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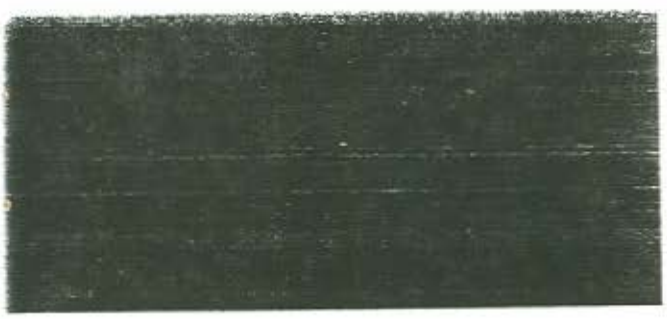
# A CITIZEN'S GUIDE TO COASTAL WATER RESOURCE MANAGEMENT



# A Citizen's Guide To Coastal Water Resource Management

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# ACKNOWLEDGEMENTS

*A Citizen's Guide to Coastal Management* is the product of five years of experience by the North Carolina Coastal Federation. It was written by staff members Jim Kennedy and Todd Miller. Contributing to the book were Lundie Spence, Walter Clark and Kathy Hart of the University of North Carolina Sea Grant College Program. They helped in developing the book's content and served as editors.

This book will serve as resource material for a series of workshops on estuarine management to be held during the spring and summer of 1988. Those workshops will be sponsored by the Coastal Federation, Sea Grant and the N.C. Department of Public Education.

The book and workshops are financed by the U.S. Environmental Protection Agency's National Estuary Program as part of the Albemarle-Pamlico Estuarine Study. The National Estuary Program is a federal and state program designed to improve the management of our coastal estuaries. Doug Rader, project coordinator for the APES study, and Ted Bisterfeld of EPA assisted in the review and production of the guidebook.

Active citizen involvement in managing our coast is a priority for APES. To that end, the study provided generous financial support for this guidebook and the workshops.

The content of this publication reflects the views and perspectives of the Coastal Federation. The federation is a nonprofit corporation that has worked since 1982 to involve citizens in efforts to conserve North Carolina's coastal resources. The federation coordinates activities of citizens interested in the wise management of the coast; keeps citizens informed about coastal issues; and helps the public participate in government programs through workshops, action alerts, direct counseling and legal representation.

The UNC Sea Grant College Program is a state and federal program that promotes the wise use and development of the nation's coasts and oceans through research, extension and education. Sea Grant publishes the award-winning newsletter, *Coastwatch*, which focuses on coastal North Carolina. The program also publishes educational materials and scientific reports that

help people understand and better utilize coastal and marine resources.

This guidebook has been reviewed by EPA and various state agencies and approved for publication. Approval does not signify that the contents reflect the views and policies of EPA or the state of North Carolina.

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CHAPTER ONE

# INTRODUCTION

There was a time when Lena Ritter couldn't name the Onslow County commissioners. She didn't attend public meetings, and she wouldn't have dreamed of making a speech. Like the seven generations before her, Ritter was a fisherman. She knew the water and how to make a living from it.

But in December 1982, a newspaper article transformed Ritter from a fisherman to a civic activist. The article revealed the development plans for Permuda Island—383 condos, four tennis courts, two swimming pools and a marina.

All of this was planned for a mile-long strip of land nestled in Stump Sound between Topsail Island and mainland Onslow County.

To Ritter, the development spelled trouble for the waters she and other local fishermen plied for their baskets of clams and oysters. She believed the rainwater and silt running off the development's roofs, roads and parking lots would pollute the waters and the shellfish beds.

For Ritter, the proposed development jeopardized her livelihood and her heritage.

To voice her opposition, Ritter got a quick lesson in civic participation. She learned how to become involved in local and state government.

It's a lesson everyone should learn because the resources that make our coast special—the bays, sounds, marshes and beaches—belong to everyone. They're public trust resources.

That's why it is important for the fisherman, the boater and the developer to have a voice in how these resources are managed. But to have that voice, people must make the effort to become involved in coastal management. They must attend public hearings, write letters to state agencies and call public officials.

And to talk knowingly about the laws and regulations that govern our coastline, citizens should develop a fundamental understanding of how coastal management works.

This guidebook is designed to help citizens develop that understanding. It is based on the experiences of groups and individuals who have learned how to contribute to and improve our coastal management process.

Now more than ever, it is important for citizens to become involved. More people are using the state's coastal waters and living along its shores. This puts more pressure on the natural resources and creates more conflicts between the people using the resources.

But no one is entitled to use those resources to the exclusion of others. The commercial fisherman, swimmer, weekend angler, property owner and developer all have rights that must be respected.

To balance all the uses and users, government has laws, regulations and state commissions. And the legislators who drafted the laws and established the commissions included provisions for you and me to participate. These legislators understood that our involvement was vital if these laws were to work as intended.

They had several reasons for involving the public: to ensure that coastal managers had access to all relevant information, to encourage citizens to look over the shoulders of the agencies implementing the laws, to make better laws and to encourage citizens to halt violations of the laws.

Although these avenues for public participation are established, few people actually know how to use them. For instance, most folks don't realize that they can actually propose a regulation to the state. Or they don't know how to appeal a permit that allows some aspect of development.

Lena Ritter knew nothing about these participatory processes. But she learned.

And what she learned helped her and other shellfishermen voice their opposition and eventually halt the proposed Permuda development. Her success was a victory for shellfishermen and a lesson in citizen participation.

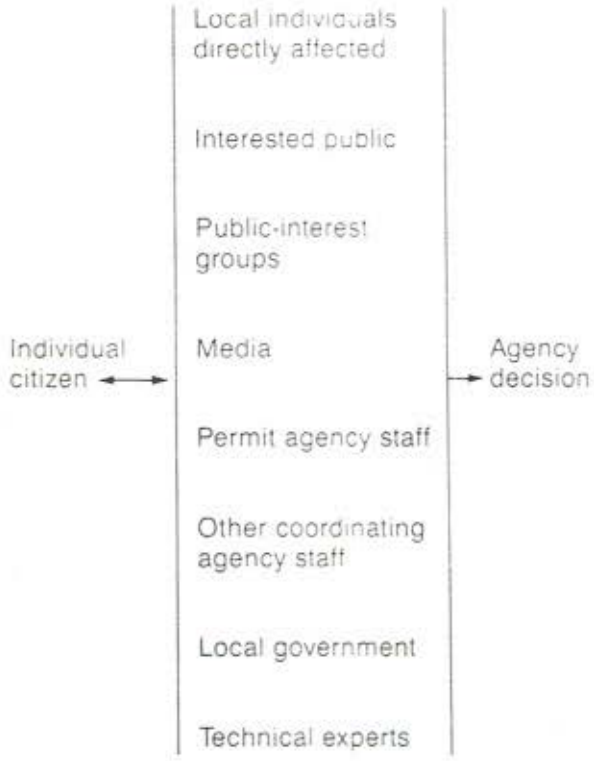
But she says that understanding how to become involved and how to make a difference in managing our coastal resources is not easy. It takes hard work and determination.

A complex combination of federal and state laws form the basis of the state's coastal management program. The most notable of these laws are the federal Clean Water Act first enacted in 1972, the N.C. Coastal Area Management Act of 1974 and the N.C. Sedimentation and Pollution Control Act of 1973.

Four chapters in this guide explain the basic provisions of these laws. The final two chapters describe other regulatory and nonregulatory programs that apply in the coastal area. And to begin the guide, we summarize the general concepts of regulatory programs and the basic principles of public participation.

We hope this guide helps you become involved. After all, public involvement ensures that decisions affecting public resources—the beaches, the sounds, the marshes—are made on behalf of all the citizens of North Carolina.

Interaction among citizens, agencies and media to develop public opinion that affects agency decisions.






*CHAPTER TWO*

# TAKING THE INITIATIVE

When Lena Ritter began her challenge of Permuda Island's proposed development, she decided to write a letter to her local newspaper to air her concerns. But she soon discovered that wasn't enough. She had to find other ways to affect development decisions.

During the next five years, Ritter and her fellow fishermen used every opportunity in every law available to them to let local, state and federal agencies know about their concerns. They found that many of the same opportunities for public involvement were available no matter what level of government or what agency was involved.

This chapter outlines the basic principles of regulatory programs and explains how to become effectively involved in managing coastal resources. These principles apply to specific regulatory programs described in later chapters.

## The Regulatory Process

Regulatory programs that protect the environment begin when the U.S. Congress or N.C. General Assembly pass laws that establish the goals and mechanisms for resource conservation and management. The laws are usually implemented by government agencies that develop and adopt regulations with specific requirements for meeting the goals set in the law.

In developing rules, agencies must interpret the laws enacted by the legislature. Often the laws are broad and interpretation is not easy. And try as they might, agencies can't develop rules that list every situation, particularly as people explore new methods of complying with regulations. Consequently, agencies must make decisions for situations not specifically described in laws and regulations. Strong public advocacy can be important in swaying these precedent-setting decisions.

If you believe an agency or commission has misinterpreted the law, you may file a lawsuit. Then the courts will decide the interpretation. Congress or the general assembly can change the laws if they find that agencies and the courts are misinterpreting them.

## Commissions and Staffs

The state environmental agencies usually have a commission and a staff. For example, the Division of Environmental Management's staff for the Environmental Management Commission, the Division of Coastal Management is staff for the Coastal Resources Commission, and the Division of Land Resources is staff for the Sedimentation Control Commission and the Mining Commission. The commissions have the authority to adopt regulations; the staffs do day-to-day work such as issuing permits in accordance with the regulations. Several divisions or staffs are combined into one department of state government. Most environmental programs discussed in this booklet are in the N.C. Department of Natural Resources and Community Development.

The interaction between agencies with different authorities, priorities and training is often a critical aspect of effective environmental management.

## Rule-Making Process

Public participation in the adoption of regulations can be an important means of protecting the environment. The agency develops proposed regulations. These are presented to the public for comments in a rule-making public hearing. Written comments can also be submitted.

A public notice of the hearing and the text of the proposed regulation are published in the North Carolina Register for state agencies and in the Federal Register for federal agencies. These documents are available at most public libraries. Notices are sometimes published as legal ads in newspapers or mailed to persons who have requested to be notified of regulation changes for a particular agency. The notice tells how to get more information on the proposals.

A hearing officer from the commission or staff presides over the public hearing. The hearing officer works with the staff to review the public comments and to make a recommendation to the full commission. The full commission makes the final decision.



## Petition for Rule-Making

In North Carolina, anyone can request that a state agency adopt or change a regulation. The request is called a petition for rule-making. The agency must respond to the petition within 120 days or at the next regularly scheduled meeting. The requested rule may pertain to any aspect of the regulatory program. It may be helpful to have an attorney prepare this request.

The agency has three choices in responding to the request. It may initiate rule-making, deny the request or defer the request to a later date if the person making the request agrees to the delay. Agencies often need more time to review an issue and agree on proposed regulations. Therefore, they establish a committee to work with the people who request a new regulation. The committee discusses the problem and agrees upon a proposed rule. The people who submit the petition are usually part of the committee and agree to the delay.

## Permits

When someone wants to undertake a development activity that affects an environmentally sensitive area, they may be required to obtain a permit. The permit indicates that the agency has found the activity environmentally sound. An application describing the proposed project is submitted to the agency, which may approve the plan, deny it or approve it with additional conditions. The certificate of approval may be called a permit or an approved plan. Table 1 shows agencies with permit authority for coastal environmental programs.

## General Permits

A general permit is a means of quickly approving projects that meet previously determined criteria. The general permit is initially issued under the same process as an individual permit. However, once a general permit is issued, all projects that meet its criteria are automatically approved. General permits are often adopted as regulations.

General permits are applied to projects that are frequently undertaken, pose minimal threats to the environment and are easily accomplished in compliance with the regulations. Some general permits do not require that the regulatory agencies be notified of a project's construction. There is never a lengthy application review process or public notice required for projects that are covered by general permits.

## Permit Decision

Agencies review applications and approve projects if they find the plans comply with the laws and regulations.

Public review and comment on issuance of individual permits varies with different agencies and types of permits. Table 1 summarizes public participation for the various environmental permits. Some permits require public notice of an application and a hearing if there is significant public interest. Permits for discharging pollution into surface waters are examples. However, CAMA permits require public notice and an opportunity for written comments but no public hearing. Conversely, no public notice or written comment is provided for septic tank permits and erosion control plans.

If you believe a permit was issued that does not comply with the regulations and laws, it can be challenged by filing an appeal. The appeal may be either to the commission responsible for the regulations or to a court of law, depending on the type of permit and circumstances of the case. In either situation, an attorney and expert witnesses are usually needed. A courtroom process ensues where witnesses are called and cross examination occurs. Although this process is sometimes called a public hearing, it is a really a contested case hearing. And it's different from the less formal town-meeting hearings discussed earlier.

