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Environmental public policy: An analysis of public opinion and environmental legislation in North Carolina

John Carson Cato

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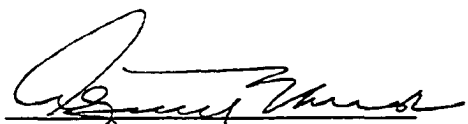

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A Dissertation Submitted in Partial Fulfillment
of the Requirement for the Degree of
Doctor of Philosophy

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ABSTRACT

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Abstract

The research was designed to give additional insight into the public policy process. Specifically, the focus of the study was on environmental public policy and the assumed relationship between public opinion on environmental issues and environmental legislation. A secondary emphasis of the research was to review environmental quality and consider the environmental quality as a function of legislative and regulatory impact. The study was restricted to the state of North Carolina and used a public opinion survey, legislative record review, and environmental quality data as the primary indicators.

The results of the study showed that (a) citizens in North Carolina have a high degree of concern and personal responsibility for environmental issues, (b) a significant volume of environmental legislation is introduced and ratified in the state's General Assembly, and (c) the state's environmental quality has improved or held its level of quality over the past 5 to 20 years.

The conclusions and directions for future inquiry should be of benefit to students of the public policy process, politicians, regulatory agencies, and environmental advocacy groups. Public opinion on environmental issues appears to be reflected in the introduction and ratification of environmental legislation. The relationship between public opinion and environmental legislation has been examined and the impact of the environmental legislation analyzed from the perspective of the state's environmental resources.

Dedicated To

Sarah Caroline Reid Cato
and
Mary Margaret Mendenhall

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Chapter I

Introduction

For the past 25 years environmental issues have continued to grow in popularity. With the passage of the National Environmental Policy Act (NEPA) in 1969 the United States accepted responsibility for the quality of its environment. Since 1969 significant pieces of Federal legislation have been passed to address the environmental concern of the majority of Americans. Major legislation includes the 1970 Clean Air Act (CAA), the 1974 Safe Drinking Water Act (SDWA), the 1976 Toxic Substances Control Act (TSCA), the 1976 Resource Conservation and Recovery Act (RCRA), the 1977 Clean Water Act (CWA), the 1980 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the 1986 Superfund Amendments and Reauthorization Act (SARA), and the 1990 Clean Air Act Amendments (CAAA).

Public sentiment for the environment was evidenced by the scale of the Earth Day celebrations on April 22, 1970. The environmental legislation enacted reflects the assumed link between public opinion and governmental action generally believed to exist in democratic societies. While the degree of correspondence between public opinion and policy development is a matter for debate, it is assumed that the efforts to protect the public welfare are enhanced and dependent on supportive public opinion. It is the intent

of this author to explore the link between environmental public opinion and environmental public policy.

The formation of public policy in the United States is a complicated process with multiple inputs, competing agendas, limited resources, and system constraints. As such, public policy is an extension of our societal value system that impacts all citizens. These societal values are communicated through legislatures and public entities designated to make difficult decisions. Public desires are communicated to policy-making entities through popular votes, legislative law, interest group activity, and public opinion polls.

Since the first Earth Day in 1970, environmental issues have occupied a significant place on the public policy agenda. The continued interest in environmental issues over the past two decades is evidenced in public opinion polls, journal articles, legislation, news reports, and scholarly publications. As such, environmental sensitivity and environmental protection have become factors of significant interest for public policy decision makers.

The formulation of any government policy is an involved issue. Environmental policy, as a component of public policy, is therefore similar in its promulgation to policies addressing crime, education, or health care. Like most policy problems, understanding environmental policy is best approached as a multidisciplinary problem.

Examination of policy formulation considers the determinants of policy, the participants involved, and the decisions reached. However, no information is known to this author that attempts to specifically confirm the public's sensitivity to environmental

issues and then relate the concern to legislative passage of environmental policy. In other words, is legislation enacted commensurate with the public's desire for environmental quality?

The formation of environmental policy is similar to most public policy in the United States--a complex process. Theories explaining the public policy process are limited. However, within the field of public policy we can examine the process from a perspective of policy formulation, policy implementation, and policy impact. Specifically looking at the process of policy formation lays the concern that elected officials be bound by the direction of their constituencies. Legislative representation is an important element for democratic society.

Environmental issues are social issues affecting the current populace and future generations. Many social activists and groups were involved in the environmental movement of the late 1960s and 1970s. These individuals and groups helped to change public attitudes on the environment that were a product of America's industrial age. The early environmental movement was initially a component of significant social change, coexisting with the sociopolitical issues of racial discord, anti-war demonstrations, feminism, and a changing value system. The young were rejecting the established attitudes of the 1950s and their parents. Each movement operated independently but in concert with the changing social issues of the time.

The public and government place a value on environmental issues based on perceived personal and social importance. Environmental value and importance is indicated by

popular votes on environmental issues, public opinion surveys, interest group representation and legislative action.

The Overall Context: Environmental Character of North Carolina

The State of North Carolina covers approximately 53,000 square miles and has traditionally been considered one of the most rural states in the nation. The state has three main regions -- Coastal, Piedmont, and Mountain. The Coastal region borders the Atlantic Ocean with a shoreline of 320 miles and is characterized by flat terrain, sandy beaches, and a chain of barrier islands. The Piedmont region is characterized by rolling terrain and major population centers. The Mountain region includes the Great Smoky and Blue Ridge Mountains, the Pisgah and Nantahala national forests, and the Eastern Continental Divide.

The "environmental character" of North Carolina can be examined from a number of perspectives in order to reveal the general tendency within the state toward environmental issues. For the purpose of benchmarking North Carolina's environmental posture, an analysis of the environmental situation is presented along the lines suggested by Lester (1989). Lester has suggested that a State's environmental effort be considered from the perspectives of organizational capacity, state wealth, pollution severity, and political partisanship.

Organizational capacity focuses on administrative, legislative and bureaucratic structures in describing environmental effort. Centralization of authority and

responsibility are key elements of the organizational capacity position. Centralization is suggested to increase a state governor's span of control and facilitate policy making and implementation. Centralized state bureaucracies are needed as the federal government continues to shift authority for environmental control to the states.

North Carolina has an active legislature when compared to other southern states and expresses in its laws and its public information statements a commitment to achieve the "twin goals" of environmental protection and economic progress. "North Carolina passes more environmental laws than any other Southern state except Florida" (Hall and Kerr, 1991, p. 135). State legislatures are considered powerful and influential forces in shaping environmental policy. Increased policy activity, or legislative activity, is an indication of organizational capacity and environmental responsibility.

In 1971 agency consolidation was first proposed by the Governor. Agency consolidation is thought to increase the power of the Governor by eliminating duplication and inefficiency between agencies. In 1989 the Department of Human Resources and the Department of Natural Resources and Community Development were centralized and brought together under one umbrella. The centralized group was renamed the Department of Environment, Health and Natural Resources. Primary stewardship of North Carolina's natural resources is the responsibility of the Department of Environment, Health and Natural Resources (DEHNR). DEHNR is a comprehensive bureaucratic agency that addresses virtually any environmental issue likely to arise.

The *wealth* argument for environmental action suggests that states with increased financial resources have a greater propensity for environmental protection. "Wealth accounts for a significant amount of the variation in state efforts to protect the environment" (Lester, 1984, p. 193).

North Carolina's fiscal status appears sound. The state's budget in 1970 was $962 million and has increased over the years to an excess of $8.5 billion in 1994. The growth on the appropriation's side of the ledger has been paralleled by growth on the revenue side. North Carolina has always avoided deficit spending and carries the highest bond rating.

On the negative side of environmental effort, Hall and Kerr (1991) point out that,

* North Carolina ranks in the bottom 10 of all states in per capita spending for environmental issues, and
* Of the Southern states, only Texas spends a smaller share of its budget on enforcement and implementation than North Carolina.

However, on the positive side Davis and Lester (1989) indicate that per capita state spending has risen faster than any other spending at other levels of government. This increase in spending is indicative of the Federal government's program of decentralization. The increase in per capita spending affects environmental appropriations. As calculated by Hall and Kerr (1991) North Carolina spends $14.85 per capita on all environmental programs.

North Carolina spends approximately 1% of the state budget on environmental programs. That would rank it 42nd compared to other states. Clearly, North Carolina does not fund its environmental effort through the state treasury at levels equal to most states. However, this may not be the full picture as states find other ways to fund their environmental objectives. For example, the cost for many monitoring and reporting programs is transferred to those holding environmental permits and not a direct expense to the state.

Pollution *severity* can also be used to assess a state's environmental effort. Literature (Lester, 1989; Lester and Lombard, 1990) suggests that states with greater environmental problems are more inclined to have increased environmental policy. The environmental policy generally comes in the form of legislative action. Linking a state's environmental pollution problem to legislative action seems reasonable. However, concrete and direct relationships between environmental effort and pollution severity are still unproven.

Much of the pollution severity argument is associated with a state's industrial base and population density. Areas of high population and high manufacturing density are expected to be more inclined toward pollution problems. In the manufacturing area, certain types of industrial operations have a poor past record of environmental stewardship. Representative of these industries are oil, automotive, pulp and paper, and chemical.

The annual population growth in North Carolina during the last decade was 20% greater than for the United States as a whole. The increase in the state's population should be kept in mind when considering the state's environmental effort and environmental quality. Common thought would associate increased pollution with increased population density. The population of North Carolina is slightly greater than 6.8 million. The ethnic and racial makeup of the state is 75.6% White, 22.0% Black, 1.2% Native American, 1.2% Hispanic and other (Otterbourg, 1993, p. 32).

By comparing North Carolina to the other 49 states we can begin to put the state's environmental effort into perspective. Some facts worth noting on the status of the pollution problem in North Carolina are indicated below.

* North Carolina is the state with the largest percentage of its population served by wells.
* The Tarheel state ranks 30th in surface and ground water that may be contaminated and 49th in households using septic tanks.
* Per capita consumption of energy in North Carolina has posted some of the largest increases across the nation.
* North Carolina is included among the Southern states which rank 35th or worse for the production of the most dangerous chemicals -- those causing either cancer, birth defects, or nerve damage (Hall and Kerr, 1991).

Lester (1989) and Hall (1991) place North Carolina's environmental pollution effort low on the list of comparable states. Lester groups states into four categories according to their commitment to environmental protection activities and institutional capability.

Based on these dimensions he assigns states to one of the four categories -- progressives, strugglers, delayers, or regressives.

Progressives have a high degree of commitment to environmental protection and strong institutional capabilities; *strugglers* have a strong commitment but limited institutional capacity; *delayers* have a limited commitment but strong institutional capacity; and *regressives* have both a weak commitment and a weak institutional capacity. Lester groups North Carolina into the regressive category alongside Arizona, Colorado, Idaho, Kansas, Mississippi, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Rhode Island, Utah, and Wyoming.

Research has attempted to link a state's environmental effort with the *partisanship* of the House and Senate (Calvert, 1989; Dunlap and Gale, 1974; Lester, 1989). It is generally believed that increased environmental action is associated with predominately Democratic Party representation.

In 1971 Governor Robert Scott, a Democrat, pushed for passage of the North Carolina Environmental Policy Act. It was this act that set the tone for the state's environmental regulatory effort and has survived the years as the guiding document. The North Carolina Act was modeled after the federal government's National Environmental Policy Act (NEPA), which established the EPA. The federal Act was advocated by President Richard M. Nixon, a Republican.

North Carolina has a history of electing representatives and leadership from the Democratic party. A review of party affiliation over the past 10 years indicates that 8 of

the last 10 Governors were registered Democrat. In fact, there have been only two Republican governors elected in the state during the 20th century.

The legislative make-up of the state over the years has been predominately Democrat. During the past 10 years the legislative make-up in the House and Senate has averaged 72% Democrat (Otterburg, 1993). Established thinking would associate big business to the Republican party. Democrats, on the other hand, have been associated more with active liberal, social, and environmental agendas.

Background of the Problem

There are several reasons to study state-level environmental policy. First, state politics and environmental policy are considered major concerns. Second, generalizations about national environmental policy can be made on the basis of state-level analysis. Third, the assessment of public opinion and legislative records should serve as an indicator of any linkage between elected officials' actions and public sentiment.

State politics are a microcosm of national politics. In the case of environmental regulation, state enforcement of federal law is required. The states have the basic responsibility for environmental protection under the umbrella of federal oversight. However, all states have the authority to pass environmental legislation and promulgate environmental regulations more strictly than federal mandates. Therefore, states can be involved in progressive and proactive environmental activities that eventually may find their way to the federal level. State action is believed to be more flexible and responsive

than federal intervention when dealing with localized concern. In most states the capacity to administer environmental programs has increased as they undertake greater responsibility.

> By the late 1980s, state governments were the driving force in policy innovation. ...State policy leadership is perhaps best illustrated by recent developments in four policy domains - economic development, education, welfare, and environmental protection. In each instance, the states, not the federal government, have initiated successful policy experiments that have eventually been copied by the national government. And in each case, state governments are providing the lion's share of funds to carry out new public strategies. (Van Horn, 1989, p. 110)

Initially, and prior to 1970, the regulation of environmental activities was the responsibility of individual states. During this time the states were generally uninterested in environmental control. It is suggested that this general disinterest paralleled low public concern for the environment. In addition, the fear that environmental regulation would restrict economic growth and force business into neighboring states with fewer regulations was certainly a factor.

With these forces in place, the federal government took the leadership role with the passage of the National Environmental Policy Act, the formation of the Environmental Protection Agency, and passage of the Clean Air Act.

Over the past 25 years, state involvement with environmental issues has increased as public concern has increased. The states now recognize the marketing potential of environmental quality for economic growth and have improved their capacity to implement environmental programs.

Problem Statement

There are a number of questions that one posits when beginning to consider the formation of environmental public opinion, environmental public policy, the policy-making process, legislation, and regulation. A few of these questions are:

* Is there really an environmental problem?
* Are environmental problems being adequately addressed?
* Does public opinion influence legislative action?
* To what degree does legislative action represent public opinion?
* Does the public feel that government regulation is needed to address environmental problems?
* Is legislative action a mandate from the public?
* Does the voting public consider a candidate's environmental position when making election decisions?
* Has environmental quality improved as a result of environmental regulation?
* What is the relationship between state and federal environmental policy?
* How much is the public willing to pay to address environmental problems?

Public opinion analyst Riley Dunlap (1989, p.131) has suggested that environmentalism is a highly consensual value but low in its ability to sustain public intensity. If this is the case, then public opinion surveys would indicate public approval of environmental issues and financial expenditure to protect the environment. But, failure by elected officials to enact protective environmental legislation would have no major

negative political consequences. Dunlap maintains that there is a weak link between a political candidate's chance for election and the candidate's legislative record.

However, a unified and coherent public opinion related to environmental issues should influence legislative voting. It is this unified public interest in environmental issues that has made environmental policy a recurring theme on the political agenda. The problem is that we do not know if public interest in the environment is translated into legislative action. The present research will attempt to throw some light on this intriguing question in the context of one state of the nation, North Carolina.

Purpose

This study is designed to explore the relationship between citizen concern for environmental quality, legislative action, and regulatory impact. The three basic research questions used to examine this relationship are: (a) What is the extent of North Carolina citizens' concern for the environment?; (b) if, and to what extent, does the legislative system respond to public concern about the environment by the introduction and passage of appropriate legislation to protect the environment; and (c) how effective is the state's environmental policy implementation?

In order to address these questions the researcher intends to verify the following propositions:

1. North Carolina citizens have a high degree of concern for the environment.

2. Citizen concern is reflected in the elected state representatives' and senators' introduction of environmental legislation.
3. Citizen concern is reflected in the passage of environmentally related legislation.
4. The state's environmental quality has improved as a result of citizen concern and enacted legislation.

Significance of the Study

The environmental movement has changed the character of our society. By studying the public policy process as it relates to environmental issues this study stands at the cutting edge of environmental policy research. The generalizations and conclusions drawn from this study will be of value to students of the policy process, potential and current elected officials, and environmental interest groups.

The growing complexity of environmental problems and human dependence on the environment requires that we spend the time analyzing these issues before environmental issues get out-of-hand and ecological survivability is jeopardized. Environmental policy impacts human and ecological health, and as such warrants study.

Furthermore, state level environmental policy analysis is not very common, generally. In particular, this study explores an otherwise unexplored territory: the relationship between state environmental legislation and public opinion on environmental issues.

Chapter II

Literature Review

In 1975, critics pointed-out that "very little research had been done by political scientists on environmental policy" (Mann, 1975, p.5). Environmental studies at the state level were scarce and in general the literature was deficient. However, in the late 1970s and progressing into the 1980s, the research and literature published on environmental politics began to expand. The increased attention on environmental public policy was primarily concerned with the public policy process at the federal level and investigation into the state and local process remained open for investigation.

This literature review is organized under the following categories:

1. Environmental public opinion.
2. Environmental public policy formation.
3. Environmental public policy implementation.
4. Environmental public policy impact.

Environmental Public Opinion

Environmental Concerns

One of the first events that moved the environment into the national spotlight was the publication of Rachel Carson's book Silent Spring (1962). Carson, a biologist by training, was particularly concerned with the pesticide DDT. The book implied that

unless something was done about pesticides and pollution in general, there would be no birds remaining to sing in the spring. Carson warned about the grave ecological and societal repercussions of pesticide use and the lack of government intervention to address the problem.

Additional publications warned about the environmental crisis and inevitable consequences of inaction. During the 1970s, Commoner (1972), Meadows (1972), Mesarovic and Pestel (1974), Brown (1972), Reich (1970), and Schumacher (1975), all published papers, articles, and books that helped bring environmental concern to a level of paramount public and national concern.

Opinion Surveys on Environmental Issues

Prior to 1970 there was very little emphasis given to environmental issues as evidenced by the lack of public opinion surveys on the issues. Louis Harris was perhaps one of the first to perform polling on environmental issues and in 1964 found that rising public interest in the problems of air and water pollution were the most recurring themes. The number of public opinion polls increased into the 1970s but few polls were repeated regularly so that trend analysis is difficult. However, a body of data now exists that offers information on the public's attitudes and behaviors toward environmental issues.

Over the years, polls on environmental issues have become more sophisticated and, increasingly, questions about tradeoffs are asked. For example, individuals are asked to make choices between environmental protection, higher prices, personal sacrifice, and

economic growth. However, environmental issues are considered post-materialist values and direct trade-off comparisons with materialist cost is difficult if not inappropriate.

Council on Environmental Quality Public Opinion Survey, 1980

In 1980, Resources for the Future, a nonprofit organization, conducted a national public opinion survey for the Council for Environmental Quality (CEQ), Executive Office of the President. A sample of 1,576 civilian adults over the age of 18 was randomly selected and interviewed. The poll's stated purpose was to determine public opinion trends over the past decade, to obtain information about new areas of environmental concern and the degree of support for environmental protection, and to determine public responses to difficult choices between environmental protection and other values.

> The overall results of the RFF survey ... demonstrate the fact that environmental protection enjoys continued strong backing. The intensity of public concern about environmental problems has lessened somewhat since its peak on Earth Day 1970. Other problems, in particular, national defense and inflation, are more urgent now. But the answers to a broad range of probing questions show abiding public support for national efforts to protect environmental quality. Environmental issues seem to have become an enduring social concern, much like health care, education, and other basic issues. (CEQ, 1980, p. 2)

Since 1970 the government has devoted much attention to environmental matters and the state of the environment is no longer viewed as a crisis. Support for environmental protection remained strong as reflected in a 1980 CEQ survey. Forty-eight percent (48%) of the 1980 survey respondents indicated that the country spends too little for environmental protection (CEQ, 1980).

Highlights of the 1980 survey are as follows:

* Concern for the environment ranks sixth on the list of social issues behind crime, unemployment, disease, public education, and aid to low income families.
* Forty-two percent (42%) believe that protecting the environment is so important that requirements and standards cannot be too high, and continuing improvements must be made regardless of cost.
* Twenty-seven percent (27%) of respondents said that growth should be sacrificed to protect the environment.
* Thirty-nine percent (39%) said that both economic growth and environmental protection can be achieved. These two goals are considered mutually exclusive.
* Eighty percent (80%) are concerned a "great deal" about inflation, matching the concern shown during the 1974 recession.
* Levels of concern about environmental issues are nearly evenly distributed, within five percentage points, across sex, race, income, and age.
* Sixty-seven percent (67%) of the public has a "great deal" or "some" confidence that the government will be able to protect the environment.
* Less than a majority, forty-four percent (44%), believe that the government is responsive to the public's views and only thirty-six (36%) believe the federal government considers the views of individual citizens.

The results of the RFF survey in 1980 indicate that concern for the environment remains strong despite no longer being viewed as a crisis issue. There appears to have

been no reduction in the emphasis the public places on environmental issues despite the claims that once the true cost of environmental protection was known attention would decline. Environmentalism is predicted to be a continuing concern in the future.

Roper Public Opinion Survey, 1990

The Roper publication "The Environment: Public Attitudes and Individual Behavior" (1990) commissioned by S.C. Johnson and Son, Inc., is based on a poll of Americans and explores responsibility for protecting the environment, solutions to environmental problems, and interest in environmental issues.

The survey is based on a sampling population of 1,413 adults, 18 years of age and older, who were asked questions during personal interviews. The findings of the survey are organized into two sections:

* Part I - The Environment: Problems, Causes, Solutions
* Part II - American Consumers: From Brown to Green

Part One of the report examines general public attitudes toward the environment, including the perceived seriousness of environmental problems; national versus local environmental problems; causes of blame for these problems; and the roles of business, government, and Americans themselves in finding the solutions.

Part Two focuses on individual actions and behavior regarding the environment, and specifically on the nature of the five groups of Americans who behave so differently in this area. It assesses the important influences on why some individuals are truly environmentalists while others are not; consumer purchases of 'green products'; the effects of advertisements and labels that stress environmental benefits; sources of information about environmental issues; and the types of environmentally friendly practices people are pursuing. (Roper, 1990, p. iii)

The highlights of Part I: The Environment: Problems, Causes, Solutions are as follows:

* Improving the environment ranks fourth on the list of national priorities after the problems of crime and drugs, AIDS, and health care costs. Improving public school education ranks fifth.
* Since 1987, public concern over the environment has grown faster than concern about any other national issue. Since 1987 concern for the environment, expressed as major environmental efforts needed, has increased from 56% to 78%.
* Solid waste problems are perceived to be caused by disposable diapers, plastic packaging, plastic bottles, and aerosol containers topping the list. This is an erroneous perspective in that these four waste streams account for only about 10% of what goes into a typical landfill.
* Local environmental conditions are generally rated as good but in need of improvement.
* Nearly three quarters of the public believe that business must be forced by government to develop environmentally safe products.
* About 7 in 10 think that environmental laws and regulations have not gone far enough.
* Most people think that the individual can do little to help solve the environmental problem and improve the environmental quality of life. Most people do not feel

empowered to solve environmental problems, which may explain the tendency to support stronger government regulation.

* Generally, Americans believe that answers to the environmental issues must be found at the institutional level and favor additional and stronger government regulation.

Highlights of Part II: American Consumers: From Brown to Green are as follows:

* There are five distinct groups of Americans when it comes to environmental attitudes and behavior. Two of them are environmentalists, two are not, and one is a "swing" group on environmental issues.
* Group 1, the "**True-Blue Greens**" (11% of the population) are environmental leaders and activists. They are well educated, hold good jobs, and are rather affluent.
* Group 2, the "**Greenback Greens**" (11% of the population) are willing to pay money to improve the environment but have little personal time to be personally involved. They are also well educated and affluent as well as the youngest of all the groups.
* Group 3, the "**Sprouts**" (26% of the population) are the swing group with attitudes and behavior both pro- and anti- environment. This group is a picture of middle America.
* Group 4, the "**Grousers**" (24% of the population) are not very involved in environmental activities and do not believe that others are doing much for the environment either. They are less affluent and educated than average.

* Group 5, the "**Basic Browns**" (28% of the population) are the least concerned with environmental issues. They are also the most disadvantaged of the groups in both educational and financial terms. They are mostly male and concentrated in the South.
* The three demographic variables of income, education, and gender correlate most closely with environmental concern. The more affluent and better educated, and more women than men, are likely to be involved.
* Consumers, on average, are willing to pay 6.6% more for environmentally friendly products.
* Recycling is the most frequently practiced environmental activity.
* About 25% of consumers read packaging labels and make purchasing decisions based on perceived environmental impact.
* The most popular reason that individuals hesitate on doing more about the environment is that they feel that companies should solve the problem.
* Technology, although not seen as the panacea for solving the environmental problem, is believed to play a part in the solution.
* Greater government regulation of environmental practices, both corporate and individual, is seen as a likely prospect for correcting environmental problems and practices.

Gallup Public Opinion Survey, 1990

The Gallup organization conducted a national telephone survey of 1,223 persons in April 1990, to determine their concern for environmental issues. Approximately half of the respondents were male and half were female. All demographic variables were considered representative of the population, except race. From the tabulated data over 90% of those surveyed were white.

Consistent with the 20th anniversary of Earth Day celebrated in April 1990, the Gallup poll found that Americans are strongly in tune with the Earth Day purpose of drawing attention to the environment. However, a significant number of people (72%) believe that not enough attention is given to environmental issues.

Many Americans (54%) feel that drastic and immediate action is necessary to protect the environment and avoid major environmental disruptions. These people are willing to pay an economic price to help solve the problems.

> Roughly the same number of Americans as in 1970 spontaneously list environmental concerns as the No. 1 problem facing the U.S. today. Concerns about the environment are overshadowed by the drug problem and economic top-of-mind considerations today, just as they were overshadowed by Vietnam in 1970. Even activists environmentalists who say that environmental concerns are critically important do not list the environment as this country's most important problem. (Gallup, 1990, p. 5)

However, 66% of Americans say they worry "a great deal" about water pollution and soil contaminated by toxic wastes. Fifty-eight (58%) are concerned "a great deal" about air pollution, 52% are concerned with beach and ocean pollution, 51% are concerned about the loss of natural habitats, and 48% are concerned with pollution from radioactivity. In each case, the percentages concerned are down approximately seven (7)

percentage points from the survey responses to the same questions received in 1989 (Gallup, 1990, p. 5).

Concerns not directly related to the individual are less likely to be of paramount importance to Americans. For example, damage to the ozone layer, loss of rain forests, the greenhouse effect, and acid rain are not seen as the most important environmental problems. This personal attachment to specific environmental issues may help explain some cases of "not-in-my-back-yard" (NIMBY) syndrome and the limited concern seen for international and global environmental issues.

Adding to the significant majority of Americans who feel that hardly anyone is concerned enough about the environment (72%), is that more than half of those polled agreed with the statement "life on earth will continue without major environmental disruptions only if we take additional and drastic action concerning the environment." Recycling has become the most frequently practiced environmental activity with over 85% of Americans reporting some recycling.

Additional highlights of the survey responses are:

* Forty-nine percent (49%) have contributed money to an environmental, conservation or wildlife preservation group.
* Forty-two percent (42%) have avoided buying a product because it was not recyclable.
* Twenty-eight percent (28%) have boycotted a company's products because of its record on the environment.

* Eighteen percent (18%) did volunteer work for an environmental, conservation or wildlife preservation group.
* Seventy percent (70%) say that environmental protection should be given priority even if it means a slowdown in economic growth. This figure is up from the 61% who gave this response in 1984.

> Gallup classifies about 20 percent of the American public as hard-core environmentalists--those who call themselves strong environmentalists, feel that major disruptions are coming if we don't take drastic environmental actions, and favor environmental actions even at the cost of economic growth. These hard-core environmentalists come from all walks of life, although they tend to be somewhat more liberal than conservative, more well-educated than not and more Democratic than Republican. (Gallup, 1990, p. 6)

Gerstman and Meyers Public Opinion Survey, 1992

Gerstman and Meyers (G+M) is one of the country's leading package design consultants and, as such, is concerned with the problem of consumer solid waste (CSW). Consumer attitudes and behaviors are believed to play a critical part in the problem and potential solution to the CSW situation. Therefore, G+M conducts consumer research to provide insight into the opinions and viewpoints of consumers (Gerstman, 1992, p. 1).

Beginning in 1989, G+M has conducted a national opinion survey annually to determine trends and develop a greater understanding on evolving and continuing issues concerning CSW. In 1992, Joel Benson Associates conducted the most recent survey at G+M's direction.

The 1992 survey was comprised of 319 interviews with female heads of household aged 21-54 who were responsible for the household grocery shopping. The sample was

comprised of approximately half working and half non-working women and divided equally between women with and without children under 18 and living at home.

The areas of investigation included:

- Importance and concern about various environmental problems
- Current and future behavior concerning CSW
- Predictive behavior based on hypothetical scenarios (including price impact)
- Attitudes and perceptions regarding the CSW problem. (G+M, 1992, p. 1)

The conclusions drawn from the survey results are as follows:

1. Consumers maintain a significant level of concern about the Solid Waste problem and are actively pursuing solutions.
   * CSW ranks nearly equal to air quality as the single most important environmental issue.
   * A significant proportion of consumers (83%) are "doing something."
   * Consumers continue to report a willingness to forgo the benefits of plastic packaging if the price increases by as little as 5%.
   * Commitment to the environment together with a desire for convenience continues to be a valued combination as consumers are still waiting to pay more for a package that provides both.

2. Concerns about the CSW problem are so significant that they are already affecting the purchase decision.
   * Over 8 in 10 (83%) agree that a company's environmental reputation impacts their choice of brands.
   * Nearly two-thirds (62%) have not bought a particular brand or product in the past year because of environmental concerns.

3. Consumers need more help from both business and government so they can take a more active role to become part of the solution -- there are not enough meaningful options available. Currently, legal requirements and consumer activities vary widely by location. Even where efforts are being made, tremendous misunderstanding continues to prevail.
   * More than 8 in 10 consumers believe that the public, business and government are not concerned enough about the environment.
   * While reported activity is highest in New Jersey, where the level of reported legal requirement is also the greatest, high levels of activity are reported in

areas that have much lower levels of reported requirements, such as Seattle and Wheeling.

* Environmental information on packages is important, but currently there is not an adequate amount, and what is available is not sufficiently believable.
* Consumers incorrectly perceive that plastic contributes most to CSW, and that paper contributes least. Despite this belief, they still use an increasing amount of plastic packaging.
* Many still incorrectly believe biodegradable packaging is currently a viable solution.

4. Packaging provides an important means for consumers to be part of the solution. As a result, packaging materials are becoming more closely scrutinized.
   * Most consumers continue to view packaging as an easy way for them to deal with the problem.
   * Packaging that is made from recycled material or that is recyclable, easily crushed or made of fewer layers is said to be the most likely to be purchased.
   * Packaging that is biodegradable, refillable, or is offered in larger sizes, or utilizes concentrates is also seen as viable.
   * Packages considered most harmful to the environment are those that are bulky, comprised of multiple layers, or made of plastic. This includes juice in steel cans, pump toothpaste, frozen entrees in a microwave tray, and soda and ketchup bottles. (Gerstman, 1992, p.2)

The strategic marketing conclusions from the survey are significant. Consumer concern for the environment is high and indicates that marketers must be responsive to public sentiment in order to maintain competitive advantage and market share.

> Utilizing environmentally friendly packaging is likely to become standard operating procedure. While it may not provide the main point of difference for a brand, by ignoring the issue entirely, a brand is more likely to be rejected in favor of a more environmentally responsive competitor. (Gerstman, 1992, p. 4)

Cambridge Energy Research Associates Public Opinion Survey, 1992

A random national telephone survey of 1,200 adults was conducted in January 1992, by Cambridge Energy Research Associates (CERA) and Opinion Dynamics; both firms

are based out of Cambridge, Massachusetts. Daniel Yergin (1992) provides the following overview of the special report:

> This third annual CERA/Opinion Dynamics survey of U.S. public attitudes on the economy, the environment, and energy documents the persistent power and stability of the environmental consensus: the perceived need for action to 'clean up' pollution that has become an important driving force in American politics. In spite of heightened concerns about the U.S. economy, a broadly based majority of Americans wants environmental problems solved even if it means higher prices for some products. This majority also believes that while the job can be done without harming the overall economy, more government regulation will be required.
>
> Yet at the same time, the public has little enthusiasm for taking money out of its own pocket, in the form of higher taxes, to pay for environmental cleanup. This is especially true for 'global' problems like greenhouse gases and ozone depletion.
>
> When it comes to voting for the President, a majority indicates opposition to any candidate who appears to favor industrial growth and jobs at the risk of harming the environment. The proposal--already defeated by Congress--to require stricter automobile mileage standards receives strong public support.
>
> Not only does the public want environmental improvement, but it expects it to happen. Both the desire and the expectation, as well as the belief in the need for more government regulation, are most strongly held by the youngest people questioned in the CERA/Opinion Dynamics survey. This is a clear signpost that the environmental consensus is not only an important, current driving force, but also seems likely to be an enduring one.
>
> Environmentalism has become what might be described as a "classical" populist issue in the American political system. It cuts right across all the traditional demographic, partisan, and ideological cleavages, appealing to conservatives and liberals, Republicans, and Democrats. But the present survey also finds a substantial shift toward optimism about the present and future conditions for the environment, compared to our previous surveys. (p. 1)

Highlights of the survey are as follows:

* Nearly 7 out of 10 (68%) Americans believe that more government regulation is needed to solve pollution problems.

* More than 6 out of 10 (63%) Americans believe that pollution can be cleaned up without hurting the economy.
* Clean water is the only environmental problem for which a majority (56%) say they would be willing to pay more in taxes to solve.
* Almost two thirds (63%) of the public--Republicans as well as Democrats--say that they would be "less likely" to vote for a candidate who favors policies that encourage industrial growth and new jobs, even if it risks harming the environment.
* Over one half (56%) think the environment is either better or about the same than did one year ago, and 6 out of 10 think it will be better or about the same in 10 years, reflecting a substantial shift to greater optimism.

The first CERA/Opinion Dynamics survey conducted in 1990 identified the public's concern about the environment as one of the main forces in American politics in the 1990s. The second survey, conducted in 1991, showed little connection between the political and economic developments of the Gulf crisis and the priority people place on environmental issues. The public does not appear to see any linkage between environmental improvement and economic conditions. Interestingly, people see the environmental problem mainly as one of regulation and 68% believe that more government regulation is required to solve pollution problems. Since most people believe solving environmental problems is one of regulation and enforcement, they are reluctant to spend their own money to get the job done (CERA, 1992, p. 3).

Issue-Attention Cycle

Public attention and concern for specific issues often experience brief national popularity. As concern fades and media attention diminish, these issues lose their popular support and legislative interest. In 1972, Anthony Downs equated public concern with public support for environmental protection and hypothesized that once the costs for environmental protection became apparent, support for environmental protection would decline (p. 38).

Downs (1972) coined the phrase "issue-attention cycle" to describe domestic attitude and behavior. Downs posits that a systematic cycle exists that can explain heightened public interest and eventual boredom with major issues. He applies the issue-attention cycle analysis to environmental issues and predicted a decline in their longevity and impact.

The "cycle" includes a series of five stages:

Stage 1: Pre-problem Stage; an undesirable social condition exists, but has yet to capture the interest of the public.

Stage 2: Alarmed discovery and euphoric enthusiasm; dramatic event focuses the public's attention and is usually followed by euphoric enthusiasm about society's ability to solve the problem.

Stage 3: Realizing the cost of significant progress; recognition that the "costs" for solving the problem are high and may require personal sacrifice.

Stage 4: Gradual decline of public interest; as people realize how costly solving the problem is, they get discouraged, threatened, or bored and attention wanes.

Stage 5: Post-problem stage; the issue removed from the center of public concern moves into a perpetual limbo but may sporadically recapture public interest.

> Public interest in the quality of the environment now appears to be about midway through the "issue-attention cycle." Gradually, more and more people are beginning to realize the immensity of the social and financial costs of cleaning up our air and water and of preserving and restoring open spaces. Hence much of the enthusiasm about prompt, dramatic improvement is fading. (Downs, 1972, p. 43)

Downs predicted that issues of environmental quality would move into the post-problem stage and decline in public interest. He believed that most citizens would not be willing to make the necessary lifestyle changes and accept the costs associated with environmental cleanup and preservation. He also predicted that environmental issues would fade from majority concern since young people and students, who generally support environmentalism, would have less free time in maturity to devote to the issue.

Additional terms used to describe environmental concern and public opinions are salience and valence.

A salient issue is considered to be one that is "on the minds" of individuals, something that is important to them, and not just something that they consider when asked about. The valence of an issue is related to the intensity of the support. Many surveys use a ranking system to measure the salience of an issue and require that issues, such as the environment, be evaluated relative to other issues (Mitchell, 1990, p. 83).

Commenting on issue salience one author writes, "elected officials confuse issue salience with issue support. Their election campaigns fix on salient issues" (Lake, 1983, p. 232).

Environmental Public Policy Formation

Policy formation is concerned with how and why certain policies are adopted. For example, policy formation is concerned with how bills are ratified in legislatures, why judicial court cases are reached, and the decisions made by appointed administrators and elected officials.

An examination of the public policy formation stage can be approached from the sense of political, social, or economic determinants; participant involvement; and the institutional arrangements (Mann, 1982, p. 5).

The ability to bring an issue up for policy consideration is termed "agenda setting." Agenda setting is the ability to impact sufficient importance and urgency to an issue that government will feel compelled to place the matter on official agenda.

Incremental Environmental Policy Formation

Elected and appointed public officials generally favor making policy changes incrementally. Incremental decisions are less politically risky and avoid sweeping changes. Incremental decisions are characterized by careful deliberation of the proposed changes and usually do not propose creative approaches to problem resolution.

> Policy making typically is part of a political process in which the only feasible change is that which changes social states by relatively small steps. Hence, decision makers typically consider, among all the alternatives that represent small or incremental changes from existing policies. (Lindblom, 1977, p. 313)

> Scholars analyzing the policy-making process tend to emphasize its incremental nature. This sometimes leads them to advocate making policy recommendations that do not substantially deviate from prevailing policy. Advocating only a small change, however, when one could have a much larger change may be even more wasteful in an opportunity-cost sense than advocating a large change which is unlikely to be adopted, but which may serve to publicize the policy and facilitate its later adoption or desirable compromise. (Nagel, 1980, p. 31)

Grass Roots Discomfort and Policy Formation

Grassroots organizations afford citizens a way to become involved in the legislative process. By definition, a grass roots movement begins at home and in the localities where the concerned live. A grassroots movement is a form of indirect lobbying but distinctly different in that the initial groundswell of interest is proliferated by nonprofessionals. Public opinion is directed by letters, speeches, and advertising. Several organizations have been successful at organizing a grassroots movement.

Corporations have reached out to grassroots organizations, convinced that an outreach program designed to solicit third party support builds a stronger base for legislative influence. It is often not enough to only have a political action committee and a Washington office. Allies, in the form of third party groups, and coalitions have an advantage by appearing to work in the public interest. This image lends credibility with the media and officials.

Contrary to common perception, one need not be an elected official to make a change in government action. Grassroots organizations have learned this lesson very well. Distinguishing themselves from the large funded advocacy groups that participate in issues at a multitude of locations across the globe, a grassroots organization originates in the community where common concern has been identified and impacts the community.

Citizen groups can band together financially and symbolically to have a big impact on the policies that affect the communities in which they live. Technology has and will continue to make organizing these grassroot communities easier and better informed. Working in groups is the key to a grassroots movement.

Often, when faced with the potential for new potential polluters locating into an area, local opponents object in opposition to the perceived adverse impact. This opposition of "Not In My Back Yard" (NIMBY) is a localized example of a grassroots movement. The perceived adverse impact, real or overstated, serves as a call to action, and public opposition has stopped many planned projects. The question of acceptable risk varies in direct proportion to the distance of our homes from hazardous waste facilities, nuclear power plants, etc. The public's confidence in the decisions of government and business has diminished.

> This has created a crisis in American politics. The conventional public policy process, from the smallest community up through the states and federal government, has been rendered incapable of effectively balancing needs for growth, development, and facility siting with those of health and environmental protection for current and future generations. (Mazmanian, 1987, p. 127)

Dramatic Events and Policy Formation

Another explanation of environmental policy formation involves a dramatic event. Over the years there have been several notable environmental events that have led to environmental policy by forcing the issue to the attention of the public.

A well-known dramatic event was the first "Earth Day" in April 1970. As has been discussed previously, the message from the public support of the Earth Day celebration sent a clear signal to public policy makers that environmental concerns were public concerns. A flurry of federal legislation followed the 1970 event.

In 1978, the Three Mile Island nuclear release led to a requirement by the Nuclear Regulatory Commission that expanded the community reporting requirements. The 1980 environmental disaster known as "Love Canal" in New York and the "Valley of the Drums" in Kentucky were driving forces behind the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund). And, in 1984, the release of methylisocyanate in Bophal, India inspired the Superfund Amendments Reauthorization Act.

Other recent environmental issues that have received media attention include ethylenedibromide in baking flour, alar used to spray apples, Chernobyl, and the Exxon Valdez tanker accident. In each of these dramatic cases, some form of policy response has followed.

Dramatic events will continue to shape environmental public policy as public policy makers attempt to correct regulatory deficiencies and prevent additional incidents.

Unfortunately, legislative response to perceived environmental problems may not adequately address the root cause of the disaster or may be inadvisable responses to minimal risks.

Environmental Policy by the Elite

Environmental activists are generally stereotyped as belonging to the affluent class. However, studies of the electorate in California (Freid, 1976) and political participation (Mohai, 1984) cast doubt on the stereotypical view.

The stereotype of affluence does not necessarily apply to the electorate when we consider that the greatest beneficiaries of pollution control would be inner city poor. In the California study (Freid, 1976), the independent variables of population density, race, age, income, education, and political party affiliation are analyzed to test the contention of elite intervention. In the California study, the electorate spanned the socioeconomic spectrum and consistently found that environmental salience includes more people than we would expect from only stereotypical environmental activists.

Mohai (1984) suggests that environmental concern is broad-based in our society. Nevertheless, environmental activists are disproportionately drawn from the upper-middle class. "If environmental activism is linked to socioeconomic status, but environmental concern is not, then that activism must be due to factors other than a unique concern for the environment by the upper-middle class" (p. 836).

Mohai (1984) successfully argues that environmental activism is primarily the result of the upper-middle class's greater access to the resources necessary to affect change. In addition, those without the necessary resources to affect political change become discouraged.

> Thus the upper-middle-class link with environmental activism can be seen as a link between that class and the factors of political activism rather than a link between the upper-middle class and environmental concern as has often been asserted by past literature and popular belief. (Mohai, 1984, p. 837)

Environmental Public Policy Implementation

Policy implementation refers to what happens to policy laws after they are adopted by legislation or other decision makers. The largest portion of the implementation stage is concerned with the administrative agencies. The Environmental Protection Agency (EPA), courts and individual states are involved with environmental policy implementation.

Environmental Protection Agency and the Promulgation of Regulation

Although a number of agencies play a role in the implementation of environmental policy, the Environmental Protection Agency (EPA) is the one with the greatest responsibility. Most implementation efforts focus on promulgating the specific regulations.

The EPA was created with the passage of the National Environmental Policy Act in 1969, signed by President R. Nixon, and reports directly to the Office of the President.

The EPA was created on the recommendation of the Ash Council. The Council was a group composed primarily of business executives charged with streamlining government. It is ironic that a commission charged with streamlining government recommended what is now the largest government agency in personnel and budget. A considerable amount of posturing and political intrigue occurred behind the scenes prior to the formation of Agency. Nixon's support for the formation of the Agency may have been a pre-emptive political strategy to counter the support being garnered by Democratic adversaries Edmund Muskie (D-Maine), John Dingle (D-Michigan) and Henry "Scoop" Jackson (D-Washington). Nevertheless, President Nixon is given singular credit for the creation of the EPA (Quarles, 1976, p. 14).

The EPA has responsibility for four main environmental areas: air quality, water quality (surface and ground), solid and hazardous waste, and pesticides. Pesticide activities are restricted to licensing rather than regulation, and groundwater regulation is still in its infancy. Hazardous wastes have been the subject of much regulation and public concern. However, clean-up methods and their success are difficult to measure. By contrast, air and surface water quality goals and measurements are well established.

The first **Clean Air Act** (CAA) was passed in 1963 to provide grants to air pollution control agencies around the country. The initial legislation was largely ineffective in the early stages as air pollution problems were growing faster than federal, state, and local efforts could control them.

In 1965, Congress amended the Act to add the Motor Vehicle Air Pollution Control Act, which authorized Federal emission standards for new vehicles. In 1967 amendments gave authority to the federal government to adopt emission control regulations in areas that had air pollution problems.

In 1970, major revisions were made to the existing legislation that totally restructured the federal and state relationship. While continuing to look to the states for regulatory enforcement, Congress provided the newly created EPA with the authority to set minimum air quality levels that each state must achieve.

Section 108 of the 1970 Act required the EPA to publish a list of pollutants determined to have adverse effects on public health or welfare. Section 109 of the law required the establishment of National Ambient Air Quality Standards (NAAQS) for all pollutants identified under Section 108.

