North Carolina is deemed to be the owner of the land thus covered up," according to the brief.

"It would be our opinion, therefore, that any deed which refers to 'high water' or 'low water' mark, is an imperpetuity deed - meaning that the owner of the deeded property and his/her heirs lose or gain as the ocean moves and shifts."

"Title to that particular lot (be extended or shortened) is subject to the sledge hammering seas... the inscrutable tides of God," the law firm said, quoting Herman Melville in *Moby Dick*.

"There are generally good legal principles to hold that the same result would be reached even for property which is described by reference to a plat which has distances from the street to the ocean shown, or from a deed described by metes and bounds with reference to a plat," the brief said.

The Sunset Beach plat "in all cases shows a squared-off ocean frontage," the law firm said, "but nowhere known to man in the history of our universe have oceans been 'squared off' when they meet land. Therefore, there is simply an impossibility of such a direct or even description of property, and the owner of that property takes the gamble of either gaining or losing property, based upon the vagaries of the ocean tides."

Citing legal precedence, the law firm concluded, "Where a waterline is the boundary of a lot or a tract of land, such line, no matter how it shifts, remains the boundary."

Minnie Hunt, secretary of the Sunset Beach Taxpayers Association, quoted Sunset Beach Developer Ed Gore as having said at a recent public hearing that he "wanted to put an end to vicious, ugly rumor about a road being put in front" of oceanfront property owners. She quoted him as saying, "Everyone knows those property owners own that land."

But, she said, "The advice has always been, 'Get a lawyer' and we got one."

OFFICERS ELECTED

The Onslow County Conservation Group recently elected new officers for 1986 at a quarterly meeting.

Those officers include Tom Caulfield, president; Pauline Joos, first vice president; Jim Rawls, second vice president; Carolyn Alford, third vice president; Annette Caulfield, secretary; and Frank Trelinski, treasurer.

The environmental group is committed to ensuring water quality preserved in shellfish waters.

BEACHES, CREEKS BECOME REAL WILDLIFE NURSERIES



photo by Barry Thomas

Peterson shows wire cage used to protect turtle eggs.

By RICHARD SMITH

(Reprinted from the Jacksonville Daily News, September 21, 1985.)

Two-legged amphibious types are common along the pristine beaches and quiet creeks of Camp Lejeune, but the sands and waterways are also nurseries for several amphibious creatures rarely found in North Carolina.

A 500-pound female green sea turtle returned to Onslow Beach in July for the first time since 1980 and laid 892 eggs in five nests. Three of those nests recently hatched, producing 532 hatchlings.

"This is the only green sea turtle ever reported to have nested above the Georgia coastline. We tagged her in 1980," said Charles Peterson of Richlands, base wildlife manager assigned to Lejeune's Natural Resources and Environmental Affairs Division.

The turtle may have been attracted to the Lejeune area because "The Onslow Beach area is one of the relatively undisturbed beach areas on the coastline of the state," Peterson said.

The Marine Corps has had a policy of protecting nests of green sea and loggerhead turtles since 1970.

Wire cages are placed over the nests. The mesh is wide enough to allow hatchlings to crawl to the sea, but narrow enough to keep predators, such as raccoons, out.

"We've completely eliminated the predator problem with the turtle eggs," Peterson said. However, a few hatchlings are eaten as they crawl to the sea.

"When they hatch, they might not leave the nest for several days. They leave the nest at night when it's cool and go immediately into the water," he said.

"The natural survival rate is only 1 or 2 percent and we've improved that. We're doing everything we can to put more hatchlings back in the water. Green sea turtles are a threatened species in North Carolina," he said.

While the turtle laid her eggs and departed out to sea, a 6-foot female American alligator who deposited eggs along Freeman Creek in June remains near her 26 offspring which hatched earlier this month.

"There are two alligator nests that we know of, and there are probably others on base. One nest had 32 hatchlings and the other had 26," Peterson said.

"This is near the northern limits of their range."

More than 80 percent of alligator eggs and hatchlings do not live to maturity.

Females become sexually mature at about 12 years and males at 16. Some American alligators have lived to be 50 years old.

Alligators mate in open water in May and in June the female begins building a conical-shaped nest of pine straw, litter and mud scooped up in her jaws.

She lays an average of 40 to 50 eggs, then covers the nest to keep the heat in.

When the eggs hatch, the female removes the top of the nest. Hatchlings play in the nest for several hours, then enter the creek.

"They eat insects, snails and small fish. They are about 6 to 8 inches long when they hatch. The hatchlings stay together in a pod for about a year," the wildlife manager said.

SUNSET TAXPAYERS SUE TO GET LAND BACK

By LOU HOPCHAS

(Reprinted from the Brunswick Free Press, October 30, 1985.)

Sunset Beach Taxpayers Association filed a lawsuit October 30 to regain property its members contend is public but was illegally withdrawn from public use by Ed Gore, councilman and developer, two of the companies he is a principle in and the Town of Sunset Beach.

The taxpayers association promised the lawsuit would be forthcoming in November when they met and approved going on with it during their Labor Day meeting.

The land in question, platted in 1955 by Gore's father and mother, M.C. and Mina Gore, is the area that extends now from the end of Sunset Boulevard to the ocean, next to the pier.

The taxpayers want the property "declared an extension of Sunset Boulevard to the ocean available and open to the plaintiffs and other members of the public for ingress and egress to the Atlantic Ocean, for parking, walking and other public uses," the lawsuit says.

In addition, the taxpayers are seeking a temporary restraining order against the defendants, including Beach Enterprises, Inc., Sunset Beach and Twin Lakes, Inc., Edward M. Gore and the Town of Sunset Beach. The suit asks that the restraining order stop the defendants from keeping them from using the property. They want the fence taken down and they want the defendants enjoined from restraining "the plaintiffs or any other members of the public, from free access to and enjoyment of said property."

In addition, the lawsuit also seeks a permanent injunction restraining them from interfering with public use of the

property and ordering the removal of the barbed wire fence that surrounds it.

The taxpayers also want court costs and attorney's fees to be paid by the defendants.

Named as plaintiffs in the suit in addition to the taxpayers association are Albert N. Wells, Charles L. Smith, Whaley P. Hunt and Frank M. Neismith, all property owners at Sunset Beach and members of the association.

According to the lawsuit, plats made in 1955 and 1958 by Gore's parents both show a road extending from the causeway to the ocean, dedicating the property in question to the public.

The public accepted the property and used it for walking, parking, picnicking, ingress and egress from 1955, the suit says.

However, in 1963, Gore's parents "and/or Sunset Beach and Twin Lakes, Inc., had a new plat filed which showed the former end of the road as "Lot 1-A" but the public continued to use the property as before, the suit claims.

In 1968, a corporation that owned land immediately adjacent to and west of Sunset Boulevard to the ocean (the land in question) sought and obtained an injunction preventing Gore's father and his company from obstructing the public's right-of-way on the property.

Again, the suit contends that the public continued to use the land as before.

In December, 1970, M.C. & Mina Gore and Sunset Beach and Twin Lakes, Inc., "executed a document which purported to be a 'Withdrawal of Dedication,'" the suit says. That document was recorded in the county register of deeds office Dec. 7, 1970.

However, before the alleged withdrawal was recorded, the Gores' company recorded, deeds that

"purported" to transfer the land (Lot 1-A) to Beach Enterprises. The suit claims that this deed was invalid and is null and void as a result.

The taxpayers' suit says the deed transfer was invalid partly because, while the deeds were dated Nov. 18, 1970, they were not recorded until Dec. 11, 1970, meaning they were executed prior to the "alleged 'Withdrawal of Dedication.'"

Sometime in 1978 "someone or some entity erected a barbed wire fence around Sunset Boulevard to the ocean (sometimes referred to as Lot 1-A of Sunset Beach and Twin Lakes, Inc. development)," according to the suit.

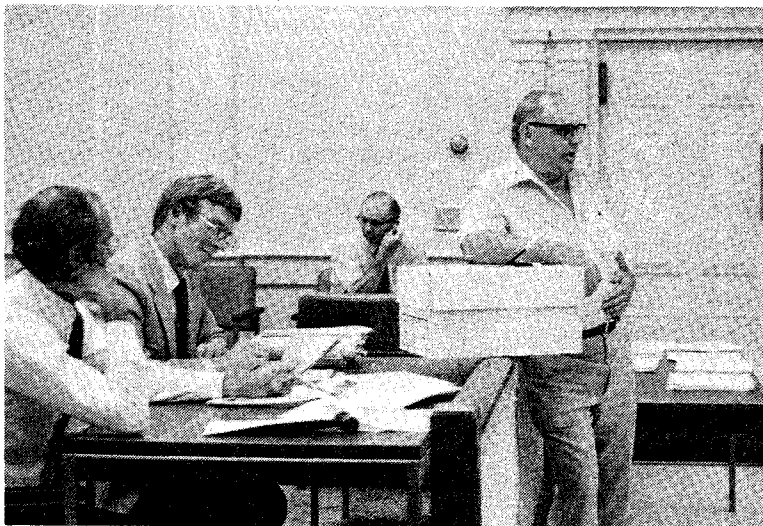
The taxpayers contend that the existence of Sunset Boulevard to the ocean provided "one of the main access routes into the Atlantic Ocean by the members of the public, was a inducement to the individual plaintiffs and many of the members of the Taxpayers Association to purchase their lots at Sunset Beach."