## Variances

Some environmental laws allow exceptions (variances) from the regulations on a case basis if the regulations cause extreme hardship in a



# Table 1

## Environmental Permits and Public Participation

| Activity | Permit Agency | Notice & Written Comments | Possible Public Hearing |
|---|---|---|---|
| Construction in a CAMA area of environmental concern | DCM | Yes | No |
| Put dredge-or-fill material into wetlands or public waters | Army Corps | Yes | Yes |
| 401 certification that dredge or fill will not violate water standards | DEM | Yes | Yes |
| Land disturbance needing erosion controls | DLR | No | No |
| Wastewater discharge to surface waters | DEM | Yes | Yes |
| Septic tank or other wastewater discharge into soil | DEM or DHS | Possibly (1) | Possibly (1) |
| Construct sewer line | DEM | Possibly (1) | Possibly (1) |
| Mining | DLR | Adjacent owners | Yes |
| Storage, collection or processing hazardous waste | DHS | Yes | Yes |
| Establish solid waste disposal site | DHS | No (2) | No |
| Construct dam greater than 15 feet high | DLR | No | No |
| Construct well greater than 100,000 gallons per day | DEM | No | No |
| Build and operate air pollution source | DEM | Some cases | Some cases |
| Open burning—eg. land clearing or maintenance | DEM | No | No |

DEM = Division of Environmental Management
DCM = Division of Coastal Management
DLR = Division of Land Resources
DHS = Division of Health Services
Army Corp = U.S. Army Corps of Engineers

(1) North Carolina law was amended in 1987 to give DEM discretion to obtain public comments on these permits and any other issue that must be decided by the division. However, the public comments are optional, not mandatory. As of February 1988, no regulations or policies for public comments on these wastewater or sewer line permits have been developed.

(2) The county commission, town council or other local government with jurisdiction over the site must approve the proposed solid waste disposal operation by resolution.

particular situation and the project has minimal environmental impact. Variances are only obtained after a special hearing process.

## Enforcement

Agencies have authority to punish violators of laws and regulations with civil penalties, or fines. However, if the agency can prove the violation was willful or knowingly committed, criminal penalties, fines or imprisonment may occur. Criminal sanctions are rarely used because the agency must prove "beyond a reasonable doubt" that the offender violated the law willfully. For civil penalties, the agency must only prove "by the greater weight of the evidence" that a violation occurred. Most environmental laws fine each day of noncompliance a new violation. Therefore, penalties can rapidly accumulate.

Agencies also have authority to issue or obtain legal injunctions to stop violations and/or restore damage caused by violations. These orders can be enforced through the courts. To correct the problem, the agency and violator may enter into a special order by consent. This is a legal agreement, and a time table is established to correct the problem.

All three enforcement actions (civil penalties, criminal penalties and legal orders) can take months or years to complete. A few offenders have decided that it is cheaper to violate environmental regulations and pay penalties than comply with the law. Large fines and strict enforcement of the laws are needed to make such tactics uneconomical.

Unfortunately, many agencies do not have adequate enforcement staff to perform frequent investigations and to follow up on violations. But observant citizens can play an important role in helping the agencies enforce the laws.

## Local Government Authorities

Counties and towns may have zoning or subdivision requirements that affect the environment and natural resources. These requirements are implemented using building or subdivision permits and are based on ordinances adopted by local governments. To establish these ordinances, the localities use a process of public notice and hearing.

Local governments also adopt land-use plans to guide development. These plans can influence the protection of natural resources and are an important means of public involvement. They are discussed in the CAMA section.

Although this guidebook focuses on how citizens can work with state and federal agencies, many of the principles also apply to working with local governments.

# Citizen Involvement in the Regulatory Process

Awareness, action and persistence are key elements to influencing rule-making and permit decisions. Citizens can use the following hints to effectively communicate their concerns to environmental agencies.

## Stay Informed

The most difficult aspect of public participation is staying informed about issues that concern you. Whether you are interested in just one issue or a broad range of issues, it is important to stay abreast the latest developments. There are a variety of ways to stay informed.

One of the best sources of information is the press. In addition to news stories, many environmental regulations require written public notice of permit applications. These are printed in the legal sections of newspapers near the classified ads. Reading the legal ads may not be exciting, but it is necessary to stay up-to-date on permit applications and rule changes. But be aware that project changes that occur after the public notice is published are often not readvertised.

Some agencies send out notices of meetings and permit actions or newsletters about their activities. Appendix 1 provides mailing lists for

citizens interested in the regulatory process. These include publications such as the N.C. Environmental Bulletin, which lists environmental impact statements and assessments under review by state agencies. Many publications and notices are free, but others, such as the North Carolina Register, require a substantial subscription fee. For publications that carry a fee, pool financial resources with other citizens who have similar concerns.

## Frequent Contacts with Staffs

Another important source of information is agency staff members. Do not hesitate to ask them for information or let them know your concerns.

Agency staff have routine contact with permit applicants and become familiar with the applicants' perspectives. To balance the staff's view, citizens affected by permit decisions should initiate frequent contact with the staff.

Phone conversations and visits to the agency office can be a learning experience for the agency and the concerned citizen. Public hearings and written comments do not allow for an exchange between agency personnel and concerned citizens. Informally providing information to the staff prior to the public comment process can be very effective. The earlier agencies receive information, the more easily they can use it.

Informal discussions with all levels of agency personnel are valuable. The technical staff often have important information to share. Or they may use your information to make recommendations to their supervisors on proposed rules or permit decisions. Also, talk with decision-making managers to make them aware of your concerns.

If phone bills are a problem and a lengthy long distance conversation with an agency person is required, you may request that your call be returned. And do not hesitate to leave your name and number with a request that your call be returned if the person you need to talk to is not available.



## Understand Rules

Obtain copies of and talk to different people about the meaning of agency rules. Pose the same questions to different staff members. They may have different interpretations of the rules or may be able to explain them better.

Making staff members aware of your interpretation of regulations can be an important part of public participation. Your viewpoint can help agencies interpret and apply regulations. The agencies will better understand the public's perspective, and you can counterbalance the views of permit applicants.

To support your interpretation of a regulation, determine when the rule was adopted and look for information in the rule-making proceedings. The preamble to the regulation in the Federal Register often explains its meaning. Likewise, the transcript for the public hearing or minutes of the commission meeting are sometimes kept at the agency. These transcripts can clarify the original intent of the rules.

## Talk with Everybody

Call or meet with anybody who could have influence over an issue that concerns you. This includes local administrators, state officials, legislators, citizen groups and the media. Get people aware of and talking about your concerns and ideas.

## Public Hearings

Public hearings are one of the best and most efficient methods of letting regulatory agencies and potential supporters know your concerns. It takes support, knowledge, courage and aggressiveness to effectively use the public hearing process.

Do your homework before the hearing. Find out everything you can about the topic of the hearing and how the meeting will be run. Inform fellow proponents of the hearing date early to eliminate time conflicts.

You may need to coach some fellow supporters about how to present their concerns. People are often hesitant to speak at hearings. They're concerned about their speaking ability, their lack of scientific knowledge and the possibility their comments will not be taken seriously. But citizens should put their fears aside and let agencies know how they feel about environmental issues. Besides, in many decisions, the decisive arguments are based on common sense or personal experience.

At most public hearings, people sign up at the door to speak. They speak in the order of arrival. Arrive early so you can speak at the beginning of the meeting. Then, the hearing officer is just forming opinions. Also have some proponents speak near the conclusion to counter points raised during the hearing.

Reporters sometimes have difficultly understanding the points being addressed at a hearing if they have no prior knowledge of the issue. To ensure balanced media coverage, help reporters understand the issues prior to the hearing. It may be beneficial to hold a press conference before the hearing at the same location. Give reporters information about the issues so they will be prepared to interpret what they hear. The press conference may also assure television coverage. Otherwise, your views may be overlooked as the television reporter meets the deadline for the late night news.

## Written Comments

Written comments can be submitted if you cannot attend a public hearing or to clarify or expand oral comments. Speakers are often limited to three to five minutes at public hearings; there is no limit to written comments. Consequently, the oral presentation may be a summary of lengthy written comments.

Written comments are the only form of comment allowed for some permits. Other agency approvals do not require public comments. But don't let that stop you. Send a letter pointing out factors to consider when reviewing the project.



## Content of Oral or Written Comments

Let the agency know what you think and why you think it. Personal observations or experiences are particularly valuable.

If possible, scientific or technical experts should review and comment on proposed regulations or permits. Agency technical staffs often do not have time to study all aspects of a proposed regulation or project. They may overlook important factors. Outside review by technical experts can bring out problems. Before asking an expert to testify, consider their qualifications. Evaluate their area of expertise, reputation, personality, political influence and ability to present their knowledge. An arrogant expert may be worse than no expert. If you do not know an expert, environmental organizations or citizen groups may have suggestions.

For the most effective strategy, combine strong public support from citizens with technical comments from experts. To demonstrate public support, solicit elected officials and many concerned citizens to testify. In some cases, it is also valuable for an attorney to present legal issues.

If you want to object to a permit for a proposed project, show that the project would violate specific laws or regulations. This guidebook summarizes some basic regulations and requirements. But regulations change frequently. Recent copies of the applicable regulations can be obtained from the agency issuing the permit. Talk to people who have had experience with the regulations to learn about its requirements.

## The Press

Public exposure increases public support and is a powerful tool available to citizens. Communicate freely what you are doing and withhold nothing about your activities.

When talking to the press, make your strongest point first. Add qualifications later. Accurate, concise statements are most effective. Don't swamp a reporter with details. For organizations, determine which member communicates best with

reporters. Don't hesitate to let that person be your media spokesman. Technical experts are frequently not good spokesmen.

It is your responsibility to make sure that reporters understand the context of any statements you make. Providing background information on an issue will mean a better, more accurate news story. To help reporters, find copies of other news stories that accurately explain the issues.

North Carolina has many media outlets—newspapers, magazines, television and radio. Effective media coverage means finding out who the reporter is that covers your community for each type of media. For example, television stations often require reporters to produce one or two news stories every day for the county they cover. Statewide newspapers have reporters that specialize in environmental issues. Local papers assign one or two reporters to cover all newsworthy events. Find out who you must contact. Soon you will develop a working list of press contacts interested in your issues.

A reporter cannot be your ally. They have a professional duty to present both sides of every issue. If you want your views to be compelling to the public, you must present a strong case to the reporter. Remember that any statements you make are likely to be countered by your opponents. Consequently, identify the weaknesses of arguments that will be used against you.

Reporters love to get a good news tip, especially an exclusive. It makes their job easier. And it's a good way for you to reward a reporter who does a good job. But before you dial that reporter's telephone number, remember that a good news tip has immediacy and is important. If the story is just interesting and has no time frame, send the reporter a letter.

Letters to the editor are also effective in bringing information and opinions to the attention of the public and newspaper editors. The letters are one of the most widely read sections of the newspaper. They can be submitted to support or oppose articles in the paper or to bring up new issues. Be sure to provide your name, address and phone number on the letter.



## Enforcement

Informing agencies about violations of environmental regulations is an important citizen contribution. Limited agency budgets and staff mean that enforcement of regulatory programs often hinges on citizen complaints. You can organize watchdog efforts to monitor compliance of environmental laws.

Call the agency immediately if you observe a project that violates regulations. The list of agency offices and phone numbers is given in Appendix 4. Before you report the suspected violation, determine the extent of the work and the type of land where it is occurring. When you make your call, obtain the following information:

- the name of the staff person that reviews projects in the county of the observed violation. Request to speak to that person. If he is not in, speak to his supervisor. If the supervisor is not available, ask to speak to the manager above him.

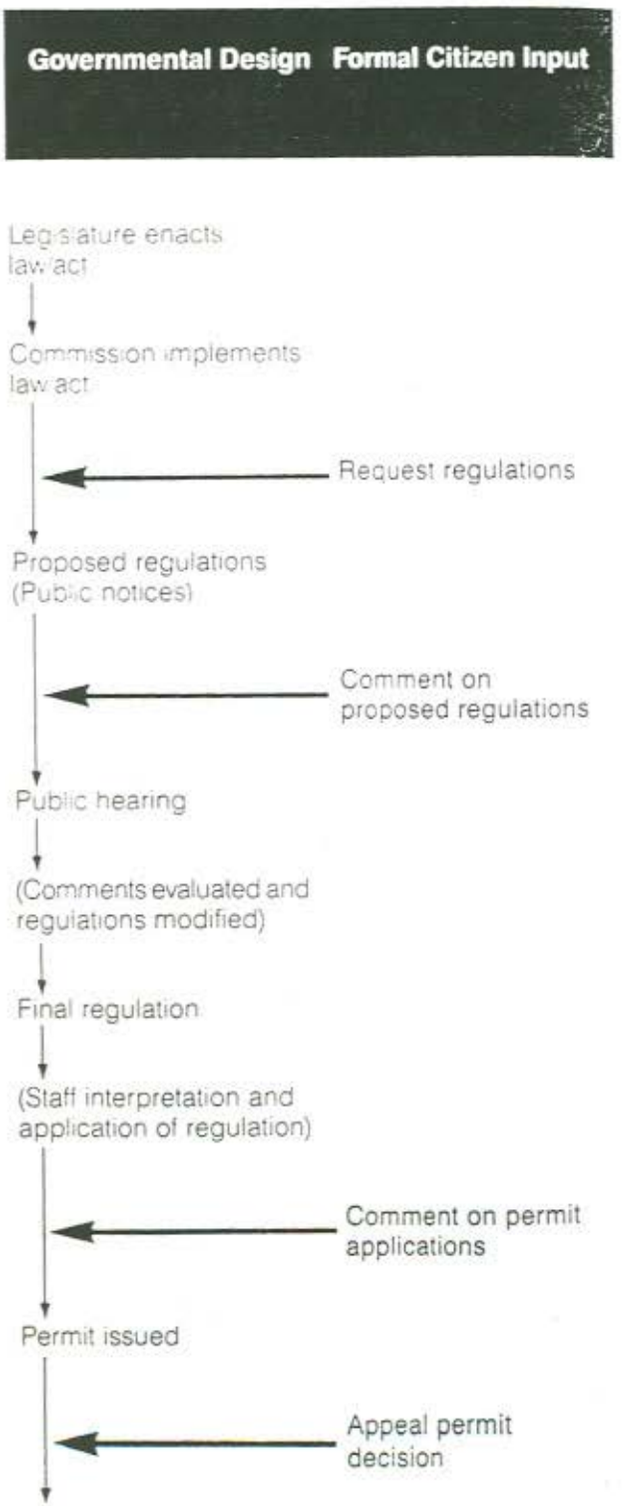
- the status of a project. Determine if the project has been reviewed by the agency and has a permit. Find out exactly what was approved if a permit was issued. You may want a copy of the permit.