There are two types of NAAQS referred to as "primary" and "secondary." A primary standard is set at a level which allowing for an adequate margin of safety will protect public health. A secondary standard protects the public welfare encompassing all aspects of the environment other than human health, e.g., soil, vegetation, animals. NAAQS exist for particulates, sulfur dioxide, ozone, carbon dioxide, nitrogen dioxide, and lead.

Section 110 provides a structure under which the state and local governments are expected to establish the regulatory framework required to achieve the NAAQS. The states are required to submit State Implementation Plans (SIPs) to the EPA for approval that are design to comply with the federal NAAQS.

In 1974 EPA promulgated regulations designed to prevent significant deterioration (PSD) of air quality in areas were ambient standards were already being met. And Section 111 provided for new source performance standards (NSPS). The NSPS are technology-based standards that are nationally applicable regardless of the quality of air where the source is located.

Section 112 provided for national emission standards for hazardous pollutants (NESHAPs) based on health protection. NESHAPs applied to both new and existing sources. NESHAPS are written for asbestos, benzene, beryllium, mercury, radionuclides, vinyl chloride, coke oven emissions, and inorganic arsenic.

The Clean Air Act Amendments of 1977 amended the previous Act, postponed the deadlines for compliance with auto emission and air quality standards, and set new standards for prevention of significant deterioration in clean air areas. Then in 1990, the Act was again amended with major additions to address the concerns of nonattainment areas, mobile sources, air toxics, and acid rain.

The **Clean Water Act** (CWA) of 1972 was passed by the Congress over the veto of President Nixon. The 1972 Act was a recodification and revision of federal water pollution control law. Prior to the 1972 Act, the states were charged with protecting the health and welfare, and water quality through adoption of water quality standards. The Act of 1972 was a major improvement over previous water related legislation such as the Rivers and Harbors Act "Refuse Act" of 1899, which protected navigation, and the 1948

Federal Water Pollution Control Act, which delegated responsibility for water pollution to the states.

The 1972 Act sought to establish both water quality standards and effluent limitations. This approach proved reasonably effective but was amended in 1977 to help focus on toxic or "priority" pollutants. In 1978, the Congress again revised the Act to cover accidental releases of hazardous pollutants.

The federal-state regulatory program, as established under the amended Act, has a statement of goals and objectives and a regulatory mechanism to achieve these goals. The objective of the Act, Section 101, is to "restore and maintain the chemical, physical and biological integrity of the nation's waters." The goals were to (a) achieve a level of water quality which "provides for the protection and propagation of fish, shellfish, and wildlife and for "recreation in and on the water," and (b) eliminating the discharge of pollutants into U.S. waters.

The mechanism for achievement of the goals and objectives is a system for imposing effluent limitations on discharges from point sources. A point source is a clearly defined discharge point, typically the end of a pipe. A permit program entitled the National Pollutant Discharge Elimination System (NPDES) was implemented requiring dischargers to disclose the volume and nature of their discharges. The NPDES program allowed the EPA to specify discharge limits, impose self-monitoring and reporting requirements, and authorized enforcement penalties. Anyone discharging pollutants into the waters of the United States was required to have an NPDES permit.

In 1987 the Congress passed the Water Quality Act that reauthorized the Clean Water Act and enlarged its scope by including "non-point source" discharges. These non-point sources include storm water run-off from agricultural and urban sites, construction sites, land disposal operations, mining operations, and industrial plants.

The **Resource Conservation and Recovery Act** (RCRA) had its infancy in the 1965 Solid Waste Disposal Act. The 1965 Act was amended in 1970 and 1973 by the Resource Recovery Act. The Solid Waste Disposal and Resource Recovery Act did not contain timetables for compliance as did similar Acts of the time. The original guidelines covered incineration, operation of sanitary landfills, storage and collection, beverage containers, resource recovery facilities, source separation, and procurement for Federal facilities. The government was attempting to lead by example in the area of solid waste.

In 1976, however, the Congress enacted the Resource Conservation and Recovery Act (RCRA). RCRA greatly expanded the government's role in the management of solid and hazardous wastes. The major emphasis of RCRA is contained in Subtitle C and covers those wastes that are considered hazardous. Wastes are deemed hazardous if they are characteristically hazardous or listed as hazardous. A characteristically hazardous waste would display defined levels of flammability, reactivity, corrosivity, or ignitability. Additional wastes can be added to the list of hazardous wastes upon the initiatives of the EPA, a state governor, or citizen suit.

Once a waste is determined as hazardous, then a cradle-to-grave responsibility is established between the generator of the waste and its ultimate disposal and residual

effects. This relationship can not be severed or transferred and has the impact of forcing accountability on the generator. All generators and treatment, storage, and disposal facilities (TSDFs) are covered by Subtitle C of RCRA.

In 1980 Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The 1980 action authorized the government to respond to hazardous waste emergencies and to cleanup chemical dump sites. The Act created a $1.6 billion "Superfund" to cover the costs for cleanup.

In 1986 Superfund was reauthorized, hence the name Superfund Amendments Reauthorization Act (SARA). SARA provided an addition $8.5 billion to cleanup the nation's most dangerous abandoned chemical dumps, set strict standards and a timetable for cleaning up such sites, and required industry to provide local communities with information on hazardous chemicals used or emitted.

The **Federal Insecticide, Fungicide and Rodentcide Act** (FIFRA) was predated by the 1910 Insecticide Act. However, due to the insignificant use of pesticides before World War II, regulation was a low priority. After the war the use of pesticides grew rapidly, resulting in benefits to health and agricultural production. In response to the increased usage, the Congress enacted the more comprehensive Federal Insecticide, Fungicide and Rodentcide Act of 1947. The Act required that pesticides distributed within the U.S. be registered with the U.S. Department of Agriculture (USDA) and required an elementary labeling provision.

In 1964 and again in 1966, the USDA tightened the restrictions and control over pesticide usage and registration. In the late 1960s environmental groups filed numerous law suits demanding the suspension of pesticides such as DDT and the herbicide 2,4,5-TP Silvex.

Due to the creation of the EPA in 1970, a greater emphasis on pesticide and herbicide usage was eminent. EPA's first policy determination is remembered as the 18th of March Statement. The ruling was the "Statement of the Reasons Underlying the Decision on Cancellation and Suspension" of DDT, 2,4,5-TP Silvex, and Aldrin-Dieldrin. The order stated that registration of pesticides would no longer be given only a cursory review and ruled that the proof of product safety rested with the chemical manufacturer. The FIFRA was again amended in 1972, 1975, and 1978. Through the historical development of the FIFRA, there has remained the intent of the EPA to transfer responsibility to the individual states, while at the same time retaining overall jurisdiction and veto power.

Environmental Policy by the Judiciary

> The judicial branch has played a major role in the development and implementation of environmental policies in America. This reflects the unique role of the courts in the U.S. political system and a cultural tendency to turn every dispute into a legal one. It also reflects the scientific complexity of environmental policy, inevitably characterized by conflicting evidence and disputes among experts. The institutional capacity of the courts to rule on technical controversies have been widely questioned, but no consensus on alternative procedures for resolving them has emerged. (Wenner, 1990, p. 206)

Frequently disputes arise as to the intention of environmental legislation that must be resolved in the courts. Therefore, judges are effectively making environmental policy by

statutory interpretation and enforcement of existing law. It has been argued that judges are uniquely unsuited for this task and responsibility due to their lack of environmental expertise (Horowitz, 1977, p. 24).

Prior to 1970 and the environmental movement, the primary recourse to the effects of environmental pollution was through common law and concepts such as trespass and personal injury. Parties injured by environmental pollution were required as plaintiffs to demonstrate that the alleged injury was the direct result of a particular polluter. The concept of "standing" meant that the courts could only hear cases where the party bringing the suit had suffered a clear injury or damage. These legal concepts were essentially ineffective in addressing the cause of the environmental problem for several reasons. First, plaintiffs had tremendous difficulty in proving singular responsibility for the damage or effect. And second, assessed damages alone failed to prevent the recurrence. Many polluters found it more cost effective to simply pay the damages and continue the activity.

As common law proved a weak deterrent to environmental pollution, proponents of resource conservation and pollution control turned to public law. Rather than depending on the threat of legal action after pollution has occurred, statutory law prohibits the act from happening in the first place. Shifting the legal recourse away from private law into the arena of public law caused the policy-making process to focus on prevention rather than remediation as corrective tools. No longer was redress between individuals and polluters but rather between the government and polluters. The number of statutory laws

following 1970 has grown steadily since the passage of the National Environmental Policy Act.

The courts have become more involved over the years in resolving the inconsistencies and ambiguities of statutory law. Judges have in effect assumed roles of legislators and administrators in implementing environmental law.

> Public law critics argue that courts should refrain from making public policy because they are a undemocratic, unelected branch of government and hence not responsive to the people. Judges, these critics argue, should only adjudicate private law cases and individual disputes: they should keep out of general policy making, which should be left to the democratically elected representatives of the people or to experts in the administrative agencies. (Wenner, 1990, p. 192)

However, these concerns about judicial intervention are overstated because judicial decisions do impact potential litigants and effect their behavior. Judges deal with the matters of technical uncertainty not because they wish to impose their position over other policy makers, but rather because others have been unable to resolve the problems themselves. Although federal judges are unelected, so too are the technical administrative experts in the administrative agencies. Courts may in fact increase the democratic participation, rather than restrict it, by countering the tendency to turn too much authority over to the bureaucratic state.

Many third party groups, specifically environmental groups, have used the expanded role of the courts to force agencies to comply with legislative intent. The threat of litigation has been used to force compliance, compromise, and negotiation.

State Primacy and the New Federalism

During the 1980s, decentralization and increasing emphasis on states' rights shifted significant environmental authority from the federal level to the state level. The label "New Federalism" was associated with this shift and President Reagan's term in office. It has been said that the most important innovations in environmental protection are now occurring at the state level (Shabecoff, 1989).

The objective of the Reagan administration's policy was to force the states to assume more control for local environmental programs. States would be forced to make the difficult choices about which programs to keep and which to postpone or discard. In a fashion, public pressure would force state decision makers to act according to localized policy preferences. Relative to the overall capabilities of the various states, each is more or less capable of managing the new assumptions of power. States vary substantially in their commitment to environmental protection policies and in their ability to carry out effective environmental programs.

The 1980s represented a shift to the "new federalism" and states' rights. Throughout President Reagan's watch, environmental programs were decentralized and authority transferred to the states. Reagan's top two appointments in the environmental area, Ann Burford, EPA Administrator, and James Watt, Interior Secretary, had strong opinions that environmental programs were too centralized and regulation too stringent. During this time, the EPA budget for environmental programs was cut by 41% and the

individual states were left to make up federal funding deficiencies in order to remain in compliance.

In response to the federal devolution of authority and funding, the states quickly filled the void and responded by enacting environmental programs exceeding federal requirements.

Environmental Public Policy Impact

Once the public policy has been implemented, it is analyzed for its anticipated or unanticipated impacts.

Financial Costs of Environmental Policy

Currently, the United States spends approximately $100 billion annually for the control and remediation of pollution. This expenditure represents approximately 1% of our country's gross national product. By comparison, the U.S. is estimated to have spent $900 billion on health care in 1993. By the year 2000, it is estimated that the United States will spend $160 billion on environmental pollution control. In 1976 expenditures for pollution control rose to their highest level at 2% of GNP (Conservation Foundation, 1987, p.23).

Between 1972 and 1980, environmental expenditures grew at an average rate of 4.7% and then slowed to a rate of 0.8% between 1980 and 1984. During the years between 1972 and 1984, the expenditures were roughly evenly divided between air (42%) and

water (42%), with the remaining money spend on solid waste problems. During the later 1980s, expenditures for environmental pollution control declined as a percentage of GNP.

Budget deficiencies on the federal level have forced the states to take a greater role in funding pollution control programs. At the same time, the federal government continues to pass legislation and promulgate regulation that mandates environmental expenditure. In many cases, state failure to achieve environmental goals established by the federal government jeopardizes federal funding for highways which in turn has a negative impact on a state's economic growth. Clearly, the reality of limited financial resources and competing priorities is evident.

Environmental Policy and a Cleaner Environment

The object of environmental legislation, regulation, and enforcement is to eventually have a clean and protected environment.

Environmental initiatives have generated conflict, compromise, and delay, but significant progress has been made in several areas. Between 1977 and 1986, emissions of suspended particulates decreased by 64%, sulfur dioxide by 21%, and lead by 94%. These reductions are similar in the reductions seen in carbon monoxide and VOCs. Atmospheric concentrations have also declined as a result of decreased emissions. For example, particulate concentrations are down by 23%, sulfur dioxide by 37%, lead by 80%, and carbon monoxide by 40% (Council on Environmental Quality, 1989).

The progress of water quality has also been positive, although less dramatic. Industrial discharges of the traditional pollutants have decreased by more than 70%, while publicly owned treatment works (POTWs) have smaller, but encouraging, reductions (Council on Environmental Quality, 1989). In contrast to these advances, the discharges of nontraditional toxic effluent have increased.

The progress in air and water quality has typically been measured by concentrations of the traditional pollutants. In the case of air quality, sulfur dioxide, particulates, and automobile-related pollutants are considered as the traditional pollutants. In the case of water quality, suspended solids, coliform, and oxygen demand the traditional measures of pollutant loading.

The regulatory efforts of the early legislation to address the problems of the traditional pollutants have been relatively successful. However, these accomplishments should be considered relative to the changing nature of the United States and its shift from an industrialized society to a society based more and more on information technology.

Future responses to environmental concerns will increasingly focus on nonconventional pollutants and global interrelatedness. Non-point source emissions, acid deposition, global climate change, toxic emissions, nuclear waste, biodiversity, population growth, and energy usage are areas for additional environmental concern.

International Environmental Issues

Held June 3rd through the 14th, 1992 in Rio de Janeiro was an unprecedented gathering. The United Nations Conference on Environment and Development (UNCED) attracted representatives from 178 countries. The conference was largely the result of Maurice Strong, a Canadian with extensive ties to the United Nations, as a follow-up to the Stockholm Conference on the Human Environment held 20 years earlier (Harrison, 1992, p. 2).

Main subjects of discussion for the conference included an "Earth Charter," an agreement for principles of environmental protection, "Agenda 21," a blue print for environmental action in the 21st century, and legally binding conventions on issues of biodiversity, forestry, and global climate change. The Earth Charter, also known as the Rio Declaration, outlines 27 principles of environmental responsibility and embraces the concepts of sustainable development as a balance between economic growth and environmental protection. Agenda 21 is a nonbinding document with specific action items to guide environmental activity. The agreement of the participating countries to embrace the concept of sustainable development is perhaps the most significant achievement of the conference. United Nations (UN) Secretary General Boutros-Gali is very involved with the oversight and coordination of the UN Commission for Sustainable Development that is charged with facilitating the objectives of Agenda 21.

The conference and discussions highlighted the differences between the developed and developing countries. Developing countries complained that developed countries were

only interested in environmental protection and not economic development. Most of the developed countries favored a treaty on forest protection but developing nations rejected it on the grounds of national sovereignty. Most of the countries supported the treaty on forest protection except the U.S., which believed that signing would retard the advances in biotechnology made by pharmaceutical companies.

The European Community (EC) criticized the U.S. for refusing to sign several treaties. It may be that there is a struggle for control of international environmental regulation between the unified body in Brussels and the leadership position of the U.S. in environmental protection. Greenpeace and the Natural Resources Defense Council (NRDC) complained that the conference fell short of their expectations and leveled charges of "greenwash" against companies who were seen as only giving lip-service to environmental issues.

In an effort to monitor the progress of the agreements reached in Rio, several reporting groups have been formed. The UN Commission on Sustainable Development reports to the UN directly and an independent organization, the Earth Council, will be based out of Costa Rica and hold meetings around the world to monitor progress toward conference agreements. The American delegates to the conference have indicated they will introduce legislation to congress that would create a "Rio Commission" to monitor the progress in the U.S. and other countries.

Conference agreements on the issues of global climate change, deforestation and biodiversity were signed by most of the participating countries. On the issue of

population and consumption control, no notable agreements were reached. The developing countries blamed the developed countries for the bulk of the pollution and environmental degradation and suggested that population produced only a negligible effect on global environmental degradation.

Chapter III

Methodology and Design

Population and Sample for the Study

The target population is the citizen base of North Carolina. As citizens, North Carolinians are ultimately impacted by state-wide legislation.

The sample participants for this study were randomly drawn from a convenient group of North Carolina residents. Specifically, a 1500 employee organization located in Catawba County, North Carolina was the primary data-base from which to sample. The choice of the sample population was assumed to represent the socioeconomic and demographic population of North Carolina. Data were collected to verify this assumption that includes, but is not limited to, the parameters of age, gender, race, education, and income. From the company's employee list, 33 percent of the employees were randomly selected for a total sample size of 500.

Instrumentation

The primary objective of the intended research was to understand and relate the goals of citizens to the actual performance of state legislators on environmental issues. The type of information necessary for this research was categorized as biographic and personal opinion of respondents on environmental issues, environmental data on

legislative activity, and data on environmental quality indicators. A questionnaire was developed to obtain the data on biographic and the personal opinion of respondents.

Validity and Reliability of the Survey Instrument

Validity

Validity is concerned with whether the questionnaire as designed actually measures what one intends to measure. Different social scientists assign a variety of names to the concept of validity.

Validity generally refers to whether a a specific measurement provides data that relate to commonly accepted meaning of a particular concept. When using a questionnaire format for measurement purposes the questions should be commonly understood and elicit similar mental pictures. Valid sampling measurements should also cover the range of possible responses. Validity was measured by consulting with a number of persons within the sample to solicit agreement on survey form prior to distribution. Significant or consistent suggestions to modify the questionnaire were addressed and the changes implemented prior to actual use of the questionnaire.

Reliability

Reliability is an indication of the extent of variable errors inherent in the measuring instrument. Inaccuracy of measurement is dependent on many factors. The inaccuracy may be due to measurement error, system bias, or inconsistent conditions. However,

when making multiple measurements of consistent objects the degree of variability between measurements is a measure of reliability.

The most obvious way to measure reliability is to administer the same test to the same population on two different occasions and apply correlation techniques between the two samples. However, when traits or opinions are in flux and undue time lapses between the first and second administration of the test, the test-retest approach is inappropriate. The test-retest approach would also be inappropriate if the administration of the test affected the responses of the second round.

For the intended research, a coefficient alpha (Cronbach Alpha) will be used to determine instrument reliability. The coefficient alpha, in this case, measures the internal consistency of the questionnaire. Internal consistency between survey responses is indicative of reliability. When using the coefficient alpha to measure reliability, a single administration of the test is sufficient. A full discussion of the Cronbach Alpha Correlation Coefficient and its use in determining reliability can be found in PsychologicalTesting by Anne Anastasi (1982, p. 248) or Measurement and Evaluation in Education by William Mehrens (1991, p. 102).

Reliability of the Survey Instrument. The inferential nature of the current research does not rely heavily on traditional statistics and does not lend itself to the common statistical relationships normally associated with independent-dependent relationships involving hypothesis testing. However, the survey instrument and responses were tested

for reliability using a Cronbach Alpha correlation coefficient for survey responses. The Cronbach Alpha is a more general form of the Kuder-Richardson formula 20 coefficient.

The Cronbach Alpha correlation coefficient is appropriate when measuring internal consistency and the uni-dimensional reliability of a survey instrument. However, the entire survey was not designed to measure a uni-dimensional characteristic and therefore the concept of reliability for the entire survey instrument is not a relevant concept. Consequently, to assess reliability the survey questions were divided into subscales that were generally believed to lie along the same opinion dimension. The survey questions were broken down into the following five subscales. Namely,

Subscale 1: Perceptions of the Local Environmental Conditions (Q8, Q9, Q13, Q15, Q16, Q18)

Subscale 2: Economics of Environmentalism (Q6, Q7, Q12R)

Subscale 3: Responsibility for Environmental Problems (Q4, Q5R, Q10R, Q29)

Subscale 4: Politics, Legislation and Regulation (Q1, Q2, Q3, Q11, Q14, Q17R, Q28R)

Subscale 5: Demographics (Q19-27, Q30, Q31).

Many of the 31 survey questions allowed responses on a five-point Likert scale format. Where necessary the survey responses were reversed for dimensional consistency. Responses were reversed for survey questions 5, 10, 12, 17, and 28. The Cronbach Alpha coefficient was then calculated individually using SAS for Subscales 1-4 as follows:

$$\text{alpha} = (n/n-1)[1-(\text{sum of item variances/total test variance})]$$

where n = number of items.

The results of the Cronbach Alpha calculation indicate a strong correlation along the Subscale 1 dimension, a medium degree of correlation along the Subscale 2 dimension, and weak degree of correlation along Subscales 3 and 4. A full display of the statistical output is found in Appendix 5.

Table 1
Cronbach Alpha Correlation

Subscale #	Cronbach Alpha Correlation Coefficient	Strength of Correlation
1	0.73	strong
2	0.54	medium
3	0.27	weak
4	0.26	weak

The results of the Cronbach reliability coefficient are based on a relatively small number of survey responses. The response rate was typical of opinion surveys at 23.2% (116 surveys) returned from the initial mailing of 500. However, these results are significant at the 0.05 level of significance and indicate that the responses received from the survey respondents are consistent. Therefore, the question of survey reliability has been tested and is considered satisfactory.

Demographic and Personal Opinion Data

In soliciting the opinions of the sample group, a questionnaire was developed. The questionnaire sought to obtain respondents' personal opinions and demographic information. A copy of the questionnaire is found in Appendix 1. The questionnaire is an obtrusive quantitative measure of citizen concern. The questions were developed by the researcher using previous national opinion polls as the guiding documents for

questionnaire construction. These polls were conducted by the Council for Environmental Quality (1980), Roper (1990), Gallup (1990), Gerstman and Meyers (1992), and Cambridge Energy Research Associates (1992).

In addition to routine demographic questions, a major portion of the questionnaire was developed as a Likert-type scale with a five-point forced answer format. The fixed points of the scale ranged from expressions of "Strongly Agree" to "Agree," "Neither Agree or Disagree," "Disagree," and "Strongly Disagree."

For data on personal opinion of respondents on enenvironmental issues, 500 employees were sent a questionnaire designed to obtain both limited demographic information and personal opinion regarding environmental issues. The questionnaire was mailed to the randomly selected sample through the regular U.S. mail system. Along with the questionnaire, a cover letter was sent explaining the purpose of the questionnaire, instructions and implications. Additionally, the package had a self-addressed and pre-stamped return envelope. In an effort to ensure a high return, the survey forms were coded so that, if necessary, a second mailing could be sent.

Environmental Data on Legislative Activity

The data on the legislative activity of the State's representatives and senators is available through several avenues. Sources of information included the North Carolina Legislative Library and the Institute of Government. Data on legislative activity is presented in Appendix 3, Environmental Legislation.

For the data on environmental legislative activity, available records were gathered from a review of legislative initiatives introduced in the North Carolina House of Representatives and the North Carolina State Senate. These data were obtained from the legislative library, reviewed, and environmental legislation recorded. In addition, a record was made of the actual bills that have been ratified. The record review was conducted for the past 10 years, 1985 to 1994, and constituted a quasi time-series review of existing publications.

Data on Environmental Quality

The environmental quality evaluation was obtained from the State's lead agency on environmental issues and enforcement, the Department of Environment, Health, and Natural Resources. The requested data covered a 10 year period, between 1985 and 1994, and addressed air quality, water quality, and solid waste management.

Additional sources that were reviewed for environmental information included the North Carolina Office of Environmental Statistics, the Institute of Southern Studies, and the Institute for Research in Social Science. The data that were obtained from these various sources varied in quality, completeness, and form. A complete discussion of the data is presented in Chapter IV, Results.

For environmental quality indicies and as a corollary to the study, environmental quality data was obtained from the State's Department of Environment, Health and Natural Resources, the government body responsible for environmental protection. The

State's evaluation of air quality, water quality, and solid waste management was accepted as accurate measures of the status of the environment in North Carolina. On the basis of the information gathered from the State, a time series analysis was also conducted to determine environmental air quality trends. Data on water quality and solid waste disposal were limited and did not allow for trend analysis.

Statistical Analysis

In performing the statistical analyses, a prewritten and generally accepted statistical package was utilized. Specifically, the Statistical Analysis System (SAS) was used.

SAS is a common statistical package and includes a wide variety of user-friendly software. Techniques for classifying data, graphing, parametric and non-parametric statistical analysis of data are available with the use of either of these two packages. Typical statistical descriptors such as mean, median, mode, frequency tables, variance, standard deviation, coefficient of variation, regression analysis and graphical displays were applied as appropriate to the data and research objectives.

In reference to the first set of data, **environmental public opinion survey results**, the returned survey responses were coded and stored in fixed format form for statistical analysis. As a preliminary measure, frequency distributions were generated for each variable.

In reference to the second set of data, **legislative record**, the data gathered were in several forms. Information of interest included, but was not limited to, the number of

bills introduced in the legislature and the number of bills ratified. In analyzing the information a 10-year analysis was conducted.

In reference to the third set of data, **environmental quality indices**, the environmental quality indices were tabulated and plotted to indicate any time series trends. In preliminary discussions with the State it appeared that this type of information was not available from any single department. Data on air quality were obtained for the years 1972-1993. Data on water quality were obtained for the years 1986-1991. And, data on solid waste disposal were obtained for the years 1990-1993. The obtained data was the most current and extensive information available. The environmental air quality indicators considered measurements for nitrogen oxide, ozone, lead, particulates, sulfur dioxide, and carbon monoxide. The environmental water quality indicators considered the classification status of lakes, reservoirs, streams, rivers, estuaries, and sounds. The environmental solid waste quality indicators were primarily concerned with volume and weight of solid waste going to non-hazardous waste landfills. Nonconventional environmental indicators such as water toxicity, hazardous waste and radiation were not used to determine environmental quality due to the insufficiency of data.

The acceptance of the first research proposition, **(P:1) North Carolina citizens have a high degree of concern for the environment,** was based on the statistical indicators explained above under public opinion survey results. A high degree of concern for the environment would be evident when the survey results equaled or exceeded the national concern expressed in the opinion surveys detailed in the Literature Review section.

The acceptance of the second and third research propositions, **(P:2) Citizen concern is reflected in the elected state Representatives' and Senators' introduction of environmental legislation, and (P:3) Citizen concern is reflected by the passage of environmental legislation,** was based on the strength of correlation between the amount of legislative activity and citizen concern. For illustrative purposes, if environmental concern is verified in proposition number one (P:1) and the magnitude of environmental legislation shows a steady or increasing trend over a five year time-series analysis, then an implied positive relationship exists between citizen concern and environmental legislation. Strict statistical comparison between citizen concern and legislative activity is not possible since the comparison is between a single static cross-sectional measure of opinion and a time series look at the legislation. In addition, the survey results are considered ordinal measures of citizen opinion whereas the legislative activity is considered essentially nominal. However, this was the best choice open to the researcher given the limitations of time and resources.

The acceptance of the fourth research proposition, **(P:4) The environmental quality has improved as a result of citizen concern and enacted regulation,** was based on using the standard analytical tools available to plot, correlate, and analyze the data on environmental quality indices. A steady trend in the improvement of North Carolina's environment would be considered a sufficient condition for accepting the fourth research proposition. The acceptance of propositions P:2 and P:3 would be necessary prior to accepting that citizen concern and enacted regulation leads to improved environmental

quality. Otherwise, an improvement in environmental quality could be attributed to any number of extraneous factors.

Summary

The research was designed to answer the assumed relationship between citizen concern about environmental issues and legislative initiatives introduced in response to citizen concern. The sampling techniques were guided by the methods typically used in social science research, public policy analysis, and research involving correlations and causality.

This research addresses a significant social issue of our time. Of interest are environmental protection, environmental quality, and the formation and effectiveness of the legislative process in solving these complex problems. The results are available to all interest groups for use toward positive social change.

Chapter IV

Results

Description, Comparison, and Discussion

This chapter describes the results of the study, compares opinion survey results with the results of the national surveys covered in the literature review and provides a brief discussion of the salient features.

Demographics

The survey questions were used to determine demographics and verify respondent representativeness. The demographic responses are shown in Figures #1 - 9. There were no surprises in the demographic characterizations.

For the most part, the demographics of the survey population reflect the state and national level demographics. However, there were three noticeable differences in the survey population. Namely, 93% of our respondents were white, 81% of our respondents were male, and 50% of our population were Republicans. Statewide averages are 76%, 48%, and 17% respectively. (Otterbourg, 1993, p.42) Besides the three demographic differences, all of those surveyed were employed. North Carolina's unemployment rate is approximately 4% and any bias introduced by failing to sample the unemployed is considered negligible.

Established thinking would not expect environmentalism to have the highest priority with white-male-Republicans and tends to lend additional credibility to the strength of the environmental awareness for the average North Carolinian. The high degree of environmental concern among the sample population gave additional credibility to the high degree of environmental concern we would expect to see across the citizen base of North Carolina.

Figure #1

Environmental Issues Survey Question 19

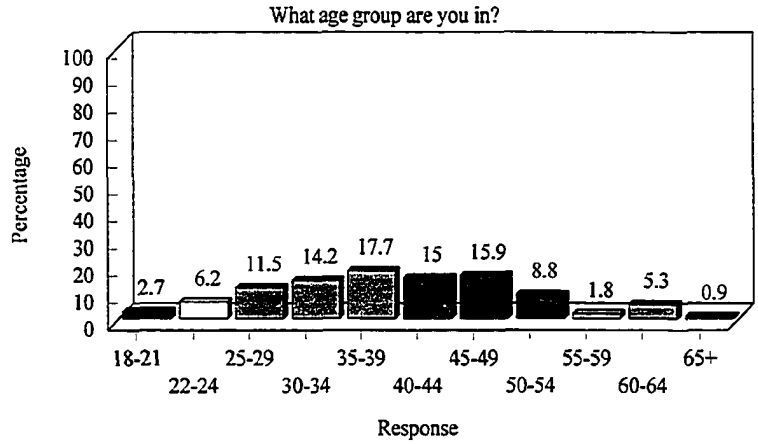


Figure #2
Environmental Issues Survey Question 20

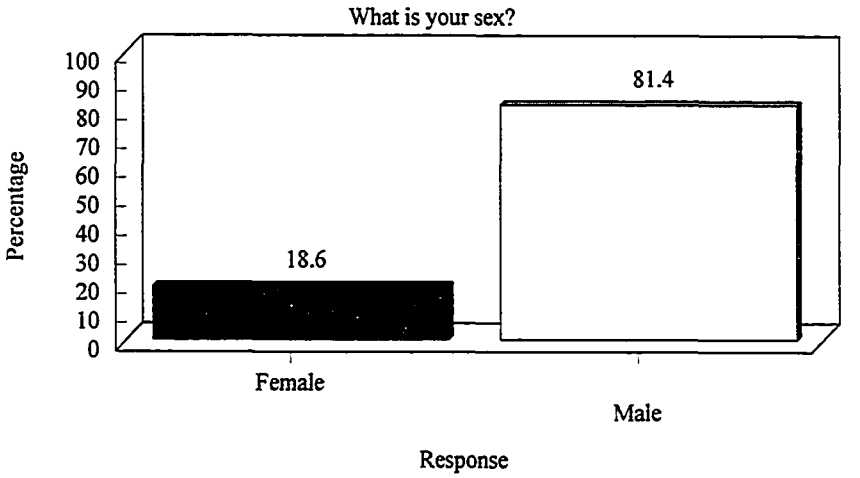


Figure #3
Environmental Issues Survey Question 21

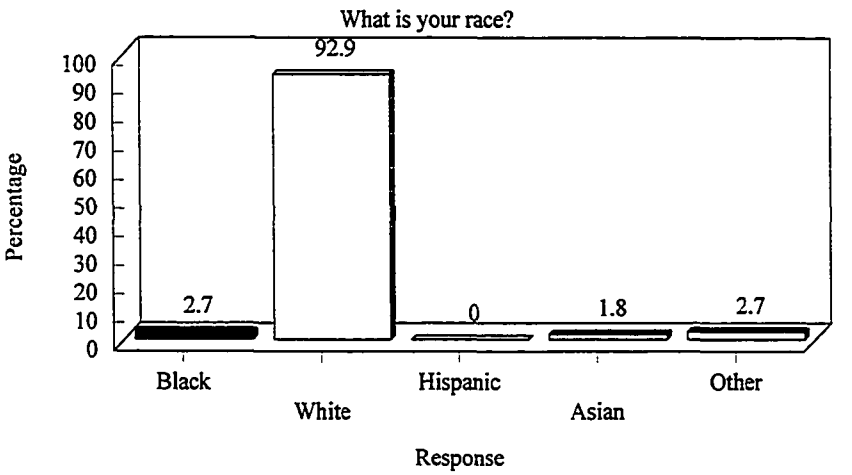


Figure #4
Environmental Issues Survey Question 22

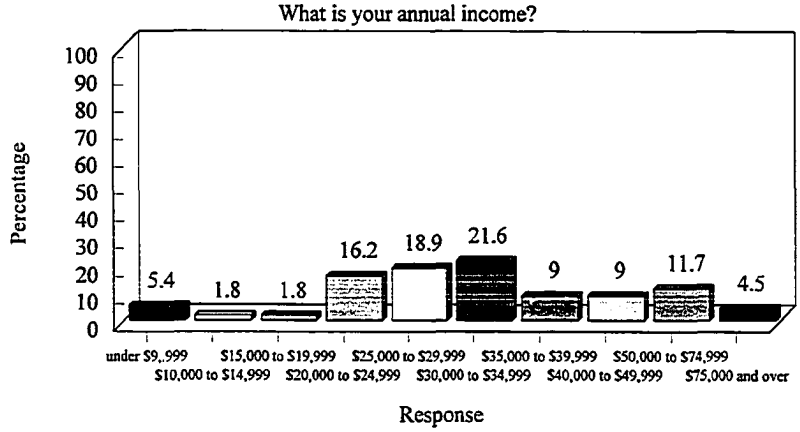


Figure #5
Environmental Issues Survey Question 23

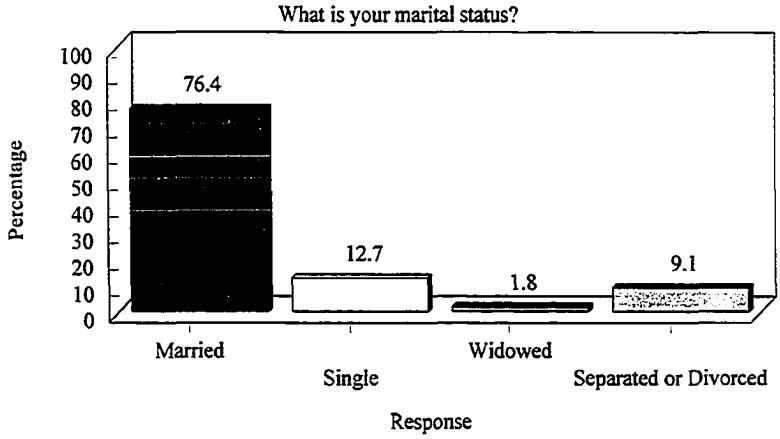


Figure #6
Environmental Issues Survey Question 24

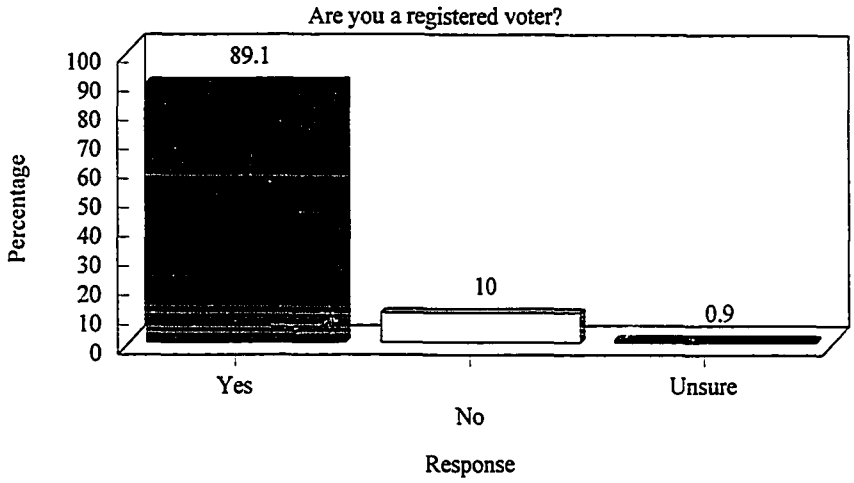


Figure #7
Environmental Issues Survey Question 25

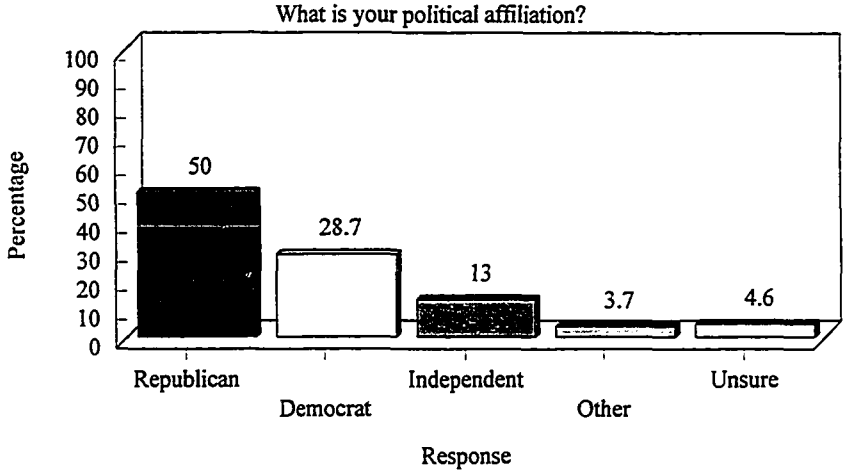


Figure #8

Environmental Issues Survey Question 26

What was the last grade of regular school that you completed -- not counting specialized schools like secretarial, art or trade school?

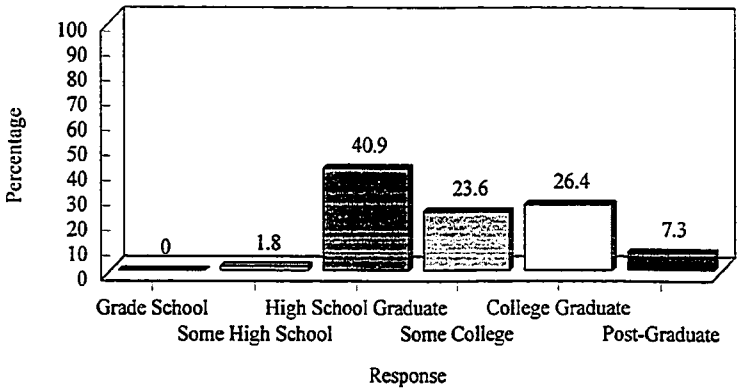
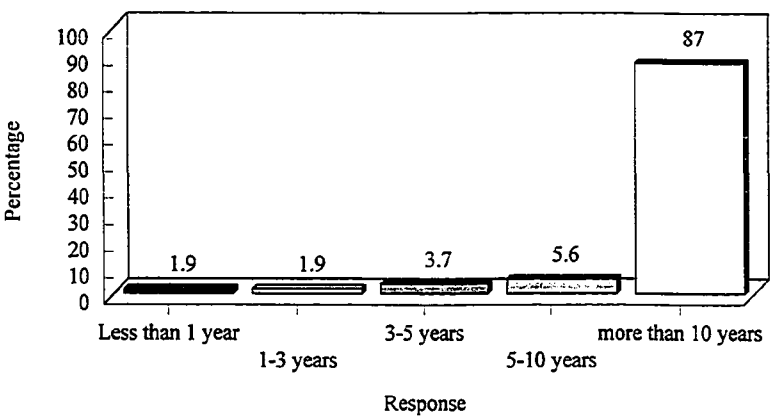


Figure #9

Environmental Issues Survey Question 30

How long have you lived in North Carolina?



Public Opinion

In order to verify Proposition 1: *North Carolina citizens have a high degree of concern for the environment*, a survey was distributed to a randomly selected group of 500 employees of a North Carolina manufacturing operation. Only 116 completed surveys were received from the initial 500 mailed, for a survey response rate of 23.2%.

Public opinion of the respondents is clearly in favor of environmental protection and against any candidate who does not support environmental quality. The overall results of the survey indicate that respondents support environmental quality. The strength of the support equals, and in many cases exceed, the national average for environmental protection. It is apparent from the survey results that support for environmental protection is firm across demographic classifications.

The results of the survey are categorized to help understand the data. The survey questions and responses are separated into the following categories of (a) Perceptions of Local Environmental Conditions, (b) Economics of Environmentalism, (c) Responsibility for Environmental Problems, (d) Politics, Legislation and Regulation, and (e) Demographics. The results of the survey instrument are compared, where appropriate, to previous national polls and interviews.

Perceptions of Environmental Conditions. Several survey questions were designed to solicit an understanding of the general perceptions that North Carolinians have toward their local environment. In a real sense, the personal assessment of local environmental conditions can generate citizen concern or complacency. The perceived "severity" of the

environmental problem may be used in explaining environmental effort in the state. The results of the survey responses are displayed graphically in Figures # 10, 11, 12, 13, and 14.

In the areas of solid waste, water and air quality, survey responses are compared to the responses from the Roper survey results of 1990 (Roper, 1990). The response choices in the Roper interviews to questions on local environmental quality differed from the response choices of the North Carolina survey instrument. Specifically, when asked to rate the local environment in the Roper survey, respondents could choose the response categories of excellent, good, fair or poor. In the North Carolina survey a five-point Likert Scale was used to measure the strength of agreement to statements on the quality of the local environment. For this reason, caution is used in drawing direct comparisons between the two. Nevertheless, comparisons are made in order to gauge North Carolina citizen concern on the landscape of national opinion.

When asked about the quality of local solid waste disposal facilities (Figure #10), slightly less than 25% of respondents agreed that local facilities are excellent. In the Roper report, 3% of the respondents gave local solid waste facilities an excellent rating and 41% rated the local facilities as good. North Carolinians appear more convinced than the average United States citizen that local solid waste facilities are adequate.

Figure #10

Environmental Issues Survey Question 8

Solid waste disposal facilities (landfills, incinerators, etc.) in this area are excellent.

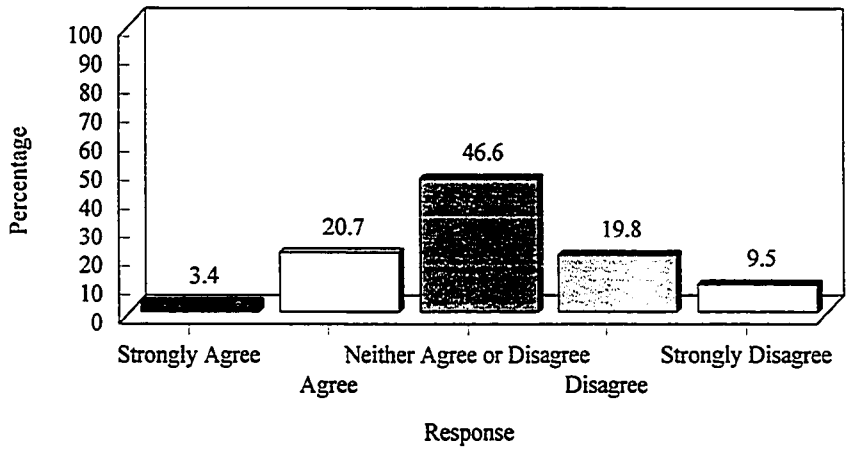
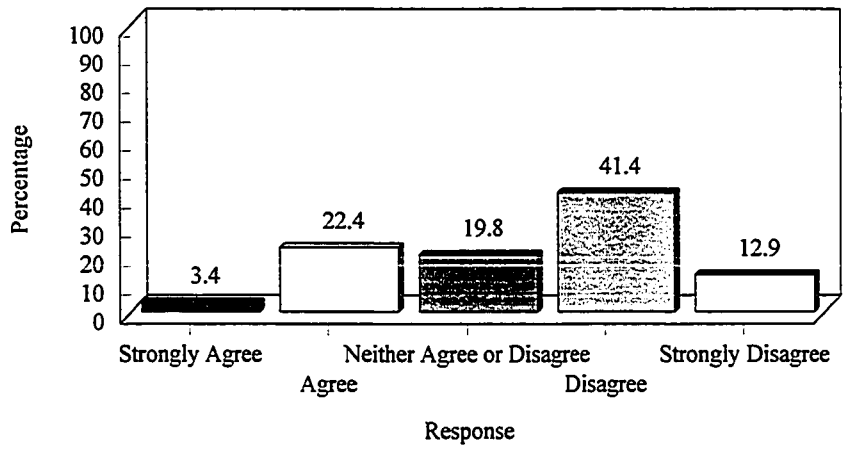


Figure #11

Environmental Issues Survey Question 9

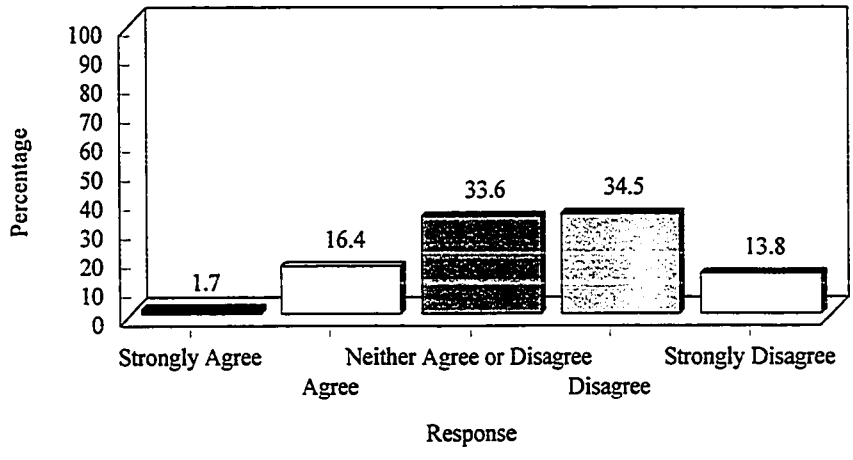
I consider the quality of water in this area to be excellent.



