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ENVIRONMENTAL PRIORITIES OF OPINION-MAKERS

Bruce B. Clary, Charles E. Roe** & Emilie Swearingen****

I. INTRODUCTION

Since the late 1960's a growing concern over the negative effects of industrialization and consumption activities of an affluent society and a rising ecological consciousness have made the environment a major political issue in the United States. The main antagonists in the resulting political debate have been citizen environmental groups, private industry, and the government. Citizen environmental groups are obvious proponents of an improved environment. Private industry, while not opposed to that goal, feels it should not be attained at the expense of economic growth. Federal, state, and local governments are principally regulators rather than adversaries, yet their actions in writing or enforcing environmental legislation are often antagonistic to either private industry or citizen groups. Nevertheless, these three groups are the primary environmental policy-makers.

The environmental policy process is similar in structure to other policy systems. It has been described as a pluralist bargaining process between various organized groups.¹ Public opinion, too, is a factor since it delimits the general boundaries of the conflict; for example, public opinion may affect the priority given to environ-

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¹ J. DAVIES III & B. DAVIES, *THE POLITICS OF POLLUTION* 219 (2d ed. 1975).

mental pollution abatement in relation to other societal goals. However, the outcome of specific controversies depends mainly upon compromises that are reached between leaders of citizen environmental groups, private industry, and government.

While studies of public attitudes toward the environment² are numerous, surveys of the environmental priorities of policy-making elite groups are few. In one study of elite group attitudes toward methods of pollution control, the authors based their analysis on the assumption that environmental policy is primarily a function of the interplay between elites.³ They found that business executives, politicians, and public administrators disagree over a variety of pollution control issues such as the desired level of state environmental control, licensing, inspection, records and enforcement, and the amount of financial assistance. The authors concluded that this demonstrated conflict was proof that central elements in environmental regulatory policy have yet to be determined.⁴ Because the environment is a relatively new political issue such questions as what coalitions will emerge, upon what issues these coalitions will be based, and what level of conflict will exist between coalitions, cannot yet be answered.⁵

This article reports the findings from a 1975 statewide survey of North Carolina opinion-makers. Opinion-makers or elites are defined as persons who occupy positions placing them in central communication roles such as government officials, representatives of associations or institutions, and individuals prominent in a particular field. Opinion-makers have the ability, individually or collectively, to transmit their opinions on political issues to the general public.⁶

² For a summary of the literature on opinion survey, see McEvoy, *The American Concern With Environment*, in SOCIAL BEHAVIOR, NATURAL RESOURCES AND THE ENVIRONMENT 214 (W. Burch ed. 1970) [hereinafter cited as McEvoy]; Springer & Constantini, *Public Opinion and the Environment: An Issue in Search of a Home*, in ENVIRONMENTAL POLITICS 195 (S. Nagel ed. 1974); Trop & Roos, *Public Opinion and the Environment*, in THE POLITICS OF ECOSUICIDE 52 (L. Roos ed. 1971).

³ Althoff & Grieg, *Environmental Pollution Control Policymaking: An Analysis of Elite Perceptions and Preferences*, 6 ENV'T & BEHAVIOR 259, 259-61 (1974) [hereinafter cited as Althoff & Grieg].

⁴ Althoff & Grieg, *supra* note 3, at 282-85.

⁵ See W. ROSENBAUM, THE POLITICS OF ENVIRONMENTAL CONCERN 19-26 (1st ed. 1973) [hereinafter cited as ROSENBAUM]; Constantini & Hanf, *Environmental Concern and Lake Tahoe*, 4 ENV'T & BEHAVIOR 209, 237 (1972) [hereinafter cited as Constantini & Hanf]; D. MILLER, LEADERSHIP AND POWER IN THE BOS-WASH MEGALOPOLIS: ENVIRONMENT, ECOLOGY AND URBAN ORGANIZATION 236-40 (1975) [hereinafter cited as MILLER].