- the results of any investigation conducted by the agency as a response to your call.

Follow up any telephone call reporting a violation with a letter. Copies of all correspondence should be sent to other coastal regulatory agencies (listed in Appendixes 2 and 4). They may also want to investigate the case.

In some cases, the agency will respond swiftly to violation reports. Other times, persistent efforts may be necessary. Several phone calls to different people may be needed. The staff person who makes inspections may be busy with work ordered by his supervisor. Contact the supervisor to adjust priorities. To make headway, you may need to talk with several levels of supervisors.

## General Regulatory Process






*CHAPTER THREE*

# WATER QUALITY STANDARDS

A part-time oysterman became a plaintiff in a lawsuit. He contested the issuance of a permit to allow construction of a marina in an area he used for oystering. He argued that the law does not allow projects that will pollute waters used for shellfishing. He won the support of EPA.

Shellfish contamination is a common complaint about coastal development in North Carolina. The federal Clean Water Act has provisions that address this and other water quality issues. Protecting existing uses of public waters is one of the powerful provisions of the Clean Water Act. It was enacted by Congress in 1972 to establish uniform national standards to restore and maintain the chemical, physical and biological integrity of our nation's waters.

## Key Provisions

Congress recognized that we must stop polluting our water if we are to prevent degradation of its uses. Even the loss of potential economic profits from development does not outweigh the public's right to use the water.

### Existing Uses

To limit pollution, the Clean Water Act requires that existing uses of the waters be maintained. In other words, waters may not be polluted to the point that they no longer support uses such as swimming, shellfishing and fish propagation. A use is existing if it has been available since November 1975 when the regulation was adopted by EPA. Pollution disposal is not a protected use for waters.

### Water Quality Classifications

The water quality classification of a water body specifies the uses to be protected. Saltwater classifications for North Carolina's coastal areas are SA, SB and SC. Freshwater classifications (B, C and WS) apply to inland waters. For example, the SA classification is for shellfishing waters. SB and B classifications are for swimming waters.

Each classification also specifies the maximum concentrations of various pollutants that will be allowed without damaging the specified uses. Every creek, river, stream, estuary, section of ocean or other segment of water in the state has been assigned a water quality classification and corresponding standards.

The anticegradation regulation requires that existing uses be protected even if the uses or threatening pollutants are not specifically mentioned in the classification and standards. For example, scallops grow in submerged grass beds that are not specifically mentioned in any of the classifications. However, pollution that would kill the grass beds and eliminate scallops violates the antidegradation requirement by eliminating the water's use for scalloping.

A water quality classification cannot be downgraded if the change would eliminate an existing use. And they cannot be downgraded if the existing use can be attained with reasonable cost. Only after a use attainability study has shown that pollution is irretrievable or the area is not suitable for the classified use can a water classification be downgraded.

***Class SA waters.*** Waters classified SA are protected for shellfishing and have stringent bacteriological standards. Disease-causing bacteria and viruses are concentrated in clams and oysters as they filter food from the water. Since shellfish can be eaten raw, the water must be free of disease-carrying pollutants.

Sewage discharges into SA waters are prohibited to protect public health. Also, fecal coliform bacteria, an indicator of harmful bacteria and viruses, must be low for SA waters (median of 14 MPN per 100 milliliters with no more than 10 percent of the samples above 43). Stormwater runoff and drainage from urbanized areas can contain high levels of fecal coliform bacteria. Special requirements for controlling runoff from new development into shellfishing waters are necessary to meet this standard.

Waters that exceed the fecal coliform standard or have a known threat of pollution are closed to shellfishing by the state. To protect existing shellfishing waters, sources of pollution that cause closure of waters must not be allowed.

***Class SB Waters.*** The saltwater classification SB designates waters used for swimming, skiing and fish propagation. To propagate fish, the water quality must support habitat for reproduction of pollution-sensitive native species.

An SB classification requires that waste treatment plants have backup equipment to ensure that no untreated sewage flows into the waters. The backup provisions must include standby power and two parallel treatment units. The fecal coliform standard is less stringent for SB waters than for SA.

***Class SC Water.*** The saltwater classification SC designates waters used for fish propagation and incidental swimming. The waters are safe for swimming but have a higher risk of pollution and human illness than SB waters. Treated sewage may be discharged into SC waters if it will not affect SA waters.

***Freshwater Classifications.*** In addition to the saltwater classifications, several classifications apply to fresh water. The B and C classifications are the freshwater counterparts to the SB and SC classifications. The WS-I, WS-II and WS-III classifications designate drinking water and differ as to the amount of protection and treatment needed for the water.

***Outstanding Resource Waters.*** The ORW designation may be applied in addition to the basic classification and provides additional protection for exceptional waters. The ORW classification is meant to protect waters without significant pollution sources and is not intended to clean up pollution problems. The specific standards for ORW classification are developed on a case basis for each water body given the designation. The ORW classification has been adopted in North Carolina to implement federal requirements that some exceptionally valuable waters be protected even if limited pollution would not violate the water quality standards.

***Nutrient Sensitive Waters.*** The NSW designation may be applied in addition to the basic classification and provides limits for nutrient

discharge. The specific limits are determined for each body of water.

## Water Quality Classification Regulations

The Environmental Management Commission determines water quality classifications and standards. The classifications and standards are regulations and must have a public hearing to be changed. The state system for adopting and maintaining classifications and standards must comply with federal regulations. Every change in classification or standards for North Carolina must be approved by EPA.

In addition, EMC has authority to fine anyone who violates water quality standards even if the activity causing the pollution does not require a permit. However, this authority has rarely, if ever, been used when a permit was not involved.

The staff of the Division of Environmental Management issues permits, sets fines and provides enforcement.

Permits issued by Environmental Management and other state agencies must comply with water quality standards, including the antidegradation regulation. This requirement applies to permits for wastewater treatment plants, for discharge of dredge-and-fill material and for development permits from the Division of Coastal Management.

## Hints on Public Participation

The Clean Water Act contains one of the strongest requirements for public participation in the federal statute book. According to Section 101(e):

> "Public participation in the development, revision and enforcement of any regulation, standard, effluent limitation, plan or program established by the administrator [of EPA] or any state under this act shall be provided for, encouraged and assisted by the administrator and the states. The administrator, in cooperation with the states, shall develop and publish regulations specifying minimum guidelines for public participation in such processes."

The public can participate in rule-making proceedings and permit reviews conducted to enforce water quality standards.

## Information on Classifications

Environmental Management can tell you what the classification and standards are for a particular area of water. The regional office nearest the site is the best source for this information. But the Raleigh office can also provide the information. The phone numbers and addresses for these offices are given in Appendix 4.

## Classification Requests

Any citizen can request that a water classifiction be changed. For example, you can ask for additional protection for exceptional waters used for shellfishing, fishing, fish propagation or swimming under the ORW classification. Or, SC waters may be changed to SB if they are used or will be used more often for swimming. The reclassification request, or rule-making petition, should state what the uses of the water are and where the boundaries of the classification should be. For ORW, suggest what additional pollution control measures are needed. In addition, unique site-specific standards can be requested for any water body, whatever the classification.

If the commission agrees that the waters are a suitable candidate for reclassification, a public hearing will be held. Strong public support for the reclassification can be important if there is opposition.

## Triennial Review

The Clean Water Act requires that classifications and standards be reviewed every three years. During this triennial review, citizens can strengthen weak standards and update classifications. Formal and informal meetings are

held to develop the proposed revisions. Then public hearings are held. A triennial review will be performed in 1988. Review information can be obtained from Environmental Management.

### Permit Reviews

You should participate in decisions about water quality permits and in their enforcement. It is important for the protection of water quality standards and uses.

## Case Studies

### Protecting Existing Uses

A developer proposed to dredge a marina from high ground next to SA waters. The adjacent waters were open to and used for shellfishing. Shellfish sanitation authorities said the marina would close waters to shellfishing because of the likely sewage discharges from docked boats. Shellfishermen who used the area objected to the proposed project.

The developer and his attorney argued they were limiting the marina's size by siting it on high ground and reducing profits to minimize impacts on the public resources. They asserted the project would boost the economy and provide more tax base and jobs than shellfishing. And they contended that the possibility of occasional sewage discharges and the subsequent closure of waters to shellfishing should not be considered a water quality violation. On most days the water quality should meet the standards, and it was unreasonable to penalize them for occasional discharges they had no control over, they argued.

The permit for the marina was denied. The waters had an existing use for shellfishing. The threat of pollution from the marina would make the waters unsuitable for shellfishing and would violate the antidegradation regulation. The Clean Water Act has already determined that long-term water quality is more important than immediate economic benefits.



This case demonstrates the importance of the antidegradation requirement to protect existing uses.

### Bradley Creek Reclassification

Developers requested that Bradley Creek near Wrightsville Beach be reclassified from SA to SC to eliminate the restrictions that protect shellfishing. The land around the creek is densely developed. Consequently, bacterial pollution from marinas, stormwater runoff and failing septic systems flow into the creek. Because of this pollution, Bradley Creek had been closed to shellfishing prior to 1975.

A use attainability study found a large oyster resource in the creek but concluded the waters could not reasonably be cleaned up for shellfishing. Pollution from septic tanks could be eliminated with a central sewage system, but pollution from the marinas and stormwater made the creek irretrievably lost to shellfishing.

At the reclassification public hearing, many Bradley Creek residents opposed the downgrade. They thought that cleaning up the waters for shellfishing should remain a goal—particularly since a new sewage system would reduce septic tank problems. Residents were concerned the downgrade would allow discharges from sewage treatment systems and increase stormwater discharges to the creek. Other residents wanted the creek classified SB for swimming.

The EMC decided to downgrade the water from SA to SC. To protect nearby SA waters, they stipulated that no discharges from sewage treatment plants would be allowed. The SB classification was not assigned because the creek was considered unsuitable for swimming due to shallowness and oyster rock.

In this case, the use attainability analysis was the key to determining what uses were protected for a body of water. The case shows the importance of preventing pollution rather than attempting to clean up problems after they occur. Once an area is polluted, the cleanup may be so expensive that the water is lost to traditional uses.

## References

[1]The Clean Water Act, enacted as the Federal Water Pollution Control Act of 1972, is found at 33 USC 1251, et seq. Section 303 pertains to water quality standards.

[2]Federal regulations on water quality classifications and standards are found at 40 CFR, Part 131. (Note: the federal regulations use the term standards to refer to classifications and standards in the North Carolina regulations.) The provisions for antidegradation and protecting existing uses are found at 40 CFR 131.12. Background on the federal antidegradation policy can be found in *Environmental Law: Air and Water, Volume 2*, 1986 by William Rodgers. West Publishing Co., pages 262-266.

[3]State law on water quality classifications and standards is NCGS 214.1 and 214.3. State regulations on water quality standards are found at 15 NCAC 2B .0100, .0200, and .0300. The actual list of classifications for all the waters of the state is kept in a Schedule of Classifications, which is organized by river basin and is not listed in the regulations. The schedule can be obtained from Environmental Management.

[4]The state antidegradation statement is at 15 NCAC 2B .0201.

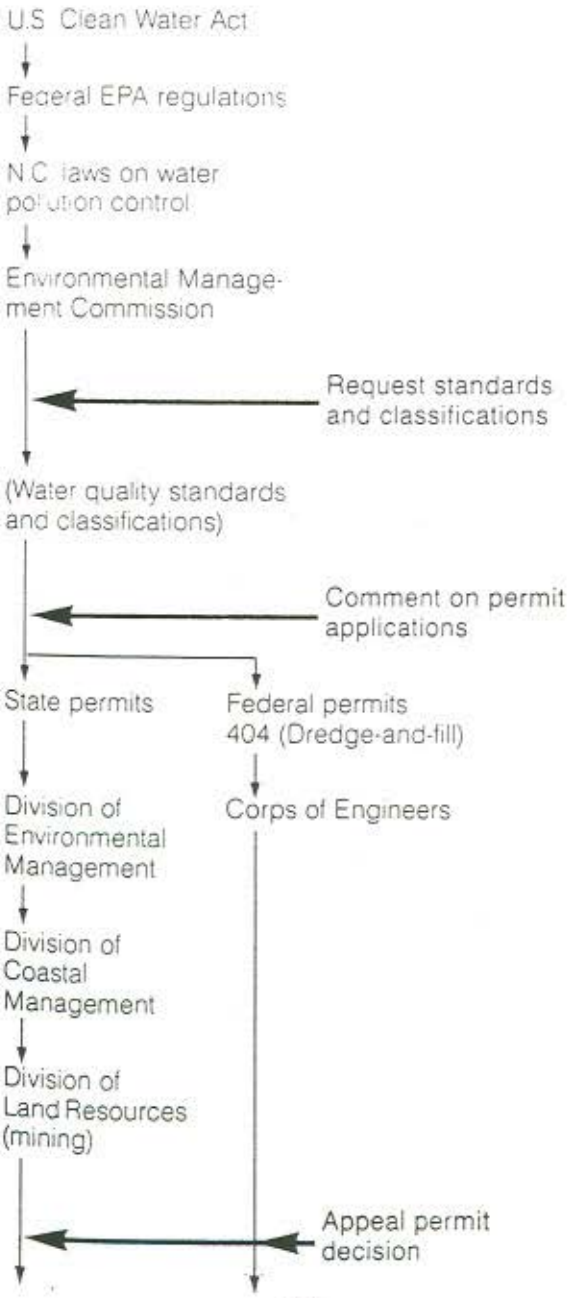
[5]The requirements for backup systems for treatment plants are given in 15 NCAC 2H .0124 and .0219.