Similarly, local water quality is given an excellent rating by 25.8% of the survey respondents. In comparison, the 1990 Roper report indicated that only 11% of those surveyed rated their local water quality as excellent. The differences between the national average and the North Carolina response seem significant and indicative of the positive perception of local water quality. While the quality of water is rated better than

the national average, less than 1 in 4 of the North Carolina respondents believes that the quality of local water has improved over the past five years.

Figure #12
Environmental Issues Survey Question 15
Over the past five years, the quality of water in North Carolina has improved.



Local air pollution is also perceived as less of a problem than the national average. Eleven percent of the Roper respondents rated the local air quality as excellent. In the North Carolina survey 43.1% agreed that the local air quality deserved an excellent rating. While the quality of air is rated better than the national average, less than 1 in 7 of the North Carolina respondents believes that the quality of local air has improved over the past five years. The results would indicate that of all the physical mediums, the quality of local air is considered the best.

Figure #13

Environmental Issues Survey Question 13

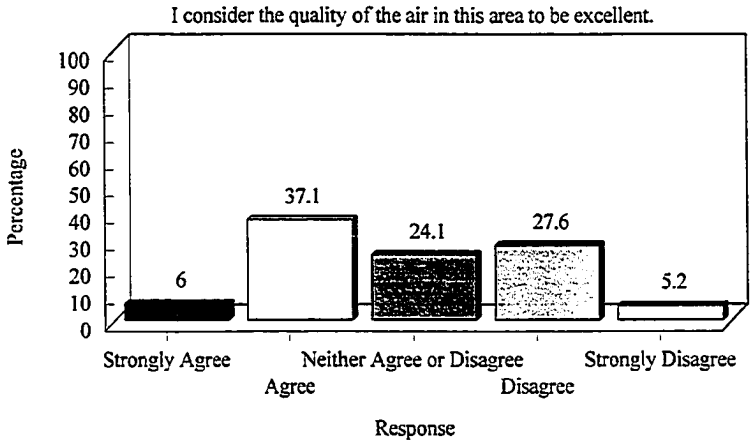
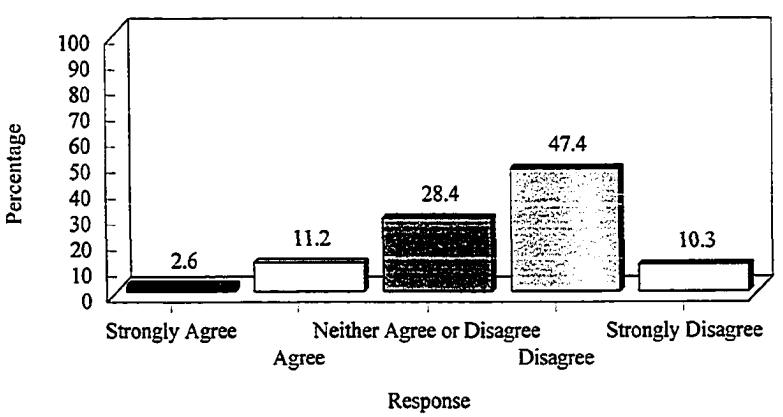


Figure #14

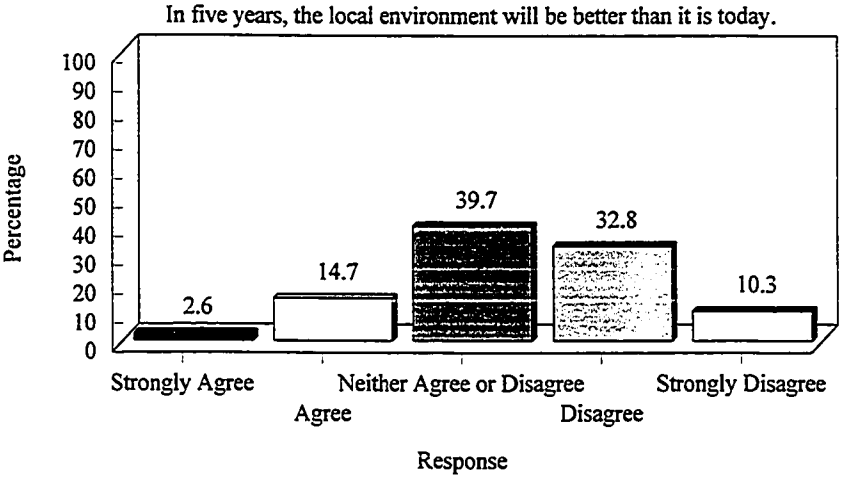
Environmental Issues Survey Question 16



One question (Figure #15) asked for agreement to the statement, "*In five years, the local environment will be better than it is today.*" A large percentage, 43.1, disagreed with the statement and is evidence of the belief that environmental quality is not expected to improve. This feeling echoes the responses from the Cambridge Energy Research Associates (1992) national survey in which 46% of those surveyed agreed that the environmental quality will be worse in five years.

Figure #15

Environmental Issues Survey Question 18



Economics of Environmentalism. Three survey questions were designed to determine what financial sacrifices could be expected to promote environmental protection. The survey responses are displayed in Figures #16, 17, and 18.

In excess of 57% of the survey respondents agreed that they would be willing to pay an extra 5% for consumer goods if it would help protect the environment. When asked about a 10% increase in the price of consumer goods the percentage dropped to slightly

less than 32%. Also, when asked about a 10% increase, the percentage of respondents disagreeing to the statement jumped from less than 31% to more than 52%. These responses are in agreement with the national concern expressed in the Roper (1990) survey where an average of 6.6% increase in price was determined to be the threshold limit.

Figure #16
Environmental Issues Survey Question 6

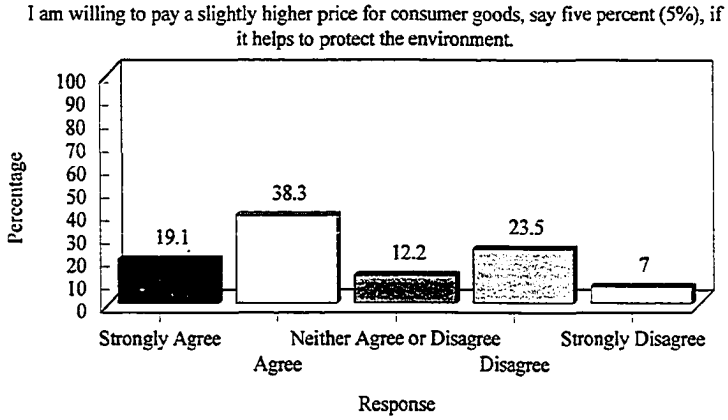
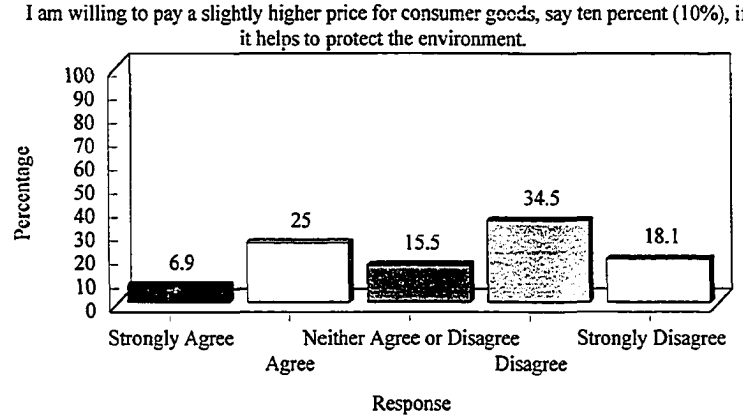


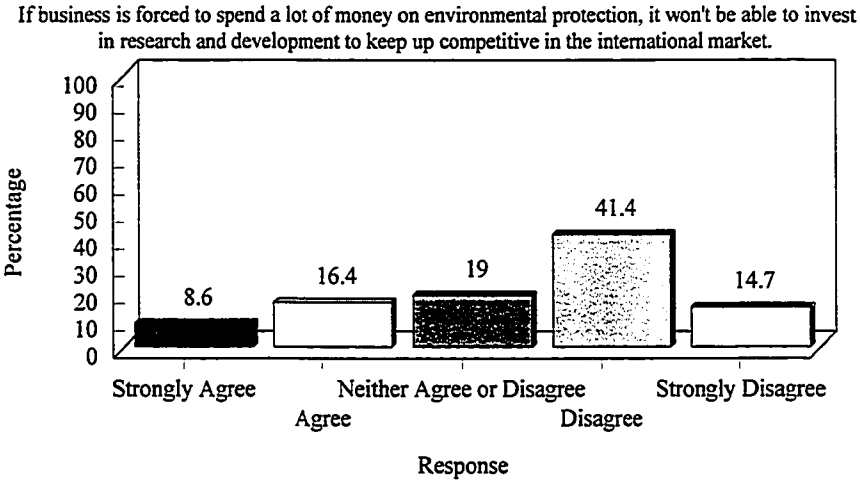
Figure #17
Environmental Issues Survey Question 7



The question, "*If business is forced to spend a lot of money on environmental protection, it won't be able to invest in research and development to keep us competitive in the international market.*" was duplicated exactly from the 1990 Roper questionnaire. In the Roper study, 25% of the respondents agreed with the statement and 9% strongly agreed. In the North Carolina study, 16.4% of the people agreed and 8.6% strongly agreed. The results are similar and reflect the feeling that the added cost for environmental protection will not damage a company's international competitiveness.

Figure #18

Environmental Issues Survey Question 12



It appears the public believes that economic growth and environmental protection are not mutually exclusive. Respondents believe that economic and environmental health can coexist.

Responsibility for Environmental Problems. Four survey questions were structured in a manner that facilitates an understanding of responsibility for environmental problems.

The responsibility for environmental pollution and environmental solutions can be seen as respondents internalize or externalize their responses.

Overwhelmingly, respondents claim to prefer to purchase recycled products. The response to question #4 (Figure #19) indicates that over 74% of those surveyed felt inclined to purchase recycled products. And, when asked in question #5 (Figure #20), who should solve environmental problems, most people included themselves as responsible for the solutions. There were 68.1% of the people who disagreed that it was a company's responsibility to solve environmental problems. This response speaks highly of the respondents and seems to indicate a willingness to accept a personal responsibility for environmental quality and environmental solutions.

Figure #19

Environmental Issues Survey Question 4

As a consumer, I prefer to purchase recycled products.

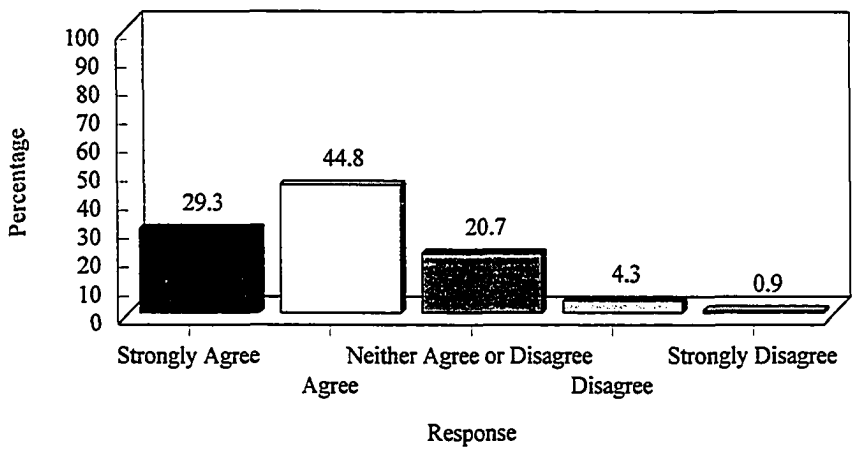
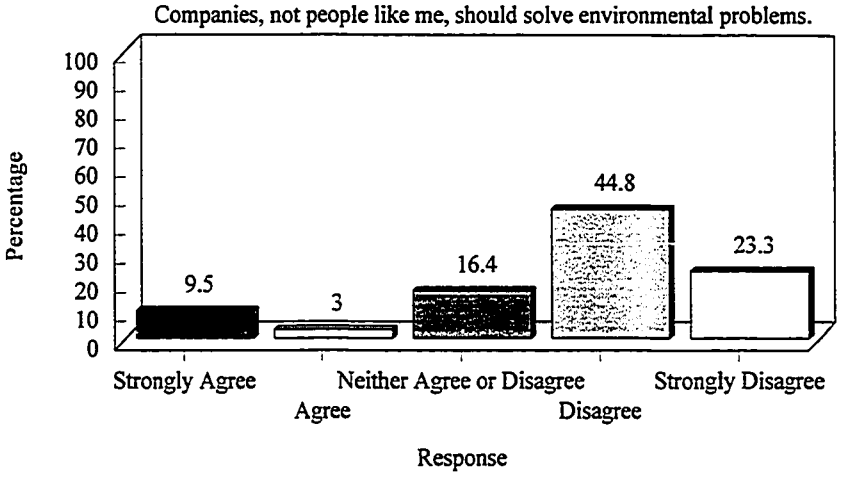
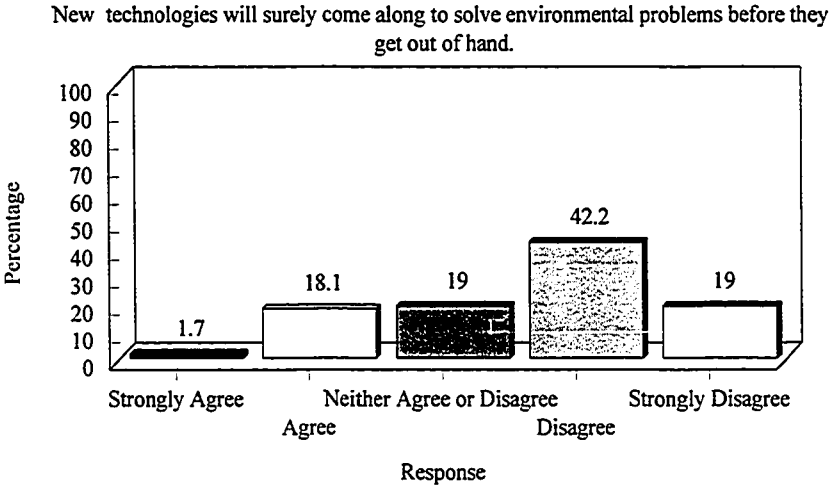


Figure #20
Environmental Issues Survey Question 5



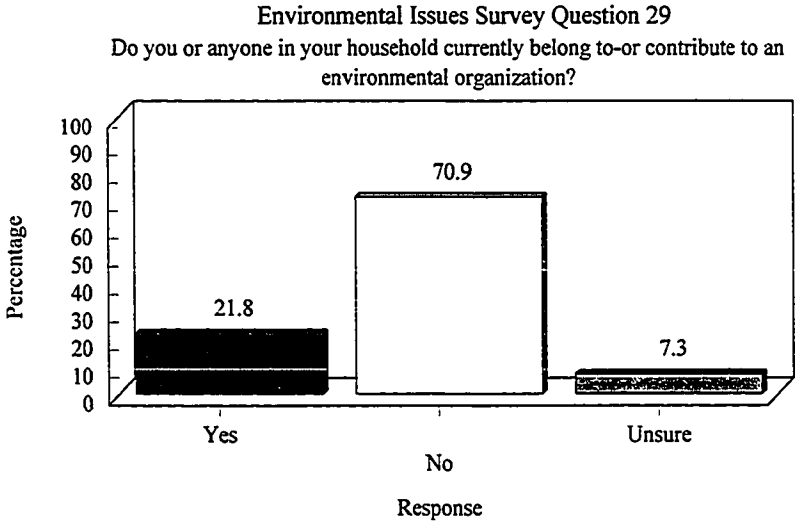
Question #10 (Figure #21) suggested that new technology will come along to solve environmental problems. Over 61% of the respondents (Figure #21) disagreed with the suggestion. A picture of personal responsibility for environmental issues is beginning to develop within North Carolina.

Figure #21
Environmental Issues Survey Question 10



Question #29 (Figure #22) of the survey was replicated from two previous national surveys (Cambridge Energy Research Associates, 1992; Roper, 1990). The question asks about contributions made to environmental groups. Of the North Carolina respondents, 21.8% belong or contribute to environmental organizations. In comparison, the Roper report indicated 27% support and the CERA report indicated 24% support. The North Carolina survey responses reflect the national proportions. As discussed earlier, environmental group strength or presence could be used to help explain environmental effort.

Figure #22

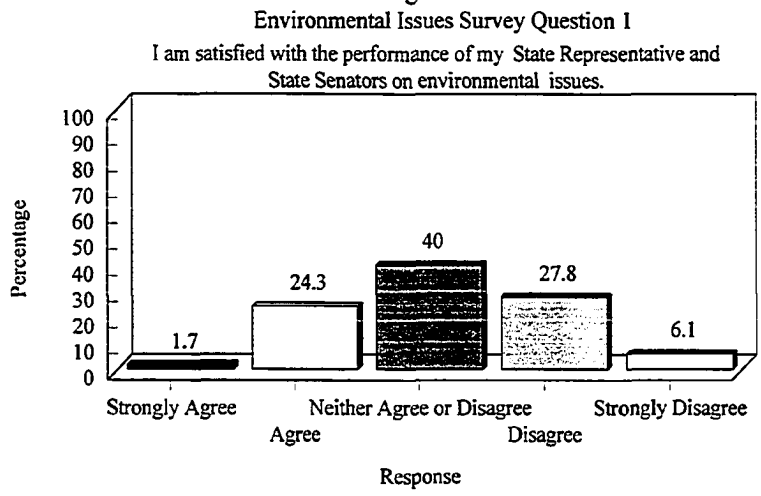


Politics, Legislation and Regulation. Numerous survey questions concerned the politics, legislation and regulation of environmental issues. The responses to these questions reflect respondent views on political participation and confidence in

environmental agencies. The results of the survey responses are displayed graphically in Figures #23 - 30.

When asked, *"I am satisfied with the performance of my State Representatives and State Senators on environmental issues"* (Figure #23), 26.0% expressed satisfaction and 33.9% expressed dissatisfaction.

Figure #23

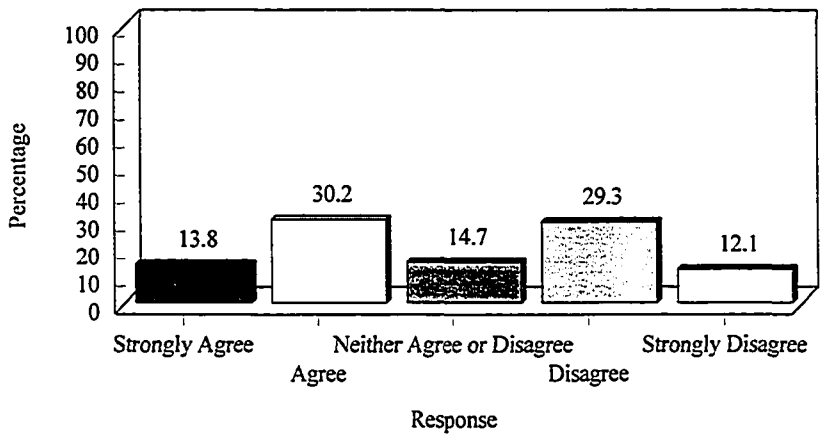


The results were evenly distributed when queried about the ability for citizens to provide input on environmental issues. Forty-four percent of survey respondents (Figure #24) acknowledged a belief that there was a great deal of opportunity to provide input. In opposition, 31.4% disagreed that much opportunity exists for issue input.

Figure #24

Environmental Issues Survey Question 2

There is a great deal of opportunity for citizens to provide input and express their views on environmental issues.



North Carolinians agreed 47.8% of the time (Figure #25) that more government regulation was needed to protect the environment but more than 51% had little faith that the regulatory agencies were capable of providing the necessary protection.

Figure #25

Environmental Issues Survey Question 14

We need more government regulation to protect the environment.

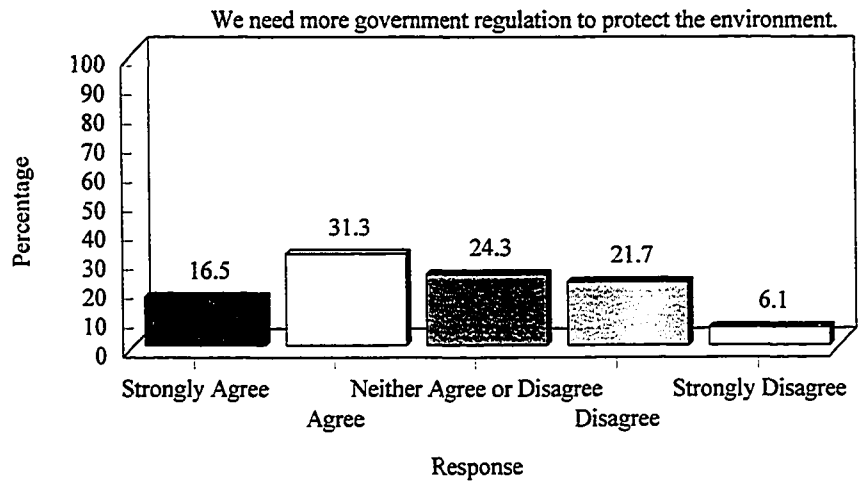
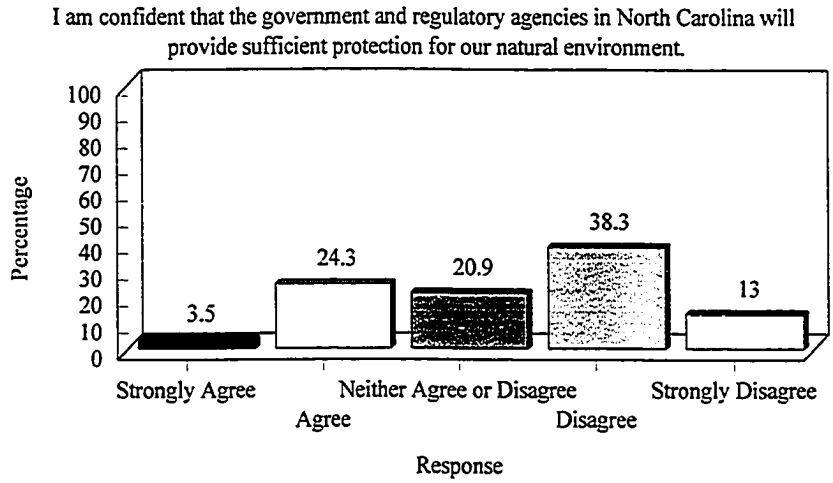


Figure #26
Environmental Issues Survey Question 3



Quoting Riley Dunlap (1991),

> the public tends to see business and industry-rather than individuals-as the major cause of environmental problems...As Roper puts it, "In the mind of the public, business causes most environmental problems, so the perception is that business should bear the brunt of the responsibility for addressing them. And the only way business will do so, in the public's view, is if it is required to by government." The result, Roper concludes, is that "the search for solutions...is above all an institutional affair. One institution-government-should increasingly intervene with another -business-to ensure that environmental improvements are made."

This assessment is similarly reflected in the results from our respondents.

In a clarion call, 81.9% of the survey respondents (Figure #27) expressed the opinion to vote against any candidate that would favor industrial growth at the expense of the environment. And, 56.9% of the survey respondents (Figure #28) indicated they would vote against any candidate who is not for stronger government protection of the environment. However, over 56% of the respondents (Figure #29) have indicated that

their voting preference is not determined solely by a candidate's position on environmental issues. Over 57% of those surveyed (Figure #30) considered their political ideology "conservative."

Figure #27

Environmental Issues Survey Question 17

I would be more inclined to vote for a candidate who favors policies that encourage industrial growth and new jobs even at the cost of environmental damage.

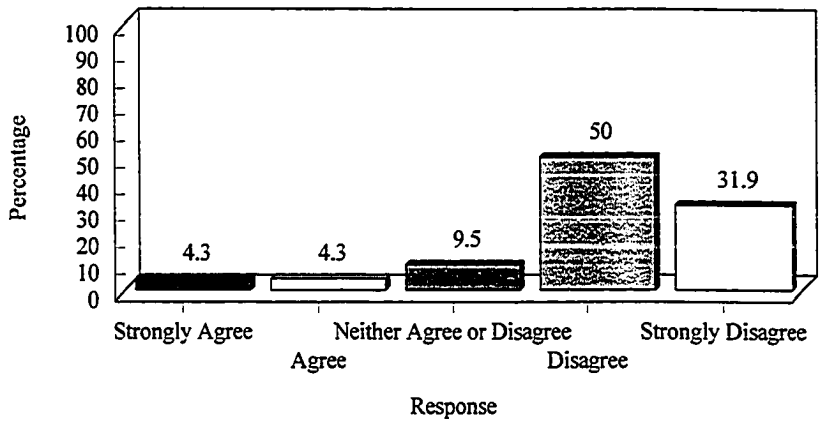


Figure #28

Environmental Issues Survey Question 11

I will vote against any candidate who is not for stronger government protection of the environment.

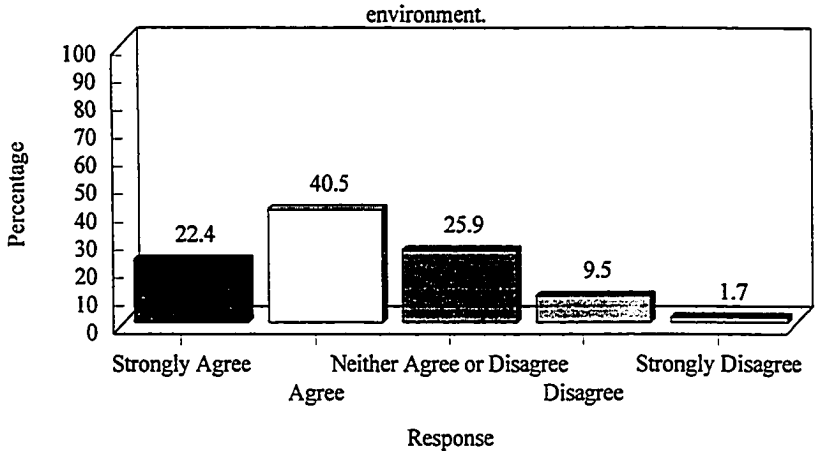


Figure #29

Environmental Issues Survey Question 31

I would vote for, or against, a candidate only because of their position on environmental issues.

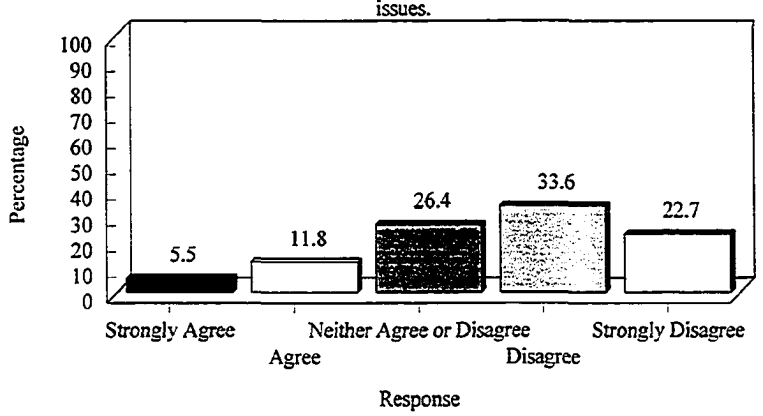
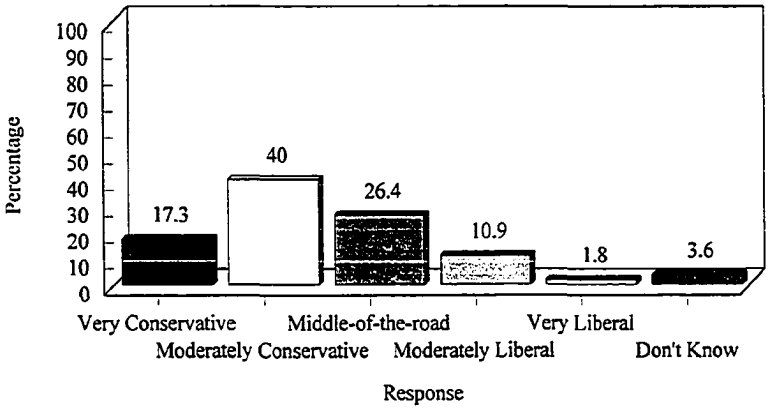


Figure #30

Environmental Issues Survey Question 27

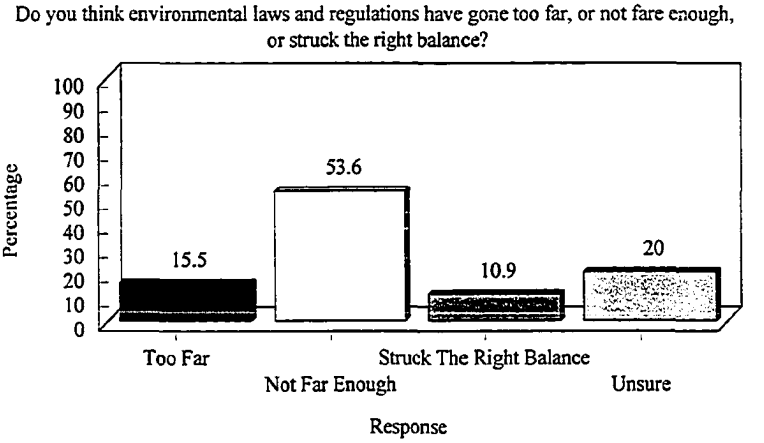
How would you classify your political/social ideology?



The question, "*Do you think environmental laws and regulations have gone too far, or not far enough, or struck the right balance?*" was replicated from a previous survey conducted by Roper (1990). The survey distributed in North Carolina indicated that

15.5% of the respondents felt that environmental laws have gone too far, 53.6% felt that environmental laws have not gone far enough, and 10.9% believe we have achieved the right balance. The Roper results were 4%, 69% and 17%, respectively. Obviously, the majority of respondents feel the need for additional environmental regulation.

Figure #31
Environmental Issues Survey Question 28



Legislation

In order to verify Proposition 2: *Citizen concern is reflected in the elected state Representatives and Senators introduction of environmental legislation,* a legislative review of North Carolina General Assembly activity was undertaken to determine the extent of environmentally related legislation introduced in the North Carolina State House and Senate. The review of the legislative activity covered the years 1985 - 1994. Detailed information on legislative activity of an environmental nature is contained in

Appendix 3, Environmental Legislation. The results of this review are shown graphically in Figures #32, 33, and 34. Figures #32 and #33 track bills of an environmental nature, and Figure #34 is concerned with funding (i.e., appropriations). There has been a large increase in the volume of environmental legislation over the past 10 years.

Figure #32
North Carolina
Environmental Legislation Introduced

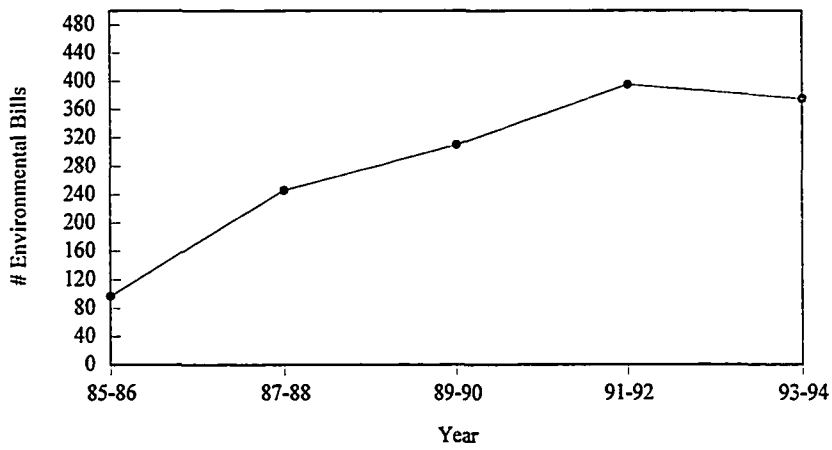


Figure #32 shows graphically a trend in environmental legislation. The review begins with the 1985-1986 legislative session and continues through the 1993-1994 legislative session. The graph tracks environmental legislation introduced in either the House or Senate of North Carolinas General Assembly. The number of bills introduced for consideration have increased more than three-fold in less than 10 years.

In order to verify Proposition 3: *Citizen concern is reflected in the passage of environmentally related legislation,* a legislative review of North Carolina General

Assembly activity was undertaken to determine the percentage of environmentally related legislation introduced by the North Carolina State House and Senate that was ratified. The review of the legislative activity covered the years 1985 - 1994. Detailed information on legislative activity of an environmental nature is contained in Appendix 3, Environmental Legislation. The results of this review are shown in Figure #33.

Figure #33
North Carolina
Environmental Legislation Ratified

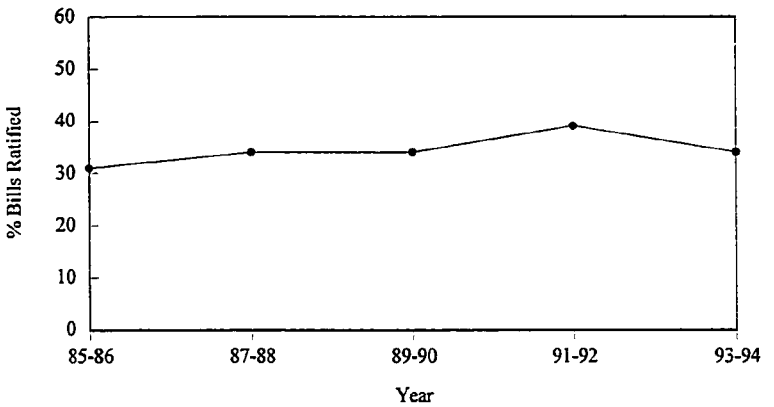


Figure #33 shows graphically a trend in environmental legislation. The review begins with the 1985-1986 legislative session and continues through the 1993-1994 legislative session. The graph tracks environmental legislation ratified by North Carolinas General Assembly. The percentage of bills ratified has remained relatively constant over the last 10 years. In light of a three-fold increase in bills introduced we similarly see a three-fold increase in ratified environmental legislation.

Figure #34
North Carolina
Environmental Appropriations

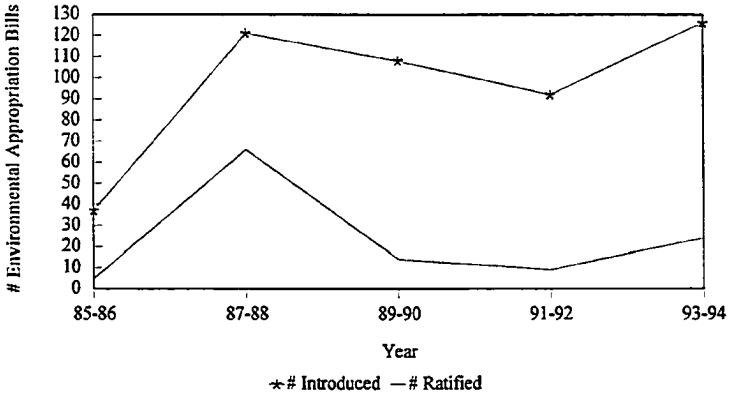


Figure #34 shows graphically a trend in environmental appropriation legislation. The review begins with the 1985-1986 legislative session and continues through the 1993-1994 legislative session. The graph tracks environmental appropriations introduced and the number ratified in North Carolinas General Assembly. Again, it appears that percentage ratified remains relatively constant and that the number ratified is primarily a function of number introduced.

Legislative Highlights, 1989

In 1989, North Carolina reorganized several agencies that had jurisdiction over public health, environmental protection, and the States natural resources. The reorganization combined the Department of Human Resources and the Department of Natural Resources

and Community Development into one cohesive unit referred to as the Department of Environment, Health and Natural Resources (DEHNR). The reorganization was offered for consideration as House Bill 480 (H 480).

The reorganization was supported by both environmental groups and members of the General Assembly. The new agency reduced the duplication of services and functions that were apparent in the competing agencies and allow for administrative efficiency and increased organizational capacity.

Most of the existing Boards and Commissions were absorbed into the new agency. However, the Environmental Review Commission (ERC) and the Environmental Management Commission (EMC) retained their identity and authority. The ERC is charged with the continued review of agency consolidation, monitoring implementation of the act, evaluation of DEHNR, and the study of recodification of environmental legislation.

The year's air quality legislation gave certified local programs the ability to give tax credits for the installation of pollution control equipment (S 523), strengthened the special order enforcement procedure by requiring the posting of a bond or other surety to ensure compliance (S 394), and made a few incremental changes to clarify existing legislation.

As with previous legislatures, 1989 legislation strengthened the coastal areas of North Carolina. Specifically, H 34 expanded the authority of the Coastal Review Commission (CRC) to designate areas requiring additional environmental permits under the Coastal

Area Management Act (CAMA), S 551 restricting airspace usage along the coast aimed at reducing noise pollution, and H 1203 which allows the CRC the authority to consider, in the permit application process, the civil and criminal performance history of applicants submitting sedimentation and erosion control plans. Additional coastal legislation includes measures for addressing aquaculture (S 44), beach littering (S 833), medical wastes (S 130), and offshore oil exploration (S 977).

The session introduced new laws concerning swimming pools (S 386), lead poisoning (H 690), and asbestos management (H 516). The session also addressed environmental health standards for migrant housing (S 631), natural and scenic rivers (S 4), (H 1075), and (H 1025), and soil and water conservation (H 221).

There were numerous measures in the area of water quality. H 35 addresses stormwater run-off while prioritizing the protection of shellfish waters, water supply watersheds, high quality and outstanding resource waters. DEHNR also established a stream watch program (H 673) to encourage volunteer groups to "adopt" streams for protection. Two bills (H 156 and H 157) were ratified which mandated a closer relationship between the state and local regulatory groups in managing water supply and watershed protection.

In the area of waste management, North Carolina moved forward with new laws and refinements to existing statues for both solid and hazardous waste. Many of the hazardous waste issues deal with the state relationship with the federal government and the cleanup of Superfund sites and were clarification of current legislative decision.

During the 1989 session the General Assembly also dealt with the dumping of medical waste (S 130) and underground storage tanks (H 957).

Noteworthy legislation was the Solid Waste Management Act of 1989 (S 111) which adopted a hierarchy of methods for handling solid waste. Included in this significant legislation was the requirement that local governments submit a solid waste management plan designed to meet the state's goal of 25% recycling. The act is comprehensive and has provisions for landfill exclusions, used oil, composting, medical waste, and white goods. The act also has provisions to deal with the disposal of scrap tires.

Legislative Highlights, 1990

New laws were adopted to increase the enforcement of environmental laws. Most notably, H 1177 increases "knowing and willful" violations of environmental laws to a felony, punishable by fines up to $100,000 per day and three year's imprisonment. Violations that place other individuals in imminent danger would be punishable by up to $250,000 per day and 10 year's imprisonment.

The EMC's civil penalty powers and procedures were changed by H 2248. The EMC is now granted quasi-judicial powers consistent with the states administrative procedures act. The EMC was granted the authority to make final agency decisions regarding contested civil penalties.

There were four laws enacted allowing for the collection of permit fees. These four laws, S 1536, S 1534, S 1535, and H 2353, concern sedimentation, mining, dams, and coastal development, respectively.

DEHNR was directed under H 2341 to charge an annual fee for the inspection of facilities seeking compliance with the food and lodging program. Also, S 917 made it unlawful to discharge sewage collected from portable toilets except into approved sewage systems.

The legislature enacted (S 1378) a one-year moratorium on the interbasin transfers of water. Interbasin transfers are the diversion or transfer of water from one water basin to another. This becomes significant when towns and municipalities upstream of other towns and municipalities divert the water and deplete downstream reserves.

A permit moratorium was enacted pursuant to (H 1223) which applies to the siting of new sanitary landfills. The moratorium is in effect if the new landfill is to be located within the watershed of class WS-I, WS-II, or WS-III waters, and at the time of filing, there is motion before the EMC for a more protective classification.

Concerning stormwater, (H 2213) directs local governments to study their stormwater management program, stormwater utilities, EPA rules on stormwater and to report to the legislature in 1991.

Enacted through the introduction of S 1631 were requirements that the state place full-time resident inspectors at each commercial hazardous waste facility in the state.

Prior to issuing a permit for operation, each facility must provide office space for the inspector and unlimited access to the entire facility.

According to S 58, cities and counties were authorized to create regional authorities for the management of solid waste. A regional authority would be recognized when two or more local governments adopted identical organizational structures and responsibility for the authority. The regional authority could undertake the management of the solid waste, and address the issues of recycling, resource recovery, and landfill management. Additionally, S 113 provided that local ordinances have the authority to force solid waste generators to participate in separation and recycling programs prior to waste pick-up.

Somewhat similar to the interbasin transfer issue, local governments were prohibited by S 1404 from acquiring land in another county, without approval, for the purpose of landfill or solid waste disposal.

Legislative Highlights, 1991

Two significant policy changes were made in 1991. These include H 410, which makes permanent the North Carolina Environmental Policy Act, and S 386, which made significant changes to the original Hardison amendments.

The North Carolina Environmental Policy Act was originally enacted in 1971 and set to expire after two years. Subsequent legislatures in 1973, 1977, and 1981 have extended the act but attached sunset provisions. The 1991 act repeals the sunset provisions and

adds additional sections requiring Environmental Impact Statements (EIS) in more situations.

The repeal of significant parts of the Hardison amendments is considered a victory for environmental groups. The Hardison amendments, named after Senator Hardison, were enacted in the 1970s and expressed the state's policy that air, water and hazardous waste standards within the state could be no more restrictive or stringent than federal standards.

North Carolina passed H 551 which enables the state to implement the Title V program requirements of the 1990 federal Clean Air Act Amendments (CAAA). Title V allows for the collection of permit fees for stationary sources emitting more than 100 tons per year of certain pollutants. The North Carolina act gave increased authority to the EMC on issues of fines, permit renewal, rule making, and pollution allocations.

A number of clarifying amendments were made during the 1991 session concerning environmental health programs such as lead poisoning, food, lodging, and sewage. Examples include H 1107 allowing pets to stay in motels at the owner's discretion, S 727 adding definition to "bed-and-breakfast" inns, H 506 limiting the scope of the lead poisoning law to facilities determined potential sources of lead, and H 423 requiring a permit for the maintenance and repair of on-site sewage systems.

A number a minor legislative actions were also ratified in 1991. H 344 contains amendments to the permit requirements for swimming pool backwash, sewer extensions and stormwater permits. Fees for stormwater utilities were granted by passage of H 501 and the watershed classification requirements for the EMC were extended. The

classification was required under the Water Supply Watershed Protection Act and becomes increasingly important when considering the classification status of existing water resources.

The issue of water basin transfer and diversion again surfaced in 1991 following the 1990 moratorium on certain transfers. At the heart of the issue is Virginia's withdrawal of water from Lake Gaston on the Virginia side of the lake. North Carolina continues to struggle with the transfer issue and is seeking a vehicle to stop Virginia from withdrawing water to supplement the public water supply of Virginia Beach. Certain significant constitutional issues surround a state's right of resource usage.

A significant action of 1991 included legislative amendments to S 111 which was enacted in 1989. H 1109 made major changes to the definitions of solid waste, restated reduction goals of 25% by 1993 and 40% by 2001, and established a baseline year of 1991 for measurement purposes unless otherwise granted by the Department of Environment, Health and Natural Resources.

In additional solid waste matters, the legislature passed H 1224 providing incentives for publishers using recycled newsprint and prohibited (H 620) the disposal of lead acid batteries in a landfill, incinerator, or waste-to-energy facility. The Lead Battery Act also requires that retailers or wholesalers of batteries accept used batteries for recycling at least in numbers equal to their sales volume.

Legislative Highlights, 1992

Following the lead of the 1991 legislature, two laws were ratified that continued the modernization of the North Carolina Environmental Policy Act. Both laws described in H 1583 and H 1596 concern policy and definitions regarding environmental impact statements and environmental assessments.