On Nov. 2, 1980, the town, with Gore sitting on the board, passed a resolution rejecting public use of the land in question which "had never been rejected by the plaintiffs or other members of the public, but, in fact, been accepted, used and continued to be accepted and used at least up to and through 1978."

Gore, or his agents, erected the fence around the area, according to the suit, which the suit says "wrongfully and illegally restrains the rights" of the plaintiffs and the public from using the land.

The suit calls for a declaratory judgment ruling that the property is public and restraining the defendants from interfering with the public's right to use it.

FISHERMEN ARE ORGANIZED TO FIGHT FOR THEIR LIVING



Reggie Caroon, a member of the NC Fisheries Association speaks at a public hearing about protecting water quality.

By EDDIE HILL

(Reprinted from the Eastern Weekly, Oct. 9, 1985.)

About six months ago people were telling Clinton Willis that he would be lucky to get three signatures for his Waterman's list. Clinton got three names and more, now the Waterman's Association membership is 200 strong and growing.

The Carteret County Waterman's Association is a countywide organization established for the good of the commercial fishermen. The county is divided into districts, with two representatives from each district. The representatives, as well as the executive officers, are elected by a majority vote and can be removed if the majority is in favor. There is a \$25 a year membership fee to offset the cost of phone bills and paperwork.

"I thought that it would take two or three years to get up to 200 members," Clinton Willis said. "Albemarle Sound has one working and we have been talking to other counties. It's hard to get them

together because fishermen are so independent."

The Waterman's Association is concerned with the overall welfare of the commercial fisherman so consequently it has many areas of interest to stay abreast of. "I've had this boat here for six months and still haven't got it over," Mr. Willis joked. Some current areas of interest have included studying the efforts of working an area that has been closed to determine whether or not it is better to be kept opened or closed, working toward getting a tariff on imported seafood and simply trying to inform local fishermen of the best markets available.

"Commercial fishermen are as much of a part of Carteret County's heritage as Fort Macon is or the lighthouse is," Mr. Willis commented. "Yeah, I can see it going. It doesn't look too good if it doesn't get any better. People will have to get another job and fish as a hobby."

The fishing industry faces many obstacles. A commercial fisherman has to compete against people who have

a regular job but come down to fish or shrimp when many fishermen cannot afford to go. Many times these "recreational" fishermen take their catch back to sell, which in turn, hurts the commercial fisherman. The importation of seafood from Mexico and a lack of loyalty by the local seafood restaurants to use only locally caught seafood also hurts the area fishermen. These are just a few of the modern day problems that face the fishermen as well as the traditional foes of the weather, lack of anything to harvest and the lack of a decent price.

"We have pretty much depended on word of mouth to get everyone together so far. We are working on a newsletter and hopefully we'll be working with Sea Grant," Mr. Willis stated.

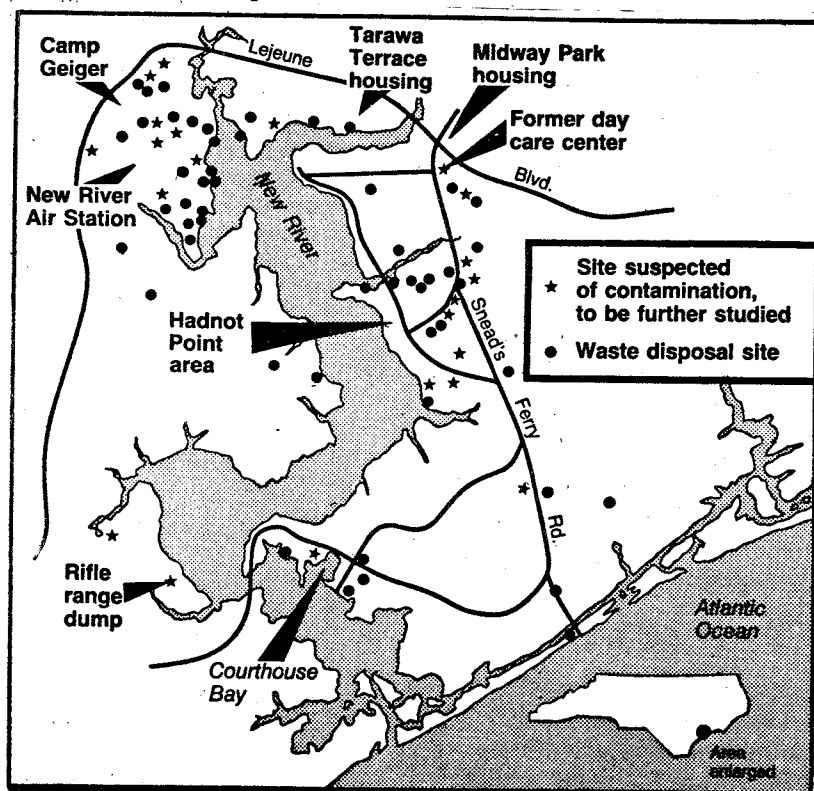
The Association is busy researching other markets for croaker and grey trout because as Clinton put it, "The more people know about the market the less likely that they'll get stuck." The association is not interested in telling anyone where to sell their catch or where not to. All they are interested in is making the local fishermen aware of the better prices.

The recreational fishermen have a slight edge on the commercial fishermen due to better jobs, better education and most importantly, more clout and pull. According to Willis all these factors come into play one way or the other. "It is easier to organize people that are used to being organized. It's harder when you are working with people who have never been too involved with any organizations except for maybe the church."

The fishing industry is one of the oldest industries in America. All in all it's an industry that has been taken care of by the people who worked it. As Mr. Willis puts it, "It would be sad to see no more commercial fishing at night for a living. I would be right sick if I walked down to the water at night and could not see any boats working. It would be sad for commercial fishing to be sacrificed for a few condos and tourists. We've been here as long as the lighthouse."

Civilians, Military Investigate Waste Dumps At Camp Lejeune

Camp Lejeune waste sites studied



By JERRY ALLEGOOD

(Reprinted from the News and Observer, Sept. 15, 1985)

CAMP LEJEUNE - Since the 1960s, Building 712 housed a nursery and day-care center for the children of Camp Lejeune's Marines. But the young children were moved away in 1982 when the soil of their fenced-in playground was found to be poisoned by a number of pesticides.

The building on Holcomb Boulevard hadn't always been a nursery. Over a 13-year span before toddlers were moved in, the Marine Corps had stored, mixed and spilled thousands of gallons of pesticides in and around Building 712. Among them, according to a 1983 Navy survey, were heavy volumes of chlordane, diazinon and DDT.

Some of the environmental impacts of military training at Camp Lejeune can be seen instantly, when artillery rounds slam into a target range and blast craters out of the sandy, shrub-covered soil.

But other effects are less apparent. Over the past 40 years, hazardous chemicals have been spilled, dumped,

buried and burned at sites scattered across the 170-square-mile base in coastal Onslow County.

Gallons of mercury — enough to poison 184,000 acres of foot-deep water if it ever reached the shallow water table — were drained from radar equipment and buried. Tear gas and other poisons may have been buried beneath what later was a basketball court, the Navy survey found.

No one has been harmed by the wastes, officials said. But no one has yet fully assessed the long-term environmental risks, either. This year, however, the dump sites are receiving new attention from civilian and military environmental officials.

Since February, 10 of Camp Lejeune's 100 wells have been closed after they were found to be polluted. Eight had been tainted by small amounts of fuel and solvents used to clean weapons and vehicles. Solvents found in two of the wells, in a residential neighborhood at the northern edge of the base, have been tentatively linked to

civilian dry-cleaning firms in nearby Jacksonville.

State environmental officials who tested the wells cited Camp Lejeune in May for violating groundwater standards. Partly in response to the state's findings, the Marines this summer commissioned a 15-month, \$500,000 study of 22 known or suspected hazardous waste sites scattered around the base.

Environmental officials say they do not consider the waste dumps threats to either New River and nearby streams and estuaries or to the 35,500 military personnel and 11,500 dependents who live or work on the base. But, the Marine Corps wants to measure pollution at the sites and assess the long-term risks. A Gainesville, Florida firm conducting the new study will make recommendations about which dumps should be cleaned up.

"The last thing we want to find is that there is a large piece of Camp Lejeune that can't be used because of toxic waste disposal," Robert B. Alexander, a base environmental engineer, said in an interview last week. "This study will in some cases open up areas where there is enough question now to limit certain types of activity."

Alexander said the 22 sites are not considered dangerous because only trace amounts have been found to have escaped from the dumps. He said people had not been directly exposed to the pollutants. (The Navy report on Building 712, however, showed that the playground used by the children was among the contaminated areas.)

Activities are restricted near contaminated sites, Alexander said, some of which are in remote locations.

In the 1983 survey, the Navy examined 73 waste disposal sites on the base and three outlying sites in Jones County. The 22 sites were flagged for further investigation because of known or suspected contamination from fuel, discarded explosives and chemicals including cancer-causing solvents, PCBs in transformer oil and pesticides.

Most of the known waste sites were located at New River Marine Corps Air Station and in the industrial area near Hadnot Point, where the Marines operate a steam heating plant, paint shops, fuel

storage facilities and a sewage treatment plant. Other waste sites may never be found, the Navy report said.