[6]State law on procedures for petitioning the EMC (or any other state agency) to change classifications of a section of water or to change or adopt any other regulation are given at NCGS 150 B-16.



## Water Quality

**Governmental Design  Formal Public Input**



*CHAPTER FOUR*

# COASTAL AREA MANAGEMENT ACT

Recognizing the destructive impact of development on irreplaceable coastal resources, the US Congress enacted the Coastal Zone Management Act in 1972. The act encourages the establishment of a comprehensive coastal management program that balances wise development against protection of coastal resources. Under the act, states develop coastal management programs that meet federal requirements in exchange for federal funding and a say over federal actions affecting their coasts.

The North Carolina Coastal Area Management Act, enacted in 1974, establishes a federally approved coastal management program for 20 coastal counties. The final law resulted from heated debate and compromise. It was contested and upheld by the state Supreme Court. Since enactment, CAMA has received growing support from residents, including many who initially opposed a state role in coastal development. The CAMA program is now considered an essential means of balancing preservation of public resources with economic growth.

## Key Provisions

CAMA preserves and manages the ecology of the estuaries, the barrier dunes and the beaches in order "to safeguard and perpetuate their natural productivity and their biological, economic and aesthetic values." This and other goals are implemented by a combined effort of state and local governments.

### Areas of Environmental Concern

CAMA identifies sensitive valuable areas, called areas of environmental concern, that need special protection or have special risks. A permit is required for development in AECs. AECs are designated by the Coastal Resources Commission in their regulations. Designated AECs include:

***Estuarine waters and public trust areas:*** all waters of the sounds, estuaries and oceans under North Carolina jurisdiction or all waters from the inland freshwater-saltwater boundary to three miles offshore.



***Estuarine shoreline:*** a 75-foot band of shoreline (from mean high water) along estuarine waters, excluding oceanfront beaches.

***Coastal wetlands:*** salt marshes or other marshes subject to tidal flooding and normal wind tides (note that use of the term wetlands under CAMA is more narrow than for the Clean Water Act).

***Ocean hazard areas:*** ocean beaches, areas near inlets and areas behind the frontal dunes (the size of the area behind the dunes depends on the erosion rates and flood potential at the site).

***Public water supplies:*** small water-supply watersheds and public groundwater well fields.

***Natural and cultural resource areas:*** regions containing endangered species, natural habitats of scientific or educational value or sites of unique geological, historical or archaeological value. These are designated on a case basis.

### Permits

A permit is required before development can begin in AECs. CAMA considers development to be any construction or any activity that disturbs land or water. Specifically, development is defined as:

> "any activity in a duly designated area of environmental concern . . . involving, requiring or consisting of the construction or enlargement of a structure; excavation; dredging; filling; dumping; removal of clay, silt, sand, gravel or mineral; bulkheading; driving of pilings; clearing or alteration of land as an adjunct of construction; alteration or removal of sand dunes; alteration of the shore, bank or bottom of the Atlantic Ocean or any sound, bay, river, creek, stream, lake or canal."

The definition specifically excludes:

- Agricultural or forestry activities unless they include excavation or filling that affects estuarine or navigable waters.

- Maintenance of existing public roads, railroads or utilities within existing right of ways.
- Construction of facilities for the development, generation or transmission of energy if the facility is regulated by other laws or the N.C. Utilities Commission.
- Emergency maintenance or repairs if life or property are in serious imminent danger.

A permit is required for a project even if only a part of the project is in an AEC.

## Major, Minor and General Permits

Projects that are larger than 20 acres, have a structure that covers more than 60,000 square feet or require another state or federal agency's approval must have a major development permit from the Division of Coastal Management. All other projects under CAMA's jurisdiction must have minor development permits from local governments under a program Coastal Management oversees.

Usually projects need a major permit because they require another agency's approval such as a sewer line permit, sedimentation control plan or federal dredge-and-fill permit.

General permits apply to routine major development activities that meet certain criteria. These include bulkheads, piers, docks, boathouses, boat ramps, wooden groins, maintenance dredging, utility line installation and emergency work.

## State Dredge-and-Fill Permits

In addition to CAMA permits, Coastal Management also issues permits for dredging or filling salt marshes. Projects that need these state dredge-and-fill permits usually require a CAMA permit. In fact, dredge-and-fill and CAMA permits have the same processing procedure and use the same permit form. There is no need to distinguish between these permits for a general understanding of the regulatory process.



## Development Guidelines

Projects requiring CAMA permits must comply with development guidelines. Some guidelines set specific, quantitative standards; others provide general design goals. Some guidelines apply to all AECs, others only to specific AECs.

Development regulations change. An up-to-date copy of the regulations can be obtained from Coastal Management. The division's ***A Handbook for Development in North Carolina's Coastal Area*** (1985) provides a useful summary of key development regulations. But it is already out-of-date in some places. (An updated version is due out in the spring of 1988.)

Examples of applicable requirements are:

- Development in AECs must not violate water quality standards or any other laws and regulations of the state. Likewise, no development will be allowed in an AEC that would cause waters with an existing use for shellfishing to be closed to that activity.
- Only water-dependent uses will be permitted in estuarine waters and salt marshes. Water-dependent projects include navigation channels, boat docks, bridges, etc. Projects such as restaurants, homes, factories and parking lots should be placed on upland sites where they will not damage public resources.
- Development must not interfere with navigation or with citizens' rights to access or use public waters and resources.
- Development in AECs must not cause major or irreversible damage to valuable historic or archaeological resources.
- Sediment controls must be implemented during construction.
- Bulkheads for shoreline erosion control should be at or above the mean high water line, landward of marsh areas and backfilled with soil from an approved upland source. (Although not mandated in the regulations, Coastal Management encourages the use of sloping

shorelines stabilized with vegetation, rip-rap or gabions rather than bulkheads. The sloping shorelines are less damaging to the environment and may be more effective, more economical and longer lasting than vertical bulkheads.)

## Guidelines for Marinas, Boat Basins and Canals

Key CAMA guidelines for construction of marinas and navigation canals include:

- Marinas that require dredging can not be located in primary nursery areas or in areas that would require dredging through primary nursery areas.
- Marinas can not be located in areas where shellfish harvesting is an existing use or near areas where shellfishing would be closed as a result of the marina.
- Marinas can be located in non-wetland areas or in deep waters (not requiring dredging). But they can't disturb submerged aquatic vegetation and wetland habitats, except to access high-ground sites.
- Navigation channels, canals and boat basins must avoid primary nursery areas, productive shellfish beds, submerged aquatic vegetation or significant areas of salt marsh.
- Finger-fill canals may not be constructed. Canals should be straight or meandering with no right angles.

## Guidelines for Drainage Ditches

Drainage ditches less than or equal to 4 feet by 6 feet and used for agriculture or forestry do not need a CAMA permit. However, ditches used to drain land for other uses, such as residential development, do need approval.



Drainage ditches that require a CAMA permit can not adversely affect primary nurseries, productive shellfish beds, submerged grass beds or other important estuarine habitat.

## Variances

A permit applicant can request a variance. If approved, a project is not required to fully comply with the regulations. The variance request is decided by the CRC. The applicant must show that (a) the regulations would cause "practical difficulties or unnecessary hardships," (b) the project has unique site conditions that could not be anticipated when the regulations were adopted, and (c) the proposed project is consistent with the spirit, intent and purpose of the regulations.

## Stormwater Control

Projects needing a CAMA permit must comply with stormwater regulations adopted by EMC. These regulations require use of stormwater control devices unless the density of development is less than a specified level. The criteria are different for sites draining to SA waters than for sites draining to other waters. Small projects and those on sites that could not threaten water quality standards are exempt from the stormwater requirements.

Any project that requires a sediment and erosion control plan (described in Chapter 5) within the 20 coastal counties must also comply with the stormwater requirements, even if a CAMA permit is not needed.

## Land-Use Plans

CAMA requires that each county develop and adopt a land-use plan. The plans must be consistent with the development guidelines and policies of the CRC. The initial plans and all changes must be approved by the commission. Municipalities can prepare their own plan or comply with the county plan. About 55 municipalities have adopted plans.

CAMA permits are denied for projects that are inconsistent with land-use plans. Likewise, federal permits and projects must be consistent with the policies of CAMA regulations. Also, local ordinances applying to an AEC must be consistent with the approved land-use plans.

The AEC should pressure local governments to be consistent with approved land-use plans outside AECs even though they are not bound by the plans in those areas. CAMA states:

> All city ordinances and other local regulations affecting a county within the coastal area but not affecting an area of environmental concern shall be reviewed by the commission for consistency with the applicable county and city land-use plans and if the commission finds any such ordinance or regulation to be inconsistent with the applicable land-use plan it shall transmit recommendations for modification to the adopting local government.

## Contents of Land-Use Plans

The land-use plan must contain three sections: a summary of data about the existing conditions, resources and constraints in the area; policies for managing the resources and development in the area; and a land-use classification map to guide development.

## Land-Use Classifications

The land classification system includes five classes that may be subdivided. All lands within the jurisdiction of the local government must be given an appropriate classification. The five classes are:

***Developed:*** intensely developed urban areas with public services such as sewers and water.

***Transition:*** future urban areas where services such as sewer and water are or will be provided.

***Community:*** clustered, mixed use and low density areas. Services such as sewer and water are not provided to avoid stimulating intense development.

***Rural:*** areas for agriculture, forestry, mineral extraction and other low density, dispersed residential uses without central services like sewers.

***Conservation:*** areas needing effective long-term management and protection with no or very limited development.

# Hints on Public Participation

## Notice of Permit Applications

Notice of each CAMA permit application is published in the legal notices of the local newspaper in the county of the project. Often a proposed project will first be made public through news articles or through requests to the local government for zoning changes or building permits.

Notice of a permit application must be posted at the project site. However, these notices are often not conspicuous and may be hard to read due to weathering. Adjacent property owners along the water must be notified of the project by certified mail or personal conversation. Adjacent landowners without waterfront property are not required to be directly notified.

The CAMA law requires that notice of each permit application be mailed to any citizen or group that requests to be notified. To comply, Coastal Management will mail a monthly report listing all major and general permit applications being processed, their status and all permits issued during the previous month.

For each application or permit, the report lists the county and location of the project, the applicant's name and a two-word description (e.g., subdivision/marina, ditch/road). Since the report is issued monthly, the review process may be almost complete when a citizen obtains the information, evaluates it and prepares written comments. There is no comparable listing of CAMA

minor permit applications. The monthly report costs $14 per year (as of February 1988) and can be ordered from Coastal Management in Raleigh (address in Appendix 1).

To participate in the development decisions in your area, have frequent conversations with agency staffs. The Coastal Management and Environmental Management regional staffs are aware of most projects before permit applications are received. Since staff personnel talk with developers about upcoming projects, they can let them know of your concerns during the design stages. This may be your most effective means of participation.

## Written Comments

The public can submit written comments in response to the notice, but no public hearing will be held prior to permit issuance. Written comments are accepted prior to the permit decision by the staff (or a variance request by the commission).

Minor permits are often issued a week or two after application; major permits take six to 10 weeks or longer. Permit decisions must be made within 50 days for a minor permit and within 150 days for a major permit. (The law states that minor and major permits be decided in 25 and 75 days, respectively, but allows this period to be doubled if necessary.)

However, permit applicants sometimes request that permit processing be delayed while modifications are made in response to objections raised during review. Permit processing must be followed closely through informal channels. The public is given notice and an opportunity to comment on the changes only if Coastal Management believes the changes are significant. Complex projects may be modified several times. Be sure to specify the date for the plans you are commenting on.

## Scattered Regulations

CAMA has important provisions located in different sections of its regulations and standards. You may have difficulty identifying all the relevant provisions. In particular, the various exceptions, general permits, permitting procedures and policies must be studied carefully.

## Comments to Other Agencies

Coastal Management relies on other agencies for technical review of water quality, fishery and public health aspects of permit applications. The division will not deny or place conditions in a permit on these technical grounds unless the reviewing agencies object to the project. The application is circulated to the agencies indicated in Appendix 2. Evaluation of the impacts on water quality and marine resources are made by Environmental Management, Marine Fisheries and Health Services.

Send comments on technical issues to the reviewing agencies and to Coastal Management. For maximum effectiveness, send your comments early so the agencies are aware of them during their technical reviews. For Environmental Management, send copies to the regional office and to the director in Raleigh. Both offices contribute to the final comment.

Information on site-specific features that are not readily apparent, such as shellfish harvest values or local navigation uses, may be particularly valuable. Agency funding and staffing limitations often preclude intensive field surveys and data collection.

Agencies are more likely to address specific concerns if concerned citizens request a copy of the reviewing agency's report or comments on the project.

## Permit Appeals

CAMA major and minor permit decisions can be appealed to the CRC. When a permit is denied, the applicant can automatically appeal the decision. The applicant must file a petition for a contested case hearing within 20 days of receiving the denial letter. Any citizen who would be adversely affected by the permit's issuance may join the state in supporting the denial.