One bill (H 1340) increased the support of three existing pollution control programs. The three programs are the sediment control program, Title V of the Clean Air Act, and the water quality program.

The requirements of the 1990 Federal Clean Air Act amendments were the driving force behind the passage of S 1197. The legislation is concerned with the ozone problem and sources of precursors. The focus of the legislation is on oxygenated and reformulated gasoline. The bill allows the EMC to regulate the oxygen content of gasoline and require the use of reformulated gasoline.

Several bills (H 1516, H 1369, and S 1205) made changes to the Coastal Area Management Act (CAMA). H 1516 made clarifications to the authority of the Coastal Resources Commission, H 1369 concern's oyster harvesting, and S 1205 created an Aquarium Commission. Sea turtle sanctuaries were authorized by H 1470 in several beach towns.

In the area of environmental health, H 1545 shifted the authority of the Division of Environmental Management (DEM) for the control of small septic systems to the Division of Environmental Health (DEH).

The secretary of DEHNR was authorized by passage of S 1156 to issue permits for closed-loop groundwater remediation. Closed-loop systems are used to treat contaminated groundwater and reintroduce the treated water beneath the surface. This significant piece of legislation was needed to correct the state's previous policy on reintroduction of groundwater.

The subject of tires reappeared in the 1992 legislature in H 1320. The bill exempted the 1% disposal privilege tax for new tires that are to be put on new vehicles. This was good news for tire manufacturers in North Carolina who are among the state's largest employers.

Legislative Highlights, 1993

The Economic Development Board was directed in S 27 to prepare a four-year strategy for economic development. The emphasis of the legislation is on economic development but requires review of the state's environmental status as it affects economic development. The review would include the development of an environmental index to assess the state's environmental quality.

More legislation was ratified in 1993 that continued the process of implementation of the 1990 Clean Air Act Amendments. The 1993 legislation (H 681) focuses on provisions for rule making, permitting, penalties, and fee structure. The EMC is given more authority for rule making and permit suspension, 30-day limits were set for persons

to seek judicial review under the Title V program, and $0.005 of the per-gallon gasoline tax are to be allocated to the air quality account to administer the air quality program.

The Coastal Futures Committee (CFC) was established by executive order of the Governor with S 27 introduced to cover part of the expenses expected from the committee. The CFC was formed to organize the celebration of the twentieth anniversary of the enactment of CAMA. Also, changes were made to the shellfish leasing laws (S 100) and transferred to DEHNR from the Marine Fisheries Commission (MFC) the ability to grant leases for cultivation.

A few minor bills were ratified in the area of environmental health. These procedural and administrative changes were made to the food and lodgings law (H 572), requirements for sanitarian registration (S 595), portable toilets (H 1077), and swimming pools (H 922 and S 592).

Every recent legislative session has introduced and ratified legislation designed to clarify and strengthen the UST rules. The basic premise of North Carolina's law in this regard follows the legal concept of strict liability for releases for oil substances from leaking USTs. Several funds have been authorized to help fund any cleanup of oil to the waters of the state. In 1993 H 1061 continued the process of refining the state's position on USTs.

Finally, in 1993 the General Assembly enacted a comprehensive revision of the interbasin transfers of water. Introduced as S 875 the act requires that before a transfer of 2 million gallons per day begins from any of 38 identified basins a permit must be

obtained from the EMC. Contested rulings from the EMC will be decided from an Administrative Law Judge. Projects completed by January 1, 1994, will be grandfathered and will not require the issuance of a permit. The constitutional issues surrounding the Virginia-Lake Gaston situation were avoided by the grandfather clause.

The siting of a hazardous waste disposal facility within the state boundaries has been the focus of effort for the Governor's Waste Management Board. Unfortunately, the 12-year history of the board has produced no site and the board has been disbanded. The vehicle for the reorganization of the hazardous waste management function was H 976. Most of the duties of the previous board were transferred to the DEHNR which further solidifies its power base. The issue of hazardous waste disposal and the disposal of low-level nuclear waste continues to be a big concern for North Carolinians.

In the area of solid waste, S 55 requires the DEHNR to establish minimum qualification and training programs for operators that burn solid waste, a disposal tax on white goods was amended to include a better definition of "white goods" by S 60, and counties were given the authority to require property owners to participate in recycling programs by up-front separation (S 53). State purchasing guidelines were specified (S 58) which encouraged the purchase of products and materials which contain recycled material.

Environmental Quality

In order to verify Proposition 4: *The state's environmental quality has improved as a result of citizen concern and enacted legislation*, the researcher assembled available environmental data on North Carolina's air and water resources, and solid waste disposal status.

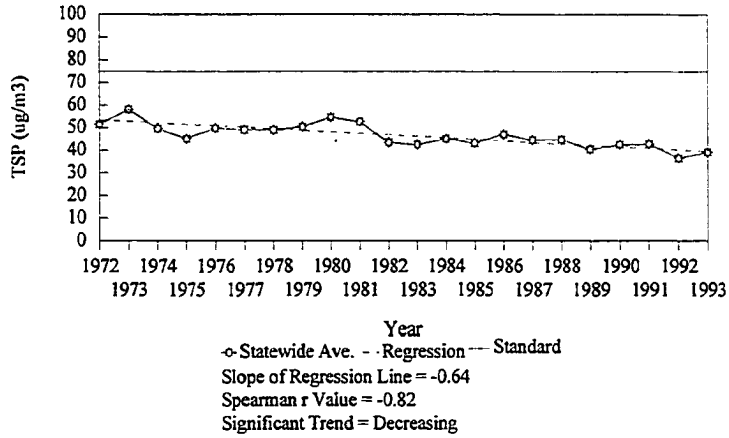
Air quality data are presented in Figures #35 - 43. State and Federal Ambient Air Quality Standards can be found in Appendix 4.

Air Pollutant Information

Particulate Matter. Atmospheric particulate matter is defined as any airborne material which exists in a finely divided form as a liquid or solid at standard temperature and pressure and has an aerodynamic diameter of less than 100 micrometers (um). Particulate matter as Total Suspended Particulate (TSP) is measured in North Carolina. A 20-year history of TSP measurements exists in North Carolina. Particulate matter is emitted from both man-made and natural activities.

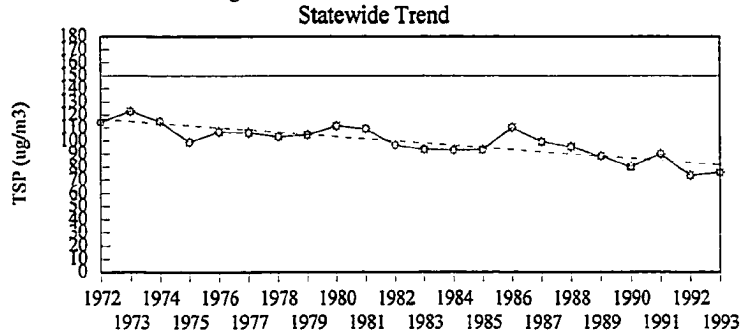
Presence of particulate matter in the atmosphere can affect the health and welfare of the surrounding population and environment. Health effects can change the physical and mental well-being of those exposed to the pollutant. Welfare effects are those that influence an individual's quality of life other than human health effects.

Figure #35
Average Annual TSP Geometric Mean
Statewide Trend



Slope of Regression Line = -0.64
Spearman r Value = -0.82
Significant Trend = Decreasing

Figure #36
Average 2nd Maximum 24 Hour TSP Conc.
Statewide Trend



Slope of Regression Line = -1.66
Spearman r Value = -0.83
Significant Trend = Decreasing

Particulate matter trends are based on TSP concentrations. The average second maximum 24-hour concentration and annual geometric means are plotted on a line graph and a line of best fit is drawn through the values to demonstrate the existence and

direction of particulate matter trends. The 21 year trend in TSP concentrations is shown if Figures #35 and 36. The trend line forms a downward trend line through the data points which indicates a trend of decreasing particulate values from 1972 to 1993. This trend is evidence that control of particulate sources is improving the air quality.

Carbon Monoxide. Carbon monoxide (CO) is an odorless, colorless gas produced by incomplete combustion of carbon containing compounds such as wood, coal, and gas. Most atmospheric CO is produced by incomplete combustion of fuels used for vehicles, space heating, industrial processes and solid waste combustion. Historical monitoring data indicate that most CO exceedences occur during the autumn and winter months.

Breathing carbon monoxide affects the blood's oxygen carrying capacity. At high concentrations, CO exposure can increase fatigue, reduce work capacity, and may adversely affect fetal development.

Figure #37
Average Second Maximum 1 Hour CO Conc.

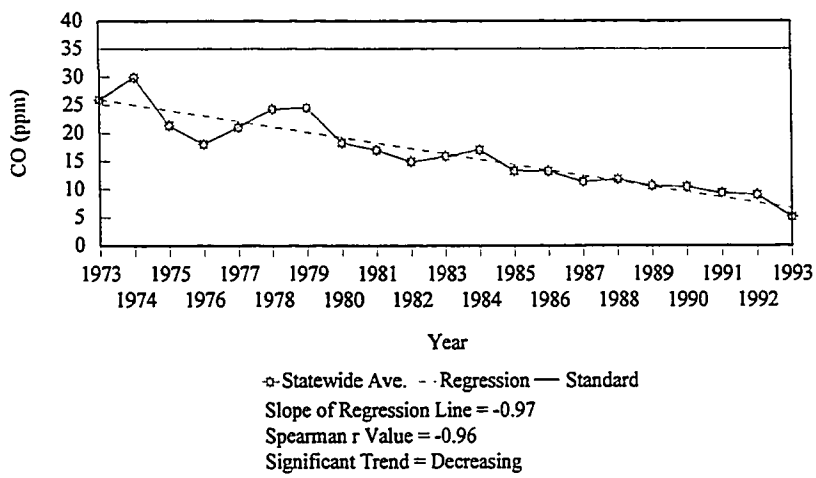
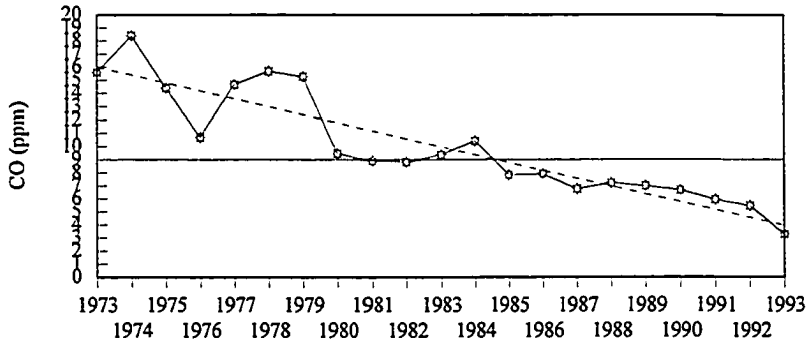


Figure #38
Average Second Maximum 8 Hour CO Conc.
Statewide Trend



-o- Statewide Ave. - - Regression Line— Standard
Slope of Regression Line = -0.60
Spearman r Value = -0.95
Significant Trend = Decreasing

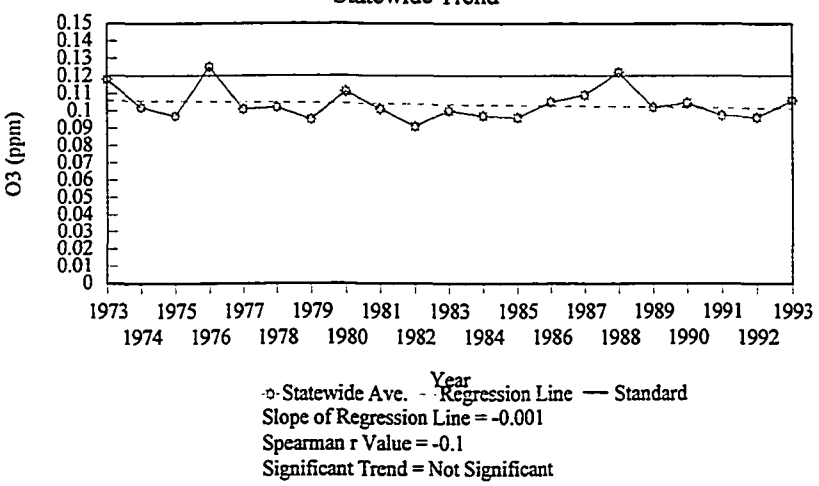
The second maximum averages were employed in trend analyses because these values are used to determine if given areas are attaining the air quality standards. Figure #37 (1 hour average trend) and Figure #38 (8 hour average trend) illustrate the decline of CO concentrations in North Carolina from 1972 to 1993. This trend is evidence that control of carbon monoxide sources is improving the air quality.

Ozone. Ozone (O_3) ambient air standards and monitoring are designed for measurement of concentrations in the lower atmosphere (troposphere). In the troposphere, high concentrations of ozone are a major health and environmental concern. Ozone in the troposphere is harmful to people, animals, vegetation, and materials. Ozone is the criteria pollutant of greatest concern in North Carolina.

Ozone is a highly reactive gas and is the main component of the air pollutant mixture known as smog. Ozone is formed by reaction of sunlight with hydrocarbons and nitrogen oxides (NO_x). Nitrogen oxides are formed as by-products of fuel burning sources such as

power plants and motor vehicles. Ozone concentrations are usually higher in the spring and summer months when temperatures are warmer and days longer.

Figure #39
Average Second Maximum O3 Concentration
Statewide Trend



Slope of Regression Line = -0.001
Spearman r Value = -0.1
Significant Trend = Not Significant

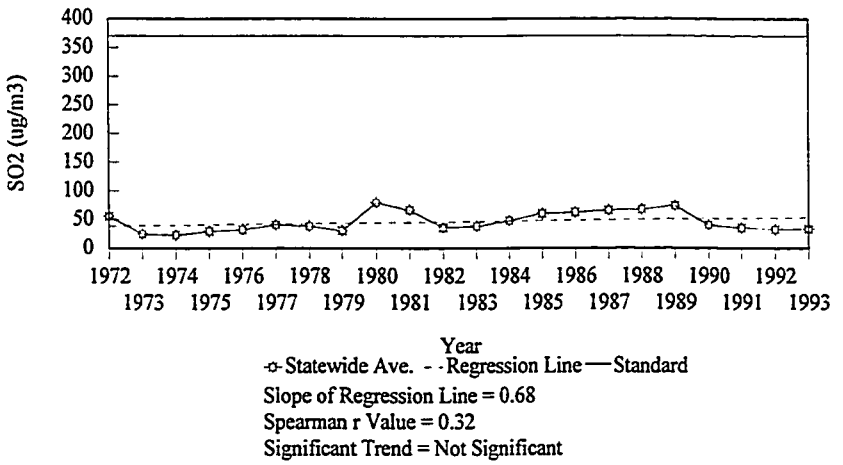
As illustrated in Figure #39, ambient ozone concentrations are neither increasing or decreasing. The trend line forms a horizontal line which demonstrates no statistically significant trend in ozone concentrations from 1973 to 1993. Ozone has become North Carolina's most serious criteria pollutant.

Sulfur Dioxide. Sulfur dioxide (SO_2) is a colorless gas that can be detected by taste. To determine attainment status compared to the sulfur dioxide ambient air quality standard, the data are evaluated in averages and annual arithmetic means.

The most obvious effects of sulfur dioxide exposure are irritation and inflammation of body tissues. A principal concern is the suspected role of ambient sulfur dioxide concentrations in acid rain formation. Acid rain lowers the pH in soils and natural

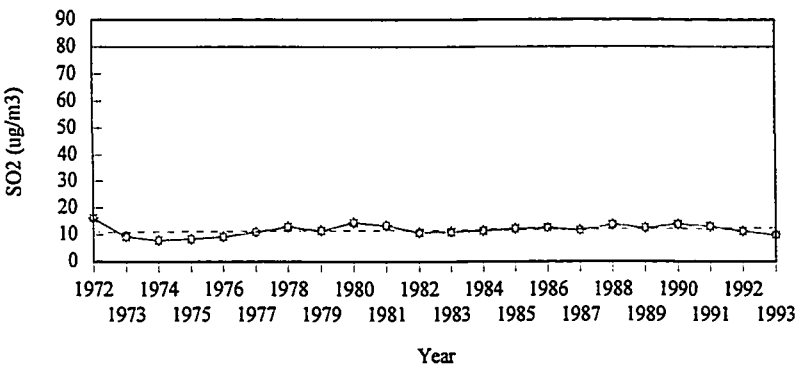
waters, causes material leaching, damages vegetation, depletes fish population in some lakes, and damages materials.

Figure #40
Average 2nd Maximum 24 Hour SO2 Conc.
Statewide Trend



Slope of Regression Line = 0.68
Spearman r Value = 0.32
Significant Trend = Not Significant

Figure #41
Average Annual SO2 Arithmetic Mean
Statewide Trend



Slope of Regression Line = 0.07
Spearman r Value = 0.27
Significant Trend = Not Significant

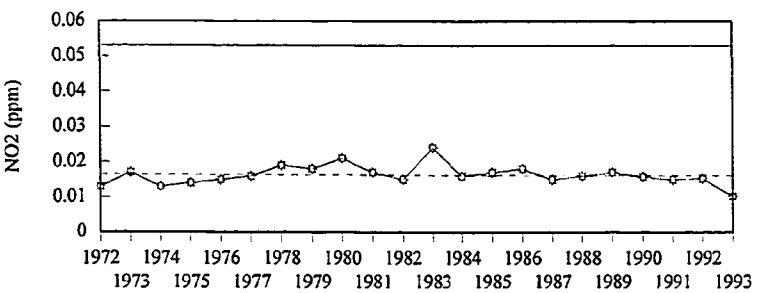
As shown in Figures #40 and 41, ambient levels of sulfur dioxide concentrations continue to be well below the standards. There is no significant trend in the concentration

As shown in Figures #40 and 41, ambient levels of sulfur dioxide concentrations
of sulfur dioxide between 1972 and 1993.

Nitrogen Dioxide. Nitrogen dioxide (NO_2) is the most abundant of the nitrogen oxides and is component in the formation of ozone during warmer months. No exceedences of the standard have ever been reported from any of the continuous monitors in North Carolina.

Exposure to nitrogen dioxide affects human health. Nitrogen dioxide and particulate nitrates are also among the air pollutants that reduce visibility. In high concentrations, nitrogen dioxide gas is reddish-brown and thought to form a portion of the brownish color observed in pollutant air. Nitrogen oxides also contribute to acid rain by forming nitric acid.

Figure #42
Average NO2 Arithmetic Mean Conc.
Statewide Trend



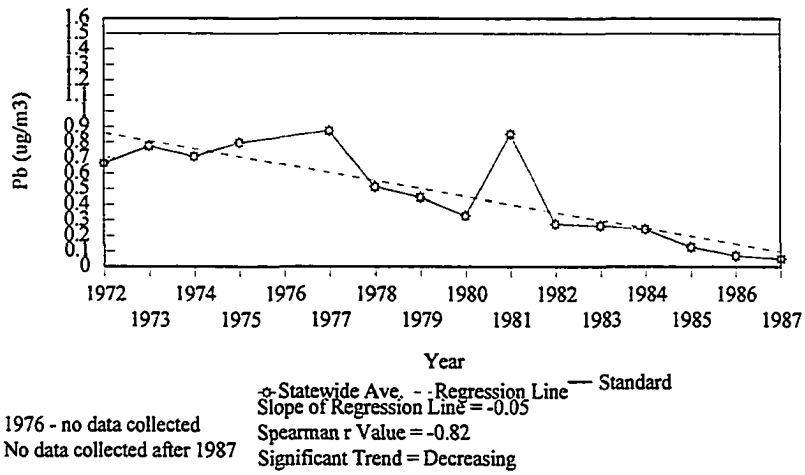
Slope of Regression Line = 0.00
Spearman r Value = -0.02
Significant Trend = Not Significant

The trend line in Figure #42 is horizontal and statistically insignificant. Nitrogen dioxide concentrations across the state have remained essentially constant between 1972 and 1993.

Lead. Lead exists in the atmosphere as gas or particulate. North Carolina ceased to collect lead data on a state-wide basis in 1987.

Lead concentrations persist and accumulate in the human body. Lead enters the body through eating and breathing and is absorbed into the blood stream and distributed to all body tissues.

Figure #43
Average Yearly Pb Mean
Statewide Trend



Illustrated in Figure #43, the concentration of ambient lead has shown a significant downward trend between 1972 and 1987. Lead levels are well below established standards.

Water Quality Information

The state has two primary types of water use classification: fresh surface waters and tidal salt waters. Waters have been classified as to their "best usage" for many years. The fresh water classes include WS-I, WS-II, WS-III, WS-IV, and WS-V water supply watersheds; Class B waters for swimming and primary recreation; and Class C for secondary recreation and fish propagation. The classification WS-I is the most protective of the fresh water designations. The tidal salt water classes include SA for shell fishing, SB for primary recreation and other use except shell fishing, and SC suitable only for secondary recreation. The classification SA is the most restrictive classification.

Once a lake, reservoir, stream, river, estuary, or sound is classified as to its best usage, state agencies rate the water resource. The rating terms offer a measure of the capability of the water resource in meeting its intended usage objective. The waters are rated as either fully supporting, support threatened, partially supporting, or nonsupporting. Fully supporting waters are considered excellent-good, support-threatened waters are considered good-fair, partially supporting waters meet their intended use only part of the time, and nonsupporting waters are severely impaired. The support threatened classification was first used in 1990-1991. Prior to 1990, statewide water quality data do not distinguish between fully supporting and support-threatened.

The EPA releases guidelines for the states to use in determining support categories. These determinations are published every two years in the states Water Quality Progress 305(b) Report. The 305(b) reports are currently the best source of information on the

water quality. The guidelines used in the reporting process are issued prior to each reporting cycle for 305(b) reports. The guidelines and methods for determining use support can change from cycle to cycle and therefore make it inappropriate to directly compare data from one 305(b) report to another.

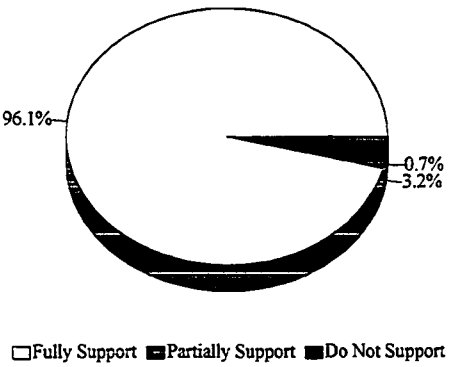
The North Carolina Department of Environmental Management (DEM) goes to some length to caution against direct year to year comparisons of 305(b) data without fully understanding the techniques used for support determination. The complicated nature of the monitoring process, missing data, changing guidelines and analytical procedures are acknowledged as presenting a complicated picture. Never-the-less, the 305(b) reports are the best information available and informed comparisons do give a general impression of the status of water quality in the state (NCDEHNR, September, 1992).

Lakes and Reservoirs. There are currently 1500 lakes in North Carolina of which 145 are considered "significant." Lakes are considered significant if they have been assessed by the Department of Environmental Management, are classified as drinking water supplies, or have greater than 100 acres of publicly accessible surface area. Total surface water area in the state is approximately 305,000 acres.

In the 1986-87 305(b) Report, 96.1% of the lakes and reservoirs support their use, 3.2% partially support and 0.7% do not support. In the 1988-89 305(b) Report, 96% of the lakes and reservoirs support their use, 0.6% partially support, and 3.4% do not support. In the 1990-91 305(b) Report, 70% of the lakes and reservoirs fully support

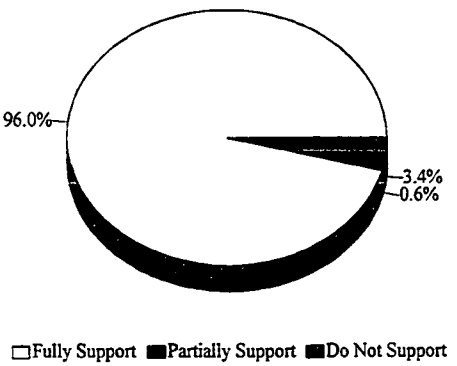
their use, 21% are support threatened, 8.5% partially support, and less than 1% do not support. The data are presented in Figures #44, 45, and 46.

Figure #44
Lakes and Reservoirs, 1986-1987



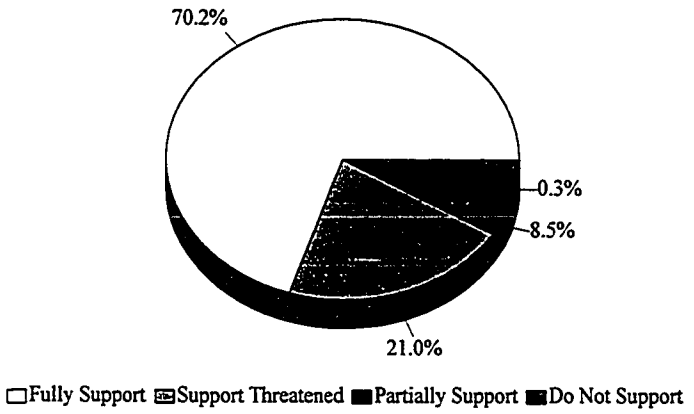
* No Support Threatened Classification in 1986-1987.

Figure #45
Lakes and Reservoirs, 1988-1989



* No Support Threatened Classification in 1988-1989.

Figure #46
Lakes and Reservoirs, 1990-1991



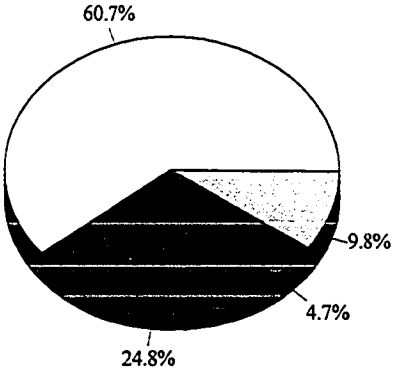
There does not appear to have been any significant improvement or degradation of the state's lakes and reservoirs during the 1986 - 1991 period.

Streams and Rivers. All North Carolina streams and rivers named on the U.S. Geological Survey 7.5 minute topographic maps have been classified as to their best usage. The classified waters total approximately 37,500 miles of stream or river bankline. There are 17 major river basins in North Carolina. The mountain waters drain to the Ohio and Tennessee Rivers while the remaining waters drain to the Atlantic Ocean.

In the 1986-87 305(b) Report, 60.7% of the streams and rivers support their use, 24.8% partially support, 4.7% do not support, and 9.9% were not evaluated. In the 1988-89 305(b) Report, 64% of the streams and rivers support their use, 25% partially support, 6% do not support, and 5% were not evaluated. In the 1990-91 305(b) Report, 34% of the streams and rivers fully support their use, 31% are support threatened, 23%

partially support, 5% do not support, and 7% were not evaluated. The data are presented in Figures #47, 48, and 49.

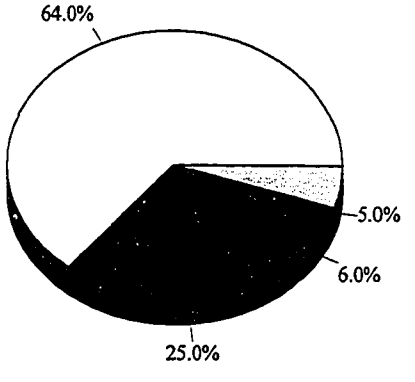
Figure #47
Streams and Rivers, 1986-1987



□Fully Support ■Partially Support ■Do Not Support □Not Evaluated

* No Support Threatened Classification in 1986-1987.

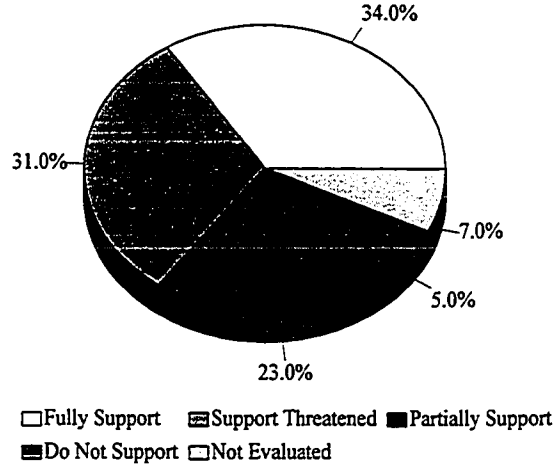
Figure #48
Streams and Rivers, 1988-1989



□Fully Support ■Partially Support ■Do Not Support □Not Evaluated

* No Support Threatened Classification in 1988-1989.

Figure #49
Streams and Rivers, 1990-1991

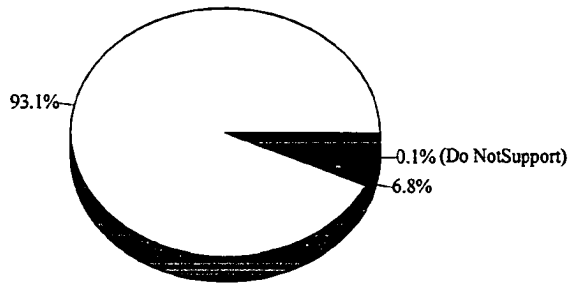


There does not appear to have been any significant improvement or degradation of the state's rivers and streams during the 1986 - 1991 period.

Estuaries and Sounds. There are in excess of 3,100 square miles of estuaries and sounds in North Carolina and a coastline of approximately 320 miles bordering the Atlantic Ocean. An estuary is an arm of the ocean at the mouth of a river.

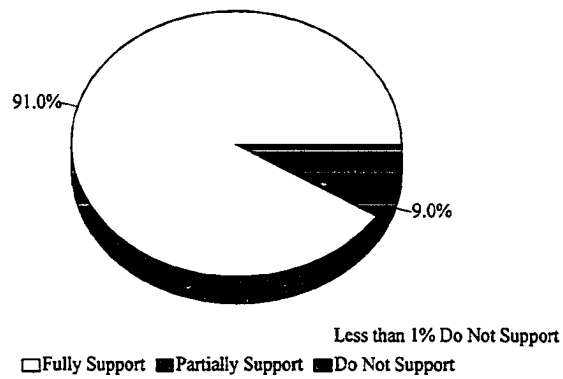
In the 1986-87 305(b) Report, 93.1% of the estuaries and sounds support their use, 6.5% partially support and 0.1% do not support. In the 1988-89 305(b) Report, 91% of the estuaries and sounds support their use, 9% partially support and 1% do not support. In the 1990-91 305(b) Report, 87% of the estuaries and sounds fully support their use, 21% are support threatened, 8.5% partially support and less than 1% do not support. The data are presented in Figures #50, 51, and 52.

Figure #50
Estuaries and Sounds, 1986-1987



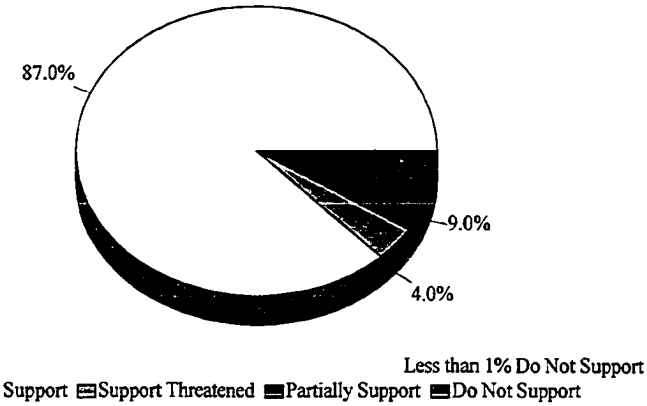
* No Support Threatened Classification in 1986-1987.

Figure #51
Estuaries and Sounds, 1988-1989



* No Support Threatened Classification in 1988-1989.

Figure #52
Estuaries and Sounds, 1990-1991



There does not appear to have been any significant improvement or degradation of the state's estuaries and sounds during the 1986 - 1991 period.

Water Pollution Determination, Sources, and Effect

The majority of the surface water in North Carolina appears to be clean as indicated in the 305(b) data. The determination of water quality is partially based on measurement of the traditional water pollutants and biological monitoring. These "conventional" water quality indicators include pH, temperature, dissolved oxygen, suspended solids, bacteria, dissolved solids, nutrients, and metals. The water biological integrity evaluation includes fish tissue analysis, studies of fish communities, and biomonitoring. In addition to the chemical and biological integrity of the water, the state uses reports of citizen complaints, responses to mailings requesting water quality information, land-use reviews of topographic maps, and best professional judgments in deciding whether the water meets its best use. These additional measures of the water quality add to the subjective

nature of the quality determination and allow for potential manipulation of environmental data.

Sources of pollution are categorized as either coming from "point sources" or "nonpoint sources." Point sources are typically industrial discharges or discharges from wastewater treatment plants directly into a surface water body. These type discharges have been controlled and regulated through the National Pollutant Discharge Elimination System (NPDES) permit program. Representative nonpoint sources include urban run-off, agricultural run-off, septic systems, and construction site activity. The nonpoint source of pollution, agricultural run-off, continues to be the major source of degraded water quality in North Carolina. Over the past few years increased emphasis has been placed on programs (stormwater, watershed, wetlands, and coastal development) to address this deficiency (NCDEHNR, November 1990).

Solid Waste Information

The majority of information on the status of solid waste generation and disposal plans is contained in the North Carolina Solid Waste Management Annual Reports. The annual reports are published by the Department of Environment, Health and Natural Resources (DEHNR). Within DEHNR information is supplied from the Division of Solid Waste Management and Office of Waste Reduction. The first Solid Waste Management Annual Report dates back to 1990 and was mandated by legislative action in SB 111, the 1989 Act to Improve the Management of Solid Waste. The Act, SB 111, as amended in 1991

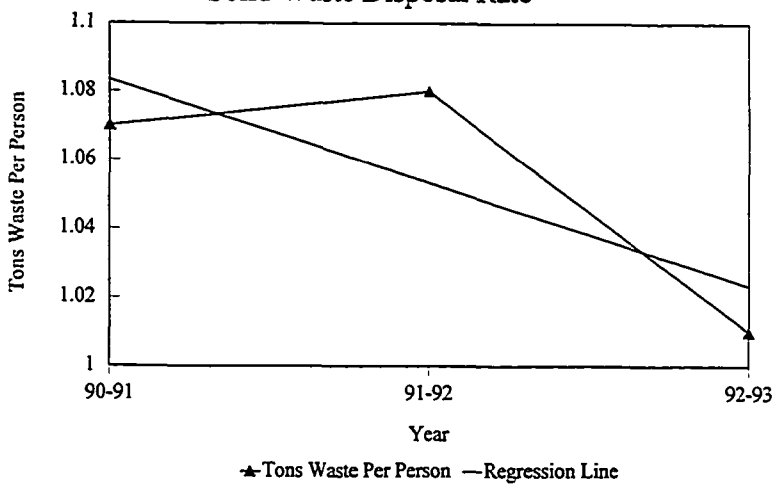
mandated a 25% reduction in municipal solid waste (MSW) by June 30, 1993 and a 40% reduction by June 30, 2001.

> The U.S. Environmental Protection Agency (EPA) also addressed the solid waste issue through its "Subtitle D regulations", (which are part of the Resource Conservation and Recovery Act [RCRA]). These new federal regulations require environmental protection standards for municipal solid waste landfills (those that receive residential solid waste). These rules established siting, design, operation, closure and post closure criteria for municipal solid waste landfills. Financial assurance requirements also are detailed. North Carolina completed its own set of municipal solid waste landfill facility rules and received "Approved State" status from EPA on October 7, 1993. (DEHNR, Solid Waste Management Report, December, 1993)

Based on data contained in the Solid Waste Management reports (DEHNR, July, 1994) the state has failed to meet its stated objective. The amount of solid waste disposed of in landfills decreased only 6.4% from the base year, FY 1991-1992. However, the state has recorded a decrease in solid waste landfilled on a per capita basis. Per capita solid waste disposal rates and projected solid waste goals are presented in Figures #53 and 54, respectively. Slow progress is indicated toward realization of the state's goal of 25% reduction.

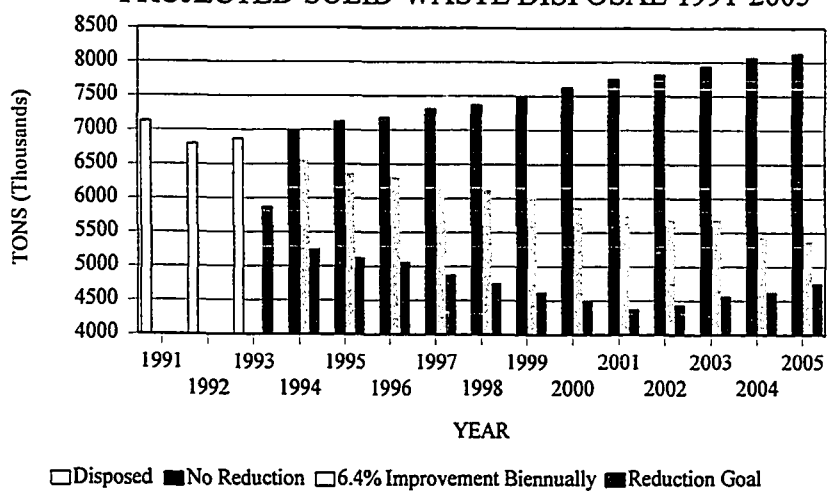
In Figure #53, *Solid Waste Disposal Rate*, the amount of waste disposed of has decreased between the 1990-1991 and 1992-1993 reporting years by 5.9%. The per capita disposal rate may give a better picture of state effort than the absolute reduction measures currently specified in legislative record. It is noteworthy that the state has mandated an absolute reduction goal of 25%. In a state that has traditionally experienced a growth rate 20% greater than the national average, absolute reductions are aggressive.

Figure #53
Solid Waste Disposal Rate



In Figure #54, *Projected Solid Waste Disposal 1991-2005*, there are three different scenarios presented. Trends in solid waste management are beginning to emerge and for explanation of the data we quote from official publications.

Figure #54
PROJECTED SOLID WASTE DISPOSAL 1991-2005



The first three columns represent municipal solid waste disposal from 1991 to 1993.

The tallest set of columns represents the annual MSW disposed given projected population increases through the year 2005. If no waste reduction efforts are made, and waste disposed remains constant at roughly one ton per person, North Carolina

> will have to manage a growing volume of waste through landfill and incineration facilities.
>
> The middle set of columns represents waste disposal if North Carolinians achieve a 6.4% reduction in solid waste every two years. By 1999, North Carolina would reach its 25% waste reduction goal and be on its way to achieving a 40% reduction by the year 2010. Under present policies and strategies, much effort will be necessary to achieve substantial, long term waste reduction.
>
> The final scenario (shortest set of columns) illustrates the state's waste reduction goal of 25% reduction in MSW disposed per person by 1993, and a 40% reduction in MSW disposed per person by 2001. The graph shows that even with a 40% reduction, the amount of waste managed will continue to grow after 2002 due to population growth, although at a lower rate. (NCDEHNR, Solid Waste Special Report, January, 1994)

In North Carolina, most MSW is disposed of in public county landfills. As of January, 1994 there were 107 public landfills accepting waste generated from businesses, households, industrial and commercial activities. In addition to the 107 public landfills there are six private landfills, three MSW incinerators, two scrap tire monofills, and 27 industrial landfills. In FY 1992-1993, 86% of MSW went to the public landfills. This is an improvement over the FY 1990-1991 disposal rate which indicated that 90% of all MSW went to the county landfills.

The problems with landfills are obvious and include a lack of available space, community opposition, groundwater contamination and wasted resources. It has become difficult to permit new landfills and current capacity is limited. Most of the state's permitted landfills are unlined and slightly more than 75% of these show some type of groundwater contamination. New landfills are now required to have liners and leachate collection systems. Lined landfills essentially prevent groundwater contamination but also hinder the natural decomposition process. Disposal facilities are in essence becoming storage facilities.

North Carolina follows established hierarchies in determining the best method for waste reduction. Source reduction is the top priority over reuse or recycling and is the preferred method identified in the state's solid waste management legislation. Reduction progress in disposal of MSW is attributed to source separation, landfill bans on certain materials (yard wastes, tires, motor oil, white goods and lead-acid batteries), community recycling efforts, interstate transfer of waste and reduction efforts by business and industry.

North Carolina claims a 6.4% reduction in the amount of MSW over the base year FY 1991-1992. To fully understand if 6.4% is accurate and significant we need to look closely at how that figure is calculated and what is happening to the diverted waste. For example, there are exceptions granted to individual counties on request in choosing the base year for calculation purposes. Certain counties use an earlier base year to claim credit for reduction activities that preceded the state's mandated reduction goals. In theory, progressive counties are given credit for historical waste reduction activities. Also, large scale movement of waste out of North Carolina into neighboring states is increasing. An estimated 96,600 tons of waste of waste went to South Carolina in FY 1992-1993. Interstate transfers account for approximately 1.5% of the waste generated in North Carolina. It is expected that this number will increase as tipping fees increase in North Carolina and tipping fees in South Carolina remain low.

As the effort to reduce the amount of MSW disposal continues it is expected that a more complete picture of the progress will develop. More counties are weighing the

waste as opposed to estimating weights, record keeping is improving, and personnel are slowly being assigned the responsibility for accurate reporting. The reduction figures supplied by the state agencies must be accepted as accurate. However, caution is advised in making sweeping generalizations about the trends for solid waste disposal.

Environmental Indicators

In 1988, the North Carolina Center for Public Policy Research, published a series of articles (Finger, 1988; Jefferson, 1988; Kebschull, 1988) in which it called for the establishment of an "environmental index" to rank and measure the status of North Carolinas environmental effort. However, this was not the first call for such an indicator. In 1972 a report was published by the State Planning Division (Paul, 1972) which called for the publication of a set of environmental indices that would be

> Used for a comprehensive assessment of the state of the environment, for determining trends or changes on the quality of the environment in the state, for identifying needs for new policies, and for setting operational goals against which progress may be charted. (p.28)

In 1988, North Carolinians still lacked a cohesive set of recognizable environmental indicators to measure the status of the states environment. In the absence of such indicators effective and informed policy decisions are difficult.

As a result of the 1988 publication from the North Carolina Center for Public Policy Research, Governor J. Martin (R) appointed a Blue Ribbon Panel in May of 1989 with the goal to

> Develop a set of key environmental indicators that will be published on a regular basis for use by the general public and state, federal, corporate and other public policy-makers as a gauge of conditions and trends in North Carolina's environmental

> quality. These indicators will be an important tool for use in achievement of the overall goal to protect and improve the state's environment and public health. (Moreau, 1990, p.1)

Members of the Blue Ribbon Panel were comprised of representatives from the state legislature, business and industry, environmental groups, universities, and others. The Blue Ribbon panel published its findings and recommendations in December of 1990. The findings and recommendations are similar to the findings and recommendations published nearly 20 years earlier by the Interagency Task Force.

The findings and recommendations of the Panel called for the establishment of environmental indicators in the areas of air, surface water, groundwater, drinking water, land use, plants and animals, waste generation, and pesticides. The Panel recommended that the Division of Statistics and Information Services of the Department of Environment, Health and Natural Resources be given the responsibility for developing the biennial report. The Panel also recommended that these indicators be re-evaluated biennially for continued improvements and that the Division of Planning and Assessment be responsible for review and publication of North Carolina Environmental Policies and Programs (Moreau, 1990, p. 2-3).

The North Carolina Center for Public Policy Research published another article in 1993 that criticized the state's progress toward achieving the recommendations of the Blue Ribbon Panel and publishing a report of environmental indicators. The article was published in August of 1993 and the state had yet to publish any report with an environmental index. The environmental index project was in bureaucratic limbo, suffering from administrative, financial, and staffing support. State revenue shortfalls,

subject complexity, and lack of departmental leadership are cited as primary causes for the delay in publishing a set of environmental indicators (Mather, 1993, p.50-61).

As a result of the 1993 article, H 1463 was introduced into the legislature that would allocate $90,000 to the Department of Environment, Health and Natural Resources for the preparation of the environmental index. After conference, $50,000 was approved for the project in S 27, ratified July 9, 1993. The responsibility for preparing the environmental indicators' report has been assigned to the State Center for Health and Environmental Statistics (SCHES). Interviews with the responsible SCHES individuals in July of 1994 indicated that development and publication of a meaningful environmental index is still on the drawing board (Vogt, 1994).

Chapter V

Conclusions

Conclusions

The present research sought to draw some conclusions on the degree of correlation between public opinion on the environment and resulting legislative activity. Additionally, the effectiveness of ratified legislation in guaranteeing environmental quality was questioned. The research was structured in a manner that lent itself to qualitative generalizations about the public policy process in addressing environmental concerns.

The results of the research have confirmed the research propositions that (a) North Carolinians are concerned about the environment, (b) legislation which reflects these concerns is introduced in the General Assembly, (c) legislation which reflects these concerns is ratified in the General Assembly, and (d) the quality of the environment in the state has improved as a result of environmental legislation.