According to the study, the Marines used many scattered sites all over the base for waste disposal. Pesticides were buried in pits. Battery acid was poured in holes in the ground. Waste oil, hydraulic fluids and solvents from aircraft and vehicles were routinely spread on dirt roads for dust control.

State, federal and military environmental officials said in separate interviews that the practices occurred before the mid-1970s, when environmental laws and controls on the handling of chemical waste were implemented. Solid and hazardous wastes on base are now regulated by the N.C. Department of Human Resources. Under a permit issued in September 1984, the Marine Corps is permitted temporarily to store waste from Camp Lejeune operations until it is shipped to South Carolina for permanent disposal.

Camp Lejeune authorities in May notified base residents and water customers of the contaminants with leaflets and articles in the base newspaper. Officials said that after the 10 wells were closed, the base water system was able to provide water from other sources not affected by contaminants.

An NCRD report said contaminants were found in eight wells in the Hadnot Point system and two wells at Tarawa Terrace, a residential area. Some hazardous waste sites pinpointed in the 1983 study are located near the industrial area but non are located at Tarawa Terrace.

Alexander said there is no clear relationship between the closing of the wells and any specific waste site.

"The way we onto the well problem was in sampling near one of our fuel farms," or fuel storage facilities, he said. "We sampled nearby wells. In one near the fuel farm, we didn't detect fuel but did detect organic solvents."

In its response to the NCRD notice of violation, the Marine Corps said 50 to 70 shallow would be drilled to test groundwater, and the soil near suspected disposal sites would be tested for the presence of chemicals.

Col. R.A. Tiebout, Camp Lejeune's assistant chief of staff for facilities, characterized all of the actions so far — closing wells, relocating the day-care center and extensive testing — as precautionary measures.

"We're going to do everything to make water, air and land as pure as possible," he said.

State records indicate that water samples taken from the 10 Camp Lejeune wells that were closed since February contained varying amounts of nine chemicals.

The Marines first found contaminants in the wells last year and informed the state, spokesmen for the Marine Corps and for the state said. State testing confirmed the contamination and the 10 wells all had been closed when, in May, the N.C. Department of Natural Resources and Community Development informed Marine officials that they had violated groundwater standards. The state said the Marines would have to take corrective measures.

In reply two months later, the Marines said they already had decided to commission the new 15-month study to assess hazardous wastes on the base and also to pinpoint the sources of well pollutants.

Charles E. Rundgren, head of the state's water supply branch, said the wells had been plugged shortly after they became contaminated. The amount of chemicals found were not a threat to people who had been drinking the water during the short period, he said. The water would not cause someone to become ill from drinking it, he said, but ill effects could result from long-term exposure.

H. Lee Mittlestadt, spokeswoman for the state Solid and Hazardous Waste Branch, said the state officials at Camp Lejeune was taking "adequate steps to protect (people) from possible exposure to the contaminants" by closing down the wells.

She added that contamination from the 22 sites was a potential problem but not an immediate threat because the locations were known and monitoring could detect future trouble.

Pollutants Were Dumped At Many Sites

By JERRY ALLEGOOD

(Reprinted from the News and Observer, Sept. 15, 1985)

CAMP LEJEUNE - When amphibious vehicles needed their oil changed, they were backed into the woods near Courthouse Bay where, over three decades, they dumped as much as 400,000 gallons of waste motor oil into the soil.

The Marines at Camp Lejeune perform the task differently now, changing and collecting the oil in maintenance areas. But a 1983 Navy survey showed that for years, hazardous chemicals were scattered at a variety of sites around the base.

The survey recommended 22 waste sites for further environmental study. At 10 of the sites, the report said, contamination was caused by petroleum, oil, and lubricants. Some of the contamination resulted from spills at fuel storage tanks. In other cases, chemicals had seeped into the ground from pits used to train firefighting crews.

In the past, the report said, about 1,000 gallons a week of contaminated fuel, crankcase fluids, paint thinners and other compounds were spread on roads for dust control and some fuel and solvents were used for firefighting training.

At the Courthouse Bay site, about 10,000 to 20,000 gallons of used battery acid were poured out at an estimated

rate of 60 gallons a month for at least 27 years. The fluid contained sulfuric acid, lead and possibly antimony.

Other sites and possible pollutants described in the study include:

- A 100 by 200 foot corridor near Building 804 on Longstaff Road at the New River Air Station, where mercury was drained from radar units and dumped or buried in randomly selected spots. About one gallon per year or 1,000 pounds in all were dumped from 1956 to 1966. The study said that amount of mercury could poison thousands of gallons of water if it reached the water table. But no mercury water contamination has been detected.

- A former chemical dump near the rifle range area, at Camp Lejeune's remote southwest corner, which was used from 1950 to 1976. The six-acre dump could contain 93,000 cubic yards of wastes, including the pesticides DDT, malathion, diazinon, lindane and PCBs, or polychlorinated biphenyls, sealed in concrete tanks. PCBs are cancer-causing agents once used as fire-retarding agents in electrical transformers.

- Two separate sites near Curtis Road at the New River Air Station, one of which had a basketball court on the property. The materials were believed to include drums containing tear gas and solvents that may include chloroform, carbon tetrachloride and benzene. Drums with 4,100 to 5,500 gallons of

chemicals were believed to have been buried at the basketball court site, and 1,400 to 4,100 gallons at the other site.

- An area between Sneads Ferry Road and Ash Street that contained a lot used for pesticide mixing and a pit that received transformer oil, which probably contained PCBs. It was estimated the site contained 100 to 1,000 gallons of pesticides and 1,300 to 11,800 gallons of oil. The study noted that quantity estimates were not based on reliable data.

- A former nursery and day care center in Building 712 that was used from 1945 to 1958 for pesticide storage and mixing. Chemicals used in significant amounts included chlordane, DDT and diazinon. Stored or used to a minor extent were dieldrin, lindane, malathion, silvex and 2,4,5-T. Contaminated areas included a 6,300 square foot playground.

Robert B. Alexander, an environmental engineer at Camp Lejeune, said there were no health tests done on children at the center because tests of the building and the site indicated the occupants were not exposed to harmful amounts. He said the children were not located in areas where contamination was suggested, but the center was relocated as a precaution.

Wayne Mathis, an environmental engineer with the Environmental Protection Agency, said he could not

speculate on the potential risks at each site without knowing specifics about the surrounding area. He said the risk from a particular site would depend on whether the material was in a stable location and whether people had access to the chemicals.

"To have a hazard, you've got to have someone exposed to it or have it moving," he said.

For example, he said, the report of discarded mercury was serious "in that it represents an unknown," but he could not gauge the risk to humans unless it was directly threatening people. In general, he said, pesticides such as DDT do not migrate in the soil so contamination would be localized.

"You wouldn't want kids out there digging in the soil," he said.

Alexander said the Marine Corps in recent years has added millions of dollars worth of pollution abatement facilities, and waste material is now recycled or disposed of properly. He added that Marines receive regular training on proper waste disposal.

"The causes of these problems really aren't there any more," he said.

Wayne Mathis, an environmental engineer with the U.S. Environmental Protection Agency in Atlanta, GA., said Camp Lejeune's past practices and its problems were neither unique nor alarming. He compared the base to a

medium-sized city that would generate waste from residents, vehicle maintenance and industries.

"They would have a little of a lot of things rather than a lot of any one thing," he said.

Arthur E. Linton, federal facilities coordinator for the EPA's southeast region in Atlanta, said Camp Lejeune and other military installations had disposed of waste in ways that were accepted practices in the past.

"The military hasn't done anything that wasn't done in the private sector," he said.

He said the contamination at Camp Lejeune is not as bad as cases at other military bases in other states involving larger amounts of chemicals and incidents where pesticides have contaminated drinking water. The EPA has proposed that four military installations — one in Tennessee, two in Alabama and one in Georgia — receive top priority for a cleanup effort by the Pentagon.

Linton said the most serious problem at Camp Lejeune was contamination of groundwater with solvents that are suspected of causing cancer. The solvents are commonly used for a number of purposes, including cleaning metal and engine parts.

CHANNEL BASS PROVE ELUSIVE

(Reprinted from The New York Times, December 1, 1985.)

In the surf just south of here at the easternmost tip of Cape Hatteras, two of nature's most powerful ocean forces collide. The warm-water Gulf Stream and the frigid Labrador Current meet again and again on the watery battlefield of the ever-moving sand bars known as Diamond Shoals.

Here in the churning surf within sight of the underwater grave of the Federal gunboat Monitor, which lost its encounter with the Shoals on a stormy night in December 1862, the prized channel bass known as the Red Drum come to feed each spring and fall.

And each year in late November, surf fishermen from up and down the East Coast abandon their home shores and converge on Hatteras Island to try their luck against nature's odds and the Red Drum.

Feeding habits of the Drum, predictable to a degree, comply only by happenstance with schedules determined by human convenience, and in that sense the 1985 world championship red drum tournament, sponsored last week by the North Carolina Coastal Federation, fell victim to the whims of nature.

More than 50 anglers from Florida to New Hampshire participated in the three-day tournament and only one, Alan Kim Price of Chesapeake, Va., was fortunate enough to land a Red Drum, but the 6-pound puppy was big enough to win the \$1,400 first prize.