When a permit is issued, people who may be adversely affected by the decision may file a petition for a contested case hearing. The petition must be filed within 20 days of the permit's issuance. The hearing will be granted if the chairman of the CRC believes the appellant has a reasonable chance of prevailing. If the request for a hearing is denied, that decision can be appealed to the state Superior Court.

Once a hearing is granted and begins, the contester must prove the proposed project will violate CAMA and/or its regulations. An attorney and expert witnesses will usually be needed.

Coastal Management reviews minor permits and may challenge a permit decision if it disagrees with how the local permit officer applied the rules. If you believe a minor permit was issued improperly, discuss your concerns with the division's Raleigh office. Several minor permits have been revoked after review.

## Land-Use Plans

Land-use plans give residents an important opportunity to direct the future of their areas. The plans are intended to establish public agreement on the type of development that is acceptable in different areas. Effective plans can prevent developers from making unwise investments that result in the developer and local residents fighting for their livelihoods.

For land-use plans to be effective, citizens must participate in developing them. Unfortunately, citizens often show little interest in land-use plans until a proposed project threatens their area. Then they find the plans were formed without establishing appropriate land uses for sensitive areas. For everyone's benefit, citizens should take an interest in the plans before controversial projects are proposed.

Local land-use plans are reviewed and updated at least every five years. Local governments must hold public hearings to review and update the plans. This is an excellent opportunity to initiate effective policies and appropriate land classifications. The CRC's approval of the amendments to the land-use plan provides another chance for public participation.

Changes in the land-use plan can be initiated by the local government any time. Local governments may be receptive to requests by concerned citizens to make changes in the land-use plan. Public hearings must be held for all changes.

## Commission Committee Meetings

Proposed regulation changes, land-use plan approvals and issues of concern are discussed in committee meetings at the CRC meetings. The public can join in these discussions. Let your thoughts be known if a committee is discussing a topic of interest to you. This is an excellent opportunity for open exchange of questions and answers among the public, commission and staff. The division office in Raleigh can provide agendas for the meetings. The commission meets every two months.

# Case Studies

## Protecting an Estuary

Residents of a low density estuarine waterfront neighborhood learned about a high-rise condominium, townhouses and a 100-slip marina to be built on a 25-acre peninsula nearby. The residents organized a meeting to discuss the CAMA permit application. Sixty people formed a group to oppose the project and to preserve the natural resources that had attracted them to the area. The group met with government officials and with experienced public-interest groups.

The group learned that their initial objections to the project were well-founded. The marina and stormwater from the condominiums would threaten shellfishing in the area. The marina dredging would destroy valuable salt marsh. The land-use classification map showed the site to be conservation rather than community as listed on

the application. However, there was some confusion about the wording of the land-use plan.

The group submitted letters opposing the CAMA permit to the review agencies, talked with agency personnel and other public-interest groups, and let the media know of their concerns. Other public-interest groups subsequently submitted comments opposing the project.

Coastal Management denied the CAMA permit. Several reviewing agencies objected to the project. It would violate at least six CAMA regulations, including water quality standards, salt marsh preservation and local land-use plans.

A few months later the developer submitted a new plan. The marina was no longer included. The high-rise condominium remained, but was set back from the water. And now 100 small lots, each with a dock, rimmed the waterfront. The lots were too small for a reasonably sized house. However, they could be sold or rented to the condominium residents to ensure access to the water without meeting the requirements for a marina. The proposed handling of stormwater was also controversial.

Again residents, about 250 strong, wrote letters, talked with other public-interest organizations and met with agency staff.

A county commission meeting to resolve the confusion about the land-use classification was critical. Residents attended the meeting to speak about the validity of the conservation classification and the threat of the project. They argued that the project was inconsistent with the conservation and community classifications. The county commission ruled the conservation classification was correct.

The developer was advised that the project was inconsistent with the conservation classification. To proceed with the project, the classification would have to be changed. A public hearing and approval by the CRC would be needed to change the land-use plan. The developer did not request the change.

This case shows that land-use plans and water quality standards can be decisive factors in maintaining water resources. The case also demonstrates the impact of citizen involvement. The citizens used formal and informal communication with many different agencies and organizations. They were persistent, generated public interest and support, followed the regulatory process closely, and participated actively.



## References


[1]The federal Coastal Zone Management Act of 1972 is found at 16 USC 1451 et seq. The federal regulations are at 15 CFR, Part 923.

[2]The North Carolina Coastal Zone Management Act is found at NCGS 113A-100 et seq. The North Carolina regulations are in 15 NCAC Chapter 7. Key sections are

A. Subchapter 7B—Land-use planning guidelines—contains procedures and requirements for land-use plans by local governments.

B. Subchapter 7H—Guidelines for development in Areas of Environmental Concern and details of general permits—defines the AECs and specifies the requirements for each.

C. Subchapter 7J—Procedures for handling major permits, enforcement, variance requests, appeals of permits and declaratory rulings—includes various substantive requirements.

D. Subchapter 7K—Activities that do not require a permit—various exemptions from the permit requirements.

E. Subchapter 7M—General policies of the Coastal Resources Commission—valuable and useful policies to be considered in review of permits or land-use plans. Particularly useful sections include public access, water quality and mitigation.

[3]The coastal stormwater regulations of the Environmental Management Commission are found at 15 NCAC 2H, Section 1000.

[4]*A Handbook for Development in North Carolina's Coastal Area* by the Division of Coastal Management provides a basic explanation of the CAMA regulatory program and its rules.

[5]*A Guide to Protecting Coastal Waters Through Local Planning*, 1986, by the Division of Coastal Management provides a concise and valuable summary of important coastal habitats, pollution sources and land-use planning concepts for preserving coastal water quality and habitat.

[6]A useful and readable summary of background information on stormwater and marina pollution is provided in the report *Coastal Development and Shellfish Waters*, 1985, by the Division of Environmental Management.

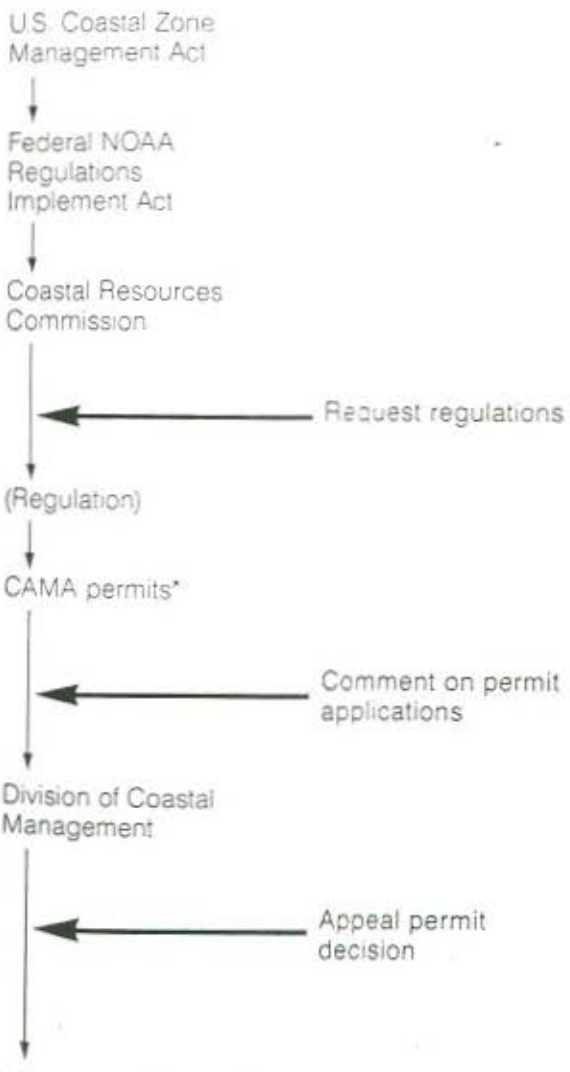
[7]Further information on stormwater can be found in *Results of the Nationwide Urban Runoff Program, Volume I—Final Report*, 1983, by the U.S. Environmental Protection Agency, NTIS Accession No. PB84-185552.

[8]Further information on the impacts of marinas is provided in *Coastal Marinas Assessment Handbook*, 1985, by the U.S. Environmental Protection Agency, Region IV, Environmental Assessment Branch, 345 Courtland Street, Atlanta, Georgia, 30365, Report No. EPA 904/6-85-132.



## Coastal Management

**Governmental Design** **Formal Citizen Input**




* Permits must comply with local land-use plans, which must, in turn, comply with requirements set by the CRC.

*CHAPTER FIVE*

# DREDGE-AND-FILL PERMITS UNDER SECTION 404

The federal program regulating dredging and filling of wetlands is based on Section 404 of the Clean Water Act. It prohibits the discharge of dredged or fill materials into waters of the United States, including wetlands, unless a permit is obtained. The U.S. Army Corps of Engineers issues the Section 404 permits. EPA sets the minimum permit requirements and oversees the program.

## Key Provisions

A complex regulatory program, complete with provisions for public participation, has been developed to implement Section 404. Key aspects of Section 404 and its implementation are described in this chapter.

### Waters of the United States

Section 404 jurisdiction applies to "waters of the United States." This includes all public waters and wetlands. This means rivers, mud flats, natural ponds, lakes, impoundments of public waters, tributaries, swamps and marshes. The provisions for protecting wetlands have emerged as the most controversial and important aspect of the 404 program for coastal areas.

### Definition of Wetlands

Section 404 defines wetlands as areas that are inundated or saturated by surface or groundwater often enough and long enough to support vegetation adapted to saturated soils. Wetlands generally include swamps, marshes and bogs. Wetlands are identified by three indicators—vegetation, soils and hydrology. Wetland vegetation can grow, compete, reproduce and live in saturated soils. Wetland soils are classified as hydric—soils that are saturated, flooded or ponded long enough to develop anaerobic (no oxygen) conditions. All three wetland indicators must be present for an area to fall under 404 jurisdiction.



### Dredge-and-Fill Activities

A 404 permit is required for the discharge of dredge or fill material into water or wetlands. These terms are defined as follows:

***Dredged material:*** material excavated from U.S. waters.

***Discharge of dredge material:*** any addition of dredged material into U.S. waters, including the addition of dredged material to a previous disposal site and the runoff or overflow from a contained land or water disposal area.

***Fill material:*** material used to replace an aquatic area with dry land or to raise the bottom elevation of a water body.

***Discharge of fill material:*** the addition of fill material into U.S. waters. This includes fill necessary to construct any structure in the water, such as a structure or impoundment requiring rock, sand, dirt or other fill material; site development fills for recreational, industrial, commercial, residential and other uses; causeway or road fills; dams and dikes; artificial islands; property protection and/or reclamation devices such as riprap, groins, seawalls, breakwaters and revetments; beach nourishment; levees; sewage treatment plants; intake and outfall pipes for power plants; underwater utility lines; and artificial reefs. Land clearing and/or drainage projects in wetlands are covered if they place or dispose of dirt in the wetland.

A number of dredge-and-fill activities are exempt from regulation under Section 404. These include:

- Normal farming, silviculture and ranching activities and construction or maintenance of farm, forest or temporary mining roads.
- Construction or maintenance of farm or stock ponds or irrigation ditches or the maintenance (not construction) of drainage ditches.
- Maintenance of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, bridge

abutments or approaches, and transportation structures.

- Federal construction projects specifically authorized by Congress and planned, financed and constructed by a federal agency. (An Environmental Impact Statement must be prepared for these cases.)

## Types of Permits Under Section 404

Individual and general permits are issued by the corps under Section 404. Individual permits require extensive case analysis. General permits are allowed for activities that cause minimal adverse environmental impact. Projects that meet the conditions of a general permit are automatically approved. The issuance of a general permit goes through the same processing and review as an individual permit. Projects that comply with the general permit are automatically approved.

General permits have been issued by the corps for these specific coastal activities in North Carolina:

- To maintain, repair, construct and install piers, docks, boathouses, mooring pilings, buoys, jetties, breakwaters, boat ramps, utility lines, and bulkheads and riprap needed for eroding shorelines.
- To authorize emergency construction of primary dunes and placement of sandbags along the ocean front.
- To dredge, fill and construct piers, docks, bulkheads, riprap, boat ramps and boathouses and to install mooring pilings within man-made basins and canals located in high ground.

In addition to these general permits, the corps has 22 nationwide general permits in effect in North Carolina. Nationwide permits cannot be issued for projects larger than 10 acres. For proposed projects of one to 10 acres, the corps may (but rarely does) require individual permits. Water and wetland projects less than an acre are usually permitted with nationwide permits. The filling of waters and wetlands that are isolated or above the headwaters are often authorized by a general permit. For coastal North Carolina, isolated waters and wetlands are not part of a surface tributary system or river that flows to the estuary. Above the headwaters means above the point on a nontidal stream where the average annual flow is less than five cubic feet per second. In eastern North Carolina, a drainage area of more than five square miles generates a flow of about five cubic feet per second.

Another general permit automatically approves 404 activities that have received a CAMA permit and a 401 water quality certification (described later). Many coastal projects fall under this type of general permit. An application must be filed before work begins but receives an expedited public notice period. Some types of activities that are covered by general permits do not require corps notification.

## Agency and Public Review

Applications for individual permits and corps/CAMA general permits are reviewed by federal and state agencies and the public. Agencies that review corps permits are listed in Appendix 2. And citizens may request placement on the corps mailing list to receive public notices that list all individual and CAMA general permit applications under consideration. Public notice of the project is usually published in a local newspaper because this is a requirement for a CAMA permit and for 401 certification from Environmental Management.