The survey results give a clear picture of the degree of concern and public opinion toward the environment. North Carolinians have a high degree of concern for the quality of the environment and express this position in a variety of ways. For example, North Carolinians have indicated a willingness to fund environmental initiatives, support recycling programs, and back political candidates who support environmentalism. The degree of support is stronger, in many cases, than corresponding national concern.

It was necessary to document that North Carolinians were indeed concerned about environmental quality. Concern is evidently high and leads to the review of the legislative process in reflecting citizen concern. Legislative action on environmental issues appears to be a mandate from the public.

Between 1989 and 1994, legislation introduced and ratified in the House and Senate has increased by a factor of three. A three-fold increase is astounding in such a short period of time. There is obviously a great deal of legislative activity in the area of environmental concern. A review of the legislation reveals a wide variety of environmental concerns. It is suggested that North Carolina legislators have an understanding of citizen concern and this is reflected in legislative activity. The legislative process is responding to public concern about environmental protection.

It is, however, interesting that in a review of the legislation many of the initiatives seem incremental in nature. There were only a few bills which are considered significant sweeping legislation. It was beyond the scope of the present research to distinguish between levels of legislative significance but it would be a valuable endeavor to better describe the incremental nature of recent environmental legislation. In the area of environmental public policy are we seeing incremental decisions designed to give the appearance of legislative action? Or, is the system and North Carolina's environmental condition in such a good shape that we need only to refine the existing laws and regulations?

Are our legislators the "single-minded seekers of re-election" as described by Mayhew (1974) or genuinely concerned about environmental quality? Concern and top-of-mind interest, *strength and salience*, for environmental issues are high in the results of the current research. The lesson for public policy decision makers is a clear call for continuing environmental protection initiatives.

The current research reviewed the quality of North Carolina's environment. Air quality data were presented for the past 20-plus years, water quality for the years 1986-1991, and solid waste data since 1990. The presented information was the most current information on the subject available.

It is apparent that the quality of North Carolina's air has improved dramatically over the past 20 years. In every case, the quality of air is significantly better than the established Federal and State pollution limits. The survey respondents rate the quality of air the best of the three major environmental yardsticks: air quality, water quality, and the quality solid waste disposal facilities.

In the area of water quality, direct year to year comparisons are difficult due to the changing guidelines used by the state for reporting purposes. However, it is safe to say that there have been no dramatic improvements or degradation of the states water quality resources between the years 1986-1991. In all cases the quality of lakes, reservoirs, streams, rivers, estuaries, and sounds meet their intended best usage over 90% of the time. Unfortunately, information on the state's water quality prior to 1986 is difficult to determine. However, the state's water quality could only have improved over the past 20

years due to the NPDES permitting process and the states adoption of the Environmental Policy Act.

The paucity of information on solid waste disposal makes informed decisions on trends questionable. The state passed the 1989 Act to Improve the Management of Solid Waste which mandated a 25% reduction in municipal solid waste by June 30, 1993. Based on the state's own limited projections North Carolina has failed to meet the objective. Solid waste disposal has decreased by only 6.4% over the base year, 1991-1992.

The results of this study are expected to add to the body of academic research on environmental policy. Environmental quality continues as a consensus issue and as such members of the North Carolina General Assembly are responding to public opinion. The responses seem to be appropriate in protecting North Carolinas environmental quality.

Recommendations

As with most research a series of additional questions emerge as the project progresses. The current research is no different in that respect and there are several avenues that deserve additional investigation.

Most states, not just North Carolina, have learned from past experience in the budgeting process ways to externalize costs. Specifically, instead of increasing taxes, a politically unattractive alternative, the states have shifted the cost for environmental stewardship to the affected parties. For example, there are a number of laws and

regulations that require self-monitoring and self-reporting of environmental discharges. Therefore, state agencies require fewer personnel and the state has in essence practiced cost avoidance. The penalty for noncompliance with the self-monitoring and self-reporting requirements is so great that most industry absorbs the cost rather than risk the consequences of noncompliance (i.e., fines and negative publicity). The point is, attempts to characterize a state's environmental effort by state-sponorsed environmental expenditure are overly simplistic. Future research describing a state's environmental effort should try to operationalize both the financial and legislative components of the dependent variable.

There is opportunity for additional investigation into the apparent incremental nature of environmental legislation. Are the number of environmental bills in recent years increasing as a result of incremental decision making and political posturing or are they really indicative of increased environmental sensitivity? A close look at the magnitude of the introduced legislation might help to normalize the volume and significance of the environmental legislation from year-to-year. By attaching a weighted significance to the actual legislation one would gain additional insight into the question of legislative representation. Public policy decision makers could be ranked and compared based on the significance of the environmental legislation and not solely on the volume of legislation.

Generally, the quality of the state's environment has improved, or at least not been noticeably degraded, over the years. However, are these environmental gains a result of

citizen concern, legislation and regulation, or a shift from industrial to post-industrial society with increasing emphasis on information technology? Additional research is needed to correlate environmental gains and the post-industrial society.

References

Anastasi, A. (1982). Psychological testing. New York, NY: Macmillan.

Bacot, A. & Dawes, R. (1994). Environmental management in the states. Personal correspondence and review of draft publication. University of Southwestern Louisiana.

Balian, E. (1988). How to design, analyze, and write doctoral or masters research. Lanham, MD: University Press of America.

Behlig, J. (1984). Guidelines for preparing the research proposal. Lanham, MD: University Press of America.

Blumenthal, L. (1984). The guide to environmental organizations in North Carolina. Raleigh, NC: Center for Public Policy Research.

Brown, L. (1978). The twenty ninth day. New York, NY: W.W. Norton.

Calvert, J. (1979). The social and ideological bases of support for environmental legislation: An examination of public attitudes and legislative action. Western Political Quarterly, 32, 327-337.

Calvert, J. (1989). Party politics and environmental policy. In J. Lester, ed. Environmental politics and policy. (pp. 158-173). Durham, NC: Duke University Press.

Cambridge Energy Research Associates and Opinion Dynamics. (1992, June). Fueling the race for the presidency: survey and analysis of U.S. public opinion on energy, the economy, and environmental issues and attitudes. Cambridge, MA.

Carson, R. (1962). Silent spring. Boston, MA: Houghton Mifflin.

Commoner, B. (1966). Science and survival. New York, NY: Viking Press.

Commoner, B. (1972). The closing circle: nature, man and technology. New York, NY: Bantam.

Conservation Foundation. (1987). State of the environment: A view toward the nineties. Washington, DC.

Council on Environmental Quality. (1980). Public opinion on environmental issues: results of a national public opinion survey. Washington, DC: U.S. G.P.O.

Council on Environmental Quality. (1989). Environmental trends. Washington, DC: U.S. G.P.O.

Davis, C. & Lester, J. (1989). Federalism and environmental policy. In J. Lester, ed. Environmental politics and policy. (pp. 57-86). Durham, NC: Duke University Press.

Downs, A. (1972). Up and down with ecology-The issue attention cycle. The Public Interest, 28, 38-50.

Dunlap, R. (1989). Public opinion and environmental policy. In J. Lester, ed. Environmental politics and policy. (pp. 87-134). Durham, NC: Duke University Press.

Dunlap, R. and Gale, R. (1974, December). Party membership and environmental politics: A legislative roll-call analysis. Social Science Quarterly, 55, 670-690.

Finger, B. (1988). Do we need a North Carolina environmental index. North Carolina Insight, 11, (1) 2-9.

Finger, B. (1988). Measuring water quality four-part harmony. North Carolina Insight, 11, (1), 21-25.

Freid, R. (1976). The November 1976 election in California: How the counties voted. Department of Political Science, University of California at Los Angeles.

Fund for Renewable Energy and the Environment. (FREE) (1987). The state of the states. Washington, DC: Renew America.

Fund for Renewable Energy and the Environment. (FREE) (1988). The state of the states. Washington, DC: Renew America.

Gallup, G. & Newport, F. (1990). America strongly in tune with the purpose of earth day. The Gallup Poll Monthly, April, 5-14.

Gerstman + Meyers. (1992). Consumer solid waste: Awareness attitude and behavior study IV. New York, NY: Gerstman + Meyers Inc.

Grosof, M. & Sardy, H. (1985). A research primer for the social and behavioral sciences. Orlando, FL: Academic Press.

Hall, B. & Kerr, L. (1991). 1991-1992 green index. Washington, DC: Island Press.

Harris, R. (1989). The politics of regulatory change. New York, NY: Oxford University Press.

Harrison, E. (1992). Report on the earth summit. Company publication of the E. Bruce Harrison Company.

Horowitz, D. (1977). The courts and social policy. Washington, DC: Brookings Institute.

Jefferson, T. (1988). What should go in a North Carolina environmental index? North Carolina Insight, 11, (1), 26-28.

Jessup, D. (1990). Guide to state environmental programs. Washington, DC: BNA Books.

Jewell, M. (1980). The neglected world of state politics. Journal of Politics, 44, (3), 638-657.

Kebschull, K. (1988). The air is cleaner - right or wrong? North Carolina Insight, 11, (1), 10-14.

Lake, L. (1983). The environmental mandate: Activists and the electorate. Political Science Quarterly, 98, (2), 215-233.

Lester, J. (1989). Environmental politics and policy. Durham, NC: Duke University Press.

Lester, J. & Keptner, P. (1984). State budgetary commitments to environmental quality under austerity. In G. Francis, ed. Western Public Lands. (pp. 193-214). Totowa, NJ: Rowman and Allenhead.

Lester, J. & Lombard, E. (1990). The comparative analysis of state environmental policy. Natural Resources Journal , 30, 301-319.

Lindblom, C. (1968). The policy-making process. Englewood-Cliffs, NJ: Prentice- Hall.

Lindblom, C. (1977). Politics and markets. New York, NY: Basic Books.

Mann, Wandesforde-Smith, & Lundqvist. (1975). In J. Lester, ed. Environmental politics and policy. (pp. 1-10). Durham, NC: Duke University Press.

Mann, D. ed. (1982). Environmental policy formation. Lexington, MA: Lexington Books.

Mann, D. ed. (1982). Environmental policy implementation. Lexington, MA: Lexington Books.

Marcus, A. (1980). Promise and performance. Westport, Conn: Greenwood Press.

Mather, T. (1993). State environmental index still on the drawing board. North Carolina Insight, 14, (4), 50-62.

Mayhew, D. (1974). Congress: The electoral connection. New Haven, CT: Yale University Press.

Mazmanian, D. & Morell, D. (1988). The elusive pursuit of toxics management. The Public Interest 90, Winter, 81-98.

Meadows, D. et. al. (1972). Limits to growth. New York, NY: Universe Books.

Mehrens, W. (1991). Measurement and evaluation in education and psychology. Fort Worth, TX: Holt, Rinehart and Winston.

Mesarovic, M. & Pestel, E. (1974). Mankind at the turning point. New York, NY: Dutton.

Mitchell, R. (1990). Public opinion and the green lobby: poised for the 1990's? In Vig & Kraft, eds. Environmental Policy in the 1990s. (pp. 81-99).

Mohai, P. (1984). Public concern and elite involvement in environmental-conservation issues. Social Science Quarterly, 820-838.

Moreau, D. (1990). Final report and recommendations of the governor's blue ribbon panel on environmental indicators. Raleigh, NC: Office of the Governor.

Nachmias, D. (1979). Public policy evaluation. New York, NY: St. Martins Press.

Nagel, S. (1980). The policy-studies handbook. Lexington, MA: D.C. Heath.

North Carolina Center for Public Policy Research. (1993, August). State environmental index still on the drawing board. North Carolina Insight, 14, (4), 50-62.

North Carolina Department of Environment, Health and Natural Resources. (1990, November). Water Quality Progress in North Carolina 1988-1989 305(b) Report. Raleigh, NC: Division of Environmental Management, Water Quality Section.

North Carolina Department of Environment, Health and Natural Resources. (1991, April). Ambient Air Quality Trends in North Carolina 1972-1989. Raleigh, NC: Division of Environmental Management, Air Quality Section.

North Carolina Department of Environment, Health and Natural Resources. (1991, November). North Carolina Inventory of Environmental Data Sets. Raleigh, NC: State Center for Health and Environmental Statistics.

North Carolina Department of Environment, Health and Natural Resources. (1992, September). Water Quality Progress in North Carolina 1990-1991 305(b) Report. Raleigh, NC: Division of Environmental Management, Water Quality Section.

North Carolina Department of Environment, Health and Natural Resources. (1994, January). 1993 Special Report: North Carolina Solid Waste Disposal. Raleigh, NC: Division of Solid Waste Management, Solid Waste Section.

North Carolina Department of Environment, Health and Natural Resources. (December, 1992). North Carolina Solid Waste Management Annual Report July 1, 1990-June 30, 1991. Raleigh, NC: Division of Solid Waste Management, Solid Waste Section.

North Carolina Department of Environment, Health and Natural Resources. (1993, December). North Carolina Solid Waste Management Annual Report July 1, 1991-June 30, 1992. Raleigh, NC: Division of Solid Waste Management, Solid Waste Section.

North Carolina Department of Environment, Health and Natural Resources. (1994, July). North Carolina Solid Waste Management Annual Report July 1, 1992-June 30, 1993. Raleigh, NC: Division of Solid Waste Management, Solid Waste Section.

North Carolina Department of Natural Resources and Community Development. (1988, July). Water Quality Progress in North Carolina 1986-1987 305(b) Report. Raleigh, NC: Division of Environmental Management, Water Quality Section.

North Carolina Office of State Budget and Management. (1993). Performance Budget for Environment 1993. Raleigh, NC: Office of State Budget and Management.

Otten, K. & Mather T. (1993). Legislative campaign costs, PAC donations continue to rise. North Carolina Insight, 14 (4), 73-89.

Otterbourg, K. & McLaughlin, M. (1993). North Carolinas demographic destiny: The policy implications of the 1990 census. North Carolina Insight, 14, (4), 3-49.

Paul, R. (1972, June). Planning for environmental quality, Phase I progress report. Raleigh, NC: State Planning Division, North Carolina Department of Administration, in cooperation with the Interagency Task Force on Environmental and Land Use Planning.

Quarles, J. (1976). Cleaning up America. Boston, MA: Houghton Mifflin.

Reich, C. (1970). The greening of America. New York, NY: Random House.

Roper, (1990). The Environment: Public Attitudes and Individual Behavior. New York, NY: Roper Organization.

Roscoe, J. (1969). Fundamental research statistics. New York, NY: Holt, Rinehart and Winston.

Rosenbaun, W. (1985). Environmental politics and policy. Washington, DC: CQ Press.

Schumacher, E. (1975). Small is beautiful: Economics as if people mattered. New York, NY: Harper and Row.

Sitarz, D. ed. (1993). Agenda 21. Boulder, CO: Earthpress.

Shabecoff, P. (1989). The Environment as Local Jurisdiction. New York Times. January 22, 1989.

Sprout, H. & Sprout, M. (1978). The context of environmental politics. Lexington, KY: University Press of Kentucky.

United Nations. (1990). Global outlook 2000. United Nations Publications.

Van Horn, C. (1989). The state of the states. Washington, DC: CQ Press.

Vig, N. & Kraft, M., eds. (1990). Environmental policy in the 1990s. Washington, DC: CQ Press.

Vogt, D. (1994). Personal Interview. July 7, 1994. Raleigh, NC. Department of Environment Health and Natural Resources, State Center for Health and Environmental Statistics.

Warren, C. (1982, May). State government's capacity: Continuing to improve. National Civic Review, 71, (5), 34-39.

Wenner, L. (1990). Environmental Policy in the Courts. In Vig & Kraft, eds. (pp. 189-210). Environmental Policy in the 1990s. Washington, DC: CQ Press

Yergin, D. (1992). Overview: Fueling the race for the presidency. In Special Report: Fueling the Race for Presidency. Cambridge Energy Research Associates and Opinion Dynamics.

Appendices

Appendix 1

Environmental Issues Cover Letter

Appendix 1

Environmental Issues Survey Cover Letter

Dear North Carolinian:

You have received a copy of a survey which seeks your opinion on a number of issues. The survey responses will be used in my doctoral research to investigate the relationship between environmental public opinion and legislative action. There are several points you should be aware of before completing the survey.

First, this survey is related to my academic pursuits and is not part of my duties as a CommScope employee. The company is supporting me; however, by allowing me to survey randomly selected CommScope employees. Your responses are confidential, not available to CommScope and can have no affect on your employment at CommScope whether or not your participate. On completion of the research, the survey results will be available for your review.

I realize that completing this survey will involve some of your valuable time and for that I am personally grateful. Please read the following directions carefully, answer the questions and mail the completed survey back to my attention. You may contact me directly at home (803) 327-3063 if you need clarification or would like to discuss the survey in greater detail.

Yours truly,

J. Carson Cato

Appendix 2

Environmental Issues Survey

Appendix 2

Environmental Issues Survey

This questionnaire primarily seeks your opinion. There are no right or wrong answers. Please don't tell me what you think I want to hear. These are complicated issues with conflicting values. Please tell me what you really think.

As you know, the same word can mean different things to different people; hence, it is impossible to find a general wording to exactly suit every person. Please bear with me if the wording of an issue doesn't seem quite right to you from time to time and do your best to answer the question.

Please follow directions for each part of the questionnaire. Generally, you will indicate your response by checking the response that most closely reflects your answer.

Some questions may ask the strength of your feeling toward a particular statement:

For example:

I prefer warm weather.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

If you strongly agree with the statement and very much prefer warm weather you would check ( ) strongly agree. If you have no preference, can't decide, or don't know, you would check ( ) neither agree or disagree. If you strongly disagree with the statement and would rather live in cold climates you would check ( ) strongly disagree. Moderate agreement with the statement or moderate disagreement with the statement would be indicated by checking ( ) agree or ( ) disagree.

Many thanks for your help!

The following statements are designed to record your opinions on certain issues. Indicate the strength of your agreement with the statement by checking "strongly agree", "agree", "neither agree or disagree", "disagree", or "strongly disagree."

1. I am satisfied with the performance of my State Representatives and State Senators on environmental issues.

   _____ strongly agree
   _____ agree
   _____ neither agree or disagree
   _____ disagree
   _____ strongly disagree

2. There is a great deal of opportunity for citizens to provide input and express their views on environmental issues.

   _____ strongly agree
   _____ agree
   _____ neither agree or disagree
   _____ disagree
   _____ strongly disagree

3. I am confident that the government and regulatory agencies in North Carolina will provide sufficient protection for our natural environment.

   _____ strongly agree
   _____ agree
   _____ neither agree or disagree
   _____ disagree
   _____ strongly disagree

4. As a consumer, I prefer to purchase recycled products.

   _____ strongly agree
   _____ agree
   _____ neither agree or disagree
   _____ disagree
   _____ strongly disagree

5. Companies, not people like me, should solve environmental problems.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

6. I am willing to pay a slightly higher price for consumer goods, say five percent (5%), if it helps to protect the environment.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

7. I am willing to pay a slightly higher price for consumer goods, say ten percent (10%), if it helps to protect the environment.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

8. Solid waste disposal facilities (landfills, incinerators, etc.) in this area are excellent.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

9. I consider the quality of water in this area to be excellent.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

10. New technologies will surely come along to solve environmental problems before they get out of hand.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

11. I will vote against any candidate who is not for stronger government protection of the environment.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

12. If business is forced to spend a lot of money on environmental protection, it won't be able to invest in research and development to keep us competitive in the international market.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

13. I consider the quality of the air in this area to be excellent.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

14. We need more government regulation to protect the environment.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

15. Over the past five years, the quality of water in North Carolina has improved.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

16. Over the past five years, the quality of air in North Carolina has improved.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

17. I would be more inclined to vote for a candidate who favors policies that encourage industrial growth and new jobs even at the cost of environmental damage.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

18. In five years, the local environment will be better than it is today.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

19. What age group are you in?

_____ 18-21
_____ 22-24
_____ 25-29
_____ 30-34
_____ 35-39
_____ 40-44
_____ 45-49
_____ 50-54
_____ 55-59
_____ 60-64
_____ 65+

20. What is your sex?

_____ female
_____ male

21. What is your race?

_____ black
_____ white
_____ hispanic
_____ asian
_____ other

22. What is your annual income?

_____ under $9,999
_____ $10,000 to $14,999
_____ $15,000 to $19,999
_____ $20,000 to $24,999
_____ $25,000 to $29,999
_____ $30,000 to $34,999
_____ $35,000 to $39,999
_____ $40,000 to $49,999
_____ $50,000 to $74,999
_____ $75,000 and over

23. What is your marital status?

_____ married
_____ single
_____ widowed
_____ separated or divorced

24. Are you a registered voter?

_____ yes
_____ no
_____ unsure

25. What is your political affiliation?

_____ republican
_____ democrat
_____ independent
_____ other
_____ unsure

26. What was the last grade of regular school that you completed-- not counting specialized schools like secretarial, art or trade schools?

_____ grade school
_____ some high school
_____ high school graduate
_____ some college
_____ college graduate
_____ post-graduate

27. How would you classify your political/social ideology?

_____ very conservative
_____ moderately conservative
_____ middle-of-the-road
_____ moderately liberal
_____ very liberal
_____ don't know

28. Do you think environmental laws and regulations have gone too far, or not far enough, or struck the right balance?

_____ too far
_____ not far enough
_____ struck the right balance
_____ unsure

29. Do you or anyone in your household currently belong to-or contribute to-an environmental organization?

_____ yes
_____ no
_____ unsure

30. How long have you lived in North Carolina?

_____ less than 1 year
_____ 1-3 years
_____ 3-5 years
_____ 5-10 years
_____ more than 10 years

31. I would vote for, or against, a candidate only because of their position on environmental issues.

_____ strongly agree
_____ agree
_____ neither agree or disagree
_____ disagree
_____ strongly disagree

Please send the completed survey back to my attention using the enclosed prestamped envelope. And again, thanks for your participation.

Appendix 3

Environmental Legislation

Legislative Analysis

Session	Bills Introduced	Bills Ratified	# Environmental Bills	%Environmental
1985-1986	3463	1099	97	2.8
1987-1988	4478	1161	246	5.5
1989-1990	4053	1150	310	7.6
1991-1992	2990	1133	395	13.2
1993-1994	3209*	619	375	11.7

* First Session Only

NORTH CAROLINA GENERAL ASSEMBLY
BILLS BY INDEX TERM WORD
ENVIRONMENT

1985-86 Biennium

BILL	SHORT TITLE		DATE	LATEST ACTION
H 1=	LAW CHANGES IN BUDGET BILLS LIMIT	*HA	7-16-85	ADOPTED
H 89	AGRICULTURAL AWARENESS REPORT DAT	R	2-27-85	RATIFIED CH.0011
H 108	RESOURCE RECOVERY FAC'TY TAX CRED	*S	4-16-85	REF TO COM ON FINANCE
H 118=	MENTAL HEALTH RECODIFICATION	HF	7- 5-85	POSTPONED INDEFINITELY
H 128	ASHEVILLE FORESTRY BUILDING FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H 129	RIVER LITIGATION FUNDS	R	3- 8-85	RATIFIED CH.0015
H 138	STONEVILLE WATER FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H 139	PRIVATE SEWER SYSTEM PERMITS	*R	6-24-85	RATIFIED CH.0446
H 140	ENVIRON'TAL PENALTIES FOR EDUCATI	HF	7-15-86	POSTPONED INDEFINITELY
H 141	WATER QUALITY LRC STUDY CONTINUED	HF	7-15-86	POSTPONED INDEFINITELY
H 157	HENDERSON FORESTRY HQ FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H 168	WOOD STOVE LRC STUDY	HF	7-15-86	POSTPONED INDEFINITELY
H 191	OFFICE APPOINTMENTS/SPEAKER'S REC	R	3-29-85	RATIFIED CH.0043
H 195	PHOSPHORUS DETERGENTS LIMITED	*S	5- 9-85	REF TO COM ON NAT&ECON
H 196	STATE ENVIRONMENT STANDARDS OPENE	*HF	4-16-85	CLINCHER MOTION ADOPTED
H 212	CURRITUCK ASSISTANT RANGER FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H 223=	WELL DRILLERS LICENSING BOARD EST	HF	5-29-85	REPTD UNFAV
H 245	HAZARDOUS WASTE STRICT LIABILITY	*S	6-25-85	REF TO COM ON JUDIC 1
H 259	PERQUIMANS ASS'T RANGER FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H 307=	NATURAL/SCENIC RIVER PROTECTION	HF	5-17-85	REPTD UNFAV
H 309	YANCEY FOREST RESOURCE OFFICE FUN	HF	7-15-86	POSTPONED INDEFINITELY
H 318=	NATURAL AREAS VOLUNTARY DEDICATIO	HF	6- 7-85	REPTD UNFAV
H 328	BRUNSWICK ARTIFICIAL REEF FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H 345=	STATE PARKS/RECREATION AREAS COMM	*HF	7-15-86	POSTPONED INDEFINITELY
H 348	WORKPLACE HAZARDOUS CHEMICALS-1	*R	7-17-85	RATIFIED CH.0775
H 380	ARTIFICIAL REEF SITES/USES/FUNDS	*HF	7-15-86	POSTPONED INDEFINITELY
H 406	CRIMINAL CODE REVISION	HF	7-15-86	POSTPONED INDEFINITELY
H 445	RADIOACTIVE WASTE SITE RESTRICTIO	H	4-11-85	REF TO COM ON WATER
H 540	CAMA PERMITS/ADJUCENT WATER USE	*S	5-23-85	RE-REF COM ON JUDIC 4
H 554	UNDERGROUND STORAGE TANK REGUL'N-	*HF	7- 2-85	POSTPONED INDEFINITELY
H 579	OCEANFRONT CONSTRUCTION LIABILITY	*S	5-27-85	REF TO COM ON JUDIC 4
H 666	ALAMANCE HAW RIVER FLOW	HF	6-26-86	REPTD UNFAV
H 795	INACTIVE HAZARDOUS WASTE SITES	*S	5-23-85	REF TO COM ON HUM RES
H 846	NO RADIOACTIVE WASTE FACILITY LIC	H	5- 6-85	REF TO COM ON WATER
H 860	WATER RESOURCES PROGRAMS FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H 922	OMNIBUS LOCAL APPROPRIATIONS	*R	7-17-85	RATIFIED CH.0778
H 945	SOLID WASTE LAW AMENDMENTS	*R	7-12-85	RATIFIED CH.0738
H1000	PIGEON RIVER BASIN WATER STUDY	HF	7-15-86	POSTPONED INDEFINITELY
H1101	SPEAKER'S APPOINTMENTS	*R	7-16-85	RATIFIED CH.0770
H1181	SEDIMENT POLLUTION BLANK BILL	H	5-17-85	REF TO COM ON WATER
H1201	LOCAL GOV'T BOND PROCEDURES	*R	7-12-85	RATIFIED CH.0723
H1214	NRCD RECLASSSIFICATION PLAN FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H1219	HAZARDOUS WASTE COMM'N EXTENDED	*R	7-11-85	RATIFIED CH.0711
H1245	PIEDMONT WASTE EXCHANGE FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H1249	VENUS FLY TRAP ON ENDANGERED LIST	R	6-24-85	RATIFIED CH.0461
H1264=	ASSAULT ON SANITARIAN PENALTY UP-	HF	7-15-86	POSTPONED INDEFINITELY
H1272	HAZARDOUS WASTE FACILITIES FEES	*S	7-11-85	RE-REF COM ON APPROP
H1281	UNDERGROUND STORAGE TANKS/LRC STU	*HF	7-15-86	POSTPONED INDEFINITELY

Bolded line indicates bill is an appropriation bill.
* indicates that text of original bill was changed by some action.
= indicates that the original bill is identical to another bill.

NORTH CAROLINA GENERAL ASSEMBLY
BILLS BY INDEX TERM WORD
ENVIRONMENT

1985-86 Biennium

BILL	SHORT TITLE		DATE	LATEST ACTION
H1287	RADIOACTIVE WASTE STUDY COMM'N RS	*HF	7-15-86	POSTPONED INDEFINITELY
H1289	WASTE FACILITY OPERATOR TRUST FUN	H	5-20-85	REF TO COM ON WATER
H1315=	ASSAULT ON SANITARIAN PENALTY UPP	*S	6-24-85	REF TO COM ON JUDIC 3
H1373	HIGH-LEVEL NUCLEAR WASTE LRC STUD	HF	7-15-86	POSTPONED INDEFINITELY
H1384	HAZARDOUS WASTE HANDLERS FEES	*R	7- 3-85	RATIFIED CH.0582
H1393	NAV RIVER WATER QUALITY LRC STUDY	HF	7-15-86	POSTPONED INDEFINITELY
H1433	RANKIN STATE FOREST FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H1674	NUCLEAR WASTE STUDY	H	6-13-86	REF TO COM ON JUDIC 1
H1728	ARTIFICIAL REEF FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H1735	ARTIFICIAL REEF BILL ALLOWED	R	6-26-86	RATIFIED RES.42
H1804=	NONPOINT SOURCE POLLUTION FUND	HF	7-15-86	POSTPONED INDEFINITELY
H1857	JOHNSTON CONSERVATION DIST FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H2030	WATER RESOURCES FUNDS	HF	7-15-86	POSTPONED INDEFINITELY
H2093	ENABLE HAZARDOUS WASTE BILL	S	6-27-86	REF TO COM ON RULES
H2110	ARTIFICAL REEF INJURY PENALTY	*R	7-12-86	RATIFIED CH.0996
H2124	ENVIRONMENTAL AGENCIES STUDY	HF	7-15-86	POSTPONED INDEFINITELY
H2141	1986 STUDIES	*R	7-16-86	RATIFIED CH.1032
S 1=	BUDGET CURRENT OPERATIONS	*R	6-27-85	RATIFIED CH.0479
S 2=	BUDGET CAPITAL IMPROVEMENT	*R	6-27-85	RATIFIED CH.0480
S 6	HORSEPASTURE RIVER PRESERVATION	*R	6- 7-85	RATIFIED CH.0344
S 58=	MENTAL HEALTH RECODIFICATION	*R	7- 4-85	RATIFIED CH.0589
S 81	WAYNE FOREST HEADQUARTERS FUNDS	S	3- 5-85	REF TO COM ON APPROP
S 88=	WELL DRILLERS LICENSING BOARD EST	S	3- 7-85	REF TO COM ON ST GOVT
S 100	HAZARDOUS WASTE COMM'N APPOINT'M'	R	3-29-85	RATIFIED CH.0042
S 108	ROWAN SOLID WASTE ORDINANCES	R	4- 5-85	RATIFIED CH.0063
S 140=	NATURAL/SCENIC RIVER PROTECTION	*R	4-26-85	RATIFIED CH.0129
S 147=	NATURAL AREAS VOLUNTARY DEDICATIO	*R	5-22-85	RATIFIED CH.0216
S 172=	STATE PARKS/RECREATION AREAS COMM	S	4-24-85	RE-REF COM ON APPROP
S 182	STATEWIDE PROJECTS FUNDS/LAW CHAN	*R	7-15-85	RATIFIED CH.0757
S 263	LAKE TABOR BIRD SANCTUARY	*R	5-24-85	RATIFIED CH.0248
S 284	CAMA PERMIT APPLICATIONS NOTICES	R	6-11-85	RATIFIED CH.0372
S 307	ONSLOW GROUNDWATER STUDY FUNDS	S	4-16-85	REF TO COM ON APPROP
S 335	WORKPLACE HAZARDOUS CHEMICALS-2	S	4-16-85	REF TO COM ON HUM RES
S 350	WORKPLACE HAZARDOUS CHEMICALS-3	S	4-16-85	REF TO COM ON HUM RES
S 421	WORKPLACE HAZARDOUS CHEMICALS-4	S	4-25-85	REF TO COM ON HUM RES
S 580	SANITARY SEWAGE SYSTEM APPROVAL	*S	6- 7-85	RE-REF COM ON APPROP
S 636=	LRC OMNIBUS STUDIES	*R	7-18-85	RATIFIED CH.0790
S 647	LT GOV'S APPOINTMENTS	*R	7-16-85	RATIFIED CH.0774
S 655	RADIOACTIVE WASTE LRC STUDY	*R	7-18-85	INCORPORATED IN CH. 790
S 699	WORKPLACE HAZARDOUS CHEMICALS-5	S	5-17-85	REF TO COM ON HUM RES
S 806	CHOWAN RIVER NC-VA STUDY COMM'N	S	6-19-85	RE-REF COM ON APPROP
S 841	STORMWATER PERMITS, STUDY	*S	7- 3-85	RE-REF COM ON APPROP
S 868	LIABILITY INSURANCE AND TORT REFO	*S	6-26-86	RE-REF COM ON INSUR
S 882	LOW-LEVEL WASTE STUDY	H	7- 2-86	REF TO COM ON APPROP-E
S 934	TECHNICAL AMENDMENT BILL ALLOWED	R	7- 2-86	RATIFIED RES.48
S1147	TRIANGLE J WATER FUNDS	S	6-17-86	REF TO COM ON APPROP
S1267=	NONPOINT SOURCE POLLUTION	S	6-18-86	REF TO COM ON APPROP
S1302	STATE OF ENVIRONMENT FUNDS	S	7- 7-86	REF TO COM ON APPROP

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BILL	SHORT TITLE		DATE	LATEST ACTION
S1306	WASTEWATER/LANDFILL CHANGES	*R	7-15-86	RATIFIED CH.1023

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1987-88 Biennium

BILL		SHORT TITLE		DATE	LATEST ACTION
H	1	STUDIES AUTHORIZED	*R	8-14-87	RATIFIED CH.0873
H	2	STATE BUDGET CLEANUP	*R	8-14-87	RATIFIED CH.0876
H	35	LOW-LEVEL WASTE MGT AUTH-2	*R	8-14-87	RATIFIED CH.0850
H	60	RHODODENDRON FESTIVAL FUNDS	R	8-14-87	INCORPORATED CH. 830
H	66	RADIOACTIVE WASTE LICENSE HALT-2	H	3- 5-87	RE-REF COM ON ST GOVT
H	67=	CLARIFY RADIOACTIVE WASTE LICENSI	*H	3-13-87	REF TO COM ON ST GOVT
H	68=	RADIOACTIVE WASTE SITING CRITERIA	HF	6-23-88	POSTPONED INDEFINITELY
H	69=	SHALLOW LAND BURIAL BAN	HF	7-23-87	POSTPONED INDEFINITELY
H	93	HAZARDOUS WASTE MANAGEMENT STUDY	*R	7-12-88	INCORPORATED CH 1100
H	94	TREATMENT WORKS PERMIT, BOND	*R	8-11-87	RATIFIED CH.0767
H	95	LANDFILL SETBACK REQUIREMENT	H	2-25-87	REF TO COM ON JUDIC 3
H	115=	CLEAN WATER REVOLVING FUND	H	3- 2-87	REF TO COM ON NAT&ECON
H	134	INACTIVE HAZARDOUS SITES CLEANUP	*R	7- 8-87	RATIFIED CH.0574
H	196	MCDOWELL LITTER LAW	R	4- 9-87	RATIFIED CH.0052
H	207	COAST GUARD AUX.LICENSE PLATES	*R	5-27-87	RATIFIED CH.0240
H	225=	PHOSPHATE DETERGENTS BANNED	H	3-16-87	REF TO COM ON NAT&ECON
H	261	LOCAL LANDFILL APPROVAL	*R	7-10-87	RATIFIED CH.0597
H	315	ARTIFICIAL REEF FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H	317=	RANDLEMAN LAKE PROJECT FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H	319	MARK CLAM-OYSTER AREAS	*R	6-24-87	RATIFIED CH.0463
H	342	BERMUDA GRASS RESTRICTION EASED	HF	4-16-87	REPTD UNFAV
H	345	WILDLIFE ENFORCE LITTER LAW	*R	5-18-87	RATIFIED CH.0208
H	355	FARMLAND PRESERVATION STUDY	*R	8-14-87	INCORPORATED CH. 873
H	368=	HAZARDOUS WASTE COMM'N DEADLINES	R	4-22-87	RATIFIED CH.0082
H	372	BIOTECHNOLOGY PROGRAM FUNDS	*HF	7- 7-88	POSTPONED INDEFINITELY
H	379	AQUATIC WEEDS/COLUMBIA LEASES	*R	8-12-87	RATIFIED CH.0781
H	430	VEHICLE LAWS IN STATE PARKS	*R	6-25-87	RATIFIED CH.0474
H	453	EMERGENCY MGT CAN REQUIRE STUDY	HF	7-23-87	POSTPONED INDEFINITELY
H	642	LOCAL BOARD OF HEALTH RULES	*R	8- 6-87	RATIFIED CH.0734
H	649	RIGHT TO KNOW ACT AMENDMENTS	*R	6-26-87	RATIFIED CH.0489
H	664	ENDANGERED/THREATENED WILDLIFE	*R	6-16-87	RATIFIED CH.0382
H	688	PESTICIDE LAW AMENDMENTS	*R	7- 6-87	RATIFIED CH.0559
H	709	MINING/WELL/SEDIMENT ACTS PENALTY	R	6- 2-87	RATIFIED CH.0246
H	713	CLEANUP VOLUNTEERS, LIMITED LIABI	*R	6- 2-87	RATIFIED CH.0269
H	749	NEW HANOVER TREE BILL	*R	8-12-87	RATIFIED CH.0786
H	756=	ADOPT-A-TRAIL PROGRAM	HF	7- 7-88	POSTPONED INDEFINITELY
H	757=	TRAILS COORDINATORS FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H	765	DARE MARITIME FOREST REGULATED	R	5-14-87	RATIFIED CH.0187
H	781	HIGHWAY FUND 1988-89 FUNDS	*R	7-12-88	RATIFIED CH.1101
H	805	FAILURE TO REMOVE DISCHARGE	R	6- 2-87	RATIFIED CH.0270
H	806	PENALTIES FOR PROHIBITED DISCHARG	R	6- 2-87	RATIFIED CH.0271
H	807	AIR/WATER/HAZ. WASTE PERMIT CRITE	*R	6-24-87	RATIFIED CH.0461
H	840	WASTE TREATMENT CERTIFICATE CHANG	*R	7- 9-87	RATIFIED CH.0582
H	843	MEMORIALIZING HUGH H. BENNETT	*R	6-19-87	RATIFIED RES.31
H	909	SOUTHPORT TREES REGULATED	R	5-28-87	RATIFIED CH.0242
H	911	SPEAKER'S APPOINTMENTS-1	*R	8-14-87	RATIFIED CH.0868
H	913	SPEAKER'S APPOINTMENTS-2	R	4-28-87	RATIFIED CH.0109
H	918	GUILFORD WATERSHED PROTECTION	*R	7-24-87	RATIFIED CH.0669

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BILL	SHORT TITLE		DATE	LATEST ACTION
H 929	METRO SEWER DISTRICT TAP-ONS	*R	6-17-87	RATIFIED CH.0396
H 958	PUBLIC SAFETY TRAINING FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H 978	APA HEARINGS, JUDICIAL REVIEW	*R	8-14-87	RATIFIED CH.0878
H1017	GAME LAND THEFT PENALTIES	S	6-23-87	RE-REF COM ON NAT&ECON
H1061	CAVE PROTECTION ACT	*R	6-23-87	RATIFIED CH.0449
H1082	WATER/SEWER AUTH. JURISDICTION	*S	5-28-87	REF TO COM ON JUDIC 3
H1087	WASTE FACILITY LICENSE TAX	*HF	6-30-88	POSTPONED INDEFINITELY
H1098	TIMBER TAX RETURN DATE	R	6-30-87	RATIFIED CH.0523
H1104	STATE TO REGULATE HAZARDOUS WASTE	H	5-27-87	RE-REF COM ON JUDIC 3
H1105	WATER QUALITY RULES FLEXIBLE	H	5- 1-87	REF TO COM ON JUDIC 3
H1114	RADIOACTIVE WASTE REWARD	HF	6-30-88	POSTPONED INDEFINITELY
H1115	NUCLEAR FACILITY TAX STATEWIDE	H	5- 1-87	REF TO COM ON FINANCE
H1136	APA TECHNICAL CHANGES	*R	8-13-87	RATIFIED CH.0827
H1167	SOUTHEAST COMPACT CONDITIONS	HF	8- 7-87	POSTPONED INDEFINITELY
H1171	SEDIMENTATION/POLLUTION ACT CHANG	*R	6-28-88	RATIFIED CH.1000
H1193	WASTE FACILITY REQUIREMENTS	HF	7-23-87	POSTPONED INDEFINITELY
H1194	CLARIFY WHEN PROPERTY REAPPRAISED	R	7-22-87	RATIFIED CH.0655
H1203	WATERSHED STUDY COMM'N	*R	8-14-87	INCORPORATED CH. 873
H1204	WATER AUTHORITY PURCHASE MONEY	*R	6-27-88	RATIFIED CH.0981
H1211	STATE PAY FOR RIGHT-OF-WAY	*R	8- 7-87	RATIFIED CH.0747
H1212	RECYCLABLE CONTAINERS REQUIRED	H	5- 4-87	REF TO COM ON NAT&ECON
H1224	LOCAL AIR POLLUTION PENALTIES	*R	8- 7-87	RATIFIED CH.0748
H1238	LRC STUDY SEPTIC TANKS	R	8-14-87	INCORPORATED CH. 873
H1239	PHOSPHATE STUDY	HF	7- 7-88	POSTPONED INDEFINITELY
H1244	CAMP BUTNER AMENDMENTS	*R	7- 2-87	RATIFIED CH.0536
H1245	URGE CONGRESS RELIEVE CANTON MILL	*HA	5-11-87	ADOPTED
H1252	COASTAL WATER QUALITY STUDY	*R	8-14-87	INCORPORATED CH. 873
H1262	CLEAN DETERGENT TECH. AMEND.	*R	8-13-87	RATIFIED CH.0817
H1277	LOW LEVEL WASTE MGT. AUTHORITY-3	*HF	7- 7-88	POSTPONED INDEFINITELY
H1279	LOW-LEVEL WASTE COMPACT STUDY	*HF	7- 7-88	POSTPONED INDEFINITELY
H1288	FINANCE OMNIBUS CHANGES	*R	7- 8-88	RATIFIED CH.1082
H1297	SOLID WASTE VARIANCES	H	5- 5-87	REF TO COM ON NAT&ECON
H1298	LOCAL HEALTH FEES AUTHORIZED	HF	6- 9-87	REPTD UNFAV
H1304	ESTABLISH LEAKING TANK FUND	*R	6-30-88	RATIFIED CH.1035
H1310	NCSU AQUACULTURE FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1316	HAZARDOUS WASTE CLEANUP FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1320	SWANSBORO FIRE DEP'T FUNDS	R	8-14-87	INCORPORATED CH. 830
H1325	KEEP NC BEAUTIFUL FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1345	SOUTHEAST WASTE EXCHANGE FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1353	GAGING STATION FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1374	NAGS HEAD WOODS FUNDS-1	R	8-14-87	INCORPORATED CH. 830
H1391	AGRICULTURAL AWARENESS FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1406	AGRICULTURAL COST SHARE FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1410	MARINE RESEARCH FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1420	HYDE COUNTY TIDEGATES	HF	7- 7-88	POSTPONED INDEFINITELY
H1471	KINSTON PARK FUNDS	R	8-14-87	INCORPORATED CH. 830
H1502	CHATHAM WHITE PINES FUNDS	R	8-14-87	INCORPORATED CH. 830
H1514	87-89 CURRENT OPERATIONS BUDGET-2	*R	8- 7-87	RATIFIED CH.0738