Price, a civilian employee of the Coast Guard, caught the coveted fish at Hatteras Point around mid-morning last Monday on the final day of the tournament. At the end of the contest, it stood as the lone Drum caught in competition.

Knowing full well the hazards of attempting to time a tournament with the arrival of feeding Drum, officials also offered prizes for the largest bluefish and largest flounder. Sheila Stafford of Richmond won \$500 for her 17-pound 4-ounce blue and John Matthews of Virginia Beach, Va., received \$500 for his 2-pound-1-ounce flounder.

Fred Tornquist, a resident of Hightstown, N.J., and a member of the Mercer County Anglers Association, has been fishing for Red Drum on the Outer Banks for more than 20 years.

"I just left some good fishing back home at Island Beach to come down here," he said on the first day of the event. Even though he didn't place in the contest, Tornquist added: "I'd say this is the best surf-fishing spot on the East Coast. When you fish down here you never know what you're going to catch. You could get a 50-pound Drum or a cooler full of fluke."

He then smiled, reached into his wallet and unfolded, not for the first time, a weigh-in ticket from another tournament in 1982. The official word was that Fred Tornquist that year brought in a Red Drum weighing 56 pounds 12 ounces.

The all-tackle world-record Red Drum caught near here just two days before the championship last year by David Deuel, a marine biologist from Vienna, Va. The monster Drum weighed 94 pounds 2 ounces, was 58 inches in length and 36 inches in girth.

Drum action during the 1984 world championship was quiet until the final day, according to the tournament director, Fred Bonner. Then, in a few hours, the Drum came ashore in a feeding frenzy and more than 200 were caught that day. "I've never, ever seen anything like it," said Bonner, who is director of the Sportfishing School at North Carolina State University.

Cyril Gray of Avon, an Outer Banks fishing guide, recalled that the real action last season continued well after the contest ended: "The day after the tournament, more than 500 Drum were taken and on the following day there were too many taken to count them," he said.

Gray recalls throwing handlines into the surf for Red Drum when he was a boy



The New York Times/Bill Jobs
Alan Kim Price in the surf at the world championship red drum tournament in North Carolina.

growing up on Hatteras Island. This, the most famous of the barrier islands, is a 60-mile-long strip of sand reaching some 30 miles east into the Atlantic. Even the calendar turns to December the warming tropical Gulf Stream currents can ease the effects of the unrelenting ocean winds.

"In the 30's and 40's, the men on watch up at the Coast Guard station would ring a bell when the Drum would come, and we'd all run down and pull them in," he said.

When he returned home several years ago after a 30-year career as an enlisted man and later an officer with the Army Special Force, Gray launched his second career as an Outer Banks fishing guide. He fishes nearly every day of the year and has gained a reputation as one of the island's premier anglers.

The secret to success for Red Drum angling, Gray advised, is first locating the prime feeding grounds and then presenting the bait in the proper manner.

There are two runs of feeding Drum each year on Hatteras, one in April and the other in November. Gray said that even though some experienced anglers fish for many seasons without taking a single Drum, those who find the right stretch of shoreline usually fare the best.

"What you want to do first is find the mouth of a slough," said Gray. That's indicated by a thin layer of white foam on the water's surface in the space between the first set of breakers crashing onshore and the next set breaking offshore. At times the fish feed farther out and then the ability to cast long distances — at times more than 100 yards — becomes essential.

But first, you must find that promising slough, Gray said. "Then," he continued "you use a fish-finder rig with a mullet strip and you're in business."

While weight and hook size vary with the conditions, this week in the foamy aftermath of Hurricane Kate's brush with the island, Gray used a 5-ounce sinker and 8/0 hook on his rig. The hook was dressed with a thin strip of fresh mullet. "That way it looks like a small minnow when the fish are feeding," he said.

They seemed to exhilarate in just standing there, waist-deep in the crashing surf and facing a stiff easterly breeze head-on and knowing that even if the fish don't bite they're still in the right place at the right time.

For information on the 1986 championship Drum tournament, contact the North Carolina Coastal Federation, Route 5, Box 603, Newport, NC 28570.

For information on Outer Banks fishing, contact Cyril Gray, c/o Tackle Express, Avon, NC 27915. Phone (919) 995-5829.

Williamson Attacks Environmentalists

By DEBORAH CRANE-SMITH

(Reprinted from the Brunswick Free Press, Wed., July 10, 1985)

Ocean Isle Developer Odell Williamson attacked environmentalists during Tuesday's town council meeting and his daughter LaDane, the town's mayor, updated the town council on stormwater management proposals which she said were not well thought out.

Williamson's remarks came during his request that the council vote to extend groins on the island's east end.

Those groins, which according to Williamson currently extend out about 150 into the ocean, will be extended another "25 to 50 feet" as a result of a unanimous vote by the council.

Williamson said he didn't agree with someone named "Prickly or Pickley or whatever."

Mayor Bullington corrected him, saying "Pilkey."

Orrin Pilkey is a Duke University geologist who contends that beaches should be left to erode at nature's rate rather than putting in artificial beach preservation measures.

"I don't have very little respect for

them when they turn around and tell you to abandon what you've got and not fight back," Williamson explained.

"This town has decided to fight back," Williamson stated. He said the fight against the Atlantic Ocean would continue so that "Ocean Isle Beach can be the best beach around."

"I'm contrary to that group that would like to stop all development and destroy all the beaches because one or two want it all to themselves," he explained.

After the meeting, he accused the Free Press of being an "environmentalist newspaper that doesn't believe in developers making a profit."

Mayor Bullington, meanwhile, updated the town council on proposed Coastal Resources Commission efforts to curb development's effects on coastal waters.

She said that the proposals, on which a public hearing is scheduled for late August, were arrived at incorrectly. She contended that the CRC used a "pick and choose" method, arriving at their proposals by exploring what other states had done to combat the problem.

"We're all concerned about water quality," Mayor Bullington said. "But

regulations should be arrived at by facts and not conjecture."

Draft CRC proposals would not allow development within areas of environmental concern if that development had a great chance of degrading adjacent water quality. They would also work to upgrade existing projects to meet better water quality standards and support basinwide management to control sources of pollution outside of the coastal area which could have a negative impact on coastal waters.

The CRC draft proposals include regulations dealing with stormwater runoff from developed areas.

It is that last area with which Mayor Bullington and Williamson have been most concerned.

At a May meeting of CRC, they arrived in tandem with Duke University hydrologist Dr. Miguel Medina, who contended that stormwater runoff is not detrimental to area waters.

Although Dr. Medina claimed to be representing concerned individuals from all along the North Carolina coast, he only referred to Ocean Isle Beach in his presentation.

BROAD CREEK MARINA PERMIT APPEALED

By BRAD RICH

(Reprinted from the Carteret County News-Times, Nov. 22, 1985)

A Broad Creek resident is asking the N.C. Coastal Resources Commission to revoke a permit granted for construction of a 17-slip marina located near the N.C. 24 bridge over Broad Creek.

Harold Morris, Route 5, Box 394, Newport, requested the action in a letter to CRC Chairman Dan Besse, New Bern. Mr. Morris is the property owner adjacent to the site of the proposed marina.

The CRC is the policy-making arm of the N.C. Division of Coastal Management, which issued the permit.

The marina is being planned by Osprey Oaks Inc.

In his letter, Mr. Morris stated that, "If you will not revoke the permit, then we request an appeal hearing to bring the permit decision before the Coastal Resources Commission."

According to John Parker of the Division of Coastal Management, Mr. Morris does not have an automatic right to appeal the division's decision to issue the permit.

"The only parties who have automatic rights to appeal are the local government, the state, or the permit applicant," he said.

"Mr. Besse will have to decide whether to grant an appeal hearing."

Mr. Morris contends the permit should be revoked for the following reasons:

- The permit was not processed according to the CRC regulations.

"The permit for this project had been denied on the grounds that the marina did not meet the county zoning (residential)," he wrote.

"Then the county's zoning for the Pearson subdivision was overturned by the court, at which time our homeowners' association petitioned the county to properly zone our area."

"Under our new zoning, adopted Nov. 4, 1985, the lot where the marina is proposed was classified B-2 (highway business). On the same day that the zoning took place, the N.C. Division of Coastal Management issued the permit for the project without reprocessing the permit application."

"This procedure did not allow the other state and federal agencies to comment on the project, using the new information regarding water quality impacts of marinas and storm water."

"Furthermore, the public's right to comment on the permit application, and to incorporate the new water quality data into our comments, was circumvented by the staff not sending this project back (for) public notice."

"Once the zoning was changed, the applicant should have been required to reapply for a permit. The regulations

allow no shortcuts."

- Storm water runoff will violate SA (shellfish) water quality standards.

"As approved, the project incorporated no measures whatsoever to control storm water runoff," Mr. Morris wrote. "The project was reviewed by the Division of Coastal Management prior to the April 1985 report entitled, 'Coastal Development and Shellfish Waters.'"

"We are prepared to present evidence to prove that the storm water runoff from this proposed marina will violate the SA water quality standard."

- The marina will violate SA water quality standards.

"Placing a marina in this creek will further degrade water quality and diminish our hope of opening these waters to oystering and clamming."

- Staff did not make an affirmative finding that water quality standards will not be violated by the marina, as required by regulation.