## Permit Requirements: 404(b)(1) Guidelines

Each Section 404 application must comply with guidelines set by the EPA before a permit can be issued. These 404(b)(1) guidelines are named after the corresponding provision of the Clean Water Act. Key requirements of the guidelines include:

- There must be no practical upland alternative for the proposed project.

- The project must be water dependent. Projects that require water or proximity to water for their basic purpose are water dependent. Boat ramps and docks are water dependent, but restaurants, houses and parking lots are not.

- The project must not violate water quality standards.

- The project must not cause or contribute to significant degradation of U.S. waters. This includes damage to aquatic life, aquatic system diversity, productivity and stability, habitat, and recreational, aesthetic and economic values.

- Secondary impacts of the project must be considered. These are impacts resulting from the project but not from the placement of the dredged or fill material.

- Cumulative impacts of the project must be considered. These are changes attributable to the collective effect of a number of projects, even though the impacts of each project alone may be minor.

- The proposed project must represent the least environmentally damaging alternative. All appropriate and practical steps must be taken to minimize adverse impacts.

## Permit Requirements: 401 Certification

Section 401 of the Clean Water Act requires that the state agency responsible for water quality certify that proposed projects do not violate water quality standards. In North Carolina, Environmental Management handles 401 certifications. The corps must have 401 approval before the 404 permit is issued. The Clean Water Act requires public notice and an opportunity for public hearing in the 401 certification. Also, as with general permits, general 401 certifications are issued for certain types of projects.

## Permit Requirements: Public Interest Review

The proposed project must not be contrary to the public interest. The corps evaluates the project to determine the public and private need for it, the feasibility of alternative locations and methods, the beneficial and/or detrimental effects, and the cumulative effect created by existing or anticipated projects.

## Permit Requirements: Environmental Assessments

The corps prepares a report called an environmental assessment that discusses the project's impacts and possible alternatives.

In addition, an Environmental Impact Statement (see chapter 7) is prepared if the activity will significantly affect the human environment. The corps makes the decision to require an EIS based upon the nature of the proposed project and the degree of public concern it has created.

If an EIS is needed, federal requirements mandate that the public be involved in the identification and evaluation of issues. The corps holds a public meeting and solicits written public comments to identify what issues must be evaluated. After a draft impact statement is prepared, another hearing and comment period allows for public review.

## Hints on Public Participation

Citizen involvement is essential in Section 404 permit reviews.

### Staying Informed

All too often, citizens become aware of the Section 404 program when they see a project under construction that disturbs them. Unless that project is being built without permits, it is too late for the public to exert much influence. As with all permit programs, the earlier citizens get involved with Section 404 project reviews, the greater success they will have in protecting the state's water resources.

The corps provides public notices when applica-

tions are submitted for individual permits, corps-CAMA general permits and changes in the regulatory requirements for general permits. Any citizen may ask to receive these public notices free by writing the corps (see Appendix 1). And, the state places a notice in the legal section of a local newspaper when a corps/CAMA general permit application has been received. The public notice for 401 certification is given jointly with the CAMA notice. Permit applicants also must place a sign on the site stating that a CAMA permit application is pending. You must be diligent if you're going to stay informed of these public notices.

Under the Freedom of Information Act, all federal information, including that pertaining to Section 404 permit applications and other corps business, is public information. You may visit the corps office and ask to see the files on any project. And it is possible to have complete copies of permit files sent to you, often at no cost, if a trip to Wilmington during business hours is unreasonable. Include the following in any request for information:

- State that you are making a Freedom of Information Act request.
- Include as much specific information as possible to describe your request, including the name of the project, property owners and permit application code.
- Request a copy of everything in the file including letters, memorandums, notes of telephone conversations or office meetings, maps, etc.
- Request a fee waiver by stating the information will be used for a public purpose, such as enhancing public participation in the permit process. If your request is for an organization, describe the purposes of your group and how it will use the information.

The only formal way to stay informed on Section 404 regulatory changes is through the Federal Register. Even though some libraries receive the register, it is unlikely you will find a notice unless someone tells you about it. Instead, regularly talk to regulatory agency personnel, conservation organizations and congressional members to stay up-to-date on changes. Many of these people will help you stay posted on regulatory changes once they know you're interested.



## Influencing Jurisdiction Calls

No opportunity exists for public participation if the corps decides a project is not within its jurisdiction. Determinations of 404 wetlands continue to be controversial, particularly when they involve the pocosin freshwater wetlands found in coastal North Carolina. If you see a project underway in a wetland area, call the corps and ask if the project is permitted. If the corps says the project does not involve wetlands and you think it does, call EPA or other federal agencies to ask for assistance. EPA has the ultimate responsibility under the Clean Water Act to identify wetlands correctly. At the request of citizen groups, EPA is now (February 1988) assuming responsibility from the corps for making jurisdiction decisions about pocosins in 19 coastal North Carolina counties.

## Making Comments

To ensure a thorough permit review, many people should write to express concerns about the project and to request a public hearing and EIS. The corps decides to hold a hearing or require an EIS based on a project's impact on the human environment. That decision is influenced by the number of public comments and the level of public attention the application receives.

As with CAMA permits, send your written comments to all agencies that review Section 404 permit applications (See Appendix 2). These agencies do not receive copies of public comments from the corps. EPA and the U.S. Fish and Wildlife Service, in particular, are interested in information about water quality or fisheries. Although not all of the agencies have responsibility for your area of concern, they still may be interested in your comments. Agencies will often provide more detailed review to projects receiving intense public attention.

Site-specific information that is not readily ap-

parent, such as shellfish harvest values or local navigation uses, may be valuable for reviewing agencies. For the most use, provide your comments well in advance of the submission deadline. Also, agencies are more likely to address specific concerns if you request a copy of the agency's project report.

In addition to providing general comments about the project, list technical and legal justifications for your position, too. In particular, references to the 404(b)(1) guidelines mentioned earlier and other applicable regulations are valuable. Get help to develop these comments if you are unsure about what regulations are relevant (See Appendix 3). The critical requirements are that the project is water dependent, upholds water quality standards and is the only practical alternative.

## 401 Certification

The 401 certification allows public input on violation of the antidegradation regulation or other water quality standards. Submit written comments and requests for a public hearing quickly. Certification decisions may be made as early as 15 days after the public notice appears in the newspaper. However, the decision usually takes longer, particularly for complex projects. The decision must be made within 130 days of receiving a complete application unless a public hearing is held.

Environmental Management will hold a public hearing on the water quality aspects of a project if there is significant public interest in the 401 certification. A large number of requests increases the likelihood that a hearing will be granted. Public notice must be given 30 days prior to a hearing, and written comments must be accepted for 30 days.

## Enforcement

The corps has a small staff to cover the coast. Therefore, it is difficult for them to be sure that projects do not violate Section 404 regulations. Call the corps (919/343-4511) if you see a project that you think is violating Section 404 regulations. Suggestions for reporting or obtaining information about potential violations were described in the enforcement section of Chapter 2.

Send copies of all correspondence on a possible violation to the regulatory agencies listed in Appendix 2. They may want to investigate the case. If you are dissatisfied with the corps' response to your complaint, contact people at other agencies and request their help. They can provide an independent opinion about whether the project is in violation of regulations.

## Citizen Suits

Citizens can bring a lawsuit if they believe that provisions of Section 404 (or any other section of the Clean Water Act) are not being implemented as required by law. This citizen suit provision is important because you can not bring an administrative appeal under Section 404. But citizen suits are complicated and time consuming. To compensate citizens, the court can award attorney fees and other legal costs if they are successful. This provision also encourages law firms to take these cases on a contingency basis, particularly if the suit is strong. If you think you need to go to court to solve a problem, seek advice from a conservation group listed in Appendix 3.

# Case Studies

## Citizen Enforcement

A wooded wetland swamp along a dirt lane off a major state highway was being filled with stumps, logs and other trash from another site. A federal employee, in the area reviewing an unrelated Section 404 permit application, noticed the fill and notified the corps. However, the site continued to be filled.

An area resident also recognized the violation and notified the corps. After several calls to corps personnel, the agency posted a notice at the site stating that the fill activity was in violation of Section 404 regulations.

This case demonstrates that the public plays an

important role in enforcing the regulations for wetlands and that persistence is often needed to obtain enforcement.

## Citizen Suit

Several corporations announced plans to drain, clear and strip mine thousands of acres of peat bogs on the Albemarle-Pamlico peninsula. Area fishermen believed the hydrologic modifications resulting from the projects would disrupt their fisheries. And they were alarmed when they discovered that no Section 404 permits were being required for the projects. The corps determined that ditches and canals existing in the peat bogs prevented the bogs from functioning as wetlands.

Joining with state and national organizations, the fishermen filed a federal lawsuit against the corps protesting its decision. After lengthy proceedings, the judge remanded the case back to the corps. He ruled that corps failed to consider critical information, and its decision was arbitrary and capricious. He later ordered the corps to pay the plaintiffs nearly $410,000 in attorney fees and other court costs.

This lawsuit indicates that citizens can challenge the corps on its wetland identification decisions. And it shows that citizens are likely to be reimbursed for their court costs. This should help to attract free legal aid for other cases. The lawsuit resulted in a large company donating 120,000 acres for a wildlife sanctuary. This case also was a major factor in EPA's decision to make wetland jurisdiction decisions for pocosin wetlands in 19 North Carolina coastal counties.

## References

[1]Section 404 of the Clean Water Act is 33 USC Section 1344. Regulations adopted to administer Section 404 are at 33 CFR Parts 320 through 330. The 404(b)(1) guidelines are found in 40 CFR Parts 230. State regulations on the 401 certification are at 15 NCAC 2H .0500.

[2]A comprehensive description of Section 404 is found in *404 Feasibility Study: Summary of the Final Project Report and 404 Feasibility Study: Final Project Report* by Judith A. Gale, C. Luther Propst and Ruth E. Sappie. Center for Environmental Studies, North Carolina State University, Raleigh, N.C. 27695-8110; May 1985.

[3]Technical guidance on wetland determinations is provided in *Corps of Engineers Wetlands Delineation Manual;* Technical Report Y-87-1; Environmental Laboratory, Department of the Army, Waterways Experiment Station, Corps of Engineers, P.O. Box 631, Vicksburg, Miss. 39180-0631; January 1987.

[4]A list of plants that occur in wetlands in the southeast is provided in *Corps of Engineers Wetlands Delineation Manual: Appendix C; Sections 1 and 2; Region 2-Southeast;* Technical Report Y-87-1; Environmental Laboratory; Department of the Army; U.S. Army Engineer Waterways Experiment Station, P.O. Box 631, Vicksburg, Miss. 39180-0631; January 1987.

[5]A series of three articles that describe the purpose and scope of Section 404 are found in *Wildlife in North Carolina;* July (Vol. 51, No. 7), August (Vol. 51; No. 8) and September (Vol. 51.; No. 9), 1987; 512 N. Salisbury Street; Raleigh, N.C. 27611.

[6]The U.S. Fish and Wildlife Service is producing wetland maps for coastal North Carolina. If you are interested in a map for a particular location, call 1-800-USA-MAPS to check if it is completed and can be purchased.

## Dredge-and-Fill Materials

**Governmental Design** **Formal Public Input**




*CHAPTER SIX*

# SEDIMENT AND EROSION CONTROL

By volume, erosion and sediment runoff is the greatest water pollutant in the state. Sediment can damage natural estuarine productivity by preventing light penetration, thus reducing habitat and oxygen levels. It also can reduce survival of fish eggs and larvae, and can smother bottom-dwelling aquatic life. Sediment carries nutrients, toxic chemicals and other pollutants attached to its particles.

Sediment from land clearing and construction sites is a major source of pollution. The N.C. Sedimentation Control Act was enacted in 1973 to protect the state's waters from degradation by soil eroded from land-disturbing activities. The law is implemented by the Sedimentation Control Commission and the Division of Land Resources.

Local governments can develop programs for erosion control, subject to approval by the commission. In the coastal area, New Hanover County, Jacksonville, Kitty Hawk, Nags Head and Ocean Isle Beach have implemented local programs.

## Key Provisions

### Standards

The sedimentation law applies to any land-disturbing actions that may increase sedimentation. However, the law does not apply to agriculture, forestry and mining.

The law requires that no visible sediment should enter public waters as a result of land-disturbing activity. In fact, a buffer zone must be used along the water to confine visible siltation to the landward 25 percent of the zone.

Erosion-control structures must prevent sediment from leaving the site. The structures commonly used are silt fences made of fabric or plastic along the edge of the site, or basins or ditches to collect and settle sediment.

Land stabilization by vegetation or other permanent means must be put in place within 30 working days or 120 calendar days after grading for any stage of the project.

### Erosion Control Plans

For sites that disturb more than one acre of land, an erosion control plan must be approved prior to construction. The plan must show how sediment will be controlled at the site and must be submitted to either Land Resources or the local erosion control program 30 days prior to construction.

Sediment must be controlled at all sites, large or small, according to the standards described above. But an approved plan is required only for larger sites.

### Stormwater Control

Any project that requires an erosion control plan in the 20 coastal counties must also comply with the coastal stormwater regulations adopted by EMC.

## Hints on Public Participation

### Report Sediment Pollution

Notify Land Resources of sites that are not properly controlling sediment during or after construction. Citizens can check sites to see that significant sediment does not wash during rain or that erosion control devices are in place.