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H1515	87-89 STATE AID APPROPRIATIONS	*R	8-14-87	RATIFIED CH.0830
H1562	JORDAN STATE FOREST FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1572	HARVEY GARDENS FUNDS	R	8-14-87	INCORPORATED CH. 830
H1757	HAW RIVER ASSEMBLY FUNDS	R	8-14-87	INCORPORATED CH. 830
H1765	NATURE SCIENCE CENTER FUNDS	R	8-14-87	INCORPORATED CH. 830
H1820	CRAVEN, PAMLICO, LENOIR FUNDS	R	8-14-87	INCORPORATED CH. 830
H1822	ONSLOW CLEAN COUNTY FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H1853	LAKE WACCAMAW WEED FUNDS	R	8-14-87	INCORPORATED CH. 830
H2032	PRINCETON WOMEN'S CLUB FUNDS	R	8-14-87	INCORPORATED CH. 830
H2046	NEW HANOVER ARBORETUM FUNDS	R	8-14-87	INCORPORATED CH. 830
H2086	NATURE SCIENCE FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H2243	ORANGE/CHATHAM OMNIBUS-2	*R	6-29-88	RATIFIED CH.1023
H2247=	SOLID WASTE REVOLVING FUND	HF	7- 7-88	POSTPONED INDEFINITELY
H2317	PINE KNOLL SHORES REGULATE TREES	R	6-23-88	RATIFIED CH.0921
H2318	SEA TURTLE SANCTUARY	*R	6-24-88	RATIFIED CH.0968
H2321	RUTHERFORD SOLID WASTE CONTRACTS	R	6-23-88	RATIFIED CH.0923
H2323	ANSON FOREST RANGER FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H2363	NEW HANOVER BEACH TAX STUDY	HP	7- 6-88	REPTD UNFAV
H2365=	LOW-LEVEL WASTE AMENDMENTS	*R	6-27-88	RATIFIED CH.0993
H2387=	LITTLE RIVER RESERVOIR FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H2388	LOW-LEVEL WASTE COMMITTEE	*R	7-12-88	INCORPORATED CH 1100
H2433	WILDLIFE ADVISORY COMM'N EXPENSES	HF	7- 7-88	POSTPONED INDEFINITELY
H2472	GASTON/LINCOLN FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2489=	DWI/COMMERCIAL VEHICLES	*R	7-12-88	RATIFIED CH.1112
H2495	MECKLENBURG AREA FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2516	1ST HOUSE DISTRICT FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2538=	SHELLFISH RELAY RESERVE FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H2539=	EMC STUDY WASTEWATER DISPOSAL	HF	7- 7-88	POSTPONED INDEFINITELY
H2540	14TH HOUSE DISTRICT FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2565	12TH HOUSE DISTRICT FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2576	CRAVEN/LENOIR/PAMLICO FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2578	SAMPSON PUBLIC SERVICE FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2594	CRAVEN/LENOIR/PAMLICO FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2596	40TH HOUSE DISTRICT FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2617=	MASONBORO ISLAND FUNDS	HF	7- 7-88	POSTPONED INDEFINITELY
H2623=	HAZARDOUS WASTE FEES CLARIFIED	*R	6-29-88	RATIFIED CH.1020
H2628	SPEAKER'S APPOINTMENTS-3	*R	7- 7-88	RATIFIED CH.1068
H2633	NEW HANOVER PROJECTS FUNDS	R	7- 8-88	INCORPORATED CH 1085
H2641	1988-89 APPROPRIATIONS-2	*R	7- 8-88	RATIFIED CH.1086
H2643	LOCAL PROJECTS APPROPRIATONS	*R	7- 8-88	RATIFIED CH.1085
H2645	WESTERN NC OMNIBUS FUNDS	R	7- 8-88	INCORPORATED CHY 1085
S 46=	RADIOACTIVE WASTE SITING CRITERIA	*HF	6-23-88	POSTPONED INDEFINITELY
S 47=	CLARIFY RADIOACTIVE WASTE LICENSI	*R	3-23-87	RATIFIED CH.0024
S 48=	SHALLOW LAND BURIAL BAN	*R	7-17-87	RATIFIED CH.0633
S 49	RADIOACTIVE WASTE LICENSE HALT-1	*H	8-13-87	RE-REF COM ON ST GOVT
S 63	REGIONAL GROWTH COMM'N	*S	3-17-87	RE-REF COM ON APPROP
S 84=	CLEAN WATER REVOLVING FUND	S	3- 5-87	RE-REF COM ON ECON GR
S 110	CLEAN WATER LOAN AND GRANT FUND	*R	8-12-87	RATIFIED CH.0796

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BILL	SHORT TITLE		DATE	LATEST ACTION
S 114	HAZARDOUS WASTE FACILITY PERMIT	*R	6-22-87	RATIFIED CH.0437
S 127	STATE LOTTERY ACT-2	SF	5-20-87	REPTD UNFAV
S 131	LITTERING PENALTY REVISED	*R	8- 8-87	RATIFIED CH.0757
S 164=	PHOSPHATE DETERGENTS BANNED	*R	4-29-87	RATIFIED CH.0111
S 182	LOCAL ORDINANCE PENALTY INCREASED	*R	8-12-87	RATIFIED CH.0772
S 194=	RANDLEMAN LAKE PROJECT FUNDS	S	3-25-87	RE-REF COM ON APPROP
S 218	INTOXICATION LEVEL,CLASS A DRIVER	S	3-26-87	REF TO COM ON JUDIC 4
S 222	USE VALUE TECHNICAL CHANGES	*R	7-30-87	RATIFIED CH.0698
S 223	SCHOOL HAZARDOUS WASTE FUNDS	S	3-27-87	REF TO COM ON APPROP
S 226	UNDERGROUND TANK CLEAN-UP	S	5-22-87	RE-REF COM ON APPROP
S 236	INFRASTRUCTURE BONDS/SCHOOL NEEDS	*S	7- 9-87	RE-REF COM ON FINANCE
S 237	CABARRUS/MOORE JUNKED VEHICLES	*R	6-23-87	RATIFIED CH.0451
S 256=	HAZARDOUS WASTE COMM'N DEADLINE	S	4- 1-87	REF TO COM ON ENVIRON
S 257	STUDIES AND BUDGET CHANGES	*R	7-12-88	RATIFIED CH.1100
S 286	IDENTIFY, CLEANUP ORPHAN DUMPS	S	4- 3-87	REF TO COM ON ENVIRON
S 304	WILDLIFE TAX CREDIT UP	S	5-20-87	RE-REF COM ON WAYS&MNS
S 359	LRC STUDY LOW-LEVEL WASTE	R	8-14-87	INCORPORATED CH. 873
S 362	LRC STUDY SOLID WASTE	R	8-14-87	INCORPORATED CH. 873
S 375	HAZARDOUS WASTE LIABILITY	*R	8-14-87	RATIFIED CH.0848
S 389	OPERATION OF WELLS REGULATED	*R	6-29-87	RATIFIED CH.0496
S 417	REVENUE LAWS TECHNICAL CHANGES	*R	8-13-87	RATIFIED CH.0804
S 469=	ADOPT-A-TRAIL PROGRAM	S	4-16-87	REF TO COM ON APPROP
S 470=	TRAILS COORDINATORS FUNDS	S	4-16-87	REF TO COM ON APPROP
S 486	PHOSPHATE SEVERANCE TAX	S	5-27-87	RE-REF COM ON FINANCE
S 515	GOVERNOR CALLS SNOW DAYS	S	4-17-87	REF TO COM ON ST PRSNL
S 517	INACTIVE HAZARDOUS SITES PROTECTI	R	8-14-87	INCORPORATED CH. 873
S 535	HAZARDOUS WASTE FEE CHANGES	*R	8-12-87	RATIFIED CH.0773
S 555	IRB BOND POOL	R	6-30-87	RATIFIED CH.0517
S 559	FERTILIZER LAW AMENDMENT	R	6- 8-87	RATIFIED CH.0292
S 567	ALLEGHANY BEAUTIFICATION	S	4-17-87	REF TO COM ON LOCGOVT2
S 568	ROCKINGHAM BEAUTIFICATION	S	4-17-87	REF TO COM ON LOCGOVT2
S 572=	SCHOOL SNOW DAYS	S	5-11-87	RE-REF COM ON EDUCATN
S 587	SURRY BEAUTIFICATION	S	4-21-87	REF TO COM ON LOCGOVT2
S 588	WATAUGA BEAUTIFICATION	S	4-21-87	REF TO COM ON LOCGOVT2
S 589	ASHE BEAUTIFICATION	S	4-21-87	REF TO COM ON LOCGOVT2
S 590	STOKES BEAUTIFICATION	S	4-21-87	REF TO COM ON LOCGOVT2
S 606	CLEAN DRINKING WATER FUND	S	4-21-87	REF TO COM ON APPROP
S 643	LT. GOVERNOR'S APPOINTMENTS-1	*R	8-14-87	RATIFIED CH.0870
S 701	SEPTAGE MANAGEMENT PROGRAM	*R	7- 7-88	RATIFIED CH.1058
S 705=	ROAN MOUNTAINS STUDY	R	5-20-87	RATIFIED CH.0216
S 724	UNC LAND RECEIPTS	S	5-12-87	RE-REF COM ON APPROP
S 749	RECREATION/NATURAL HERITAGE TRUST	*R	8-14-87	RATIFIED CH.0871
S 750	NATIONAL HERITAGE TRUST FUNDS	S	5- 1-87	REF TO COM ON APPROP
S 762	STRICTER RULES, LANDFILL PERMITS	*R	8-10-87	RATIFIED CH.0761
S 766	LIMIT WASTE FACILITIES PROXIMITY	S	5- 1-87	REF TO COM ON ENVIRON
S 796	CLEAN DETERGENT ACT CHANGE	*H	5-27-87	REF TO COM ON JUDIC 3
S 806	REUSE PHOSPHATE DISCHARGES	*S	5-15-87	RE-REF COM ON APPROP
S 824	WATER QUALITY ACT STUDY	*R	6-29-87	RATIFIED CH.0501

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S 825	WEIGHT RELIEF, GARBAGE HAULERS	*R	7-31-87	RATIFIED CH.0707
S 831	AQUACULTURE PLANNING ACT	*S	5-14-87	RE-REF COM ON APPROP
S 832	SANITARIAN AMENDMENTS	S	5- 4-87	REF TO COM ON HUM RES
S 840	WATER TEST/PRIVATE LABS	*R	6-29-87	RATIFIED CH.0502
S 845	WATERFOWL HABITAT DEDUCTION	S	5- 4-87	HELD AS FILED
S 848	LOW-LEVEL WASTE MGT AUTHORITY-1	*S	8-13-87	RE-REF COM ON ENVIRON
S 855	LRC STUDY INTERBASIN TRANSFERS	R	8-14-87	INCORPORATED CH. 873
S 875	WATERFOWL HABITAT IMPROVEMENTS	*S	7-17-87	RE-REF COM ON WAYS&MNS
S 895	WARREN FIRE PLOW FUNDS	R	8-14-87	INCORPORATED CH. 830
S 908	BEAUFORT FOREST HEADQUARTERS	S	5-13-87	REF TO COM ON APPROP
S 922	GREENSBORO ARBORETUM FUNDS	R	8-14-87	INCORPORATED CH. 830
S 931	WILDLIFE TIMBER DEED FUNDS	S	5-18-87	REF TO COM ON APPROP
S 941	NAGS HEAD WOODS FUNDS-2	R	8-14-87	INCORPORATED CH. 830
S 942	EDGECOMBE FIRE EQUIPMENT FUNDS	S	5-18-87	REF TO COM ON APPROP
S 975	LOWELL RECREATION FUNDS	R	8-14-87	INCORPORATED CH. 830
S1065	ENVIRONMENTAL HEALTH FUNDS	S	5-25-87	REF TO COM ON APPROP
S1066	WEYMONTH NATURE PRESERVE FUNDS	R	8-14-87	INCORPORATED CH. 830
S1079	MOORE NATURAL FUNDS	R	8-14-87	INCORPORATED CH. 830
S1104	KINSTON HARVEY GARDENS FUNDS	R	8-14-87	INCORPORATED CH. 830
S1166	NCSU FORESTRY BIOTECH. FUNDS	S	5-26-87	REF TO COM ON APPROP
S1167	INLAND WATERS/PHOSPHATE TAX STUDY	R	8-14-87	INCORPORATED CH. 873
S1241	DISTILLERY TAX CREDIT CHANGES	*R	8-14-87	RATIFIED CH.0872
S1257	NATURE SCIENCE CENTER FUNDS	R	8-14-87	INCORPORATED CH. 830
S1291	CHATHAM WHITE PINES FUNDS	R	8-14-87	INCORPORATED CH. 830
S1293	HAW RIVER ASSEMBLY FUNDS	R	8-14-87	INCORPORATED CH. 830
S1308	LEGISLATIVE BUDGET COMM'N	S	5-27-87	REF TO COM ON RULES
S1331	NEW HANOVER ARBORETUM FUNDS	R	8-14-87	INCORPORATED CH. 830
S1370	TRIANGLE LAND CONSERVANCY FUNDS	R	8-14-87	INCORPORATED CH. 830
S1377	WILSON FIREMEN'S ASS'N FUNDS	R	8-14-87	INCORPORATED CH. 830
S1393	WAYNE FORREST OFFICE FUNDS	S	5-28-87	REF TO COM ON APPROP
S1430	PAMLICO-TAR FUNDS	R	8-14-87	INCORPORATED CH. 830
S1498	WILSON EMERGENCY MGT FUNDS	R	8-14-87	INCORPORATED CH. 830
S1573=	SOLID WASTE REVOLVING FUND	*HF	7- 7-88	POSTPONED INDEFINITELY
S1577	ENVIRONMENTAL CONSOLIDATION	S	6- 6-88	REF TO COM ON APPROP
S1579	CLEAN WATER REVOLVING FUNDS	S	6- 7-88	REF TO COM ON APPROP
S1591=	EMC STUDY WASTEWATER DISPOSAL	S	6- 8-88	REF TO COM ON APPROP
S1592=	SHELLFISH RELAY RESERVE FUNDS	S	6- 8-88	REF TO COM ON APPROP
S1625=	LITTLE RIVER RESERVOIR FUNDS	S	6- 9-88	REF TO COM ON APPROP
S1631=	LOW-LEVEL WASTE AMENDMENTS	*S	6-15-88	RE-REF COM ON FINANCE
S1642	MARINE RESEARCH FUNDS	S	6-10-88	REF TO COM ON APPROP
S1647	HAYWOOD CLEAN-UP FUNDS	S	6-13-88	REF TO COM ON APPROP
S1657	HARVEY GARDENS FUNDS	R	7-11-88	INCORPORATED CH.1094
S1674=	DWI/COMMERCIAL VEHICLES	S	6-15-88	REF TO COM ON JUDIC 1
S1689=	MASONBORO ISLAND FUNDS	S	6-16-88	REF TO COM ON APPROP
S1724	EASTERN REVITALIZATION FUNDS	R	7-11-88	INCORPORATED CH.1094
S1746	WESTERN EDUCATION PROJ FUNDS	R	7-11-88	INCORPORATED CH.1094
S1815	WESTERN NC OMNIBUS FUNDS	R	7-11-88	INCORPORATED CH.1094
S1838=	CLARIFY HAZARDOUS WASTE FEES	S	6-20-88	REF TO COM ON ENVIRON

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BILL	SHORT TITLE		DATE	LATEST ACTION
S1840	SENATE LOCAL PROJECTS FUNDS	*R	7- 8-88	RATIFIED CH.1094
S1844	NEW HANOVER COMMUNITY FUNDS	R	7-11-88	INCORPORATED CH.1094
S1850	1ST SENATE DISTRICT FUNDS-1	R	7-11-88	INCORPORATED CH.1094
S1852	1ST SENATE DISTRICT FUNDS-2	S	6-21-88	REF TO COM ON APPROP
S1861	16TH SENATE DIST. CULT. FUNDS	R	7-11-88	INCORPORATED CH.1094
S1865	LT. GOVERNOR'S APPOINTMENTS	R	7- 7-88	RATIFIED CH.1060

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1989-90 Biennium

BILL	SHORT TITLE		DATE	LATEST ACTION
H 617	DEGRADABLE PLASTIC CARRYING BAGS	H	7- 6-90	REPTD TO BASICRES
H 618	DEGRADABLE FOOD PACKAGING	H	7- 6-90	REPTD TO BASICRES
H 619	CHLOROFLUOROCARBONS PACKAGING	H	7- 6-90	REPTD TO BASICRES
H 644	CLARIFY INACTIVE HAZ. SITES LAW	*R	6-12-89	RATIFIED CH.0286
H 673=	STREAM WATCH PROGRAM	*R	6-22-89	RATIFIED CH.0412
H 678	ENVIRONMENTAL INTERNSHIPS FUNDS	*HF	7-28-90	REPTD UNFAV
H 705=	VEHICLE INSPECTION CHANGES	*R	6-21-89	RATIFIED CH.0391
H 706	HAZARDOUS WASTE REMEDIAL FUND	*S	5- 9-89	REF TO COM ON ENVIRON
H 707	SOLID WASTE COMM'N RULES	*R	6-14-89	RATIFIED CH.0317
H 708	NCSU AGRICULTURAL PROGRAMS FUNDS	HF	7-28-90	REPTD UNFAV
H 717=	LUMBER RIVER/NATURAL RIVER SYSTEM	*HF	7-28-90	REPTD UNFAV
H 728=	BUSINESS ENERGY IMPROVEMENT	*HF	7-28-90	REPTD UNFAV
H 745	WATERSHED MGMT SPECIALIST FUNDS	HF	7-28-90	REPTD UNFAV
H 748	GENETIC ENGINEERING ACT	*HF	7-28-90	REPTD UNFAV
H 753=	SALES TAX/EDUCATION/SALARIES	HF	7-28-90	POSTPONED INDEFINITELY
H 758=	PLANT PROTECTION ACT AMENDED	*R	6-29-89	RATIFIED CH.0508
H 771	DEGRADABLE CONNECTOR RINGS	H	7- 6-90	REPTD TO BASICRES
H 806	RALEIGH STORMWATER REGULATION	*R	7-27-90	RATIFIED CH.1043
H 892	CURRITUCK BEAUTIFICATION DISTRICT	*R	7-31-89	RATIFIED CH.0703
H 915	ORANGE OMNIBUS BILL	*R	6-27-89	RATIFIED CH.0478
H 923	CURRITUCK BANKS BEAUTIFICATION	*R	6-21-89	RATIFIED CH.0400
H 957=	TANK CLEANUP ACT AMENDMENTS	*R	7-15-89	RATIFIED CH.0652
H1025	AMEND SCENIC RIVER ACQUISITION	*R	7-15-89	RATIFIED CH.0654
H1035	DOWN ZONING THREE-FORTHS VOTE	*HF	5-11-89	FAILED 2ND READING
H1045=	INFECTIOUS WASTE STUDY	*HF	7-27-90	POSTPONED INDEFINITELY
H1057	POLLUTION CIVIL PENALTIES	H	7- 6-90	REPTD TO BASICRES
H1060	WATER HEATER TEMPERATURE	*S	5-29-89	RE-REF COM ON HUM RES
H1073	LAKE NORMAN STUDY FUNDS	HF	7-26-90	POSTPONED INDEFINITELY
H1075	IMPLEMENT SCENIC RIVER PLAN	*R	8-11-89	RATIFIED CH.0765
H1096	SPEAKER/PRO TEM APPOINTMENTS	*R	8-12-89	RATIFIED CH.0781
H1110	COUNTY VOTE ON WASTE FACILITY	HF	6-28-89	POSTPONED INDEFINITELY
H1113	MEMORIALIZING HUBERT WILLIS	*R	4-17-89	RATIFIED RES.12
H1124	AIR QUALITY PERMIT NOTICE	*R	8-11-89	RATIFIED CH.0766
H1134=	ENVIRONMENTAL HEALTH FUNDS	HF	7-28-90	REPTD UNFAV
H1177	ENVIRONMENTAL CRIMES PENALTIES	*R	7-27-90	RATIFIED CH.1045
H1182	STRENGTHEN LITTER LAWS	HF	7-19-90	POSTPONED INDEFINITELY
H1203	EROSION CONTROL PLAN CRITERIA	*R	7-25-89	RATIFIED CH.0676
H1204	SEDIMENT CONTROL PENALTY INCREASE	H	7- 6-90	REPTD TO BASICRES
H1222=	SUPERFUND AUTHORIZATION	*S	5- 9-89	REF TO COM ON ENVIRON
H1223=	DELAY LANDFILLS IN WATERSHEDS	*R	7-26-90	RATIFIED CH.1014
H1224	HAW IN SCENIC RIVER SYSTEM	*HF	7-28-90	REPTD UNFAV
H1225	SOLID WASTE REVISIONS-1	H	4-20-89	ASSIGNED TO INF-SOL
H1260	SEDIMENT CONTROL SET BACK LINE	H	5- 4-89	REPTD TO BASICRES
H1261	EROSION CONTROL/VIOLATION NOTICE	H	7- 6-90	REPTD TO BASICRES
H1283	MAGISTRATE ACCEPT LITTER PLEA	*R	6-15-89	RATIFIED CH.0343
H1284	SANITARIAN EDUCATION CHANGES	*R	6-30-89	RATIFIED CH.0545
H1304	AGRIBUSINESS PLANT VARIANCES	*HF	7-28-90	REPTD UNFAV
H1312=	LOW-LEVEL WASTE AMENDMENTS-1	*S	7-26-89	RE-REF COM ON ENVIRON

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H1317	SEDIMENT CONTROL FILING FEE	H	7- 6-90	REPTD TO BASICRES
H1325	NC EXCEED ENVIRONMENT REGS	H	7- 6-90	REPTD TO BASICRES
H1366	JACKSON NATURE INVENTORY FUNDS	HF	7-28-90	REPTD UNFAV
H1376	CAROLINA RAPTOR CENTER FUNDS	HF	7-28-90	REPTD UNFAV
H1381=	AVERY COUNTY GROWTH MANAGEMENT	HF	7-28-90	REPTD UNFAV
H1405	MECKLENBURG AREA FUNDS	HF	7-28-90	REPTD UNFAV
H1437=	FRENCH BROAD RIVER FUNDS	HF	7-28-90	REPTD UNFAV
H1451	COAL TRANSPORT STUDY-1	HF	7-26-90	POSTPONED INDEFINITELY
H1455	STATE WATER SUPPLY FUNDS	HF	7-28-90	REPTD UNFAV
H1456	HYDE WATERFOWL FUNDS	HF	7-28-90	REPTD UNFAV
H1460=	KEEP NC CLEAN FUNDS	HF	7-28-90	REPTD UNFAV
H1538	FORSYTH SCIENCE CENTER FUNDS	HF	7-28-90	REPTD UNFAV
H1586	STONEVILLE WASTEWATER FUNDS-2	HF	7-28-90	REPTD UNFAV
H1598=	ENVIRONMENTAL RESOURCE FUNDS	HF	7-28-90	REPTD UNFAV
H1616	REGIONAL SOLID WASTE STUDY FUNDS	HF	7-28-90	REPTD UNFAV
H1686	NEW MRCD POSITIONS FUNDS	HF	7-28-90	REPTD UNFAV
H1687	INACTIVE HAZARDOUS SITES FUNDS-1	HF	7-28-90	REPTD UNFAV
H1719	FLOWER HILL PRESERVATION FUNDS	HF	7-28-90	REPTD UNFAV
H1748	JONESBORO GARDEN CLUB FUNDS	HF	7-28-90	REPTD UNFAV
H1785	TRIANGLE J COMPUTER FUNDS	HF	7-28-90	REPTD UNFAV
H1815=	BAKER'S MOUNTAIN FUNDS	HF	7-28-90	REPTD UNFAV
H1894	NC ARBORETUM FUNDS	HF	7-28-90	REPTD UNFAV
H1895	FLETCHER RESEARCH STATION FUNDS	HF	7-28-90	REPTD UNFAV
H1929	PLANT PROTECTION FUNDS	HF	7-28-90	REPTD UNFAV
H1945	WATER RESOURCES PLANNING COMM'N	HF	7-26-90	POSTPONED INDEFINITELY
H1950	MASONBORO ISLAND FUNDS	HF	7-28-90	REPTD UNFAV
H1955	TOXAWAY RIVER STUDY	H	5-10-89	REF TO COM ON RULES ETC
H1967	DURHAM RESOURCES INVENTORY FUNDS	HF	7-19-90	POSTPONED INDEFINITELY
H1970	HOUSE DISTRICT 6 FUNDS	HF	7-28-90	REPTD UNFAV
H1986	A&T AGRICULTURAL RESEARCH FUNDS	HF	7-28-90	REPTD UNFAV
H1992	STORAGE TANK FUNDS	HF	7-28-90	REPTD UNFAV
H2003=	ENVIRONMENTAL CONSOLIDATION FUNDS	HF	7-28-90	REPTD UNFAV
H2004=	SUPERFUND FUNDS	HF	7-28-90	REPTD UNFAV
H2009	WATER RESOURCES DEVELOPMENT FUNDS	HF	7-28-90	REPTD UNFAV
H2043=	WATER TRANSFER PROHIBITED	H	5-29-90	ASSIGNED TO BAS-WAT&
H2070=	REVENUE LAWS TECH. CHANGES	*H	7-28-90	REF TO COM ON FINANCE
H2078	ELIZABETHAN GARDEN FUNDS	HF	7-28-90	REPTD UNFAV
H2093	EROSION CONTROL PLAN\PENALTY FEES	*S	7- 5-90	REF TO COM ON FINANCE
H2166	RECYCLED PAPER INCENTIVE	HF	7-28-90	POSTPONED INDEFINITELY
H2174	ALLOW CERCLA/SARA LIEN BILL	R	6-15-90	RATIFIED RES.39
H2205=	HAZARDOUS WASTE SITING-1	HF	7-28-90	POSTPONED INDEFINITELY
H2206=	HAZARDOUS WASTE SITING-2	HF	7-28-90	POSTPONED INDEFINITELY
H2216	REGIONAL WASTE FACILITY FUNDS	HF	7-28-90	REPTD UNFAV
H2248=	WASTEWATER COMMISSION STUDY	H	7- 3-90	RE-REF COM ON BASICRES
H2249	CLARIFY EMC CIVIL PENALTY POWERS	*R	7-27-90	RATIFIED CH.1036
H2254	CLARIFY ENVIRONMENTAL PERMITS	*R	7-27-90	RATIFIED CH.1037
H2260=	ENVIRONMENTAL TECHNICAL CORR.	*R	7-20-90	RATIFIED CH.1004
H2264	ESTABLISH FEES FOR DAM PERMITS-1	*HF	7-28-90	POSTPONED INDEFINITELY

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H2265	ESTABLISH MINING PERMIT FEES-1	*HF	7-28-90	POSTPONED INDEFINITELY
H2266=	ESTABLISH EROSION PLAN FEES	*HF	7-28-90	POSTPONED INDEFINITELY
H2282	SECONDARY NUTRIENT RECYCLING	*R	7- 9-90	RATIFIED CH.0880
H2297	SPEAKER'S APPOINTMENTS-1	*R	7-27-90	RATIFIED CH.1038
H2313	SOUTH CUMBERLAND FUNDS	HF	7-28-90	REPTD UNFAV
H2315=	COMMERCIAL DRIVERS LICENSES	H	7-20-90	REPTD TO COMMERCE
H2325	FIREMAN'S RELIEF FUND LIABILITY	*S	7-16-90	REF TO COM ON INSUR
H2331=	RADIATION EMERGENCY RESPONSE FEE	*R	7-26-90	RATIFIED CH.0964
H2340	LIMITS ON SITING WASTE FACILITY	HF	7-28-90	POSTPONED INDEFINITELY
H2353=	CAMA FEES-1	*R	7-19-90	RATIFIED CH.0987
H2359	MARINE FISHERIES LICENSE	H	7- 9-90	REPTD TO BASICRES
H2373	SMALL SYSTEM WASTEWATER STUDY	R	7-28-90	INCORPORATED CH.1078
H2382=	HAZARDOUS WASTE FACILITY CRITERIA	HF	7-27-90	POSTPONED INDEFINITELY
H2394	UNIFORM FEDERAL LIEN REGISTRATION	*R	7-27-90	RATIFIED CH.1047
S 27	ENVIRONMENTAL REG. LIMIT REPEALED	*H	3- 1-89	ASSIGNED TO BAS-WAT&
S 43=	BASE BUDGET APPROPRIATIONS	*R	6-28-89	RATIFIED CH.0500
S 44=	1989-91 EXPANSION BUDGET	*R	8-10-89	RATIFIED CH.0752
S 50	HOME LOAN BANK DEPOSITS TAX EXEMP	*R	8-12-89	RATIFIED CH.0769
S 51=	INCOME TAX BASED ON FEDERAL LAW-2	*R	8- 7-89	RATIFIED CH.0728
S 58	SOLID WASTE CLEARINGHOUSE	*R	7-11-90	RATIFIED CH.0888
S 70	INSPECT AUTOS FOR HYDROCARBONS	H	5-10-89	ASSIGNED TO BAS-WAT&
S 110	SOLID WASTE BRANCH STAFF FUNDS	S	2- 6-89	REF TO COM ON APPROP
S 111	SOLID WASTE REVISIONS-2	*R	8-12-89	RATIFIED CH.0784
S 112	LRC SOLID WASTE STUDY CONTINUED	S	5-31-89	REF TO COM ON APPROP
S 113	LOCAL SOLID WASTE ORDINANCES	*R	7-26-90	RATIFIED CH.1009
S 114	COUNTY LANDFILL DISPOSAL FEES	*S	7-26-90	RE-REF COM ON HUM RES
S 115	SOLID WASTE REVOLVING FUND	*R	8-11-89	RATIFIED CH.0756
S 116	STATE TO BUY RECYCLED GOODS	S	2- 6-89	REF TO COM ON ST GOVT
S 120	TVA REGULATE RIVER BASIN	S	2- 6-89	HELD AS FILED
S 130	NO INFECTIOUS WASTE OCEAN DUMPING	*R	8- 9-89	RATIFIED CH.0742
S 140=	BOYCOTT TENNESSEE LIQUOR	SF	3- 2-89	REPTD UNFAV
S 155	MUNICIPAL WASTEWATER DISCHARGE	*R	7-18-90	RATIFIED CH.0951
S 160=	NONPOINT SOURCE POLLUTION FUNDS	S	2-14-89	REF TO COM ON APPROP
S 177=	ENERGY POLICY EXTENDED	R	3-23-89	RATIFIED CH.0023
S 207=	REPEAL UNUSED TAX CREDITS	S	2-20-89	REF TO COM ON FINANCE
S 213=	ON-SITE SEWAGE REGULATION	S	2-21-89	REF TO COM ON ENVIRON
S 231=	1989-91 STUDIES	*R	8-12-89	RATIFIED CH.0802
S 274	PESTICIDE APPLICATION NOTICE	*S	5- 5-89	RE-REF COM ON APPROP
S 302=	WELL CONSTRUCTION AMENDMENTS	S	2-27-89	REF TO COM ON ENVIRON
S 304	INMATE WORK EFFICIENCY	S	2-27-89	REF TO COM ON VETS &
S 306=	RANGER RESIDENCE/DELETE REPORTING	*H	7-11-90	RE-REF COM ON BASICRES
S 324	HAZARDOUS WASTE MANAGEMENT	*R	5-30-89	RATIFIED CH.0168
S 354=	ENVIRONMENTAL AGENCY CONSOLIDATED	S	3- 6-89	REF TO COM ON ENVIRON
S 359=	DEGRADABLE SIX-PACK RING	*R	6-21-89	RATIFIED CH.0371
S 360	COASTAL RESERVE SYSTEM	*R	6-19-89	RATIFIED CH.0344
S 367=	LRC STUDY GROUNDWATER RESOURCES	S	5-31-89	REF TO COM ON APPROP
S 371	SEWAGE SYSTEM REGULATION TRANSFER	S	3- 8-89	REF TO COM ON ENVIRON
S 372	CERTIFY SEWAGE SYSTEM OPERATORS	*R	6-21-89	RATIFIED CH.0372

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S 379=	QUALIFY FORESTRY EXEMPTION	*R	6- 1-89	RATIFIED CH.0179
S 387=	STREAM WATCH PROGRAM	*HF	6-27-89	POSTPONED INDEFINITELY
S 392	AIR QUALITY CLASSES REPEAL	R	5-25-89	RATIFIED CH.0132
S 394=	ENVIRONMENTAL COMPLIANCE BONDING	*R	5-25-89	RATIFIED CH.0133
S 402	INCREASE FISHERIES FINES	*R	6-12-89	RATIFIED CH.0275
S 405	INCREASE CONSERVATION TAX CREDIT	R	8- 3-89	RATIFIED CH.0716
S 428	AQUACULTURE WATER COLUMN LEASES	*R	6-23-89	RATIFIED CH.0423
S 431	AIR QUALITY AMENDMENTS	*R	5-25-89	RATIFIED CH.0135
S 454	OUTER BANKS BEAUTIFICATION	R	6-20-89	RATIFIED CH.0363
S 474	ENVIRONMENTAL COMPLIANCE BONDING-	S	3-16-89	REF TO COM ON ENVIRON
S 475	CERTAIN LANDS TO NATURE PRESERVE-	*R	5-29-89	RATIFIED RES.23
S 476	CERTAIN LANDS TO NATURE PRESERVE-	*R	5-29-89	RATIFIED CH.0146
S 487	WILDLIFE COMMITTEE EXPENSES	S	5- 3-89	RE-REF COM ON APPROP
S 488=	VEHICLE INSPECTION CHANGES	*S	5- 3-89	RE-REF COM ON FINANCE
S 523	LOCAL POLLUTION TAX CERTIFICATION	R	5-29-89	RATIFIED CH.0148
S 525	GENERAL STATUTES TECHNICAL AMENDS	*R	8-12-89	RATIFIED CH.0770
S 551	CAMA REGULATE SUBSURFACE/AIRSPACE	*R	6-14-89	RATIFIED CH.0313
S 561	STOKES BEAUTIFICATION	S	3-21-89	REF TO COM ON LOC GOVT
S 563	ROCKINGHAM BEAUTIFICATION	S	3-21-89	REF TO COM ON LOC GOVT
S 564	SURRY BEAUTIFICATION	S	3-21-89	REF TO COM ON LOC GOVT
S 565	ALLEGHANY BEAUTIFICATION	*R	6- 5-89	RATIFIED CH.0211
S 567	ASHE BEAUTIFICATION	S	3-21-89	REF TO COM ON LOC GOVT
S 568	WATAUGA ACQUIRE SCHOOL PROPERTY	*R	6-28-89	RATIFIED CH.0487
S 577=	PLANT PROTECTION ACT AMENDED	*S	4- 5-89	RE-REF COM ON FINANCE
S 584=	LOCAL GOV'T STORM DRAINAGE SYSTEM	*R	7-15-89	RATIFIED CH.0643
S 617=	**GATES HIGH SCHOOL WATER FUNDS**	**S**	**3-23-89**	**REF TO COM ON APPROP**
S 624=	**BUSINESS ENERGY IMPROVEMENT**	***S**	**4-20-89**	**RE-REF COM ON APPROP**
S 640	HUNTERSVILLE TREE ORDINANCE	S	3-27-89	REF TO COM ON LOC GOVT
S 649	PLANTATION VILLAGE BIRD SANCTUARY	R	6- 1-89	RATIFIED CH.0182
S 666	AMEND CATAWBA LAW	*H	7- 9-90	REPTD TO GOVERN
S 697	ARBORETUM NAME CHANGE	*R	5-25-89	RATIFIED CH.0139
S 720	BAN FOAM PACKAGING	*H	7- 9-90	REPTD TO COMMERCE
S 721=	**ENVIRONMENTAL HEALTH FUNDS**	**S**	**4- 3-89**	**REF TO COM ON APPROP**
S 723	SOLID WASTE COLLECTION	S	4- 3-89	REF TO COM ON ENVIRON
S 748	**NC SOLAR CENTER FUNDS**	**S**	**4- 3-89**	**REF TO COM ON APPROP**
S 755	LEGISLATIVE APPOINTMENTS	*R	7-14-89	RATIFIED CH.0640
S 766	VESTED DEVELOPMENT RIGHTS	*R	7-20-90	RATIFIED CH.0996
S 789	SENATE PRESIDENT'S APPOINTMENTS	*R	8-12-89	RATIFIED CH.0779
S 797	DAMAGE TO AQUACULTURE FORBIDDEN	*R	6-12-89	RATIFIED CH.0281
S 816=	TANK CLEANUP ACT AMENDMENTS	S	4- 6-89	REF TO COM ON ENVIRON
S 818	WEIGHT RELIEF FOR RECYCLERS	H	7-19-90	REPTD TO FINANCE
S 822=	INFECTIOUS WASTE CONTROL	S	4-10-89	REF TO COM ON HUM RES
S 831	SCRAP TIRE DISPOSAL ACT	*H	8- 3-89	ASSIGNED TO FIN-W&M
S 833	BEACH LITTER FINE RAISED	*R	6-28-89	RATIFIED CH.0491
S 840	LOCAL GOV'T FINANCE AMENDMENTS	S	4-11-89	REF TO COM ON FINANCE
S 856=	INACTIVE SITES AMENDMENTS	*H	5-18-89	ASSIGNED TO INF-SOL
S 869=	SUPERFUND AUTHORIZATION	*H	5-18-89	ASSIGNED TO INF-SOL
S 870	REGULATE HAZARDOUS WASTE DISPOSAL	S	4-12-89	REF TO COM ON ENVIRON

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S 871=	LOW-LEVEL WASTE AMENDMENTS-1	*S	5-10-89	RE-REF COM ON FINANCE
S 876	AIR CLEANING DEVICE PERMIT	*R	6-28-89	RATIFIED CH.0492
S 907=	AVERY COUNTY GROWTH MANAGEMENT	S	4-17-89	REF TO COM ON APPROP
S 909	SOUTHEAST WASTE COMPACT CONDITION	S	4-18-89	REF TO COM ON ENVIRON
S 913	INCREASE VANITY PLATE FEES	*R	8-12-89	RATIFIED CH.0774
S 917	PORTABLE TOILET WASTE REGULATED	*R	7-28-90	RATIFIED CH.1075
S 942	LOCAL NOTICE FOR DISCHARGE PERMIT	*R	6-28-89	RATIFIED CH.0494
S 947	COASTAL SOUNDS WATER QUALITY	S	4-19-89	REF TO COM ON MAR RES&
S 951	MAGISTRATE ACCEPT PLEA/LITTERING	*R	7-27-90	RATIFIED CH.1041
S 952	REDUCE HAZARDOUS WASTE	S	4-19-89	REF TO COM ON ENVIRON
S 957	AMEND SOUTHEAST COMPACT	S	4-19-89	REF TO COM ON ENVIRON
S 958	SOLID WASTE ADVANCE DISPOSAL FEE	S	4-19-89	REF TO COM ON ENVIRON
S 959	COUNTIES TO REQUIRE RECYCLING	*S	5-11-89	RE-REF COM ON FINANCE
S 960	SANITARIANS CONTINUING EDUCATION	H	6-30-89	REPTD TO HUMRES
S 962	UNDERGROUND STORAGE TANK AMENDS	*S	5-25-89	RE-REF COM ON FINANCE
S 970	LOCAL NOTICE FOR DISCHARGE PERMIT	S	4-19-89	REF TO COM ON ENVIRON
S 977	OFFSHORE OIL IMPACT PROTECTION	*R	7-19-89	RATIFIED CH.0656
S 996	BASE BUDGET APPROPRIATIONS-2	H	7-28-90	REPTD UNFAV
S1009	LAW ENFORCEMENT TRAINING	S	4-26-89	REF TO COM ON VETS &
S1022	MASONBORO ISLAND FUNDS	S	6-21-89	RE-REF COM ON APPROP
S1027=	KEEP NC CLEAN FUNDS	S	4-27-89	REF TO COM ON APPROP
S1042	1989 CAPITAL IMPROVEMENTS	*R	8-10-89	RATIFIED CH.0754
S1053	NC HWY 400 UNDER VOYAGES COMM'N	S	5- 1-89	REF TO COM ON WAYS&MNS
S1066	MARINE RESEARCH	S	6-21-89	RE-REF COM ON APPROP
S1074	COAL TRANSPORT STUDY-2	S	5-31-89	REF TO COM ON APPROP
S1127	AGRICULTURAL COST SHARE FUNDS	S	5- 3-89	REF TO COM ON WAYS&MNS
S1152=	ENVIRONMENTAL RESOURCE FUNDS	S	5- 3-89	REF TO COM ON APPROP
S1172	SOIL WATER CONSERVATION FUNDS	S	6-21-89	RE-REF COM ON APPROP
S1180	STONEVILLE WASTEWATER FUNDS-1	S	5- 4-89	REF TO COM ON WAYS&MNS
S1198	NATURAL HERITAGE/CLEAN WATER	*S	5-31-89	REF TO COM ON APPROP
S1203	FLETCHER RESEARCH STATION FUNDS	S	6-21-89	RE-REF COM ON APPROP
S1214	SOLID WASTE MANAGEMENT COMM'N	S	5- 8-89	REF TO COM ON ENVIRON
S1222=	FRENCH BOARD RIVER FUNDS	S	6-21-89	RE-REF COM ON APPROP
S1223	JUVENILE SPECIES PROTECTION ACT	*H	6- 7-89	ASSIGNED TO BAS-MAR
S1249	AIR/WATER POLLUTION TAXES FUNDS	S	5-10-89	REF TO COM ON APPROP
S1250	WETLANDS PROTECTION ACT	*S	6- 7-89	RE-REF COM ON APPROP
S1251	AIR POLLUTION TAX	S	5-23-90	RE-REF COM ON ENVIRON
S1252	WATER POLLUTION TAX	S	5-23-90	RE-REF COM ON ENVIRON
S1253=	BAKER'S MOUNTAIN FUNDS	S	6-21-89	RE-REF COM ON APPROP
S1270=	ENVIRONMENTAL CONSOLIDATION FUNDS	S	5-11-89	REF TO COM ON APPROP
S1271	INACTIVE HAZARDOUS SITES FUNDS-2	S	5-11-89	REF TO COM ON APPROP
S1272=	SUPERFUND FUNDS	S	5-11-89	REF TO COM ON APPROP
S1309	BUDGET RECONCILIATION ACT	*R	8-12-89	RATIFIED CH.0799
S1337	OMNIBUS TECHNICAL AMENDMENTS	*R	7-27-90	RATIFIED CH.1024
S1361=	REVENUE LAWS TECHNICAL CHANGES	*R	6-25-90	RATIFIED CH.0814
S1378=	WATER TRANSFER PROHIBITED	*R	7-18-90	RATIFIED CH.0954
S1406=	WASTEWATER COMMISSION STUDY	*R	7- 6-90	RATIFIED CH.0850
S1416	SENATE PRESIDENT'S APPOINTMENT	*R	7-27-90	RATIFIED CH.1048

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S1420=	ESTABLISH EROSION PLAN FEES	S	6-12-90	REF TO COM ON ENVIRON
S1423	HOPE MILLS LAKE AND PARK FUNDS	S	5-30-90	REF TO COM ON APPROP
S1425=	CAMA FEES-1	S	6-12-90	REF TO COM ON ENVIRON
S1426	OPERATIONS APPROPRIATIONS/1990-91	*R	7-28-90	RATIFIED CH.1066
S1427	CAPITAL APPROPRIATIONS/1990-91	*R	7-28-90	RATIFIED CH.1074
S1454	ORANGE OPEN SPACE	S	6- 4-90	REF TO COM ON LOC GOVT
S1468=	HAZARDOUS WASTE SITING-1	S	6- 4-90	REF TO COM ON ENVIRON
S1469=	HAZARDOUS WASTE SITING-2	S	6- 4-90	REF TO COM ON ENVIRON
S1482	PENDER SERVICE DISTRICT VOTE	*S	6-27-90	RE-REF COM ON FINANCE
S1490=	ENVIRONMENTAL TECHNICAL CORRECTIO	S	6- 4-90	REF TO COM ON ENVIRON
S1496	CLAIMS TO SUBMERGED LAND	R	7- 9-90	RATIFIED CH.0869
S1534	ESTABLISH MINING PERMIT FEES-2	*R	7-17-90	RATIFIED CH.0944
S1535	ESTABLISH FEES FOR DAM PERMITS-2	*R	7-19-90	RATIFIED CH.0976
S1536	ESTABLISH EROSION PLAN FEES-2	*R	7-13-90	RATIFIED CH.0906
S1552=	RADIATION EMERGENCY RESPONSE FEE	S	6-12-90	REF TO COM ON ENVIRON
S1567	LOW LEVEL WASTE FACILITY AMENDS	*H	7-18-90	REF TO COM ON INFRAST
S1582	INFRASTRUCTURE BOND BILL	*R	7-28-90	INCORPORATED CH.1078
S1583	CAMA FEES-2	S	6- 6-90	REF TO COM ON FINANCE
S1589=	COMMERCIAL DRIVERS LICENSES	*H	7-19-90	ASSIGNED TO FIN-HWY
S1595	HAZARDOUS WASTE FACILITY CRITERIA	S	6- 6-90	REF TO COM ON ENVIRON
S1597=	HAZARDOUS WASTE FACILITY CRITERIA	S	6- 6-90	REF TO COM ON ENVIRON
S1606	HAZARDOUS WASTE SITING RES.	S	6-18-90	REF TO COM ON RULES &