"The evidence that the marina and adjacent shoreline development will violate SA water quality standards is overwhelming," Mr. Morris wrote.

"CRC regulation 15 NCAC 7H .0208 (a) (2) states that, 'before being granted a permit by the CRC or local permitting authority, there shall be a finding that the applicant has complied with the following standard(s): (C) Development shall not violate water and air quality standards.'"

SUPREME COURT RULING PROTECTS MANY WETLANDS

By AARON EPSTEIN

(Reprinted from the Knight-Ridder News Service)

WASHINGTON - In a major victory for environmentalists, the U.S. Supreme Court ruled unanimously Wednesday that the federal government may prevent commercial development of a broad range of wetlands throughout the nation.

The justices, handing a sharp setback to developers, concluded that marshes, swamps, bogs, shallows and mudflats are entitled to federal protection even though they are not frequently flooded by neighboring river, streams, lakes or seas.

No one can place fill materials on such lands - a prelude to construction - without getting a permit from the Army Corps of Engineers, the high court said.

The decision affects millions of acres of saturated lands in virtually every state.

Wetlands are environmentally

beneficial in several ways. They help control floods, serve as nurseries for fish, filter out pollutants, protect drinking water supplies, and provide food for aquatic animals and nesting and wintering areas for migratory birds.

The legal issue arose nine years ago when Riverside Bayview Homes, Inc. prepared for construction of homes by filling in 80 acres of marshy land it owned near the shores of Lake St. Clair north of Detroit.

Saturation of the low-lying land was due to ground water rather than to frequent floods from the lake or nearby Black Creek. The land provided a suitable habitat for muskrats and marsh wrens, and the vegetation was dominated by water-loving cattails, marsh grass and duckweed.

When the owners failed to apply for a federal permit, the Corps of Engineers filed suit.

There was no question that the Corps had authority under the Clean

Water Act to regulate wetlands regularly drenched by adjacent waters. The issue raised by the case was whether the law also covered millions of acres of aquatic lands that were adjacent to other waters but were not regularly flooded by them.

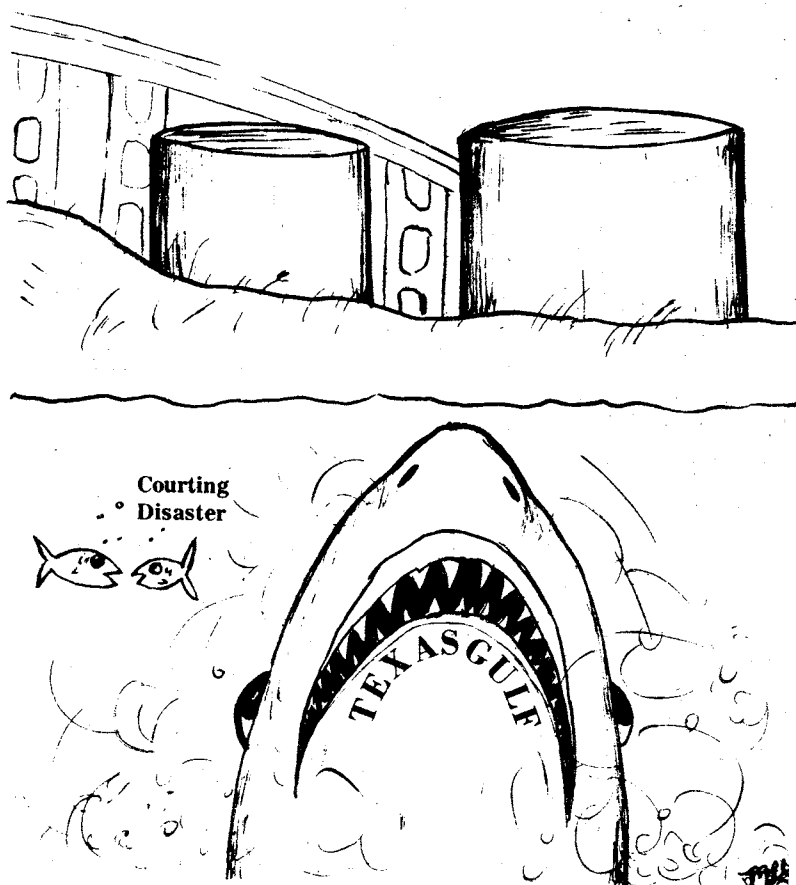
A federal trial judge sided with the corps but the federal appeals court ruled for the developers, concluding that the Clean Water Act was not intended to apply to the type of land near Lake St. Clair. A broad interpretation of wetlands could subject landowners to an unconstitutional taking of their land by the government without fair payment, the appeals court said.

That ruling was nullified in a 9-0 Supreme Court opinion written by Justice Byron R. White.

Congress recognized in enacting the Clean Water Act that "protection of aquatic ecosystems... demanded broad federal authority to control pollution," White declared.

Texasgulf Takes County To Court

*Just When You Thought
It Was Safe to Go Back. . .*



(Reprinted from the Eastern Weekly, Sept. 11, 1985.)

Texasgulf Chemicals Company has taken Carteret County to court. The company filed the suit in the Superior Court in Beaufort.

On August 5 the County Commissioners denied a special use permit to Texasgulf. The company has applied for the permit on April 25 "to build an anhydrous ammonia storage facility on Radio Island, said facility to include two storage tanks."

The suit asks for judicial review of the commissioners' decision to deny the permit. The petition filed by Texasgulf asks the court to "find that the actions of the county in denying the requested special use permit were not in accord with law and order the Board of County Commissioners to issue said permit."

Dr. Irving Hooper, president of Carteret County Crossroads, said, "I think the county was on firm legal ground in doing what they did and we expect it to be upheld."

George Hammond was on the Radio Island Task Force which prepared the Port Industrial Zone ordinance which applies to the area where Texasgulf hopes to build the ammonia storage tanks. "We were appointed by the governor (Jim Hunt) and we represented each of the municipalities and the county," Mr. Hammond said.

"Our purpose was to return control of the area to the county," he continued. The ordinance defines those developments which would need a special permit and requires the County Commissioners to vote on issuing the permit after a public hearing is held.

The hearing was held. When the commissioners voted to deny a permit to Texasgulf, Commissioner Carl Tilghman read a five-page document explaining the reasons for the decision into the record.

According to the Texasgulf suit, "Those purported findings and conclusions are in many instances: not supported by any evidence in the record; totally irrelevant; based upon nothing but wild speculation; based upon an assumption that the operation will not be operated as planned and thus will create a dangerous situation; based upon a denial to petitioner of rights permitted to others under similar conditions and thus violate the equal protection rights of the petitioner; constitute an attempt by County to exercise control over navigable waters not within the jurisdiction of the County, in violation of constitutional provisions and petitioner's rights; "And, in general, are unsupported by material, competent and substantial evidence sufficient to deny a special use permit when petitioner had shown compliance with all requirements of the

ordinance through material, competent and substantial evidence."

The suit also makes a point of noting "The Carteret County Planning Commission heard the requests petitioner and recommended approval of the height variance and also approval of the special use permit."

Texasgulf had requested a permit to build storage tanks 83 feet high, despite a limit of 60 feet in the ordinance. When the County Commissioners told the Planning Board they could not grant a height variance with a special use permit, the suit said the Planning Board recommended a change in the height limitation in the ordinance.

We asked Mr. Hammond about the thinking of the Task Force in proposing the original 60-foot limitation for structures on Radio Island. "You don't want extremely high rises in a hurricane zone," he explained.

The County Commissioners decided not to change the ordinance, to allow structures 90-feet high and refused to grant Texasgulf a variance. "With the denial, the petitioner's request became one for a special use permit that would meet the sixty-foot height requirement of the suit said.

Texasgulf is also asking the court to make the county pay for the legal fees the company in bringing this suit.

Majority Urges Tighter Regulations At Hearings On Storm-Water Runoff

By JIM POLSON

(Reprinted from The News and Observer, Oct. 18, 1985.)

WILMINGTON — Developers and local government officials squared off against environmentalists and fishermen October 17 at a public hearing on what both sides agreed could be important new state controls on pollution of coastal waters.

Opponents of the controls said proposed regulations aimed at curbing pollution by storm-water runoff from urban areas were arbitrary, needlessly complex and vague. They called for the N.C. Coastal Resources Commission, which proposed the rules, to delay adopting them.

But the majority of the arguments urged the commission to tighten development restrictions and greatly expand its geographic jurisdiction over coastal development. Representatives of environmental groups from several states, along with scientists and engineers, joined fishermen in urging quick action to stem pollution that they said threatened thousands of acres of productive shellfishing waters.

Also attending the hearing, sponsored by the resources commission, was S. Thomas Rhodes, secretary of the Department of Natural Resources and Community Development, who said in an interview that he hoped the commission would delay action on the proposed rules long enough to consider comments from the hearing.

John Fussell, a spokesman for Carteret County Crossroads, an environmental group, told the commission that "what you are proposing would not reduce the number of acres closed by pollution, nor would it keep that number from growing. It would keep the number of acres from going up as rapidly."

Fussell joined most speakers in praising the philosophy behind the proposals but pleading for tighter controls.