⁶ This definition of opinion-makers is from J. ROSENAU, PUBLIC OPINION AND FOREIGN POLICY

The study discussed in this article surveyed environmental opinion-makers to ascertain which issues they consider important, what interrelationships they see between the issues, and what differences exist between the attitudes of the various groups. Other studies of elite perceptions of environmental priorities have focused on similar questions but their scope has been narrower. That is, they have considered issues relevant only to a particular geographic area,⁷ or questions of alternative methods of pollution control.⁸ While the scope of the survey discussed in this article was limited to North Carolina, that state is divided into three distinct regions—Mountain, Piedmont, and Coast—thus ensuring a geographically diverse set of respondents.⁹ In addition, the survey differs from others in that it focuses on a broad range of policy goals rather than on alternatives to specific environmental problems. This emphasis upon environmental policy goals rather than specific problems is important. As suggested by Lynton Caldwell, if a consensus on goals can be reached, the present adversary approach to environmental policy-making can be replaced by the more advantageous problem-solving approach.¹⁰ This consensus is possible, according to Caldwell, because environmental problems have a greater informational content than most policy problems; thus, the consequences of one course of action as opposed to another can be more clearly determined.¹¹ It was the overall purpose of this survey to discover if, in fact, North Carolina elites had reached such a consensus.

II. STUDY DESIGN

In survey research the particular sampling procedure employed to select the respondents to be interviewed is of critical importance. There are many variant forms of sample selection, but all can be categorized according to two broad types: probability and nonprob-

45, 59-73 (1961).

⁷ Constantini & Hanf, *supra* note 5.

⁸ See Althoff & Grieg, *supra* note 3; MILLER, *supra* note 5.

⁹ Although North Carolina ranked forty-fifth in terms of urban population, it is among the most rapidly urbanizing states. Thus, while urban environmental problems may not exist now, the possibility of such problem in the future is real and is of interest to North Carolina elites. For urban consensus figures, see U.S. BUREAU OF THE CENSUS, 1 U.S. CENSUS OF POPULATION: 1970, CHARACTERISTICS OF THE POPULATION, PART 1, UNITED STATES SUMMARY - SECTION 1, at 31, 32, 34, 35 (1970).

¹⁰ Caldwell, *Popular Values and Environmental Politics*, in *THE ENVIRONMENT: COSTS, CONFLICTS, ACTION* 104 (J. Cairn & K. Dickson eds. 1974) [hereinafter cited as Caldwell].

¹¹ *Id.*

ability.¹² In probability sampling, respondents are chosen at random from a population; statistically valid inferences from the sample to the population depend upon this procedure of random selection. If the population cannot be defined, however, there is no way to determine whether the sample accurately reflects the population. Thus, nonprobability samples are often used where there are problems in identifying the members of a population. Given the structure of the population for the North Carolina survey, it was decided that the best approach would be to use a nonprobability sampling procedure. We could not be certain, no matter how exhaustive our compilation of population members would be, that our population was similar in structure to the actual distribution of opinion-makers in North Carolina. To compile a list of the total members of this population would have required far too many subjective decisions about whom to include. Had we attempted a probability sample, the ultimate structure of the survey population would have been a result of the choices we made and not of the population as it exists.

The sample for this survey was drawn according to a modified "snowball" technique.¹³ Nominations to the sampling list were initially made by the members of the staff of the Environmental Studies Council of the University of North Carolina. Subsequent nominees were added upon the recommendations of persons on the original list. This sampling list, which is set out in Table 1, included local and state public officials, members of environmental and other interest groups, representatives of private industry, agricultural, and business, and professionals such as educators, lawyers, and architects. A total of nineteen affiliations were included.

The affiliation category most frequently listed was education (22%). Sixteen percent of the sample listed industry as an affiliation. Other categories often listed were science/research and agriculture (both 16%), and planning (15%). Ninety-nine percent of the sample listed at least one affiliation; 53% listed at least two; and 27% listed three or more. The presence of these multiple roles among environmental elites indicates the complexity of this policy system. Many of these opinion-makers must reconcile conflicting points of view regarding the environment because of the overlapping roles

¹² See generally H. BLALOCK, JR., *SOCIAL STATICS* 392-412 (1960).

¹³ See Constantini & Hanf, *supra* note 5, at 212-13. A related method of drawing a sample is the "key information procedure." See Bridgeland & Sofranko, *Community Structure and Issue-Specific Influences: Community Mobilization Over Environmental Quality*, 11 *URBAN AFF. Q.* 186, 192 (1975).

they occupy in the policy-making process. Further, this makes the establishment of environmental priorities that much more complicated.