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H 11	SCRAP TIRE TAX AMENDMENTS	*R	6- 5-91	RATIFIED CH.0221
H 14	GA OPEN MEETINGS	*R	7-15-91	RATIFIED CH.0694
H 17=	COUNTY CLEAN-UP FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 18	LOCAL HEALTH BOARD RULES	*R	7-12-91	RATIFIED CH.0650
H 25	EMC COMMUNITY SERVICE PROGRAM	*S	5-13-91	REF TO COM ON ENVIRON
H 60	HAZARDOUS WASTE COMM. REPEALED	H	2-27-91	ASSIGNED TO ENV-HAZA
H 61	REVENUE LAWS TECHNICAL CHANGES	*R	4-22-91	RATIFIED CH.0045
H 64=	SIMPLIFY SPECIAL PLATE STATUTES	*R	7-13-91	RATIFIED CH.0672
H 83=	1991-93 APPROPRIATIONS ACT	*R	7-13-91	RATIFIED CH.0689
H 84	CURRITUCK TAX SUNSET REMOVED	R	4-23-91	RATIFIED CH.0047
H 86	SOLID WASTE FEES	*R	7-12-91	RATIFIED CH.0652
H 97	UNIFORM COLOR DISPOSABLE GLASS	HF	7- 1-92	POSTPONED INDEFINITELY
H 117	INCREASE FISHERIES FINES	*R	5-30-91	RATIFIED CH.0176
H 118	FISHERIES TECHNICAL CORRECTIONS	*R	5-14-91	RATIFIED CH.0086
H 124=	WATER PROJECTS PLAN	*R	7- 8-91	RATIFIED CH.0579
H 125=	WATER TRANSFER PERMITS	H	2-27-91	ASSIGNED TO ENV-WAT&
H 127=	LRC STUDY SURFACE WATER	HF	6-25-92	POSTPONED INDEFINITELY
H 128=	WATER RESOURCES IN BUDGET	HF	7-24-92	POSTPONED INDEFINITELY
H 130=	IMPROVE APA RULE-MAKING PROCESS	HF	6-18-92	POSTPONED INDEFINITELY
H 132	DRAINAGE ASSESSMENT NOTICE	*R	7-11-91	RATIFIED CH.0634
H 133	DOT USE RECYCLED GOODS	*R	7- 3-91	RATIFIED CH.0522
H 134	REGIONAL WASTE AUTHORITY POWERS	*R	7- 8-91	RATIFIED CH.0580
H 136	SOLID WASTE INCINERATOR BANS	*S	7-12-91	RE-REF COM ON ENVIRON
H 137	PROHIBITED ACTS FOR ANTIFREEZE	H	2-27-91	ASSIGNED TO ENV-SOLI
H 139	TEMPORARY PARK EMPLOYEE PAY	HF	7-24-92	POSTPONED INDEFINITELY
H 140	PARK LIFEGUARDS FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 141	STATE PARKS STUDY COMM'N	R	7-16-91	INCORPORATED CH 754
H 142	PARK IMPROVEMENT PLAN	HF	7-24-92	POSTPONED INDEFINITELY
H 143	PARK LAND ACQUISITION FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 144	PARKS CLERKS FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 146	SOLID WASTE FACILITY FEE	H	2-21-91	REF TO COM ON FINANCE
H 147	INCINERATOR/MFR PERMIT CONDITION	H	2-27-91	ASSIGNED TO ENV-SOLI
H 153=	APA HEARINGS/REPEAL APA SUNSET	*HF	7-24-92	POSTPONED INDEFINITELY
H 223	WASHINGTON GARBAGE FEE COLLECTION	H	5- 9-91	REPTD TO FINANCE
H 226	ONE CENT LOCAL SALES TAX	H	3-11-91	REF TO COM ON FINANCE
H 227=	RANDLEMAN RESERVOIR FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 228=	HAZ.WASTE INSPECTORS DELAY	R	3-27-91	RATIFIED CH.0020
H 231	ARSENIC PESTICIDES STUDY	*HF	6-12-92	POSTPONED INDEFINITELY
H 232	NO TAX ROLLBACK ON CONDEMNATION	*S	5-14-91	REF TO COM ON FINANCE
H 234	1/2 CENT LOCAL SALES TAX	H	3-11-91	REF TO COM ON FINANCE
H 236	CONTINUE WETLANDS STUDY	HF	6-12-92	POSTPONED INDEFINITELY
H 239	STATE/LOCAL ONE CENT SALES TAX	H	3-14-91	REF TO COM ON FINANCE
H 258=	PRISONERS WORK FOR COUNTIES	HF	7- 1-92	POSTPONED INDEFINITELY
H 259=	PRISONERS WORK FOR COUNTIES	HF	7- 1-92	POSTPONED INDEFINITELY
H 263	LOCAL SOLID WASTE CONTACTS	R	4- 1-91	RATIFIED CH.0029
H 274	SPEAKER'S APPOINTMENTS	*R	7-16-91	RATIFIED CH.0756
H 283	ASSAULT ON PUBLIC OFFICIAL	*R	7- 3-91	RATIFIED CH.0525
H 318	OUTDOOR ADVERTISING FEES UPPED	H	5-29-91	REPTD TO FINANCE

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H 340	INCREASE CURRITUCK OCCUPANCY TAX	*R	5-29-91	RATIFIED CH.0155
H 342	STATE BOND ACT OF 1991	H	4-25-91	RE-REF COM ON FINANCE
H 344	WATER POLLUTION PERMIT AMENDMENTS	*R	5-29-91	RATIFIED CH.0156
H 358	MECKLENBURG AREA FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 374	HUNTER SAFETY STATEMENT	R	5- 6-91	RATIFIED CH.0070
H 376	MOTOR VEHICLE INSPECTIONS	HF	7- 7-92	POSTPONED INDEFINITELY
H 378	TRESPASS TO HUNT	HF	5- 7-91	REPTD UNFAV
H 392	EXTEND BLAZE ORANGE REQUIREMENT	*R	5- 6-91	RATIFIED CH.0071
H 402	VEHICLE REGISTRATION/INSPECT EXHA	*R	7-12-91	RATIFIED CH.0654
H 406	NO INSPECTION CERTAIN TRUCKS	*R	6-25-91	RATIFIED CH.0394
H 410=	ENVIRONMENTAL POLICY ACT AMENDS	*R	6-27-91	RATIFIED CH.0431
H 412=	RECYCLE HAZARDOUS WASTE	*R	6-13-91	RATIFIED CH.0286
H 413=	INCREASE FINES FOR LITTERING	*R	7- 9-91	RATIFIED CH.0609
H 420	OMNIBUS TECHNICAL AMENDMENTS	*R	7-11-91	RATIFIED CH.0636
H 422	WATER/AIR WASTE DEFINITION	*R	6-13-91	RATIFIED CH.0287
H 423	SANITARY SYSTEM REPAIR-1	*R	6-11-91	RATIFIED CH.0256
H 448=	SEDIMENTATION STOP-WORK ORDERS	*R	6-26-91	RATIFIED CH.0412
H 449=	SEDIMENTATION CONTROL AMENDS	*R	6-12-91	RATIFIED CH.0275
H 458	CUMBERLAND SOLID WASTE FEES	H	5- 9-91	REPTD TO FINANCE
H 469	WASTE COMM'N MAY BYPASS COUNCIL	HF	7- 1-92	POSTPONED INDEFINITELY
H 472	SANITARY SYSTEM REPAIR-2	H	4- 3-91	ASSIGNED TO ENV-WAT&
H 480	PORT FISHER FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 489=	UNC-CH EPA PROJECT	HF	7-24-92	POSTPONED INDEFINITELY
H 497	PUBLIC HEALTH SALARY FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 499	PUBLIC HEALTH MISSION	*R	6-17-91	RATIFIED CH.0299
H 501=	STORMWATER UTILITIES	*R	7- 8-91	RATIFIED CH.0591
H 507=	LOW-LEVEL RAD. WASTE AMENDS	H	4- 2-91	ASSIGNED TO ENV-HAZA
H 512	SEDIMENTATION CONTROL COMMISSION	*R	7- 4-91	RATIFIED CH.0551
H 520	OIL SPILL CLEANUP LIABILITY	*R	6-27-91	RATIFIED CH.0432
H 523=	TRANSMISSION LINE SITING	HF	7-23-92	POSTPONED INDEFINITELY
H 528	AMEND REPORTING REQUIREMENTS	*R	7-20-92	RATIFIED CH.0990
H 529=	UNDERGROUND STORAGE TANK FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 537=	OCEAN AFFAIRS COUNCIL	HF	6-25-92	POSTPONED INDEFINITELY
H 541	DISCLOSE ENVIRONMENTAL LIMITS	*S	5-14-91	REF TO COM ON ENVIRON
H 551	CLEAN AIR ACT IMPLEMENTED	*R	7- 4-91	RATIFIED CH.0552
H 554=	AQUATIC WEED CONTROL	*R	5-27-91	RATIFIED CH.0132
H 572=	INACTIVE SITE CLEANUP DISCRETION	S	4-16-91	REF TO COM ON ENVIRON
H 585	BRUNSWICK ABC STORE LOCATION	*R	6-24-91	RATIFIED CH.0372
H 589=	NC MAY EXCEED U.S. AIR/WATER REGS	H	4- 4-91	ASSIGNED TO ENV-WAT&
H 593=	HOLLY RIDGE SOLID WASTE FEE	H	5- 9-91	REPTD TO FINANCE
H 594	NEWSPAPER INSERT NOT TAX EXEMPT	H	4- 4-91	REF TO COM ON FINANCE
H 596	POLYSTRENE USE STUDY	*HF	6-11-92	POSTPONED INDEFINITELY
H 598	PASQUOTANK ROAD HUNTING	*R	6-10-91	RATIFIED CH.0247
H 603	GRANVILLE HUNTING PERMITS	R	5-29-91	RATIFIED CH.0159
H 620	RECYCLE LEAD-ACID BATTERIES	*R	6-24-91	RATIFIED CH.0375
H 623	COLUMBUS/BRUNSWICK SOLID WASTE	*R	6-19-91	RATIFIED CH.0334
H 625	IREDELL DISPOSAL FEES	H	5- 9-91	REPTD TO FINANCE
H 626	PITT SOLID WASTE FEES	H	5- 9-91	REPTD TO FINANCE

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H 643=	LOW-LEVEL WASTE FACILITY SITE	HF	7-23-92	POSTPONED INDEFINITELY
H 644=	WASTE COMPACT THIRD HOST STATE	HF	5-14-91	FAILED 2ND READING
H 645=	WASTE COMPACT COMM'N MEMBERSHIP	*HF	5- 8-91	FAILED 2ND READING
H 648	COLUMBUS SOLID WASTE FEES	H	5- 9-91	REPTD TO FINANCE
H 656	NC RURAL WATER ASS'N FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 659=	ONSLOW HUNTING SAFETY	*R	6-27-91	RATIFIED CH.0435
H 667	NONSURFACE DISCHARGE NOTICE	*R	7- 2-91	RATIFIED CH.0498
H 675	WATTS WASTE SITE FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 700	LRC STUDY PUBLIC TRANSPORTATION	HF	6-11-92	POSTPONED INDEFINITELY
H 732	LRC STUDY CROP DEPREDATION	HF	6-12-92	POSTPONED INDEFINITELY
H 734	COLLEGIATE REGISTRATION PLATES	*R	7-16-91	RATIFIED CH.0758
H 735	BUNCOMBE PREDEVELOPMENT	R	6-10-91	RATIFIED CH.0250
H 742	MOUNTAIN PLANNING ACT	HF	7- 1-92	POSTPONED INDEFINITELY
H 746	STATE RECYCLING AT PUBLIC AREAS	*R	6-19-91	RATIFIED CH.0336
H 748	SPEAKER'S APPOINTMENTS-2	*R	7-16-91	RATIFIED CH.0759
H 759	HARNETT SOLID WASTE FEES	H	5- 9-91	REPTD TO FINANCE
H 760	HARNETT TOWNS FEES	*R	7- 2-91	RATIFIED CH.0502
H 768=	CAPE FEAR COMM. COLLEGE FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H 786	WATER/SEWER ORDINANCE PENALTY	R	6-26-91	RATIFIED CH.0415
H 799	SAMPSON DISPOSAL FEES	H	5- 9-91	REPTD TO FINANCE
H 803	REPEAL PENDER TRAPPING LAW	HF	6-23-92	POSTPONED INDEFINITELY
H 856	STUDY SOIL/WATER DIV'N TRANSFER	HF	6-18-92	POSTPONED INDEFINITELY
H 857	STUDY FOREST RESOURCES TRANSFER	HF	6-18-92	POSTPONED INDEFINITELY
H 862	REDUCE PACKAGING TOXICITY	H	4-18-91	ASSIGNED TO ENV-SOLI
H 873	WATERSHED PROTECTION DEADLINE	*R	7- 1-91	RATIFIED CH.0471
H 882	OPEN MEETINGS AMENDMENTS	HF	6-18-92	POSTPONED INDEFINITELY
H 885	SOLID WASTE REDUCTION BLANK	HF	6-18-92	POSTPONED INDEFINITELY
H 886	ENVIRONMENTAL FEES BLANK	HF	6-18-92	POSTPONED INDEFINITELY
H 899	LAW ENFORCEMENT DEATH BENEFIT	*HF	7-24-92	POSTPONED INDEFINITELY
H 900	SPECIAL HAZ. WASTE INSPECTORS	R	6-28-91	INCORPORATED 450
H 913	COASTAL COMM'N MEMBERSHIP	S	5- 8-91	REF TO COM ON STPERS&
H 924	AIR PERMITS/LOCAL ORDINANCES	*R	7-10-91	RATIFIED CH.0629
H 929	TECHNICAL CORRECTIONS	*R	7-16-91	RATIFIED CH.0761
H 960	STATE USE REUSABLE HAND TOWELS	HF	7-24-92	POSTPONED INDEFINITELY
H 961	BAN PVC PLASTICS	H	4-30-91	ASSIGNED TO ENV-SOLI
H 962	DISPOSAL OF PAINTS & SOLVENTS	H	4-23-91	ASSIGNED TO ENV-HAZA
H 966	DISSOLVE INACTIVE SANITARY DIST	*R	6-26-91	RATIFIED CH.0417
H 976	FEDERAL OFFICER IMMUNITY	*R	6-11-91	RATIFIED CH.0262
H 978	FORESTRY LIMIT NUISANCE LIABILITY	*R	7- 8-92	RATIFIED CH.0892
H 981	AIR EMISSION PERMIT HEARING	H	4-23-91	ASSIGNED TO ENV-WAT&
H 985	CITY REQUIRE GARBAGE SERVICE-2	*R	7-15-91	RATIFIED CH.0698
H 988	PROTECT WOODPECKER HABITAT	H	4-29-91	ASSIGNED TO TRAN-HWY
H 990	SOIL/WATER DISTRICT AUDIT	H	4-23-91	ASSIGNED TO ENV-WAT&
H1001	ADOPT-A-BEACH PROGRAM	HF	7-24-92	POSTPONED INDEFINITELY
H1007	PLASTIC/GLASS CONTAINER DEPOSIT	*HF	6-18-92	POSTPONED INDEFINITELY
H1008	I-40 SCENIC/MEMORIAL HIGHWAY-2	*HF	5-13-91	FAILED 2ND READING
H1020=	STATE TO USE EFFICIENT LIGHTING	HF	7- 1-92	POSTPONED INDEFINITELY
H1021	LRC STUDY ENERGY CONSERVATION	HF	6-25-92	POSTPONED INDEFINITELY

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H1032	SHELLFISH LEASE AUTHORITY STUDY	*HF	6-18-92	POSTPONED INDEFINITELY
H1038	SANITARIAN ED./SEPTIC TANK FEE	H	6-10-91	REPTD TO FINANCE
H1056	EMC CANNOT REMIT FINES	H	4-30-91	ASSIGNED TO ENV-WAT&
H1068	RADIOACTIVE WASTE DISPOSAL	*S	5-13-91	REF TO COM ON ENVIRON
H1069	HAZ. FACILITY NEAR MENTAL HOSP.	HF	7- 1-92	POSTPONED INDEFINITELY
H1070	ENVIRONMENTAL POLICY STUDY	HF	6-18-92	POSTPONED INDEFINITELY
H1074=	COMMERCIAL TANK DEFINITION	H	4-30-91	ASSIGNED TO ENV-WAT&
H1090	PRIVATE LANDFILL IMPACT STATEMENT	*HF	6-18-92	POSTPONED INDEFINITELY
H1093	PERMITS/WASTE REDUCTION PLANS	H	4-30-91	ASSIGNED TO ENV-SOLI
H1095	STUDY HAZARDOUS WASTE DIPSOSAL	HF	6-18-92	POSTPONED INDEFINITELY
H1096	HAZARDOUS WASTE FACILITY SITING	H	4-30-91	ASSIGNED TO ENV-HAZA
H1097	HAZ. WASTE LANDFILL BARRIERS	*R	6-28-91	RATIFIED CH.0450
H1105	STUDY LICENSE TO SELL FISH	*HF	6-25-92	POSTPONED INDEFINITELY
H1109	SOLID WASTE LAW AMENDMENTS	*R	7- 9-91	RATIFIED CH.0621
H1113	LOTTERY FOR CAPITAL PROJECTS	H	4-24-91	REF TO COM ON COURTS&
H1120	NO NET LOSS OF WETLANDS	H	4-30-91	ASSIGNED TO ENV-WAT&
H1124=	ENVIRONMENT TECH. CORRECTIONS	*R	6-19-91	RATIFIED CH.0342
H1128	OPEN MEETINGS AMENDMENTS-2	HF	6-18-92	POSTPONED INDEFINITELY
H1131	DEMOLITION ASPHALT AS FILL	*R	7- 3-91	RATIFIED CH.0537
H1150	MAYO FEASIBILITY STUDY FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1167	AGRIC., FORESTRY, SEAFOOD STUDY	HF	6-18-92	POSTPONED INDEFINITELY
H1178	CASWELL/BALD HEAD OCCUPANCY TAX	*R	7-12-91	RATIFIED CH.0664
H1188=	INACTIVE HAZ. SITES FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1203	RECYCLABLE MARKETS LEAD AGENCY	HF	7-24-92	POSTPONED INDEFINITELY
H1210=	HAZ. MATERIALS RESPONSE TEAMS	*HF	6-25-92	POSTPONED INDEFINITELY
H1222	UNDERGROUND STORAGE TANK AMENDS	*R	7- 3-91	RATIFIED CH.0538
H1224	RECYCLE PAPER TAX INCENTIVE	*R	7- 3-91	RATIFIED CH.0539
H1227	STUDY ENVIRONMENTAL POLICY ACT	HF	6-18-92	POSTPONED INDEFINITELY
H1228=	4-H CAMP OPERATION FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1229=	4-H CURRICULUM SUPPORT FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1243	SEDIMENTATION CONTROL FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1244	PULP/PAPER RESEARCH FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1261	OMNIBUS STUDY BILL-2	*HF	7-24-92	POSTPONED INDEFINITELY
H1266	HAZ. WASTE MANAGEMENT FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1269	TAX BANK DEPOSITS ABOVE $5,000	H	5-10-91	REF TO COM ON FINANCE
H1277	REMEDY CERTAIN WATER WITHDRAWALS	H	6- 4-91	ASSIGNED TO ENV-WAT&
H1320	SCRAP TIRE DISPOSAL TAX CHANGE	*R	7- 7-92	RATIFIED CH.0867
H1321	REVENUE LAW TECHNICAL CHANGES	*R	7-21-92	RATIFIED CH.1007
H1334=	SEAFOOD AWARENESS CHANGE	*SF	7- 2-92	POSTPONED INDEFINITELY
H1337	RECYCLABLE WEIGHT PENALTY	*H	7-23-92	REF TO COM ON RULES&
H1340	CURRENT OPERATIONS APPROP 1992	*R	7- 8-92	RATIFIED CH.0900
H1343	SPEAKER'S APPOINTMENTS	*R	7-24-92	RATIFIED CH.1038
H1345=	LOCAL SOLID WASTE CONTRACTS	R	6- 9-92	RATIFIED CH.0763
H1368=	NCSU SEAFOOD LAB FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1369=	SHELLFISH LEASE AMENDMENTS	R	6-29-92	RATIFIED CH.0788
H1370=	SHELLFISH ENHANCEMENT FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1373=	ALLOW FLYTRAP BILL	HF	7-24-92	POSTPONED INDEFINITELY
H1376	COUNTY SOLID WASTE CONTRACTS	*R	6-22-92	RATIFIED CH.0773

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BILL	SHORT TITLE		DATE	LATEST ACTION
H1383=	NCSU WASTE FACILITY FUND	HF	7-24-92	POSTPONED INDEFINITELY
H1399=	CREATE ENVIRONMENTAL CENTER	HF	7-24-92	POSTPONED INDEFINITELY
H1402=	AMEND STATE PARK LAWS	HF	7-10-92	POSTPONED INDEFINITELY
H1403	CONTROL EAGER BEAVERS FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1409=	LOCAL SOLID WASTE CONTRACTS	*R	6-22-92	RATIFIED CH.0775
H1420	WAYNE FORESTRY BUILDING FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1463	WATER RESOURCES FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1470	LOCAL SEA TURTLE SANCTUARIES	*R	6-29-92	RATIFIED CH.0794
H1474	DAVIDSON ROAD HUNTING	R	6-29-92	RATIFIED CH.0795
H1477	POLK HUNTING SAFETY	H	6- 2-92	REF TO COM ON LOC&RGII
H1478	HYDRILLA ERADICATION FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1486	CAMDEN ROAD HUNTING	R	6-29-92	RATIFIED CH.0796
H1488	HERTFORD LITTER LAW CHANGE	S	6-18-92	REF TO COM ON JUDIC 1
H1491	RAISE LAKE NORMAN FINES	R	6-29-92	RATIFIED CH.0797
H1514=	LOTTERY/PAY RAISE INCREASED	*S	7- 8-92	REC FROM HOUSE
H1520	CRAVEN ROAD HUNTING	R	7- 6-92	RATIFIED CH.0850
H1525	PARK ACQUISITION FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1533	BEAVER CONTROL PILOT FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1545	SUBSURFACE WASTEWATER REG.CONSOL.	*R	7-14-92	RATIFIED CH.0944
H1547	PUBLIC USE OF THE BEACH	*S	7- 2-92	RE-REF COM ON APPROPR
H1561	CAMA CHANGES	*R	7- 2-92	RATIFIED CH.0839
H1568	SET FEE REVENUE POLICY	*R	7-24-92	RATIFIED CH.1039
H1582=	UNDERGROUND STORAGE TANK AMENDS	H	6- 5-92	ASSIGNED TO ENV-WAT&
H1583	STATE ENV. POLICY ACT RULES	*R	7- 8-92	RATIFIED CH.0899
H1584	LUMBER RIVER STATE PARK FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1591	RANDLEMAN RESERVOIR FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1592	COMMEMORATE FORESTRY-2	HF	7- 1-92	POSTPONED INDEFINITELY
H1594	MARINE FISHERIES FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1596	ENV. POLICY ACT COVERS PUBLIC LAN	*R	7-14-92	RATIFIED CH.0945
H1601=	ENVIRONMENTAL REVISIONS	*R	7-24-92	RATIFIED CH.1028
H1602=	THIRD-PARTIES APPEAL ENV. PERMITS	H	6- 5-92	REF TO COM ON JUDICII
H1608	LOW-LEVEL RADIOACTIVE WASTE FUNDS	HF	7-24-92	POSTPONED INDEFINITELY
H1634=	JOINT UTILITY AGENCY POWERS	*HF	7- 8-92	POSTPONED INDEFINITELY
H1639=	UNC-CH CAPITAL PROJECT	HF	7-24-92	POSTPONED INDEFINITELY
H1645	1992 STUDIES	*HF	7-24-92	POSTPONED INDEFINITELY
H1656	GENERAL STATUTES TECHNICAL CHANGE	*R	7-24-92	RATIFIED CH.1030
H1658	ALLOW FOREIGN TRADE RES.	H	6-22-92	REF TO COM ON RULES&
S 11	REPEAL APA SUNSET	*R	5-23-91	RATIFIED CH.0103
S 12	APA RULE MAKING APPLICABILITY	*R	7- 2-91	RATIFIED CH.0477
S 13	LRC STUDY GROUNDWATER RESOURCES	R	7-16-91	INCORPORATED CH 754
S 14=	COUNTY CLEAN-UP FUNDS	S	2- 6-91	REF TO COM ON APPROPR
S 15	LRC STUDY YOUTH PHYSICAL FITNESS	*R	7-16-91	INCORPORATED CH 754
S 37	INFRASTRUCTURE BOND BILL	S	2- 7-91	REF TO COM ON FINANCE
S 55	FORT FISHER FUNDS	S	2-12-91	REF TO COM ON APPROPR
S 61	SENATE PRESIDENT APPOINTMENTS-2	*R	7-20-92	RATIFIED CH.0978
S 62	SENATE PRESIDENT APPOINTMENTS-3	*R	7-16-91	RATIFIED CH.0714
S 84=	WATER PROJECTS PLAN	*R	6- 3-91	RATIFIED CH.0181
S 85=	LRC STUDY SURFACE WATER	R	7-16-91	INCORPORATED CH754

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BILL	SHORT TITLE		DATE	LATEST ACTION
S 88=	1991-1993 APPROPRIATIONS ACT	*S	6- 4-91	RE-REF COM ON FINANCE
S 129=	WATER TRANSFER PERMITS	*S	5-30-91	RE-REF COM ON FINANCE
S 130	PARK OFFENSES WAIVABLE	*R	5-29-91	RATIFIED CH.0151
S 132	NC PARK AUTHORITY	*S	5-16-91	RE-REF COM ON APPROPR
S 133	RESORT AREA AS STATE PARK	S	3-25-91	RE-REF COM ON APPROPR
S 134	STATE TRAIL DESIGNATION	R	5-27-91	RATIFIED CH.0115
S 135	PILOT PARK ENTRANCE FEES	S	2-20-91	REF TO COM ON FINANCE
S 136	TRAIL SYSTEM LIABILITY	*R	4-16-91	RATIFIED CH.0038
S 137	PARKS PLANNING STAFF FUNDS	S	2-20-91	REF TO COM ON APPROPR
S 142	PLASTIC BAGS/NOTICE DEADLINE	*R	4- 1-91	RATIFIED CH.0023
S 143	LRC STUDY WASTE MANAGEMENT	R	7-16-91	INCORPORATED CH 754
S 144	RECYCLABLES STUDY EXTENDED	R	3-26-91	RATIFIED CH.0019
S 145	SOLID WASTE AMENDMENTS	*R	7-14-92	RATIFIED CH.0932
S 150	RAISING FALLOW DEER	*R	6-19-91	RATIFIED CH.0317
S 151	PROTECT NATURAL/SCENIC RIVERS	*HF	7-16-91	FAILED 3RD READING
S 154=	WATER RESOURCES IN BUDGET	SF	5- 9-91	REPTD UNFAV
S 155=	IMPROVE APA RULE-MAKING PROCESS	*R	6-27-91	RATIFIED CH.0418
S 157=	APA HEARINGS/REPEAL APA SUNSET	*R	4-15-91	RATIFIED CH.0035
S 162	ENVIRONMENTAL SPECIALIST FUNDS	S	2-21-91	REF TO COM ON APPROPR
S 167	CLAY/GRAHAM/SWAIN FEE COLLECTION	S	3-21-91	RE-REF COM ON FINANCE
S 201=	RANDLEMAN RESERVOIR FUNDS	S	3- 4-91	REF TO COM ON APPROPR
S 207=	HAZ.WASTE INSPECTORS DELAY	S	3- 5-91	REF TO COM ON ENVIRON
S 213	HAMMOCKS BEACH PARCEL REMOVED	R	6-19-91	RATIFIED CH.0318
S 217	DOA PROCUREMENT POSITION	*S	4- 3-91	RE-REF COM ON APPROPR
S 221	MAYO FEASIBILITY STUDY FUNDS	S	3-11-91	REF TO COM ON APPROPR
S 229	STUDY SOLID WASTE DISPOSAL FEE	*R	7-16-91	INCORPORATED CH 754
S 234	SOLID WASTE SALES TAX REFUND	R	6-24-91	RATIFIED CH.0356
S 243	PRESIDENT PRO TEM APPOINTMENTS	R	4-22-91	RATIFIED CH.0043
S 246	EDUCATIONAL FACILITIES RESEARCH	S	3-20-91	REF TO COM ON APPROPR
S 330	STREAM OBSTRUCTION ENFORCEMENT	R	5-29-91	RATIFIED CH.0152
S 344	CLEAN WATER LOAN TRANSFER	*R	6- 3-91	RATIFIED CH.0186
S 348	AMEND STATE AUDITOR'S DUTIES	*H	5- 1-91	REF TO COM ON STATGOVT
S 352	DOT UNDERGROUND TANKS	*S	5-16-91	RE-REF COM ON FINANCE
S 360	IMMINENT HAZARD REDEFINED	*R	7-11-91	RATIFIED CH.0631
S 377=	INACTIVE SITES CLEANUP DISCRETION	*R	6-13-91	RATIFIED CH.0281
S 378	RURAL WATER ASS'N FUNDS	S	3-28-91	REF TO COM ON APPROPR
S 386=	NC MAY EXCEED U.S. AIR/WATER REGS	*R	6-26-91	RATIFIED CH.0403
S 389=	OCEAN AFFAIRS COUNCIL	*R	6-19-91	RATIFIED CH.0320
S 390=	COMMERCIAL WASTE FACILITY DEFINED	S	4- 1-91	REF TO COM ON ENVIRON
S 406=	UNDERGROUND STORAGE TANK FUNDS	S	4- 1-91	REF TO COM ON APPROPR
S 409=	AIR QUALITY CIVIL PENALTY	S	4- 1-91	REF TO COM ON ENVIRON
S 410=	ENVIRONMENTAL POLICY ACT AMENDS	*H	6- 6-91	ASSIGNED TO ENV-WAT&
S 417=	TRANSMISSION LINE SITING	*R	6- 3-91	RATIFIED CH.0189
S 418=	LOW-LEVEL RAD. WASTE AMENDS	S	4- 1-91	REF TO COM ON ENVIRON
S 433	CASWELL SOLID WASTE OPTIONS	*R	7-16-91	RATIFIED CH.0724
S 438	DEP'T EHNR CONFIDENTIAL INFO.	*R	7-16-91	RATIFIED CH.0745
S 448	WATERSHED PROGRAM AMENDMENTS	H	5-15-91	REF TO COM ON RULES&
S 449	COMMUNITY WATER SYSTEMS PERMITS	*R	7- 8-91	RATIFIED CH.0576

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S 450	WATER POLLUTION CONTROL OPERATORS	*R	7-10-91	RATIFIED CH.0623
S 451	IMPROVE ENVIRONMENTAL ENFORCEMENT	*R	7-16-91	RATIFIED CH.0725
S 453=	STORMWATER UTILITIES	S	4-24-91	RE-REF COM ON FINANCE
S 454=	SEDIMENTATION STOP-WORK ORDERS	S	4- 1-91	REF TO COM ON ENVIRON
S 455=	AQUATIC WEED CONTROL	*H	6- 6-91	ASSIGNED TO ENV-WAT&
S 456=	SEDIMENTATION CONTROL AMENDS	S	4- 1-91	REF TO COM ON ENVIRON
S 458	CONTROLLER TECHNICAL CHANGES	*R	7- 4-91	RATIFIED CH.0542
S 459	WELL CONSTRUCTION PENALTIES	*H	4-18-91	ASSIGNED TO ENV-WAT&
S 460	STRIPED BASS PROCLAMATIONS	*R	5-23-91	RATIFIED CH.0104
S 461	FRANKLIN SOLID WASTE FEES	S	4- 1-91	REF TO COM ON FINANCE
S 472	DRIVERS LICENSE CHANGES	*R	7-16-91	RATIFIED CH.0726
S 474	SEWERAGE DISTRICT EXPANSION	*R	7-15-92	RATIFIED CH.0954
S 475	CALDWELL/AVERY BEAR SANCTUARY	*R	6-17-91	RATIFIED CH.0295
S 483=	UNC-CH EPA PROJECT	R	6-18-91	RATIFIED CH.0306
S 487	IREDELL SOLID WASTE FEES	S	4- 8-91	REF TO COM ON FINANCE
S 496=	HOLLY RIDGE SOLID WASTE FEE	S	4- 8-91	REF TO COM ON FINANCE
S 497	EDGECOMBE FOX TRAPPING	S	4- 8-91	REF TO COM ON AGRICUL&
S 499=	ONSLOW HUNTING SAFETY	S	4- 8-91	REF TO COM ON AGRICUL&
S 502	TOPSAIL ISLAND NO-WAKE ZONE	*R	5-21-91	RATIFIED CH.0090
S 511	WAKE FIREARM REGULATION	*R	6-12-91	RATIFIED CH.0266
S 513=	WASTE COMPACT THIRD HOST STATE	S	4- 9-91	REF TO COM ON ENVIRON
S 514=	LOW-LEVEL WASTE FACILITY SITE	S	4- 9-91	REF TO COM ON ENVIRON
S 515=	WASTE COMPACT COMM'N MEMBERSHIP	S	4- 9-91	REF TO COM ON ENVIRON
S 530	REPEAL FOX HUNTING SUNSET	*R	7- 2-91	RATIFIED CH.0483
S 531	CHEROKEE INDIANS SOLID WASTE	*R	7-16-92	RATIFIED CH.0948
S 544	REPEAL PENDER TRAPPING LAW	R	5-27-91	RATIFIED CH.0118
S 547	PENDER INCINERATOR REFERENDUM	*S	6-24-91	RE-REF COM ON APPROPR
S 553	FRANKLIN ROAD HUNTING	R	5-23-91	RATIFIED CH.0108
S 554	EROSION CONTROL FOR RAILROADS	S	4-10-91	REF TO COM ON ENVIRON
S 565	POPLAR TENT BEAUTIFICATION DIST.	*R	7-16-91	RATIFIED CH.0685
S 568=	CAPE FEAR COMM. COLLEGE FUNDS	S	4-11-91	REF TO COM ON APPROPR
S 575	CASWELL TRESPASSING TO HUNT	R	5-21-91	RATIFIED CH.0092
S 608	COUNTY PERMITS FOR HAZ. WASTE	S	4-15-91	REF TO COM ON ENVIRON
S 623	ORANGE/CHATHAM OMNIBUS	*R	6-10-91	RATIFIED CH.0246
S 654	FERTILIZER STORAGE RULES	R	5-22-91	RATIFIED CH.0100
S 670	WILDLIFE OFFICERS JURISDICTION	*R	7-16-91	RATIFIED CH.0730
S 703	TRAVEL & TOURISM POLICY ACT	R	5-28-91	RATIFIED CH.0144
S 728=	STATE TO USE EFFICIENT LIGHTING	*S	5-13-91	RE-REF COM ON STPERS&
S 733	FARMS FOR FUTURE ACT AUTHORITY	*R	7-16-91	RATIFIED CH.0734
S 753	1991 BASE BUDGET	*S	4-25-91	RE-REF COM ON FINANCE
S 773	RECYCLABLE 6-PACK RINGS	*R	6- 6-91	RATIFIED CH.0236
S 781	CHLOROFLUOROCARBON EMISSIONS	S	4-24-91	REF TO COM ON ENVIRON
S 786	HAZ. WASTE BLANK-1	S	4-24-91	REF TO COM ON ENVIRON
S 787	HAZ. WASTE BLANK-2	S	4-24-91	REF TO COM ON ENVIRON
S 788	CLEAN AIR DEMONSTRATION	*R	7-16-91	RATIFIED CH.0738
S 789	LRC STUDY RENEWABLE ENERGY	R	7-16-91	INCORPORATED CH 754
S 795=	COMMERCIAL TANK DEFINITION	S	4-24-91	REF TO COM ON ENVIRON
S 801	PRESIDENT PRO TEM APPOINTMENTS	*R	7-16-91	RATIFIED CH.0739

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S 802=	WATER WITHDRAWAL REMEDIES	*R	7- 4-91	RATIFIED CH.0567
S 803	SOLID WASTE BOND SECURITY	S	4-24-91	REF TO COM ON FINANCE
S 812	STATE BUY RECYCLED GOODS	*H	7- 4-91	REF TO COM ON RULES&
S 813	LANDFILL REGULATION STUDY	*R	7-16-91	INCORPORATED CH754
S 821	PROTECT WATER SUPPLY WATERSHEDS	*H	5-23-91	ASSIGNED TO ENV-WAT&
S 827	TEMPORARY EROSION CONTROL PERMIT	S	4-25-91	REF TO COM ON ENVIRON
S 834	RECODIFY DEP'T HENR LAWS	S	4-25-91	REF TO COM ON STPERS&
S 835	REORGANIZE DEP'T HENR BOARDS	S	4-25-91	REF TO COM ON STPERS&
S 872=	INACTIVE HAZ. SITES FUNDS	S	5- 8-91	REF TO COM ON APPROPR
S 892	DEED TAX/NATURAL HERITAGE FUND	S	5- 9-91	REF TO COM ON FINANCE
S 895	MODIFY NATURAL HERITAGE FUND	S	7- 9-91	RE-REF COM ON APPROPR
S 901	USED OIL DISPOSAL TAX	S	5-29-91	RE-REF COM ON ENVIRON
S 904	FORESTRY TRUCKS FUNDS	S	5-13-91	REF TO COM ON APPROPR
S 909	CLEAN AIR ACT IMPLEMENTATION	S	5-13-91	REF TO COM ON ENVIRON
S 914=	4-H CAMP OPERATION FUNDS	S	5-13-91	REF TO COM ON APPROPR
S 917	OMNIBUS STUDY BILL-1	*R	7-16-91	RATIFIED CH.0754
S 922=	HAZ. MATERIALS RESPONSE TEAMS	R	7-16-91	INCORPORATED CH 754
S 923	COMPOST/RESEARCH DEMO. PROJECT	S	5-13-91	REF TO COM ON APPROPR
S 926	BOND REFERENDUM FUNDS	S	5-13-91	REF TO COM ON APPROPR
S 927	LEGISLATIVE BUDGET COMMISSION	*H	7-17-92	REF TO COM ON APPROP
S 928	EDUCATION BOND ACT	*H	7-14-92	REF TO COM ON FINANCE
S 930	NON-VOTED CAPITAL FACILITY BONDS	*R	7-16-91	RATIFIED CH.0760
S 937=	4-H CURRICULUM SUPPORT FUNDS	S	5-13-91	REF TO COM ON APPROPR
S 943	WATER TRANSFER REGISTRATION	*R	7-16-91	RATIFIED CH.0712
S 946	LRC STUDY EMERGENCY MANAGEMENT	R	7-16-91	INCORPORATED CH 754
S 977	PRO TEM APPOINTMENTS	*R	7-24-92	RATIFIED CH.1040
S1001=	NCSU WASTE FACILITY FUNDS	S	5-27-92	REF TO COM ON APPROPR
S1020=	1992 STUDIES-2	*H	7-21-92	CONF COM APPOINTED
S1030=	CREATE ENVIRONMENTAL CENTER	S	5-28-92	REF TO COM ON APPROPR
S1041=	ALLOW FLYTRAP BILL	H	6- 9-92	REF TO COM ON RULES&
S1042	MAKE VENUS'S FLYTRAP STATE PLANT	S	6- 1-92	HELD AS FILED
S1056=	NCSU SEAFOOD LAB FUNDS	S	6- 1-92	REF TO COM ON APPROPR
S1057=	SHELLFISH ENHANCEMENT FUNDS	S	6- 1-92	REF TO COM ON APPROPR
S1058=	SHELLFISH LEASE AMENDMENTS	*H	6-19-92	REF TO COM ON ENVIRONM
S1066=	SEAFOOD AWARENESS CHANGE	*R	6-29-92	RATIFIED CH.0785
S1068	COMMEMORATE FORESTRY	*R	7- 1-92	RATIFIED RES.55
S1093	CAPITAL APPROPRIATIONS	*S	7-21-92	RE-REF COM ON APPROPR
S1094	CAPITAL APPROPRIATIONS-3	*H	7-24-92	REF TO COM ON APPROP
S1151	UNION CONTAMINATED SOIL DISPOSAL	S	6- 3-92	REF TO COM ON ENVIRON
S1156	CLOSED LOOP GROUNDWATER SYSTEMS	*R	6-29-92	RATIFIED CH.0786
S1158=	AMEND STATE PARK LAWS	*R	7- 9-92	RATIFIED CH.0907
S1159	LOCAL GOV'T SOLID WASTE CONTRACTS	*R	7-22-92	RATIFIED CH.1013
S1161	CASWELL FOX TRAPPING	R	7- 9-92	RATIFIED CH.0908
S1169=	UNDERGROUND STORAGE TANK AMENDS	*R	7- 1-92	RATIFIED CH.0817
S1184	CHAPEL HILL BEAVER TRAPPING	S	6- 3-92	HELD AS FILED
S1188	VOLUNTARY HAZARDOUS WASTE CLEANUP	S	6- 4-92	REF TO COM ON ENVIRON
S1197	OXYGENATED GASOLINE	*R	7- 8-92	RATIFIED CH.0889
S1201=	THIRD-PARTIES APPEAL ENV. PERMITS	S	6- 4-92	REF TO COM ON ENVIRON

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1991-92 Biennium

BILL	SHORT TITLE		DATE	LATEST ACTION
S1203	PESTICIDE PROGRAM FUNDS	S	6- 4-92	REF TO COM ON APPROPR
S1205=	CAPITAL APPROPRIATIONS-2	*R	7-25-92	RATIFIED CH.1044
S1206=	ENVIRONMENTAL REVISIONS	*R	7- 8-92	RATIFIED CH.0890
S1209	ALLOW NON-RESIDENT GUIDE BILL	R	6-30-92	RATIFIED RES.51
S1214	NCSU GREENHOUSE FUNDS	S	6- 8-92	REF TO COM ON APPROPR
S1219	LOW-LEVEL RADIOACTIVE WASTE FUNDS	S	6- 8-92	REF TO COM ON APPROPR
S1223	MOTOR VEHICLE AMENDMENTS	*H	7-20-92	RE-REF COM ON AGRICULT
S1229	HISTORICAL ATTRACTIONS PLATES	*R	7-24-92	RATIFIED CH.1042
S1233=	UNC-CH CAPITAL PROJECT	*R	7-21-92	RATIFIED CH.1002
S1246	WILMINGTON HARBOR STUDY FUNDS	S	6- 8-92	REF TO COM ON APPROPR
S1261	GUIDE LICENSE CHANGE	*R	7-20-92	RATIFIED CH.0989

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1993-94 Biennium

	BILL	SHORT TITLE		DATE	LATEST ACTION
H	30=	CONTINUE SHELLFISH ENHANCEMENT FU	HF	7-17-94	POSTPONED INDEFINITELY
H	31=	MODIFY WATER COLUMN LEASES	*R	7- 9-93	RATIFIED CH.0322
H	32=	MODIFY MARINE FISHERIES COMM'N	H	3- 4-93	REPTD TO STATGOVT
H	35=	AGRICULTURE/FORESTRY COMM'N MEMBE	*S	3-30-93	RE-REF COM ON APPROPR
H	36=	LANDOWNER PROTECTION	*S	5- 3-93	REF TO COM ON JUDIC 2
H	38	1993 LOTTERY WITH REFERENDUM-2	HF	7-17-94	POSTPONED INDEFINITELY
H	52=	LRC STUDY WATER ISSUES	H	2- 4-93	REF TO COM ON RULES&
H	59	STATE LOTTERY-1993	H	2- 8-93	REF TO COM ON CONAM&RF
H	60=	CLEAN WATER BOND BILL	H	2- 8-93	REF TO COM ON FINANCE
H	67=	ADVANCED DISPOSAL TAX ON WHITE GO	HF	7-17-94	POSTPONED INDEFINITELY
H	68=	LANDFILL/INCINERATOR BANS	H	2- 8-93	REF TO COM ON ENVIRONM
H	69=	LRC STUDY SOLID WASTE	H	2- 8-93	REF TO COM ON RULES&
H	82=	LOCAL ORDINANCES REQUIRE RECYCLIN	H	2- 9-93	REF TO COM ON ENVIRONM
H	83=	INCREASE SCRAP TIRE DISPOSAL TAX	*R	7-24-93	RATIFIED CH.0548
H	85=	STATE PURCHASE RECYCLED GOODS	H	3-25-93	ASSIGNED TO SG-STPK&
H	86=	HAZ.MATERIALS EMERGENCY RESPONSE	HF	7-17-94	POSTPONED INDEFINITELY
H	88=	CONTINUE EMERGENCY MGMT STUDY	H	2- 9-93	REF TO COM ON RULES&
H	89=	CLARIFY INCINERATOR OPER. TRAININ	H	2- 9-93	REF TO COM ON ENVIRONM
H	90=	PHASE OUT PVC PLASTIC	H	2- 9-93	REF TO COM ON ENVIRONM
H	91=	STATE WASTE REDUCTION	*S	3-31-93	REF TO COM ON STPERS&
H	94=	ABOLISH ENERGY DEVELOPMENT AUTHOR	*R	4-12-93	RATIFIED CH.0016
H	96=	STATE REAL PROPERTY MANAGEMENT	H	3-18-93	ASSIGNED TO SG-STPK&
H	99=	UNC BUDGET FLEXIBILITY FOR ENERGY	HF	7-17-94	POSTPONED INDEFINITELY
H	100=	LOCAL ENERGY SAVINGS CONTRACTS	H	2-10-93	REF TO COM ON ENVIRONM
H	101=	ENERGY POLICY FOR STATE GOVERNMEN	*R	7-13-93	RATIFIED CH.0334
H	102=	ENERGY EFFICIENT SCHOOL CONSTRUCT	*R	7-23-93	RATIFIED CH.0465
H	103=	STATE ENERGY CONSERVATION PROGRAM	HF	7-17-94	POSTPONED INDEFINITELY
H	104=	LRC STUDY ENERGY CONSERVATION	H	2-10-93	REF TO COM ON RULES&
H	111=	TRANSFER AQUACULTURE LICENSES	H	2-10-93	REF TO COM ON AGRICULT
H	117=	MOUNTAIN AREA STUDY FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H	118=	MOUNTAIN AREA STUDY CONTINUED	H	2-10-93	REF TO COM ON RULES&
H	120	OPEN MEETINGS LAW CHANGES	*R	6-23-94	RATIFIED CH.0570
H	125=	SHELLFISH LEASE AUTHORITY	HF	6-30-94	POSTPONED INDEFINITELY
H	145	MAINTENANCE FUNDS FOR PARKS	HF	7-17-94	POSTPONED INDEFINITELY
H	146=	PARK LAND ACQUISITION FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H	147	STATE PARKS OPERATION FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H	148	PARK IMPROVEMENT PLAN	HF	7-17-94	POSTPONED INDEFINITELY
H	149	STATE PARKS STUDY COMMISSION	H	2-15-93	REF TO COM ON RULES&
H	150	LRC STUDY ENERGY CONSERVATION	H	2-15-93	REF TO COM ON RULES&
H	179	DELETE ENVIRONMENTAL REPORTS	*R	7-24-93	RATIFIED CH.0513
H	205	PORT FISHER FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H	226	HYDRILLA ERADICATION FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H	235	PRISON BOND FUNDS/INMATE LABOR	*R	7-24-93	RATIFIED CH.0550
H	268	STATE BUDGET & FISCAL CONTROL ACT	HF	7-17-94	POSTPONED INDEFINITELY
H	278=	CLASSIFY MISDEMEANORS	*R	7-24-93	RATIFIED CH.0539
H	279=	RECLASSIFY SOME FELONIES	HF	7-17-94	POSTPONED INDEFINITELY
H	294=	GPAC/ECONOMIC DEVELOPMENT	*HF	7-17-94	POSTPONED INDEFINITELY.
H	297	MARINE FISHERIES LICENSE TO SELL	*R	7-24-93	RATIFIED CH.0515