Do not hesitate to report violators. The Land Resources staff encourages reports. In response to citizen reports, the staff visits the site and requires sediment controls. Since the sediment-control staff spend a lot of time making site inspections, be persistent in reaching the right staff person.

There is no public notice or opportunity for comment on erosion control plans.

### Lawsuits

Any person who suffers losses because of sediment from a construction site can file a lawsuit for damages. The court may award costs of litigation, including attorney and expert witness fees, to the plaintiff if the ruling is in his favor. This law allows those damaged to recover their losses from the responsible party. Fines collected by the state do not directly help people damaged by violations of the regulations.

## Case Studies

### Citizen Enforcement

A person noticed that a nearby five-acre construction site for a shopping center did not have erosion control measures. He called Land Resources to report the problem. The division discovered that no erosion control plan had been submitted and visited the site two days later.

The site visit verified that the project needed an erosion control plan. No off-site damage had occurred yet. The division notified the developer of the violation and gave him 10 days to submit an erosion control plan. The plan was submitted in nine days and approved by the state 15 days later. The erosion control measures were implemented a few days later.

The developer was not fined because he responded promptly to the notice of violation.

This case shows the importance of citizen help in enforcing sediment control regulations. Due to limited staff and the large number of projects, the enforcement of sediment-control regulations relies heavily on citizen response.

## References


[1]The North Carolina Sedimentation Pollution Control Act of 1973 is at NCGS 113A-50 through 71. The regulations are in 15 NCAC Chapter 4.

[2]The *Sedimentation and Erosion Control Guide for On-Site Construction* provided by the Division of Land Resources gives simple explanations of sediment-control methods. It is aimed at the general public.

[3]The *Guide for Sediment Control on Construction Sites*, 1979, by the U.S. Department of Agriculture, Soil Conservation Service provides detailed technical information on designing sediment-control measures.

[4]An *Erosion and Sediment Control Design Manual* is being developed by Land Resources and will be available in the spring of 1988. It will be an extensive desk-top reference for design professionals and others interested in sediment control.



*CHAPTER SEVEN*

# OTHER ENVIRONMENTAL LAWS

The four regulatory programs described in the previous chapters are major elements of North Carolina's coastal resource management program. There are other programs, however, that affect our estuarine resources. This chapter provides a brief description of them and tells how citizens may participate in them.

## NPDES Permits

A National Pollutant Discharge Elimination System permit must be obtained for any discharge of wastewater into surface water. The permit covers the construction and operation of treatment plants, including municipal sewage plants.

The Clean Water Act requires that NPDES permit programs be developed and meet certain requirements. The program implemented in North Carolina by the EMC and Division of Environmental Management has been approved by EPA. Any changes to the program must also be approved by EPA.

A proposed treatment plant must treat wastewater to meet limits set in the NPDES permit. Minimum permit limits are set by federal regulations for various types or categories of wastewater. These limits are required for all treatment plants within a specific category such as textile plants or domestic sewage plants.

A discharge to surface waters must also meet water quality standards, including the anti-degradation requirement. If a discharge meeting minimum (technology based) limits would violate water quality standards at a location, then the NPDES permit will contain more stringent limits. The permit will be denied if it is impossible to develop a reliable treatment system that protects water quality standards at a site.

### Public Participation

A public notice for a proposed NPDES permit is published in a local newspaper and sent to people who request copies of NPDES notices. The notice lists the location and size of the proposed

treatment plant and indicates that a draft permit decision has been made. The draft permit decision will contain tentative permit limits or explain the reason for denying the permit. The public can submit written comments on this draft permit decision for 30 days after the notice.

A public hearing (sometimes called a public meeting) will be held if there is significant public interest in the draft permit. Requests for a hearing are submitted during the period for written comments. Notice of a public hearing is published in a local newspaper and sent to the NPDES mailing list 30 days prior to the hearing.

Environmental Management makes the final permit decision after the comment period is over.

## Wastewater Discharged into the Ground

Wastewater disposal systems such as septic tanks, spray irrigation systems and rotary distributors that release treated wastewater into the soil require permits. These soil absorption systems are called nondischarge systems because they do not discharge to surface waters. Permits are also required for construction of sewer lines.

The Division of Health Services or local health department issue permits for residential septic tanks. Environmental Management issues permits for other nondischarging wastewater systems, including septic tanks that are publicly owned or for industrial wastes, spray irrigation systems, land application systems, rotary distributor systems and sewer lines.

### Public Participation

There is no public notice or formal chance to comment on these permits even though they are often critical environmental decisions. However, written comments submitted to and discussions with the appropriate agency will be considered in the permit decision. But it's not easy to find out about these permit applications. Sometimes you can learn about them through the CAMA permit process. Or if public funds will be used to build a system, a state EIS may be prepared.



## Mining Permits

A state mining permit is required for any land-disturbing activity that affects one or more acres and is associated with mining minerals, ores, soils or other solid matter. The permit is issued by Land Resources. A reclamation plan and performance bond must be provided before the permit will be issued.

The law states that the permit may be denied because the activity: adversely affects wildlife or fish; violates water or air quality standards; adversely affects a publicly owned park, forest or recreation area; or may deposit substantial quantities of sediment in stream beds or may cause acid water pollution.

### Public Participation

Notice of the proposed mine is given to all adjacent property owners and to the local government. If there is significant public interest, a public hearing will be held. The permit decision must be made within 60 days of the permit application if no public hearing occurs and within 90 days if one does occur. Since the permit decisions may be made as soon as 10 days after the notice, comments and hearing requests should be made quickly. The public hearing requires only 10 days notice.

## State Environmental Impact Statements

Permit reviews conducted by individual regulatory programs seldom evaluate cumulative and secondary impacts. Therefore, additional evaluation of projects is often needed. North Carolina law requires that some projects be evaluated more extensively. The project requires a state EIS if it: expends public money, requires action by a state agency such as issuance of a permit, and has significant environmental effect.

Many projects significantly affect the environment but are privately financed and not subject to a more comprehensive evaluation. Public money means the funds of a state or local public or quasi-public entity. It does not include resources used solely for processing a license, a certificate or a permit, the lending of credit, or the providing of technical services.

State actions include licensing, certification, permitting, the lending of credit, expenditures of public money and other final agency decisions.

Environmental effects include primary, secondary and cumulative impacts of a project or program that may be significant.

All proposed activities that include the three conditions listed above must complete an Environmental Assessment. This includes maps and a brief discussion of the following items: need for the proposed activity, reasonable alternatives to the recommended course of action, methods to mitigate or avoid adverse environmental impacts and environmental effects of the proposed activity and alternatives.

Once an EA is prepared, the state agency overseeing the project must decide if it is complete. If the agency determines the proposed project has no significant adverse environmental impacts, then it submits the assessment and determination to the state clearinghouse for review. The clearinghouse circulates these documents to state and local officials to obtain comments. It also publishes a summary in the Environmental Bulletin. The public is given 15 working days to comment after the bulletin's publication. Based upon comments received, the clearinghouse decides if an impact statement must be completed.

If there is the potential for significant environmental impacts, an EIS must be prepared. The agency preparing the EIS may hold a meeting to define the issues that it should address. The impact statement should describe:

- the purpose and need for the proposed project,
- alternatives to the proposal and their impacts,
- appropriate mitigation measures,
- assessment of social and economic impacts of each alternative and
- the environmental consequences of the proposal.

The state may hold a public hearing on the draft impact statement. It must allow 30 days for public comment on the draft once a notice is published in the Environmental Bulletin. Another 15 days is allowed for comment on the final EIS after its notice is published in the bulletin.

The lead state agency makes its decision on the proposed project based on information in the EIS. Any state or local agency or citizen may request that the decision be reconsidered by the secretary of the agency's parent department. This request must be made in writing. The decision by the secretary is final.

### Public Participation

The rules governing implementation of an EIS leave much to the discretion of the state agencies. Decisions about impact statements, public hearings and certification are difficult to challenge through legal means. Consequently, it is important to have a lot of people request an EIS. Public involvement is essential if the EIS process is to work as the legislature intended.

Local governments can require an EIS from private developers, even if no public money is involved, for projects of two or more contiguous acres. This provision has rarely been used but could be an important planning tool for citizens.

## Federal Environmental Impact Statements

Many federal agency actions are subject to requirements of the National Environmental Policy Act. This act requires that EISs be prepared for major federal actions that significantly affect the quality of the human environment. For example, Section 404 permits issued by the corps for

projects that would have major environmental impacts require an EIS. EPA's funding of municipal sewage systems is another example of a federal action that requires an EIS. These impact statements should assess:

- unavoidable adverse environmental impacts,
- mitigation efforts,
- alternatives to the proposed action,
- relationships between short-term uses of the environment and long-term productivity, and
- irreversible use of resources due to the proposed action.

The process used to prepare federal EISs are similar to those used for state EISs.

## Public Participation

Again, the rules governing preparation of federal EISs leave much to the discretion of the federal agency responsible for the project. But the public should make every effort to become involved in every step of the process. This includes the session to define the issues, the review of the draft impact statement and the review of the final document.



*CHAPTER EIGHT*

# NONREGULATORY WAYS TO HELP PROTECT WATER RESOURCES

There are other ways besides involvement with government regulatory agencies that citizens can use to protect their coastal resources. You can participate in nonregulatory programs designed to preserve coastal resources. Many of these programs have been instrumental in preserving some of our most fragile coastal areas.

This chapter provides an overview of these programs. Contact them for more information about their activities.

## State Natural Resource Programs

**Stream Watch—Stream Watch Coordinator, Division of Water Resources, P.O. Box 27687, Raleigh, N.C. 27611, 919/733-4064.**

Stream Watch is a citizen program that encourages people to become active stewards of the state's rivers, streams, estuaries and lakes. Citizen groups identify a waterway or an entire watershed and adopt the area. More than one group can adopt a body of water. The state provides the group with maps, information on water resource issues and technical support.

The Stream Watch group inventories its adopted area. It learns about its history, land uses, natural assets, potential and present needs, and problems. The group also monitors planned development and watches for adverse effects on their waterway. Violations of regulations and potential problems are reported to state agencies.

By staying informed about local, state and federal plans that affect their waterway, these groups are a focal point for citizen participation in water resource issues.

These volunteer monitors have been successful in other states and initially in North Carolina. Several Stream Watch groups have been formed at the coast. The Stream Watch Program is coordinated by the N.C. Division of Water Resources. Some small grants are available for Stream Watch projects such as educational materials, stream cleanups and river bank restorations.

**N.C. Natural Heritage Program—P.O. Box 27687, Raleigh, N.C. 27611, 919/733-7701.**

The N.C. Natural Heritage Program is a state effort to identify areas of our natural environment that need preservation. A statewide inventory of the most significant natural areas is being prepared.

Once an important natural area has been identified, the Natural Heritage Program encourages protection of the area. For areas owned or managed by the government, preservation management programs are recommended. For privately owned areas, the program advises owners of preservation methods and maintains a Registry of Natural Heritage Areas to honor owners who take preservation steps. In addition, the program works with landowners to assist in donating areas to public agencies or nonprofit preservation organizations.

The Natural Heritage Program can assist people in determining the special features of a site and advise people of the options for protecting it. In fact, requests for help from citizens is an important way of finding important natural areas.

## Land Acquisition

Often the best way to protect fragile lands is through public ownership by a conservation-oriented agency or organization. Or establish a conservation easement that sets permanent limits on the development of private land. Landowners who donate land or make conservation easements can receive federal and state tax deductions.

To explore the option of land acquisition, talk with the N.C. Heritage Program. Some of the organizations that can assist in acquiring land for conservation purposes include:

**N.C. Nature Conservancy, P.O. Box 805, Chapel Hill, N.C. 27514, 919/967-7007.**

The Nature Conservancy is a national, nonprofit organization dedicated to the preservation of important natural areas through acquisition, conservation easements and management agreements.



The North Carolina chapter has helped preserve more than 200,000 acres of important habitat, some of it in critical coastal areas. The conservancy also is often an intermediary in transferring property from individuals to government bodies.

**N.C. Division of Coastal Management, N.C. Coastal Reserve Program, P.O. Box 27687, Raleigh, N.C. 27611, 919/733-2293.**

The N.C. Coastal Reserve Program, managed by Coastal Management, preserves valuable estuarine areas for research, education and compatible traditional use. The N.C. National Estuarine Research Reserve Program (formerly the Estuarine Sanctuary Program) is a state-federal component of the Coastal Reserve Program. However, the Coastal Reserve Program accepts ownership and responsibility for areas not limited by the regulations of the national estuarine program. Most lands in the Coastal Reserve Program have been purchased by the state. But Coastal Management also accepts donations. Coastal Management also works with local governments to provide public access to coastal waters. Public access depends heavily on contributions of land and easements.

**N.C. Division of Parks and Recreation, P.O. Box 27687, Raleigh, N.C. 27611, 919/733-4181.**

This agency administers a system of parks, nature preserves, scenic rivers, trails and recreational lakes. It may acquire land and can receive conservation easements that protect the park system.

**N.C. Wildlife Resources Commission, 512 N. Salisbury St., Archdale Building, Raleigh, N.C. 27611, 919/733-7133.**

This agency administers North Carolina's gamelands for wildlife management, hunting and fishing. It owns some of the areas, leases others and acquires land and conservation easements for protection of wildlife of special interest.

Local Governments

All local governments have the authority to acquire land and conservation easements. How the government uses the land or manages the easement will depend on its commitment to the wishes of the donor.

# APPENDICES

## APPENDIX 1

### Agency Mailing Lists of Regulatory Information

### N.C. Division of Coastal Management

Information:

(A) Coastal Area Management Act Major Development and General Permits Monthly Report, (B) CAMAGRAM, report of the CRC, (C) agenda and minutes of the CRC.