The amended proposals announced at the hearing by Ralph W. Cantral, assistant director of the Division of Coastal Management, would prohibit most construction within 50 feet of any coastal

waters, require a 50-foot buffer of vegetation around all coastal waters, and limit to 15 percent the amount of land that could be covered by buildings or pavement within 75 feet of coastal waters. The proposals allow some exceptions for single-family homes.

The intent of the proposals is to reduce the amount of runoff generated by new development, officials have said.

By its own rules, the Coastal Resources Commission regulates development that occurs within 75 feet of estuarine waters, which include salt marshes, tidal flats and tidal streams. Todd L. Miller, executive director of N.C. Coastal Federation, and many other speakers asked the commission to extend its jurisdiction to at least 200 feet from the water line. Some speakers recommended 1,000 feet.

The 75-foot jurisdiction is "ludicrously small," said Charles Petersen, a biology professor at the University of North Carolina at Chapel Hill and member of the state Marine Fisheries Commission. Miller called calims by the Division of Coastal Management that it lacks the staff to enforce its regulations in a 200-foot wide zone "ridiculous."

"Every state agent is understaffed until it receives additional responsibility," he said.

Developers and local officials accused the commission of ignoring innovative techniques to retain and treat polluted storm water and ignoring possible sources of water pollution.

"I honestly can't figure out how this thing is going to work when it is so vague and confusing," said John Nesbitt, director of public works for Wrightsville Beach. On Shell Island, an area under development on the north end of the town, "we've simply required that we retain runoff on site. It's worked through two storms," Nesbitt said.

"In the spirit of Henry David Thoreau, I urge the commission to simplify, simplify, simplify," said H.N. "Salty" Miller, a Topsail Island Developer and clam fisherman.

JANUARY 16 HEARING SCHEDULED Town Claims That Bostic's Sewer Treatment Facility Extended Illegally

On July 2, 1982, Marlow Bostic was granted a certificate by the North Carolina Utilities Commission to provide sewer service in North Topsail Shores and Topsail Reef Subdivisions located on North Topsail Island in Onslow County. The sewer treatment facility is located on the mainland and is connected to the service areas by eight miles of pressure main.

On September 18, 1985, Attorney General Lacy Thornburg filed a motion with the Commission requesting a hearing to determine if Bostic's sewer plant should lose its franchise to provide water and sewer service. In support of his motion, the Attorney General indicated that Bostic had stated he intended to extend his sewer main more than five miles from its present service area through the Town of Surf City to serve a condominium development on the southern end of Topsail Island, but has to apply for a certificate to provide such service.

In response to the Attorney General's motion, Bostic requested that it be denied and indicated that he had not begun construction of a line to serve the area south of his service area and had no intention of beginning the construction or operation of a line without first obtaining permission from the Utilities Commission.

On November 6 the Attorney General filed affidavits of Michael Lord, Town Manager of Surf City and Milton Oppegard, Mayor of Topsail Beach, indicating that Bostic has constructed sewer lines beyond the limits of his original authority. Recent big development projects outside of Bostic's service area such as Ocean Ridge, Harbor Towers, Permuda Island and Bermuda Landing, have all said that their sewage would be handled through Bostic's plant.

Since it first began operation, the mainland spray irrigation facility has been out of compliance with its permits.

In a Motion to Intervene in the hearing filed by the Town of Surf City, the town states that it has reason to believe Bostic's Utility has violated state statutes and regulations at least six times and has been assessed at least two civil penalties. Moreover, the town states that Bostic has violated state statutes and regulations at least twenty-three times since January 1976. The Division of Environmental Management recently placed moratorium on any new hookups to the plant until it has been brought into compliance with its permits.

Upon consideration of the motion filed by the Attorney General and Surf City, the Commission has scheduled a public hearing for January 16, in the Town of Surf City Town Hall, to determine the proper service area for Bostic's sewer facility and whether he is capable of properly operating a sewer system. The public is invited to testify at this 9:30 a.m. meeting.

Galveston Ruling May Have Impact In NC

A recent decision by the Fifth Circuit of the U.S. Court of Appeals could have a major impact on coastal development in North Carolina that requires federal permits. The ruling places new importance on the need for the U.S. Army Corps of Engineers to consider cumulative impacts of development which extend beyond the boundaries of a proposed project.

Eleven years ago, a developer applied for a federal permit to dredge canals in on Galveston Island, Texas. Community groups and neighboring landowners fought against the development. They sought first to persuade, and then to compel, the Corps to prepare a formal environmental impact statement, under the provisions of the National Environmental Policy Act, before issuing the permit to dredge.

Their attempts to persuade failed; the developer obtained a permit without preparation of an environmental impact statement. Their attempts to compel, on the other hand, could not have been more successful. The District Court of the

Southern District of Texas, principally because the Corps did not adequately consider "cumulative impact," enjoined the developer from performing work under the permit and ordered the Corps to prepare a comprehensive environmental impact statement on the whole of West Galveston Island.

The court also enjoined the Corps from granting additional dredging permits for this project or any similar project on the west end of the island until the environmental impact statement is completed.

Both the developer and Corps appealed the decision. The developer argued that the environmental assessment of the project was adequate and that a formal impact statement is not required. The Corps, on the other hand, argued that, although the environmental assessment may not have been adequate, the district court should at most have remanded the case back to the agency for reconsideration of cumulative impacts. Both claimed that determining the scope of an

environmental impact statement is an administrative function, not a judicial one, and that, even if it can now be said that an environmental impact statement is required, the district court erred by defining the precise parameters of the statement.

The Court of Appeals ruled on Oct. 7, 1985 that the Corps had not performed an adequate analysis of the cumulative impacts that may flow from this and other developments on West Galveston Island. It also agreed, however, that the district court should not have ordered the preparation of an impact statement at this state in the process. Because of the Corps' failure to conduct the proper study, the court said it is too early to tell whether an impact statement is required. Thus, it remanded the permit decision back to the Corps with instructions that further permit processing be consistent with the court's conclusions.

Permit Nixed For Project In West Onslow

by Donna Long
(Reprinted from the Jacksonville Daily News, Oct. 1, 1985)

JACKSONVILLE — The state Division of Coastal Management has refused to issue a permit for the building of a 14-story, 102-unit condominium on West Onslow Beach.

Harbor Properties Inc. of Southern Pines applied for permission to build the project, Harbor Towers, on seven acres from the ocean to the sound along N.C. 210.

The Onslow County Commissioners voted in August 1984 to rezone the land from low-density to high density. At that time, Century 21 Prime Inc. of New Hanover county planned to build a 13-story condominium there. Harbor Properties bought the land in January.

One of the reasons the permit was denied was that stormwater runoff from the site onto N.C. 210 and into wetlands and shellfishing waters would harm estuarine resources, according to David W. Owens of the Division of Coastal Management. He said the project could "substantially" elevate the level of coliform bacteria in public shellfish waters.

Owens listed the reasons for the denial in a letter sent Sept. 13 to Del Crawford of Fayetteville, a representative of Harbor Properties, Inc.

The letter said the proposal to put pavement or other surfaces impervious to water on more than 30 percent of the area of environmental concern exceeded CAMA regulations. The project was also inconsistent, he said, "with state guidelines pertaining to pollution of water in areas of environmental concern.

Owens also said four state agencies had submitted objections or expression of concern to the developer's proposal.

Tom Caulfield, president of Onslow County Conservation Group, said he was pleased that the permit had been denied. The conservation group has been opposing high-density projects on the land for the past two years.

"This shows just how effective groups can be when they work with the state," Caulfield said. He said his group had opposed the projects because they would "downgrade" water quality.

Myrtle Beach Officials Report Fewer Tourists

(Reprinted from The News and Observer August 13, 1985.)

MYRTLE BEACHM S.C. (AP) — The hotel and motel room rates along the Grand Strand have been reduced because the number of visitors to the Grand Strand is down, resulting in more places to stay, tourism officials say.

Motels and hotels that were flashing "No Vacancy" signs a year ago are advertising reduced rates to attract guests, the officials say.

"I've heard that (occupancy rates at) front-row properties are as much as 6 percent off," said Wim Pastoor, president of the Myrtle Beach Hotel-Motel Association and general manager of The Landmark Best Western.

"On second row and third row, I've been told things are off 20 to 30 percent or more," he added.

He said he has seen prices as low as \$40 to \$30 for oceanfront rooms, "and that's scary."

Figures at the Myrtle Beach Area Chamber of Commerce indicate that the beach has about 5,000 more rooms than last year.

"I think we probably have slightly more people, but we have added more facilities and the growth of the facilities has outstripped the tourism growth," said Ashby Ward, executive vice president of the chamber. "The pie is being cut in a lot more pieces."

Ward said that although the number of new rooms had risen 10 percent to 12 percent since last season, tourism growth had only increased 3 percent to 5 percent.

"I honestly don't believe there's as many people," Pastoor said.

"We haven't had as many people calling for reservations either."

WISH TO PARTICIPATE IN PROTECTING COASTAL WATER QUALITY?

SEND THIS OPEN LETTER TO SECRETARY S. THOMAS RHODES

Secretary S. Thomas Rhodes
N.C. Department of Natural Resources
and Community Development
P.O. Box 27687
Raleigh, N.C. 27611

Dear Secretary Rhodes:

Please do not allow high density development on the coast to damage shellfish and fish resources in North Carolina. I request that you do everything in your power to comply with federal law which requires that these resources not be damaged or threatened by water pollution.