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H 298	FUNDS/LICENSE TO SELL	HF	7-17-94	POSTPONED INDEFINITELY
H 317=	GPAC/SUNSET STATE BOARDS/COMMISSI	HF	6-30-94	POSTPONED INDEFINITELY
H 319	PASQUOTANK/CAMDEN BEAR HUNTING	R	6-28-93	RATIFIED CH.0220
H 320	CURRITUCK DEER/BEAR HUNTING	*R	6-28-93	RATIFIED CH.0221
H 322	GPAC/INFORMATION TECHNOLOGY	HF	7-17-94	POSTPONED INDEFINITELY
H 323	GPAC/DOT REORGANIZATION	*HF	7-17-94	POSTPONED INDEFINITELY
H 337=	GPAC/ELIMINATE DEPT. OF CCPS	HF	7-17-94	POSTPONED INDEFINITELY
H 345	GPAC/ENTIRE PACKAGE	HF	7-17-94	POSTPONED INDEFINITELY
H 369	GPAC/DOA REORGANIZATION	HF	6-30-94	POSTPONED INDEFINITELY
H 373	GPAC/CLASSIFICATION STUDY/SBI PAY	*HF	7-17-94	POSTPONED INDEFINITELY
H 416	NO CORE SOUND SHELLFISH LEASES	*R	5-13-93	RATIFIED CH.0044
H 425=	RANDLEMAN RESERVOIR FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H 428	REPEAL GATES TURKEY HUNTING BAN	R	5-24-93	RATIFIED CH.0065
H 436=	NEW HANOVER/PERSONAL WATERCRAFT	*R	6- 7-93	RATIFIED CH.0125
H 437	TRUSTEE POWERS ACT-1	*R	7-17-93	RATIFIED CH.0377
H 447	POULTRY COMPOSTING TAX CREDIT	H	3-18-93	REF TO COM ON AGRICULT
H 460	LUMBER RIVER STATE PARK FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H 462=	NO WASTE SITE NEAR STATE LINE	HF	6-30-94	POSTPONED INDEFINITELY
H 474	PROMOTE MARITIME ACTIVITY	R	7- 5-93	RATIFIED CH.0278
H 483=	DAM SAFETY LAW IMPROVEMENTS	*R	7-19-93	RATIFIED CH.0394
H 484	BOATING SAFETY EDUCATION	H	4- 5-93	ASSIGNED TO TRAN-AIR
H 485	ADOPT NAVIGATION RULES	*R	7-16-93	RATIFIED CH.0361
H 486	RESTRICT PERSONAL WATERCRAFT	*R	7-15-94	RATIFIED CH.0753
H 487	BOATING SAFETY COMMITTEE	H	4-22-93	REFTD TO TRANSPOR
H 492	BOILING SPR. LAKES BIRD SANCTUARY	R	5-24-93	RATIFIED CH.0066
H 493	SOUTHPORT NO-WAKE ZONE	R	5-24-93	RATIFIED CH.0067
H 544	OMNIBUS TECHNICAL AMENDMENTS	*R	7-24-93	RATIFIED CH.0553
H 547	SEAFOOD PARK AUTHORITY/FEES	*R	7- 9-93	RATIFIED CH.0323
H 548	SEAFOOD PARK AUTHORITY/NO GUNS	*S	5-12-93	REF TO COM ON JUDIC 1
H 549	WANCHESE SEAFOOD INDUSTRIAL PARK	H	3-25-93	REF TO COM ON PUBUTILS
H 550=	MINING ACT IMPROVEMENTS	*R	6-21-94	RATIFIED CH.0568
H 576	WATER RESOURCES PROJECTS FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H 578	UNC CAPITAL PROJECTS	*R	7-23-93	RATIFIED CH.0451
H 589	FISHERIES MORATORIUM PANEL	*R	7-16-94	RATIFIED CH.0770
H 600	MADISON ROAD HUNTING	R	5-24-93	RATIFIED CH.0070
H 604	MOUNTAIN COUNTY ROAD DISTRICTS	*R	7-18-93	RATIFIED CH.0378
H 631	WILDLIFE LICENSE PLATES	*HF	7-17-94	POSTPONED INDEFINITELY
H 637=	NAT. SCI. MUSEUM CONSTRUC. FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H 644=	IMPROVE SEDIMENTATION CONTROL	*R	7-17-94	RATIFIED CH.0776
H 648	MOTORBOAT LICENSES	H	3-29-93	REF TO COM ON TRANSPOR
H 650	ASBESTOS PROGRAM PENALTIES	*R	7- 6-94	RATIFIED CH.0686
H 655=	AGRICULTURE MEDICAL WASTE FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H 663	AGENCY DUTIES/RECYCLING INDUSTRY	*R	6-30-93	RATIFIED CH.0250
H 664	UNC IMPROVEMENTS BOND ACT	*R	7-24-93	INCORPORATED CH.542-SB14
H 681=	CLEAN AIR ACT IMPLEMENTATION	*R	7-19-93	RATIFIED CH.0400
H 686	HENDERSON/TRANSYLVANIA ECON. DEV.	*R	7-24-93	RATIFIED CH.0520
H 702	ENVIRONMENTAL PERMITTING REFORM	H	4- 1-93	REF TO COM ON ENVIRONM
H 703	NAGS HEAD BEACH REGULATION	S	5-10-93	REF TO COM ON AGRICUL&

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H 717	HOSPITAL UNDERGROUND TANK CLEANUP	H	4- 1-93	REF TO COM ON ENVIRONM
H 739	CATAWBA WATERSHED ZONING NOTICE	H	4-21-93	RE-REF COM ON LOC&RGI
H 760	4-H ENVIRONMENTAL CTR. FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H 767	RECOVER SOME OIL SPILL COSTS	H	4- 6-93	REF TO COM ON JUDICIII
H 787	PERMITS/WASTE MANAGEMENT PLANS	*R	7-17-93	RATIFIED CH.0365
H 799	ZONING NOTICE	*R	7-23-93	RATIFIED CH.0469
H 802	RECYCLABLE WEIGHT PENALTY	*R	7-21-93	RATIFIED CH.0426
H 804	WILKES WATERSHED ZONING NOTICES	*R	6- 1-93	RATIFIED CH.0101
H 810	STUDY SHELLFISH LEASES	H	4- 8-93	REF TO COM ON RULES&
H 826=	SENATE PRESIDENT'S APPOINTMENTS	*R	7- 7-93	RATIFIED CH.0302
H 827=	UNIFORM ROADSIDE HUNTING	*S	7-19-93	RE-REF COM ON JUDIC 1
H 837=	WRIGHTSVILLE EMINENT DOMAIN	*R	6-21-93	RATIFIED CH.0187
H 841=	AMEND PRINCIPAL & INCOME ACT-2	*R	7- 5-93	RATIFIED CH.0284
H 844	ALAMANCE ROOFING BUILDING PERMIT	*R	7-18-93	RATIFIED CH.0381
H 855	TAKE WATERFOWL ON SUNDAY	H	5- 5-93	FAILED 2ND READING
H 856	RIEGELWOOD PROPERTY USE	*R	7- 1-93	RATIFIED CH.0266
H 860	LOCAL WATERSHED ZONING NOTICES	*R	7- 1-93	RATIFIED CH.0267
H 869=	STOKES WATERSHED ZONING NOTICE	R	6- 8-93	RATIFIED CH.0139
H 870	WATAUGA WATERSHED ZONING NOTICE	*R	6-14-93	RATIFIED CH.0156
H 876	LOCAL NO-WAKE ZONES	*R	7-22-93	RATIFIED CH.0434
H 878	FALLS LAKE WATERSHED STUDY	HF	7-17-94	POSTPONED INDEFINITELY
H 921	MARINE LITTER PROHIBITED	H	4-13-93	REF TO COM ON ENVIRONM
H 969=	DEMOLITION ASPHALT SUNSET OFF	*R	5-26-93	RATIFIED CH.0086
H 975	POSTPONE WASTE SITE SELECTION	HF	6-30-94	POSTPONED INDEFINITELY
H 976	REORGANIZE GOVERNOR'S WASTE MGM'T	*R	7-23-93	RATIFIED CH.0501
H 979=	MASTER APPLICATION/BUSINESS LICEN	HF	7-17-94	POSTPONED INDEFINITELY
H 990=	REGULATE INTERBASIN TRANSFERS	H	4-19-93	REF TO COM ON ENVIRONM
H 998	STRENGTHEN LITTER LAW	*S	6-14-93	REF TO COM ON JUDIC 1
H1021	BUSINESS LICENSE REPORTS	*R	7- 6-93	RATIFIED CH.0289
H1052	VEGETATION CUTTING ON HIGHWAY	H	4-19-93	REF TO COM ON TRANSPOR
H1053	SCENIC HWYS/OUTDOOR ADS LIMITED	=R	7-26-93	RATIFIED CH.0524
H1054	ZONING/NONCONFORMING USES	H	4-19-93	REF TO COM ON JUDICI
H1060	LRC STUDY FARM PRESERVATION PROGR	*H	7-14-93	RE-REF COM ON RULES&
H1061=	UNDERGROUND TANKS AMENDS	*R	7-19-93	RATIFIED CH.0402
H1075	ABATE SCHOOL WATER FINES	HF	6-30-94	POSTPONED INDEFINITELY
H1076	COMMERCIAL FISHING LICENSE	H	4-19-93	REF TO COM ON RULES&
H1077=	DEFINE SEPTAGE	*R	6-16-93	RATIFIED CH.0173
H1102	PESTICIDE ENV. TRUST FUND	*R	7-23-93	RATIFIED CH.0481
H1118	WATER SUPPLY RECLASSIFICATION	*HF	6-30-94	POSTPONED INDEFINITELY
H1121	WATER SUPPLY PLANS EXPANSION	*S	7-14-93	REF TO COM ON RULES &
H1127	PILOT MTN PARK RIGHT-OF-WAY	*R	7-23-93	RATIFIED CH.0457
H1132	STUDY RECYCLING TAX INCENTIVES	H	4-19-93	REF TO COM ON RULES&
H1137=	CLEAN WATER LOAN AMENDS	HF	7-17-94	POSTPONED INDEFINITELY
H1138	WATER QUALITY AMENDMENTS	HF	7-17-94	POSTPONED INDEFINITELY
H1139	DELAY WATERSHED PROTECTION RULES	H	4-19-93	REF TO COM ON ENVIRONM
H1151	LITTER LAW ENFORCEMENT	*S	5-18-93	REF TO COM ON JUDIC 1
H1152	MANUF. GAS PLANT SITES REMED.	HF	5-13-93	POSTPONED INDEFINITELY
H1158	NO BILLBOARDS NEAR PILOT MTN.	*R	5-24-94	RATIFIED CH.0559

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H1159=	NCSU STUDY HOG OPERATIONS	*HF	7-17-94	POSTPONED INDEFINITELY
H1170	TURF RESEARCH & EDUCATION FUNDS	*HF	7-17-94	POSTPONED INDEFINITELY
H1182	GRAHAM COUNTY FORESTRY FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1211=	EHNR WATER FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1216=	TEMPORARY BUDGET CONTINUATION	*R	6-30-93	RATIFIED CH.0253
H1225	LRC STUDY PUBLIC TRANSPORT./RAIL	H	5- 3-93	REF TO COM ON RULES&
H1229=	WAYNE COUNTY FORESTRY FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1239	EXPAND BEAVER PROGRAM/FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1240	PLANT PROTECTION FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1251	LAND RESOURCES STAFF FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1252	NC CLEAN WATER FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1258	BEAVER CONTROL PROGRAM/FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1265	SOIL SURVEY POSITIONS FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1277	UNC CONIFER/PEST MGMT. FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1282	LRC STUDY COMMERCIAL NETS	H	5- 6-93	REF TO COM ON RULES&
H1285	AGRI AND FORESTRY STUDY COMMISSIO	H	5- 7-93	REF TO COM ON RULES&
H1288	NO NONHAZARDOUS SOLID WASTE IMPOR	H	5- 7-93	REF TO COM ON RULES&
H1318	NC SOLAR CENTER FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1319	1993 OMNIBUS STUDIES ACT	*R	7-16-94	RATIFIED CH.0771
H1323	REPUBLICAN CAUCUS OMNIBUS	HF	7-17-94	POSTPONED INDEFINITELY
H1326=	DURHAM LEIGH FARM PARK FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1332	PARK AUTHORITY/PARK FUND	*HF	7-17-94	POSTPONED INDEFINITELY
H1358	SCIENCE MUSEUM FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1371	MOUNTAIN AREA FIRE FIGHTING FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1372=	ECONOMIC DEV. FINANCING BONDS	HF	7-17-94	POSTPONED INDEFINITELY
H1387=	MYCOTOXIN/RESEARCH FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1388	FORESTRY SEASONAL PERSONNEL	H	5-13-93	REF TO COM ON PENS&RET
H1406	LAKE JAMES STATE PARK	HF	7-17-94	POSTPONED INDEFINITELY
H1415=	WATER RESOURCES DEV'T FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1416	MOUNT MITCHELL STATE PARK FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1423	ENVIRONMENTAL JUSTICE COMMISSION	H	5-17-93	REF TO COM ON RULES&
H1427=	ARBORETUM FUNDS/BOARD CHANGES	HF	7-17-94	POSTPONED INDEFINITELY
H1458	CAPITAL NEEDS BOND BILL	H	5-17-93	REF TO COM ON FINANCE
H1463	DEPT. EHNR FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1470	BRUNSWICK ENV. MGMT. FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1476=	LAKE BENSON PARK FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1505	CARTERET WATER ISSUES	HF	7-17-94	POSTPONED INDEFINITELY
H1539=	BRUNSWICK TIRE RECOVERY FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1540=	CRAB LICENSE/FISHERIES MORATORIUM	*R	6-27-94	RATIFIED CH.0576
H1541=	FUND ENDORSEMENT TO SELL PROGRAM	HF	7-17-94	POSTPONED INDEFINITELY
H1542	SHELLFISH SANITATION LAB FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1544=	WACCAMAW STUDY FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1545=	BIRD ISLAND FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1548=	OYSTER BLUE RIBBON ADVISORY COUNC	H	5-25-94	REF TO COM ON RULES&
H1620	LET DOT BUY MITIGATION LAND	HF	7-17-94	POSTPONED INDEFINITELY
H1628=	SEWER DISTRICT AMENDMENTS	*R	7- 6-94	RATIFIED CH.0696
H1660=	GOVERNOR'S 1994 OPER. BUDGET	HF	7-17-94	POSTPONED INDEFINITELY
H1678=	RICHMOND WASTE SITE FUNDS	HF	7-17-94	POSTPONED INDEFINITELY

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H1697	ALLOW OSHA BILL	H	5-26-94	REF TO COM ON RULES&
H1714	**WILSON TECH OIL CLEANUP FUNDS**	**HF**	**7-17-94**	**POSTPONED INDEFINITELY**
H1736=	REGULATE LEAD ABATEMENT	*HF	7-17-94	POSTPONED INDEFINITELY
H1740=	**NEUSE RIVER BASIN PROJECT FUNDS**	**HF**	**7-17-94**	**POSTPONED INDEFINITELY**
H1747=	**SOLID WASTE PERMIT FEES/FUNDS**	**HF**	**7-17-94**	**POSTPONED INDEFINITELY**
H1792	NATIONAL ENVIROTHON FUNDS	HF	7-17-94	POSTPONED INDEFINITELY
H1811	**WATTS WASTE SITE CLEANUP FUNDS**	**HF**	**7-17-94**	**POSTPONED INDEFINITELY**
H1843	EMISSIONS INSPECTION CHANGES	*R	7-15-94	RATIFIED CH.0754
H1858	**ENVIRONMENTAL HEALTH FUNDS**	**HF**	**7-17-94**	**POSTPONED INDEFINITELY**
H1925=	SURRY DESIGN-BUILD CONTRACTS	*S	6-20-94	REF TO COM ON LOC GOVT
H1941=	UNDERGROUND STORAGE TANK AMENDS	H	6- 1-94	REF TO COM ON JUDICIII
H1942	ENV. PERMITTING REFORM	H	6- 1-94	REF TO COM ON JUDICIII
H1949=	ENCOURAGE ENVIRONMENTAL AUDITS	H	6- 1-94	REF TO COM ON JUDICIII
H1961=	ENCOURAGE VOLUNTARY REMEDIATION	*R	7- 1-94	RATIFIED CH.0598
H1962=	ENVIRONMENTAL TECH. CORR.	H	6- 1-94	REF TO COM ON ENVIRONM
H1969	LEAD-ACID BATTERY TAX	HF	7-17-94	POSTPONED INDEFINITELY
H1971	MOTOR OIL TAX/USED OIL PROGRAM	HF	7-17-94	POSTPONED INDEFINITELY
H1972=	PROTECT TRADE SECRET ENV. DATA	*R	7- 6-94	RATIFIED CH.0694
H1973=	LANDFILL PERMIT LOCAL REVIEW	*R	7- 7-94	RATIFIED CH.0722
H2016	**GLOBAL POSITIONING EQUIP. FUNDS**	**HF**	**7-17-94**	**POSTPONED INDEFINITELY**
H2073	**OIL TERMINAL FACILITIES**	**HF**	**7-17-94**	**POSTPONED INDEFINITELY**
H2074	ALLOW WATERSHED BILL-1	H	6- 7-94	REF TO COM ON RULES&
S 14	**EDUCATION/CLEAN WATER/PARKS BONDS**	***R**	**7-24-93**	**RATIFIED CH.0542**
S 26	**1993-95 CAPITAL BUDGET**	***R**	**7-24-93**	**RATIFIED CH.0561**
S 27	**CURRENT OPERATIONS BUDGET**	***R**	**7- 9-93**	**RATIFIED CH.0321**
S 37=	AGRICULTURE/SEAFOOD COMM'N MEMBER	*R	4-15-93	RATIFIED CH.0023
S 40=	LANDOWNER PROTECTION	S	2- 3-93	REF TO COM ON JUDIC 2
S 52=	PHASE OUT PVC PLASTIC	S	2- 4-93	REF TO COM ON ENVIRON
S 53=	LOCAL ORDINANCES REQUIRE RECYCLIN	*R	6-16-93	RATIFIED CH.0165
S 54	TAX HAZARDOUS HOUSEHOLD ITEMS	*S	5-27-93	RE-REF COM ON FINANCE
S 55=	CLARIFY INCINERATOR OPERATOR TRAI	*R	4-21-93	RATIFIED CH.0029
S 56=	LRC STUDY SOLID WASTE	S	2- 4-93	REF TO COM ON RULES &
S 57=	INCREASE SCRAP TIRE DISPOSAL TAX	S	2- 4-93	REF TO COM ON ENVIRON
S 58=	STATE PURCHASE RECYCLED GOODS	*R	7- 1-93	RATIFIED CH.0256
S 59=	LANDFILL/INCINERATOR BANS	*R	7- 7-93	RATIFIED CH.0290
S 60=	ADVANCE DISPOSAL TAX ON WHITE GOO	*R	7-23-93	RATIFIED CH.0471
S 65=	CLEAN WATER BOND BILL	S	4-12-93	REF TO COM ON BONDS
S 67=	LRC STUDY WATER ISSUES	S	2- 4-93	REF TO COM ON RULES &
S 72=	**HAZ MATERIALS EMERGENCY RESPONSE**	**R**	**7- 9-93**	**INCORPORATED CH.321-SB27**
S 75=	CONTINUE EMERGENCY MGMT STUDY	S	2- 8-93	REF TO COM ON RULES &
S 85=	**MOUNTAIN AREA STUDY FUNDS**	**S**	**2- 9-93**	**REF TO COM ON RULES &**
S 86=	MOUNTAIN AREA STUDY CONTINUED	S	2- 9-93	REF TO COM ON RULES &
S 90=	STATE WASTE REDUCTION	*R	6-23-93	RATIFIED CH.0197
S 91=	UNC BUDGET FLEXIBILITY FOR ENERGY	S	3-10-93	RE-REF COM ON APPROPR
S 92=	ENERGY POLICY FOR STATE GOVERNMEN	S	2- 9-93	REF TO COM ON STPERS&
S 93=	ENERGY EFFICIENT SCHOOL CONSTRUCT	*S	3-10-93	RE-REF COM ON APPROPR
S 94=	LOCAL ENERGY SAVINGS CONTRACTS	*R	7-16-94	RATIFIED CH.0775
S 95=	**STATE ENERGY CONSERVATION PROGRAM**	***H**	**7- 1-93**	**REF TO COM ON APPROP**

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BILL	SHORT TITLE		DATE	LATEST ACTION
S 96=	MODIFY WATER COLUMN LEASES	S	2-24-93	RE-REF COM ON FINANCE
S 97=	MODIFY MARINE FISHERIES COMM'N	R	3-23-93	RATIFIED CH.0008
S 98=	CONTINUE SHELLFISH ENHANCEMENT FU	R	7- 9-93	INCORPORATED CH.321-SB27
S 99=	TRANSFER AQUACULTURE LICENSES	*R	4-13-93	RATIFIED CH.0018
S 100=	SHELLFISH LEASE AUTHORITY	*R	7-23-93	RATIFIED CH.0466
S 150	STRATEGIC PLANNING AUTHORITY	S	2-15-93	REF TO COM ON ECONDEVL
S 155	TAX LAWS TECHNICAL CHANGES/SECREC	*R	7-23-93	RATIFIED CH.0485
S 161	SPECIAL/MULTIYEAR PLATE CHANGES	*R	7-24-93	RATIFIED CH.0543
S 169	GPAC/REORGANIZE DOT	S	2-16-93	REF TO COM ON GPAC
S 185	GPAC/ECONOMIC RESPONSIBILITY	S	2-17-93	REF TO COM ON GPAC
S 187	GPAC/DEV. PERFORMANCE INDICATORS	S	2-17-93	REF TO COM ON GPAC
S 190	UTILITIES STUDY	*S	7-24-93	RE-REF COM ON RULES &
S 191=	GPAC/COMMERCE REG. OFFICES	S	2-17-93	REF TO COM ON GPAC
S 238=	GPAC/COMMERCE REG. OFFICES	S	2-18-93	REF TO COM ON GPAC
S 244	GPAC/MARINE AFFAIRS TO DEHNR	R	7- 9-93	INCORPORATED CH.321-SB27
S 286=	GPAC/ELIMINATE DEPT. OF CCSP	S	4- 5-93	RE-REF COM ON APPROPR
S 312=	GPAC/SUNSET BOARDS/COMMISSIONS	S	2-22-93	REF TO COM ON GPAC
S 315	GPAC/INFO. TECH. BRIEFINGS	*H	5-18-93	REF TO COM ON APPROP
S 322	GPAC/AGENCY AUDIT RESPONSE	S	2-23-93	REF TO COM ON GPAC
S 337=	LRC STUDY ENERGY CONSERVATION	S	2-24-93	REF TO COM ON RULES &
S 369	GPAC/CIVILIANIZATION	*R	7- 9-93	INCORPORATED CH.321-SB27
S 403=	RECLASSIFY SOME FELONIES	S	2-25-93	REF TO COM ON JUDIC 1
S 417	OPEN MEETINGS LAW CHANGES-2	*H	3-25-93	REF TO COM ON JUDICI
S 438	PORT FISHER FUNDS	S	7- 8-93	REF TO COM ON CAPTEXPD
S 457	STATEWIDE BEAVER SEASONS	*R	4-26-93	RATIFIED CH.0033
S 471=	RANDELMAN RESERVOIR FUNDS	R	7-24-93	INCORPORATED CH.561-SB26
S 480	CUMBERLAND RANGER FUNDS	S	7- 8-93	REF TO COM ON CAPTEXPD
S 507=	NEW HANOVER/PERSONAL WATERCRAFT	S	3-18-93	REF TO COM ON JUDIC 1
S 524=	NO WASTE SITE NEAR STATE LINE	S	3-22-93	REF TO COM ON ENVIRON
S 530=	AGRICULTURE MEDICAL WASTE FUNDS	R	7-24-93	INCORPORATED CH.561-SB26
S 558	PRESIDENT PRO TEM'S APPTS	*R	7-24-93	RATIFIED CH.0555
S 570=	IMPROVE SEDIMENTATION CONTROL	*S	4-19-93	RE-REF COM ON FINANCE
S 571=	DAM SAFETY LAW IMPROVEMENTS	*H	6-17-93	REF TO COM ON RULES&
S 572	WASTE REDUCTION/STATE REPORTS	*R	7-22-93	RATIFIED CH.0448
S 589	MANDATORY HUNTER SAFETY CHANGES	H	5-11-93	REF TO COM ON JUDICI
S 590	INCREASE CERT. OF NUMBER FEES	*R	7-21-93	RATIFIED CH.0422
S 591	WILDLIFE LICENSE RESTRUCTURING	*R	7- 5-94	RATIFIED CH.0684
S 595	SANITARIAN EDUC. REQUIREMENTS	*R	6-29-93	RATIFIED CH.0233
S 624=	MINING ACT IMPROVEMENTS	S	3-29-93	REF TO COM ON ENVIRON
S 625	ISTEA AMENDMENTS	*R	7-23-93	RATIFIED CH.0488
S 632=	CLEAN AIR ACT IMPLEMENTATION	S	3-30-93	REF TO COM ON ENVIRON
S 653	MINING ACT AMENDMENTS	S	3-31-93	REF TO COM ON JUDIC 1
S 697	TRUSTEE POWERS ACT-2	S	4- 5-93	REF TO COM ON JUDIC 2
S 698=	AMEND PRINCIPAL & INCOME ACT	S	4- 5-93	REF TO COM ON JUDIC 2
S 713=	WAYNE COUNTY FORESTRY FUNDS	R	7-24-93	INCORPORATED CH.561-SB26
S 724	HIGH ROCK LAKE MARINE COMM'N	*R	7-16-93	RATIFIED CH.0355
S 733	PARK AND RECREATION TRUST FUND	*R	7-16-94	RATIFIED CH.0772
S 734	PILOT PARK ENTRANCE FEES	*H	7-16-93	RE-REF COM ON APPROP

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BILL	SHORT TITLE		DATE	LATEST ACTION
S 735	PROTECT NATURAL/SCENIC RIVERS	H	5-11-93	REF TO COM ON ENVIRONM
S 736	PARTNERSHIP FOR QUALITY GROWTH	S	4- 8-93	REF TO COM ON RULES &
S 737	QUALITY GROWTH PARTNERSHIP FUNDS	S	4- 8-93	REF TO COM ON APPROPR
S 753=	ABOLISH ENERGY DEVELOPMENT AUTH.	S	4- 8-93	REF TO COM ON STPERS&
S 754=	STATE REAL PROPERTY MANAGEMENT	*H	5-17-93	REF TO COM ON STATGOVT
S 779	DELAY LOW-LEVEL SITE PROCESS	S	4- 8-93	REF TO COM ON ENVIRON
S 784	FORT BUTLER FEASIBILITY FUNDS	S	4- 8-93	REF TO COM ON APPROPR
S 794=	WRIGHTSVILLE EMINENT DOMAIN	*H	5-11-93	REF TO COM ON JUDICII
S 808	ORANGE REVENUE CHANGES	*R	7-23-93	RATIFIED CH.0449
S 809	ORANGE/CHATHAM OMNIBUS	*R	7-16-93	RATIFIED CH.0358
S 821	WATER WITHDRAWAL REGISTRATION	*R	7-14-93	RATIFIED CH.0344
S 824	PUBLIC FACILITIES BONDS	S	4-13-93	REF TO COM ON CAPTEXPD
S 828=	NAT. SCI. MUSUEM CONSTRUC. FUNDS	S	7- 8-93	REF TO COM ON CAPTEXPD
S 855=	EDEN/ROCKINGHAM ECONOMIC DEVELOPM	*R	7-21-93	RATIFIED CH.0418
S 869=	MASTER APPLICATION/BUSINESS LICEN	R	7-24-93	INCORPORATED CH.561-SB26
S 875=	REGULATE INTERBASIN TRANSFERS	*R	7-15-93	RATIFIED CH.0348
S 898	LAND/CLEARING/DEBRIS LANDFILLS	*R	6-30-94	RATIFIED CH.0580
S 911=	UNIFORM ROADSIDE HUNTING	*S	5- 5-93	RE-REF COM ON JUDIC 1
S 918	CLARIFY STATE TRAILS SYSTEM	*R	6-21-93	RATIFIED CH.0184
S 926=	REGULATE HOG OPERATIONS	*R	7-24-93	INCORPORATED CH.561-SB26
S 927	LAND RESOURCES STAFF FUNDS	S	4-20-93	REF TO COM ON APPROPR
S 928=	UNDERGROUND TANKS AMENDS	S	4-20-93	REF TO COM ON ENVIRON
S 932=	DEMOLITION ASPHALT SUNSET OFF	*H	5- 6-93	REF TO COM ON ENVIRONM
S 956	ANIMAL RESIDUE MARKETING STUDY	S	4-26-93	REF TO COM ON RULES &
S 975=	GOVERNOR'S OPERATING BUDGET	S	4-27-93	REF TO COM ON APPROPR
S 979=	EENR WATER FUNDS	R	7- 9-93	INCORPORATED CH.321-SB27
S 980=	DEFINE SEPTAGE	*S	5-13-93	RE-REF COM ON FINANCE
S 991	RESTRICT DARE MENHADEN FISHING	*H	6-17-93	RE-REF COM ON AGRICULT
S1003	LANDFILL PERMIT AMENDMENTS	*R	7-23-93	RATIFIED CH.0473
S1005	COLD-WATER AQUACULTURE FUNDS	R	7- 9-93	INCORPORATED CH.321-SB27
S1011	GARNER FEES	S	5- 3-93	REF TO COM ON LOC GOVT
S1012	ECONOMIC IMPACT OF RULES	*S	5-13-93	RE-REF COM ON WAYS&MNS
S1020	NORTH CAROLINA ARBORETUM CHANGES	*H	5-18-93	REF TO COM ON RULES&
S1045	PHOTOVOLTAIC EQUIP. TAX CREDIT	*R	6-30-94	RATIFIED CH.0584
S1049=	LUMBER RIVER STATE PARK FUNDS	R	7-24-93	INCORPORATED CH.561-SB26
S1065	AGENCY RECEIPTS FOR RECYCLING	S	5- 6-93	REF TO COM ON APPROPR
S1075	BEACH ACCESS PROGRAM CLARIFIED	H	7-22-93	REF TO COM ON RULES&
S1082	NASH/FRANKLIN WATERSHED ZONING	*R	7- 7-93	RATIFIED CH.0296
S1099	VANCE TRACTOR-PLOW FUNDS	S	7- 8-93	REF TO COM ON CAPTEXPD
S1105=	DURHAM LEIGH FARM PARK FUNDS	S	5-11-93	REF TO COM ON CAPTEXPD
S1112=	CLEAN WATER LOAN AMENDS	*R	7-23-93	RATIFIED CH.0496
S1121	SOIL CONSERVATION LAW CHANGES	*R	7-19-93	RATIFIED CH.0391
S1125	DIVE-OVER NONNAVIGABLE WATERS	S	5-11-93	REF TO COM ON AGRICUL&
S1153	RADIOACTIVE WASTE PACT REPEALED	S	5-13-93	REF TO COM ON JUDIC 1
S1157=	ECONOMIC DEV. FINANCING BONDS	*R	7-23-93	RATIFIED CH.0497
S1163	POLLUTION FACILITIES FINANCING	*R	6- 8-93	RATIFIED CH.0130
S1164	SOLID WASTE FINANCIAL REPONS.	R	7- 5-93	RATIFIED CH.0273
S1170=	WATER RESOURCES DEV'T FUNDS	R	7-24-93	INCORPORATED CH.561-SB26

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BILL	SHORT TITLE		DATE	LATEST ACTION
S1177=	N.C. ARBORETUM FUNDS	R	7-24-93	INCORPORATED CH.561-SB26
S1183=	MYCOTOXIN RESEARCH FUNDS	R	7-24-93	INCORPORATED CH.561-SB26
S1191	DAVIDSON FORESTRY FUNDS	R	7-24-93	INCORPORATED CH.561-SB26
S1193	CAPE FEAR BOTANICAL GARDEN FUNDS	S	7- 8-93	REF TO COM ON CAPTLXPD
S1195	USE VALUE/DONATED LAND	*H	7- 6-93	REF TO COM ON FINANCE
S1210=	LAKE BENSON PARK FUNDS	S	7- 8-93	REF TO COM ON CAPTLXPD
S1241	NCSU TOXICOLOGY BUILDING FUNDS	S	6-16-93	REF TO COM ON CAPTLXPD
S1246	MOUNTAIN ISLAND LAKE PARK FUNDS	S	7- 8-93	REF TO COM ON CAPTLXPD
S1254	FUNDS FOR PARKS/RECREATION	S	6-28-93	REF TO COM ON CAPTLXPD
S1273	1993-94 CAPITAL BUDGET	S	6-30-93	REF TO COM ON CAPTLXPD
S1275	MOUNTAIN ISLAND LAKE PARK STUDY	S	7- 5-93	REF TO COM ON RULES &
S1282	UNC MARINE SCIENCES STUDY	S	7- 5-93	REF TO COM ON RULES &
S1289	WATER RESOURCES ACCESS FUNDS	S	7- 5-93	REF TO COM ON APPROPR
S1324	POULTRY COMPOSTING	S	5-25-94	REF TO COM ON FINANCE
S1342=	RICHMOND WASTE SITE FUNDS	S	5-25-94	REF TO COM ON APPROPR
S1352	PARTNERSHIP FOR THE SOUNDS FUNDS	S	5-25-94	REF TO COM ON APPROPR
S1403=	OYSTER BLUE RIBBON ADVISORY COMMC	*S	6-16-94	RE-REF COM ON APPROPR
S1435=	FUND ENDORSEMENT TO SELL PROGRAM	S	5-25-94	REF TO COM ON APPROPR
S1436=	CRAB LICENSE/FISHERIES MORATORIUM	*R	7- 5-94	RATIFIED CH.0675
S1437	SUBMERGED LANDS EXTENSION	R	7- 7-94	RATIFIED CH.0717
S1463	CHATHAM WASTE SITE FUNDS	S	5-25-94	REF TO COM ON APPROPR
S1471=	SEWER DISTRICT AMENDMENTS	*R	7- 7-94	RATIFIED CH.0714
S1498=	NEUSE RIVER BASIN PROJECT FUNDS	S	5-25-94	REF TO COM ON APPROPR
S1504	1994-95 SPECIAL PROVISIONS	*R	7-17-94	RATIFIED CH.0777
S1505	1994-95 BUDGET MODIFICATION	*R	7-16-94	RATIFIED CH.0769
S1509=	RTRD ISLAND FUNDS	S	5-25-94	REF TO COM ON APPROPR
S1512	ABOVEGROUND TANK PROGRAM FUNDS	S	5-31-94	RE-REF COM ON APPROPR
S1537=	BRUNSWICK TIRE RECOVERY FUNDS	S	5-25-94	REF TO COM ON APPROPR
S1571=	SOLID WASTE PERMIT FEES/FUNDS	S	5-25-94	REF TO COM ON FINANCE
S1574	SOIL & WATER CONSERVATION FUNDS	S	5-25-94	REF TO COM ON APPROPR
S1598	GLOBAL TRANSPARK AUTHORITY FUNDS	S	5-26-94	REF TO COM ON APPROPR
S1610=	WACCAMAW STUDY FUNDS	S	5-26-94	REF TO COM ON APPROPR
S1611=	LEAD HAZARD MGT. PROGRAM	S	5-26-94	HELD AS FILED
S1631=	LANDFILL PERMIT LOCAL REVIEW	*S	6-22-94	RE-REF COM ON LOC GOVT
S1638=	ENCOURAGE VOLUNTARY REMEDIATION	*H	6-27-94	REF TO COM ON ENVIRONM
S1639=	ENCOURAGE ENVIRONMENTAL AUDIT	S	6- 1-94	REF TO COM ON ENVIRON
S1641=	PROTECT TRADE SECRET ENV. DATA	S	6- 1-94	REF TO COM ON JUDIC 2
S1647=	ENVIRONMENTAL TECH. CORR.	S	6- 1-94	REF TO COM ON ENVIRON
S1651=	UNDERGROUND STORAGE TANK AMEND	S	6- 1-94	REF TO COM ON ENVIRON

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Appendix 4
Ambient Air Quality Standards

Appendix 4

AMBIENT AIR QUALITY STANDARDS

Ambient air quality progress is determined by measuring ambient pollutant concentrations and comparing the measured concentrations to the corresponding standard. The "ambient air" is defined by the Environmental Protection Agency (EPA) as "that portion of the atmosphere, external to buildings, to which the general public has access." The ambient air quality standards are classified as primary standards, secondary standards, or both. The primary standards were established to protect public health. Secondary standards protect the public welfare from adverse effects associated with pollutants in the ambient air. In protecting public welfare, air pollution effects on the following are considered: soils, water, crops, vegetation, man-made materials, animals, wildlife, weather, visibility, climate, property, transportation, economy, personal comfort and well-being. The scientific criteria upon which the standards are based are periodically reviewed by EPA and the standards are re-established or changed based upon the findings. An "exceedance" is defined as a measurement that is greater than the ambient air quality standard for a specific averaging time.

The national primary and secondary standards and the North Carolina ambient air quality standards are summarized below.

Summary Of National and N. C. Ambient Air Quality Standards

POLLUTANT	TIME OF AVG.	NAT. PRIM. STD	NAT. SEC. STD.	N.C. STD
TSP	Ann. Geo. Mean	75 µg/m³	None	75 µg/m³
	24 Hour 2nd Max	260 µg/m³	150 µg/m³	150 µg/m³
SO2	Ann. Arith. Mean	80 µg/m³	None	80 µg/m³
	24 Hour 2nd Max	365 µg/m³	None	365 µg/m³
	3 Hour	None	1300 µg/m³	1300 µg/m³
NO2	Ann. Arith. Mean	.053 ppm	Same as Prim.	.053 ppm
CO	8 Hour	9 ppm	None	9 ppm
	1 Hour	35 ppm	None	35 ppm
O3	1 Hour	.12 ppm	Same as Prim.	.12 ppm
Pb	Quarterly			
	Arith. Mean	1.5 µg/m³	Same as Prim.	1.5 µg/m³

µg/m³ - micrograms per cubic meter of air
microgram - one millionth of a gram, where 454 grams = 1 pound
ppm - parts per million

Curriculum Vitae

John Carson Cato, Ph.D.

Education: B.S., Chemical Engineering, North Carolina State University, Raleigh, North Carolina, 1981.

M.B.A., Winthrop College, Rock Hill, South Carolina, 1988.

Ph.D., Administration/Management, Walden University, Minneapolis, Minnesota, 1995. Dissertation: Environmental Public Policy: An Analysis of Public Opinion and Environmental Legislation in North Carolina.

Experience:

Currently the Director of Environment, Health and Safety for CommScope, Inc., the world's largest manufacturer of coaxial cable. The position is responsible for the company's regulatory compliance and risk reduction in the areas of environmental protection and employee safety. Similar positions of increasing responsibility within the Pulp and Paper and Tire manufacturing industries.

Memberships:

American Institute of Chemical Engineers

National Association of Environmental Professionals

Water Environment Federation

Institute of Hazardous Materials Managers

Environmental Assessment Association

National Environmental Health Association

World Safety Organization

Correlation Analysis

Subscale 1, Perceptions of Local Environmental Conditions
Cronbach Coefficient Alpha

for RAW variables : 0.730137
for Standardized variables: 0.728948

	RAW Variables		Std. Variables	
Variable Combination	Correlation with Total	Alpha	Correlation with Total	Alpha
Q8	0.228394	0.755833	0.219954	0.758503
Q9	0.577525	0.656157	0.572776	0.658256
Q13	0.471734	0.690678	0.466791	0.690235
Q15	0.558977	0.664606	0.569005	0.659422
Q16	0.549632	0.669603	0.552590	0.664475
Q18	0.420130	0.705018	0.420710	0.703629

Correlation Analysis

Subscale 2, Economics of Environmentalism
Cronbach Coefficient Alpha

for RAW variables : 0.546405
for Standardized variables: 0.539342

	RAW Variables		Std. Variables	
Variable Combination	Correlation with Total	Alpha	Correlation with Total	Alpha
Q6	0.491413	0.212172	0.483579	0.212344
Q7	0.525817	0.153564	0.515529	0.153812
Q12R	0.111424	0.780457	0.111588	0.780523

Correlation Analysis

Subscale 3, Responsibility for Environmental Problems
Cronbach Coefficient Alpha

for RAW variables : 0.247885
for Standardized variables: 0.271569

	RAW Variables		Std. Variables	
Variable Combination	Correlation with Total	Alpha	Correlation with Total	Alpha
Q4	0.248692	0.039586	0.272520	0.033415
Q5R	0.129744	0.198441	0.139930	0.214119
Q10R	0.054348	0.300098	0.038370	0.337833
Q29	0.098151	0.234832	0.109766	0.252146

Correlation Analysis

Subscale 4, Politics, Legislation and Regulation
Cronbach Coefficient Alpha

for RAW variables : 0.283333
for Standardized variables: 0.255212

	RAW Variables		Std. Variables	
Variable Combination	Correlation with Total	Alpha	Correlation with Total	Alpha
Q1	-0.124848	0.367073	-0.108448	0.362396
Q2	0.055531	0.298003	0.072472	0.247804
Q3	-0.037929	0.342511	0.002292	0.294011
Q11	0.286067	0.157446	0.221444	0.141912
Q14	0.366544	0.069895	0.333097	0.055202
Q17R	0.089865	0.268681	0.064304	0.253300
Q28R	0.198572	0.181135	0.182190	0.170875

Curriculum Vitae

John Carson Cato, Ph.D.

Education: B.S., Chemical Engineering, North Carolina State University, Raleigh, North Carolina, 1981.

M.B.A., Winthrop College, Rock Hill, South Carolina, 1988.

Ph.D., Administration/Management, Walden University, Minneapolis, Minnesota, 1995. Dissertation: Environmental Public Policy: An Analysis of Public Opinion and Environmental Legislation in North Carolina.

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Memberships:

American Institute of Chemical Engineers

National Association of Environmental Professionals

Water Environment Federation

Institute of Hazardous Materials Managers

Environmental Assessment Association

National Environmental Health Association

World Safety Organization

Committees:

Mecklenburg Community Awareness and Emergency Response 1989-1991

Mecklenburg County Waste Management Advisory Board 1990-1992

Chairman, Environment Committee, Manufacturers' Council 1991-1992

Land Use Committee, Charlotte Chamber 1992

Environmental Committee, N.C. Citizens for Business and Industry

Certifications:

Certified Safety Executive (C.S.E.)

Certified Environmental Inspector (C.E.I.)

Certified Safety Professional (C.S.P.)

Certified Hazardous Materials Manager (C.H.M.M.)

Certified Environmental Professional (C.E.P.)

Registered Professional Engineer (P.E.)

Publications:

Cato, J. C. (1993). Developing stormwater pollution prevention plans. Focus, Raleigh, NC: Office of Waste Reduction. Summer.

Presentations:

Cato, J. C. (1993, October). Environmental leadership: A paradigm for modern organizations. Carolinas Environmental School. Charlotte, NC: Charlotte Chamber of Commerce.

Cato, J. C. (1993, November). Leadership requirements for total quality management. Conference on Water Issues in the 1990's. Sponsored by the Environmental Policy and Studies Center of Catawba Valley Community College.