Address to get on mailing list:

David Owens, Director, Division of Coastal Management; P.O. Box 27687; Raleigh, North Carolina 27611.

### N.C. Division of Environmental Management

Information:

(A) public notice of all proposed rule changes and public hearing dates; (B) Public notices of all NPDES permit applications in the state; (C) agenda, summary of agenda, and minutes of EMC and its committees.

Address to get on mailing list:

Paul Wilms, Director; Division of Environmental Management; P.O. Box 27687; Raleigh, North Carolina 27611.

### U.S. Army Corps of Engineers

Information:

Public notices of permit applications, public hearings and proposed rule changes.

Address to get on mailing list:

U.S. Army Corps of Engineers, P.O. Box 1890, Wilmington, North Carolina 28402-1890.

## N.C. State Clearinghouse

Information:

Bi-weekly, *North Carolina Environmental Bulletin* listing information pertaining to state or federal environmental impact statements.

Address to get on mailing list:

Chrys Baggett, Director, North Carolina State Clearinghouse, 116 West Jones Street, Raleigh, North Carolina 27611.

## Office of Administrative Hearings

Information:

*North Carolina Register*, published monthly, contains notices of proposed regulations, newly adopted regulations, new laws, executive orders and other legal actions pertaining to regulatory programs. Subscription costs $95 per year. County libraries should have copies.

Address to get subscription:

North Carolina Register, Office of Administrative Hearings, PO. Drawer 11666, Raleigh, North Carolina 27604.

## N.C. Division of Land Resources

Information:

Agenda and minutes of Mining Commission and Sedimentation and Erosion Control Commission.

Address to get on mailing list:

Stephen Conrad, Director; Division of Land Resources; PO. Box 27687; Raleigh, North Carolina 27611.



# APPENDIX 2

## Agencies That Review CAMA and Corps Section 404 Permits

(Note: Many proposed projects require CAMA and 404 permits, so all the following agencies review the project.)

| AGENCY | CAMA | 404 |
|---|---|---|
| Director<br>N.C. Division of Environmental Management<br>P.O. Box 27687<br>Raleigh, NC 27611<br>919-733-7015 | yes | yes |
| N.C. Division of Environmental Management<br>7225 Wrightsville Avenue<br>Wilmington, NC 28403<br>919-256-4161<br>(for Brunswick, New Hanover, Pender, Onslow and Carteret counties) | yes | yes |
| N.C. Division of Environmental Management<br>1424 Carolina Avenue<br>Washington, NC 27889<br>919-946-6481<br>(for Craven, Pamlico, Beaufort, Hyde, Dare, Tyrrell, Washington, Bertie, Chowan, Perquimans, Pasquotank, Hertford, Gates, Camden and Currituck counties) | yes | yes |
| Director<br>N.C. Division of Coastal Management<br>P.O. Box 27687<br>Raleigh, NC 27611<br>919-733-2293 | yes | yes |

| | | |
|---|---|---|
| Director<br>N.C. Division of Marine Fisheries<br>P.O. Box 769<br>Morehead City, NC 28557<br>919-726-7021 | yes | no |
| Shellfish Sanitation Branch<br>N.C. Division of Health Services<br>P.O. Box 769<br>Morehead City, NC 28557<br>919-726-6827 | yes<br>(where shellfish are affected) | yes |
| N.C. Wildlife Resources Commission<br>P.O. Box 27687<br>Raleigh, NC 27611<br>919-733-3391 | yes | no |
| N.C. Division of Land Resources<br>P.O. Box 27687<br>Raleigh, NC 27611<br>919-733-3833 | yes | no |
| Wetlands Division<br>U.S. Environmental Protection Agency, Region IV<br>345 Courtland Street<br>Atlanta, GA 30364<br>404-347-2126 | no | yes |
| U.S. Fish and Wildlife Service<br>P.O. Box 25039<br>Raleigh, NC 27611<br>919-856-4520 | no | yes |
| Habitat Conservation Division<br>U.S. National Marine Fisheries Service<br>Pivers Island<br>Beaufort, NC 28516<br>919-728-8780 | no | yes |
| U.S. Army Corps of Engineers<br>P.O. Box 1890<br>Wilmington, NC 28402-1890<br>919-343-4511 | yes | yes |
| N.C. Division of Soil and Water Conservation<br>P.O. Box 27687<br>Raleigh, NC 27611<br>919-733-2302 | yes | no |



# APPENDIX 3

## Organizations Involved in Coastal Resource Management

Albemarle Protection Organization
Rt. 1, Merry Hill, NC 27957
Contact: Terry Pratt

American Farmers of the Sea
P.O. Box 386, Englehard, NC 27824
Contact: Kenneth Pearce

Camp Lejeune Officers Wives Garden Club
MOQ 3343, Camp Lejeune, NC 28542

Cape Fear Sierra Club
2 Cowrie Lane, Wrightsville Beach, NC 28480
Contact: Kathleen Conner

Carteret County Crossroads
P.O. Box 155, Beaufort, NC 28516
Contact: Irv Hooper

Carteret County Watermen's Association
P.O. Box 263, Beaufort, NC 28516
Contact: Clinton Willis

Carteret County Wildlife Club
P.O. Box 1123, Morehead City, NC 28557

Conservation Council of North Carolina
307 Granville Road, Chapel Hill, NC 27514
Contact: Mary Beth Eddleman

Center for the Reflection of the Second Law
8420 Camellia Dr., Raleigh, NC 27612
Contact: James Berry

Clean Water Fund
P.O. Box 1008, Raleigh, NC 27602
Contact: Lisa Finaldi

Coastal Sierra Club
3012 Red Fox Rd., New Bern, NC 28560
Contact: Wally Runner

Concerned Citizens of Brunswick
15 Myers Drive, Lexington, NC 27292
Contact: Raymond Cope

Concerned Citizens of Coastal Carolina
Rt. 2, Box 215A, Swan Quarter, NC 27885
Contact: Mark Dodge

Cypress Sierra Club
1205 E. Wright Rd., Greenville, NC 27834
Contact: Vince Bellis

Dare County League of Women Voters
34 Duck Woods Dr., Kitty Hawk, NC 27949
Contact: Diane Henderson

Duke Ecos
101-3 Bryan Center, Duke University Station
Durham, NC 27706

Environmental Defense Fund
128 E. Hargett Street, Suite 250
Raleigh, NC 27601
Contact: Steve Levitas

Environmental Law Institute
1616 P Street NW, 2nd Floor
Washington, DC 20036
Contact: William Futrell

Environmental Policy Institute
218 D Street SE, Washington, DC 20003
Contact: Chuck Fox

Environmental Resource Project
311 Pittsboro St., 256H
UNC-Chapel Hill
Chapel Hill, NC 27514
Contact: Melva Okun

Friends of Hatteras Island
P.O. Box 692, Buxton, NC 27920
Contact: Carol Anderson

Institute for Southern Studies
P.O. Box 531, Durham, NC 27702
Contact: Bob Hall

Land Stewardship Council
P.O. Box 540, Winton, NC 27986
Contact: Patsy Jones



League of Women Voters of North Carolina
215 North Dawson Street
Coates Local Govt. Ctr., Suite 121
Raleigh, NC 27603
Contact: Margaret Holton

Middle Sound Homeowners Association
5 Falcon Point Road, Wilmington, NC 28405
Contact: Bob Parr

Nags Head Woods Preserve
P.O. Box 1942, Kill Devil Hills, NC 27948

National Audubon Society
P.O. Box 1268, Charleston, SC 29402
Contact: Polly Holden

N.C. Chapter Sierra Club
130 Justice Street, Chapel Hill, NC 27514
Contact: Bob Daland

N.C. Fisheries Association
P.O. Box 810, Oriental, NC 28571
Contact: Jerry Schill

N.C. Nature Conservancy
P.O. Box 805, Chapel Hill, NC 27514
Contact: Katherine Skinner

Neuse River Foundation
P.O. Box 5451, New Bern, NC 28560
Contact: Roger Mays

North Carolina Wildlife Federation
P.O. Box 10626, Raleigh, NC 27605
Contact: Mike Corcoran

North East New Hanover Conservancy
8516 Bald Eagle Lane,
Wilmington, NC 28405
Contact: Paul Foster

Onslow County Conservation Group
P.O. Box 1720, Jacksonville, NC 28540
Contact: Tom Caulfield

Outer Banks Audubon Society
P.O. Box 1248, Kill Devil Hills, NC 27948
Contact: Mrs. Ritchie Buckingham

Pamlico-Tar River Foundation
P.O. Box 1854, Washington, NC 27889
Contact: Dave McNaught

PenderWatch
349 Dogwood Lane, Hampstead NC 28443
Contact: Howard Winkemeier

Pungo River Association
Rt. 2, Box 57, Belhaven, NC 27810
Contact: Anne Braddy

Quality of Life Alliance
407 Sylvan Lane, Wilmington, NC 27403
Contact: M.H. Vaughan

Regional Development Institute
East Carolina University, Willis Building
Greenville, NC 27858-4353
Contact: Janice Faulkner

Roanoke Chowan Wildlife Club
P.O. Box 158, Woodland, NC 27897
Contact: Bill Piland or A.L. Morris Jr.

Rural Advancement Fund
Pittsboro, NC 27312
Contact: Betty Bailey

Society for Masonboro Island
P.O. Box 855, Wrightsville Beach, NC 28480
Contact: Jay Kapner

Southeast Waste Exchange
UNC-Charlotte, Charlotte, NC 28223
Contact: Mary A. McDaniel

Southern Environmental Law Center
201 W. Main St., Suite 14,
Charlottesville, VA 22901
Contact: Rick Middleton or David Carr

Stump Sound Shellfishermen
Rt. 2, Box 259, Holly Ridge, NC 28445
Contact: Lena Ritter

Stumpy Point Civic Club
General Delivery, Stumpy Point, NC 27978
Contact: Carroll Payne



Triangle Sierra Club
130 Justice Street, Chapel Hill, NC 27514
Contact: Bob Daland

Trust For Public Land
322 Beard Street, Tallahassee FL 32303
Contact: Kathy Blaha

United Farmers Organization
P.O. Box 176, Oak City, NC 27857
Contact: Benny Bunting

## APPENDIX 4

### Agency Phone Numbers and Addresses for Reporting Possible Violations or Getting Information

#### Emergency Management Division

Contact at any time about any pollution emergency that needs immediate action.

Phone Number
(800) 662-7956

#### Division of Environmental Management

Contact about water or groundwater pollution.

Phone Number:
(919) 733-7015—director's office
(919) 733-5083—Water Quality Section

Address
Paul Wilms, Director
Division of Environmental Management
P.O. Box 27687
Raleigh, NC 27611

#### DEM regional offices at the coast

For Brunswick, New Hanover, Pender, Onslow and Carteret counties:

Phone Number:
(919) 256-4161

Address:
Division of Environmental Management
7225 Wrightsville Avenue
Wilmington, NC 28403

For Craven, Pamlico, Beaufort, Hyde, Dare, Tyrrell, Washington, Bertie, Chowan, Perquimans, Pasquotank, Hertford, Gates, Camden and Currituck counties:

Phone Number:
(919) 946-6481

Address:
Division of Environmental Management
1424 Carolina Avenue
Washington, NC 27889

#### Division of Coastal Management

Contact about construction in coastal waters, on the shoreline, in salt marsh, or in designated Areas of Environmental Concern.

Phone Number:
(919) 733-2293

Address:
David Owens, Director
Division of Coastal Management
P.O. Box 27687
Raleigh, NC 27611

#### Regional offices

For Brunswick, New Hanover, Pender and Onslow counties:

Phone Number:
(919) 256-4161

Address:
Division of Coastal Management
7225 Wrightsville Avenue
Wilmington, NC 28401

For Carteret, Craven and Pamlico counties:

Phone Number:
(919) 726-7021

Address:
Division of Coastal Management
P.O. Box 769
Morehead City, NC 28557

For Beaufort, Hyde, Washington and Tyrrell counties:

Phone Number:
(919) 946-6481

Address:
Division of Coastal Management
1424 Carolina Avenue
Washington, NC 27889

For Dare, Currituck, Camden, Pasquotank, Perquimans, Gates, Hertford and Bertie counties:

Phone Number:
(919) 338-1558

Address:
Division of Coastal Management
108 S. Waters Street
Elizabeth City, NC 27909

## U.S. Army Corps of Engineers

Contact about dredging or filling activity in water or wetlands, or land clearing in wetlands.

Phone Number:
(919) 343-4511

Address:
U.S. Army Corps of Engineers
P.O. Box 1890
Wilmington, NC 28402-1890

## Division of Land Resources

Contact about construction sites without adequate sediment controls and about mining operations.

Phone Number:
(919) 733-3833

Address:
Steve Conrad, Director
Division of Land Resources
P.O. Box 27687
Raleigh, NC 27611

## Regional offices

For Brunswick, New Hanover, Pender, Onslow, Carteret, Columbus and Duplin counties:

Phone Number:
(919) 256-4161

Address:
Division of Land Resources
7225 Wrightsville Avenue
Wilmington, NC 28403

For Craven, Pamlico, Beaufort, Hyde, Dare, Tyrrell, Washington, Bertie, Currituck, Camden, Pasquotank, Perquimans, Chowan, Gates, Hertford, Martin and Pitt counties:

Phone Number:
(919) 946-6481

Address:
Division of Land Resources
P.O. Box 1507
Washington, NC 27889