Some types of low density development adjacent to estuarine waters is usually acceptable if properly controlled. However, high density development such as condominiums and shopping centers must be located a safe distance from the water and must include stringent control measures.

The State should **not** allow developers to put in high density development which relies on unproven means for controlling water pollution.

The regulations for protecting coastal waters should provide **specific** standards and criteria, **not** vague, "flexible" regulations that allow developers with political connections to force approval of bad projects.

Send me information on any proposed regulations for controlling pollution due to coastal land use and development. (Providing this information is required by G. S. 143-215.4 and G. S. 113A-24.) In this information, please state specifically the degree to which the proposed regulations comply with each of the points noted above.

Please enter this letter into the record of comments for any proposed regulations (either Coastal Resources Commission or the Environmental Management Commission) for controlling pollution due to coastal development.

Please make this letter known to the General Assembly when they are considering coastal resources and water quality.

Sincerely,

Name _____

Street Address _____

City _____ State _____ Zip _____

Stricter Standards Approved To Protect Some Waters Behind Wrightsville Beach

By MONTE BASGALL

(Reprinted from the News and Observer, Oct. 11, 1985)

Some waters behind Wrightsville Beach, which have been cleaned up since the island town stopped discharging sewage there, received an upgraded classification. To protect them for shellfishing.

The action on Oct. 10th by the N.C. Environmental Management Commission, one of several coastal water quality items on its agenda, converts Bradley Creek and other waters on the mainland

side of the island town to pristine SA classification.

"The town is acutely aware of what is happening in our surrounding waters — the diminishing returns of our fisherman and shrimpers, the once lucious oyster beds now dead — and we are trying to correct our faults," said Wrightsville Beach Mayor Frances L. Russ in a statement before the commission's vote.

In 1984, Wrightsville Beach's sewage discharges ceased after the town tied with the sewage treatment system that serves Wilmington. The town pushed for the new classification, which places area waters under stricter standards.

S. Thomas Rhodes, Secretary of Natural Resources and Community Development, called the town's cleanup efforts "commendable."

In a contrasting decision, the environmental commission upheld a \$10,000 civil penalty against the former operators of a sewage treatment system serving Currituck County mobile home park. That company had been treating sewage without a permit since 1980, state officials said.

Universal Park Associates, the former operator, originally was assessed

the penalty in 1983. But the N.C. Division of Environmental Management delayed enforcement when the company promised to comply, the company never did, state records show.

R. Paul Wilms, the Director of the Environmental Management Division, said he would not have delayed enforcement as long as his predecessor, Robert F. Helms, who was fired this year by the Martin administration.

"I think we should have pressed them harder," Wilms said in response to questioning from commission members. At the same time, he said that he was concerned for the 165 families in the park, who could face eviction if the sewage treatment system is shut down.

A Virginia company, Orchards Associates Limited, took over operations of the treatment system in January and is seeking a permit, he said.

"Where in the world is the county health department in these matters, the county commission, the county government?" said James C. Wallace, the EMC's vice chairman.

"We can't run these things in Raleigh. The people in Currituck County need to assume some responsibility," Wallace said.

In other related matters, the EMC:

- Learned that Wilms has revoked an earlier water quality certification for a proposed boat basin and access channel at the Sugar Loaf Properties project on Bogue Sound.

Todd Miller, director of the N.C. Coastal Federation, called Wilms' decision "outstanding." The Coastal Federation opposes the Sugar Loaf project, saying it would pollute shellfishing waters.

Wilms' move would prevent the project developers from receiving a dredge and fill permit from the U.S. Army Corps of Engineers, but the developers have contended they are not required to get the permit.

Sugar Loaf Properties Inc. has yet to receive a development permit from the N.C. Coastal Management Division, which wants to see the company's storm water management plan before making a decision.

- Received draft water management guidelines that Wilms' staff would use in evaluating mining permits in coastal peat fields. The proposed guidelines, which were referred to the EMC's water quality committee, include requirements for companies that propose perpetual pumping to remove fresh water during and after peat mining.

Miller told the commission that there were still too many uncertainties about the impact of fresh water runoff on marine life for the state to adopt such guidelines.

"As one fisherman said, 'We don't drive at night with our headlights off.' "

Miller said of the unanswered questions about peat mining.

UPDATE: On the day the new SA classification was to take effect, a group of developers filed suit and have succeeded in getting the court to review the reclassification.

STRATEGY FOR BEACH PRESERVATION

Continued from page 8

beach, the more popular the community and the richer the citizens. History makes clear that as beaches disappear, a community's problems grow. But once begun, stabilization can seldom be reversed and generally calls for progressively larger and more massive defenses. The cost of providing protection has in large part been assigned to all Americans through state and federal taxes.

An example of the ultimate consequence of shoreline stabilization and its failure as a management strategy is illustrated by the long walls of Sea Bright, N.J. In 1984 a northeaster struck the town and community officials claimed \$82 million in damages. Although relatively few buildings had been seriously damaged, the dollar figure equaled the approximate assessed value of all the buildings in town. Most of the damage was attributable to the sea wall. If the damage claims are accurate, economic sense will direct abandonment of the whole community in the next few decades! Not a popular statement but one that more and more communities may find themselves facing in the next few years.

The impetus for shoreline stabilization comes mainly from owners of beach-front buildings and from sympathy generated for the loss of private property. Beach-front property owners, however, are only a small fraction of those who use beaches. Taxpayers, increasingly aware of facts, have begun to resist paying for expensive stabilization. As taxpayers intensify their efforts to reduce the tax burden, their resistance will probably increase.

Shoreline erosion and the advancing ocean are not a problem for beaches - only buildings and the people who develop and own them. In this context the familiar cry to 'Save the beach,' is not only a misstatement, it is misleading and often dishonest. In reality it is a cry to save the private property and sacrifice the beach. If beaches are allowed to continue their slow retreat, unencumbered by stabilization, they will retain the natural form and width that have made them one of the public's most valued natural resources.

Several coastal states, including Florida, North Carolina, New York, Massachusetts, and Maine, have taken or are considering steps to halt the construction of hardened defenses. Other states will follow the lead of North Carolina, whose Coastal Resources Commission recently adopted a general prohibition against such structures. The North Carolina position is, in essence, a call to retreat. In some cases, buildings are already being moved and relocated out of the high-hazard zone.

Strategic retreat, whether on the beach or in war, has often been the key to ultimate self-preservation and victory. The greatest resistance comes from a misplaced sense of pride and from the very real possibility of short-term but large private-economic setbacks. In a country whose economy has been built on the private use of natural resources, the interests of private property owners are important and politically powerful. The wisdom of strategic retreat will not be accepted emotionally or legally unless the needs of property owners are adequately addressed.

We are fortunate to have a variety of legal and economic tools to create a strategy that is fair to property owners without destroying traditional public interests in coastal resources. Those tools range from simple restraint to foresight in planning for new development to measures that mitigate losses of existing property owners. The choice of tools must be made with a clear understanding of erosion rates, the functions of primary and secondary dunes, the dynamics and barrier islands, the role of plant communities and volumes of sand supply, and the economic value of development. Because each situation will require its own combination of tactics, we offer a variety of recommendations. Some will suit many beaches, others only a few.

However, the number of possible solutions should underline the many options available to solve our problems.

We believe that overwhelming evidence demands that all decisions begin with 2 important facts: 1. Struggles against shoreline problems, even many which seem small, short-lived or very local, are struggles against worldwide rising sea level that is expected to continue to rise for many generations. 2. Stabilizing the retreating shoreline to defend private property causes larger than natural changes in adjacent beaches or beaches up and down the coast, destroying many areas of great public interest.

Our response to those facts must be to adopt a policy of retreat from the hazard zones. Some cities have grown so large and so important to their regions that they cannot be dismantled or abandoned. However, even for those cities steps can be taken to retreat from immediate threats.

Wherever there is any doubt, decisions should begin from a foundation of sound oceanographic and geologic evidence. Offshore sand supplies, for instance should not be locked up to serve communities at the head of a supply area. The Easthampton, N.Y., beaches face erosion problems, but to lock up offshore sand supplies would be to use sand that would naturally move westward, helping maintain the rest of Long Island's ocean beaches.

The impact of beach stabilization in the natural system is typically negative. Since almost all communities must ultimately rely on achieving protection by integrating development and the natural system, stabilization must be severely restricted. That fact and the changing scenario created by rising sea level means we must also continually reevaluate the costs and benefits of existing structures. In some instances, legal or natural processes have forced the removal of buildings, including some larger buildings. We must be ready to remove, revamp, demolish or relocate some major structures when their existence becomes more burden than benefit to the natural environment or public.

How to put a policy of retreat in place will be answered differently by different communities. Some less developed areas can rely on performance standards, building codes, setbacks and land-use plans. More developed communities will have to address the problem of existing buildings and defensive structures. Communities where defensive structures have already destroyed the natural beaches will have to consider restoration measures. In all areas safety must be paired with conservation of the natural environment.

Since the general public interest is at stake, government must take the lead. In coastal high-hazard areas, we recommend that the following measures be considered. The problems are so diverse that their solutions will require many different actions by several levels of government and private sectors.

Federal government: 1. End all federal expenditures, direct or indirect, in support of private coastal development. Require private coastal development to pay its full cost. 2. Replace economic incentives for private development in high-risk areas with incentives to relocate and build in other areas. 3. Acquire undeveloped areas to preserve natural features or recreational beaches important to the public. 4. Discontinue government back insurance programs for new development and substantial rebuilding and require flood insurance for existing structures to be actuarially sound. Also condition the use of insurance receipts or disaster payments on rebuilding outside coastal hazard areas. 5. Permit the use of offshore sand supplies for beach nourishment only where the value and extent of development outweighs other values and where nourishment would not deprive other communities of natural sand supplies. 6. Encourage research in new technologies for managing beach areas, especially inlets and navigation

channels, without disturbing natural processes. 7. Provide special tax incentives and disincentives to limit development in the units of the Coastal Barriers Resources System and V Zones, including these:

- a. Remove the limits on deductions for gifts of land to government or conservation groups if the land is in a threatened area.
- b. Allow tax-deductible gifts with the right of the owner to use improvements until damaged by erosion or storms.
- c. Eliminate casualty-loss tax deductions for properties in high-risk zones purchased or built after adoption of a new policy.
- d. Eliminate Accelerated Cost Recovery System for property in high-risk zones.
- e. Treat gains on property in high-risk areas as ordinary income, rather than as capital gains.
- f. Put business and home-owners on an equal footing by disallowing as business expenses the costs of draining, filling, or building protective measures on properties in the high-risk zone.
- g. Repeal the deduction for interest paid on loans for properties in high-risk zones.
- h. Allow tax-exempt financing for the financing of public acquisition of properties in the hazard zones.
- i. Give preferential tax treatment to profits made on sales to public bodies or conservation groups.
8. Amend the Interstate Land Sales Act to require disclosure of the possible consequences of buying or building in hazard zones. 9. Stimulate full disclosure by removing the 'private offering' exemption in Section 4(2) of the Securities Act of 1933 for proposed private investment and development in units of the Coastal Barrier Resources System and in V Zones identified by the National Flood Insurance Program. 10. Establish a firm policy that all usable (compatible) sand material from navigation projects be placed on adjacent beaches.

State government: 1. End all state expenditures, direct or indirect, in support of private coastal development. Require private coastal development to pay its full cost. 2. Halt tax-free exempt financing of private development on ocean beaches. 3. Acquire undeveloped areas with natural features or recreational beaches important to the public. 4. End state funding for roads and other public works serving high-risk areas unless most of the benefits accrue to public coastal areas. 5. Halt stabilization, including sea walls, groins, jetties and other hardened construction, especially since such structures usually set off a chain of greater and greater defenses that typically lead to appeals for public subsidy, while destroying nature's system of beach maintenance. 6. Create a property transfer tax to fund acquisition of important coastal resources, public beaches and beach access, as already in Florida and Massachusetts. 7. Create a tax check-off system or provide for ear-marking tax refunds for public purchase of property in the high-risk zones. 8. Allow special favorable tax assessments for land in high-risk zones whose owners donate conservation easements or adopt uses compatible with preserving the natural beaches (e.g., fishing camps, some recreational uses, parks, etc.) 9. Establish building set-backs that protect natural beaches and primary dunes and that prohibit permanent structures in threatened areas. Where seasonal changes in beaches create new beach areas, prohibit building on newly accreted land. 10. Require developers and real-estate agencies marketing property to disclose in writing the risks of being in high-hazard areas, including the costs associated with such risks during the expected life of the building. 11. Require when recording each change of ownership or new financing that a current plat be filed showing the lot lines, locations of buildings and the shoreline location. Deed descriptions might note specific risks of hazard zones. 12. Require a successful applicant for a permit to rebuild in a hazard area to waive the right to petition government for public aid when future damage

occurs. 13. Educate the public about the nature of open ocean beaches, public and private property interests and the economic consequences of beach-management options and about how hardened defenses of private property burdens the taxpayer and denies citizens access to and use of their public beaches. 14. Enact enabling legislation, if necessary, to allow local government to create transferable development-rights programs.

Local government: Land-use planning should guide a variety of specific measures. Local land-use plans should identify areas threatened by coastal erosion and flooding. Many coastal management acts already identify those areas. Land-use plans and development regulations ought to prohibit unmovable buildings whose life spans will at any time place them in the path of the retreating shoreline. 1. Adopt zoning and land use controls that encourage development in safe areas by providing property owners who have to move back from the shore with development incentives elsewhere - e.g., cluster development, transferable development rights, extra building height, or total area. 2. Assign a non-conforming status to high-risk uses of land just as zoning codes consider certain uses non-conforming. Regulations could prohibit non-conforming uses from being rebuilt after a certain level of damage has been sustained. 3. Require new subdivisions to set aside lands in safe areas for those who must retreat from the shore. Where shore-line retreat is likely to threaten buildings, lots could be required to have space for at least one back step large enough to safeguard the relocated building from rising sea level for at least the term of its projected life or require developers to set aside areas of land for future relocation. 4. Remove or require demolition of structures that become a threat to public safety, including sea walls and other structures in the surf zone and high risk buildings. 5. Remove hard stabilization structures that no longer serve their purpose and cause adverse effects to nearby shoreline. 6. Establish a fund to buy up property that should not be built on. Such a fund would allow government to move quickly to buy storm-damaged property when owners are most likely to sell at the lowest prices. 7. Establish a system of Transferable Development Rights in which presently developed or undeveloped ocean-front property is endowed with separable development rights that can be used or sold further inland if the ocean-front areas cannot be rebuilt or developed. If a government were to prohibit building or severely limit the density allowed on a given property, it could provide economic relief to the owner by assigning transferable and thus salable development rights. 8. Develop zoning provisions that have special standards for areas of unstable beaches, including a 'floating zone' in which zoning designation and standards move with natural features such as mean high water, dune, or vegetation line. 9. Levy special impact assessments on risky development to provide a reserve fund for buying out damaged properties. 10. Using what is known of long-term erosion rates, set time limits on residential use of certain beach fronts, enabling owners to plan a realistic depreciation and income projection into their financial plans. 11. Establish building setbacks that protect natural beaches and primary dunes and that prohibit permanent structures in threatened areas. Where season changes in beaches create new beach areas, prohibit building on newly accreted land.

All levels of government: 1. Tailor infrastructure planning to discourage high-risk development. One of the strongest motivations to development is the extension of public works - water, sewers, and roads. Federal and state funding should not be available for infrastructure in areas threatened by erosion except to service recreation use of beaches. Local planning for infrastructure should direct it toward safe areas. 2. Adopt user fees to assess

the users of public investment for cost of goods and services, in keeping with the tradition of individual responsibility. Part of such a policy would be to adjust insurance rates to reflect the cost of insuring ocean-front property, price utility service to reflect the great cost of installation and maintenance. Adopt a policy for triggered removal judged by measurement of sea-level and long term shoreline retreat. Rather than wait for disaster to strike with all expenses and angers, regulations might establish a 'trigger' mark after which threatened structure would have to be removed within a specified time. Coordinate protection and regulation. Where beach nourishment or other stabilization projects help a community protect property or preserve a public beach, permission or funding (or both) for the protective measure could be coupled with restrictions on further development. 5. Let buildings fall in. In many cases that will be the only feasible response to shoreline retreat and accompanying natural disasters.

Private sector: 1. Develop innovative technologies to adapt to changing public policy, with emphasis on new modes of sand bypass, maintenance, and residential construction. 2. Real-estate organizations such as the National Association of Realtors and the National Association of Home Builders should educate their members about the need for new policies and about development patterns that can minimize the effects of new regulations. 3. Professional appraisers and economists should develop standards for assessing the effects of new policies on property values.

Our creativity can serve us as well constructively in these new directions as it tried to do in building defensive structures. We already have the technical, legal, scientific, and economic tools to help property owners, to protect local treasuries, and to assure the public that its valuable beaches will be preserved and available.

Most of these tools have been available for many years. Our faith in builders and inventors and our preference for winning a battle once begun have made us ignore these less spectacular and tangible tactics. Repeated and costly defeats on the ocean beaches, however, should convince all but the most reckless that the time is overdue to build a new understanding. Only a foolhardy strategist eliminates retreat as an option and it is even more foolhardy not to learn how to turn retreat into victory.

Adapted from a position paper that is the result of the Second Skidaway Institute of Oceanography Conference on America's Eroding Shoreline. The conference was convened by James D. Howard of Skidaway Institute of Oceanography, Savannah, Georgia; Wallace Kaufman of Pittsboro, N.C.; and Orrin H. Pilkey of Duke University, Durham, N.C. Other participants: Sarah Chasis, Natural Resources Defense Council, New York; Robert G. Dean, University of Florida, Gainesville; Paul S. Denison, Henry von Oesen & Associates, Wilmington, N.C.; David R. Godschalk, University of North Carolina, Chapel Hill; Peter H.F. Graber, Greenbrae, Calif.; H. Crane Miller, Washington, D.C.; Robert A. Morton, Texas Bureau of Economic Geology, Austin; Sharon Newsome, National Wildlife Federation, Washington, D.C.; James Nicholas, Florida Atlantic University, Boca Raton; Walter D. Pilkey, University of Virginia, Charlottesville.