Table 1
RESPONDENT AFFILIATION
(Respondents could list more than one affiliation)

Public Sector	N	%
Planning	91	15
Social and Health Services	31	5
State Govt., Elected/Appointed	57	9
State Govt., Civil Service	35	6
Local Govt., Elected	35	6
Local Govt., Civil Service	32	5
Federal Govt., Civil Service	22	4
Private Sector		
Agriculture	99	16
Industry	101	16
Commerce	52	8
Finance	45	7
Utilities	19	3
Land Development/Real Estate	46	7
Professional		
Science/Research	97	16
Education	135	22
Law	27	4
Architecture/Engineering	48	8
Journalism/Public Communication	28	5
Citizen Group		
Member of Citizen Organization	46	7

The survey questionnaire consisted of a list of sixty issues related to environmental pollution, land and natural resources management, recreational and aesthetics planning, the proper role of gov-

ernment, and the interrelationship between the environment, politics, and the economy. These issues were developed with the aid of specialists in each of these environmental fields, and an attempt was made to include a representative cross section of issues from each area. The respondents were asked to rank each issue on a five-point scale according to its importance as an environmental priority. The respondents were then asked to list what they considered the ten most important issues. Questions pertaining to group affiliation and location (metropolitan or non-metropolitan residence) were also included. Prior to its administration the questionnaire was pre-tested. The actual survey was conducted by mail, with two follow-up letters sent to the respondents when necessary. With one thousand questionnaires mailed, the response rate was 62% (sample size of $N=621$), a response return considered adequate for a mail survey.

III. HYPOTHESES

Before discussing the hypotheses examined in this study it is necessary to consider the role of opinion-makers in the environmental policy process. Elite attitudes are an essential component of the policy process, but the making of public policy is a phenomenon involving the interaction of many elements. Public policy can be conceptualized as a function of five factors: elite behavior, mass political behavior, governmental institutions, socioeconomic composition, and historic-geographic conditions.¹⁴ Within this conceptual mode, elite behavior is viewed as the most forceful cause of policy formation, but the other factors also influence elites and their policies. Thus, policy-making is not an isolated process of conflict and bargaining between individuals and groups; a decision must also reflect the surrounding context. For example, even if the environmental priorities of North Carolina opinion-makers are similar to those of elites in other states, environmental policies enacted in those other states could be substantially different. Many factors affect environmental policy-making in North Carolina: the peculiar traditions of southern politics, illustrated by the lack of political competition (a result of the state's one-party dominance); the predominantly rural character of the state, and its consequent late experience with urban development; and the state's low level of economic development which, as in other southern states, has re-

¹⁴ R. HOFFERBERT, *THE STUDY OF PUBLIC POLICY* 225-57 (1974).

sulted in lenient pollution control standards so as not to discourage industrial expansion.

While these various factors are not the focus of this study, they are nonetheless important since they place the analysis in a broader and more realistic context. Only the environmental priorities of opinion-makers were considered in this study. As a result, these opinions are strong indicators of the type of environmental policies that can and do emerge, but they are not self-sufficient causal factors, they are only necessary factors. Despite these limitations, an attempt will be made to analyze the data from a sufficiently broad perspective to permit a general, though exploratory, understanding of the environmental priorities of opinion-makers. Three dimensions of elite priorities will be considered: first, which issues are considered important; second, which issues are perceived as being related to each other; and third, what differences exist between the groups and their priorities.

The following section of this article will examine the issue priorities of opinion-makers. First, what are their highest priorities: specific and technical problems, or broader issues related to the role of government or to economic growth? Or, are both sets of issues important to opinion-makers? Secondly, do mass attitudes toward these issues differ significantly from elite preferences and if so, in what ways? The issues receiving the highest priorities from elites are most likely to be acted on first. If issues dealing with environmental problems and their technical solution are given higher priority than issues dealing with economic growth or the role of government in environmental regulation, this would suggest that opinion-makers do not view the major environmental challenges we face as dependent upon political or economic solutions.

The second part of this article focuses on the interrelationships between the issues. Are different issues ranked the same way by the respondents? If so, this type of pattern or cluster would indicate that opinion-makers view environmental issues in terms of policy areas. If the issues do cluster, then what is the structure of these clusters? Are issues clustered because they all focus on the same broad phenomenon, such as land use, or are they clustered for some other reason? If a cluster contains issues related to different substantive problems, this would suggest that opinion-makers view substantively different environmental problems as having similar causes. If the issues in these policy areas are not linked together by their focus on a common problem, they must be clustered because they reflect a more general dimension, the respondent's environmental ideology.

On the other hand, we may find that opinion-makers perceive environmental problems as similar only if they deal with the same substantive problems, such as water pollution. If this is the case, then the absence of a broadened perspective where different problems are linked together by more general themes would substantiate the claims of some observers that the environmental policy process is hopelessly fragmented. Our failure to see the common cause of many environmental problems, it would be argued, prevents us from devising administrative frameworks and policies providing a coherent and integrated approach to environmental problem-solving.¹⁵

The final section of this article will discuss the differences in priorities between groups of opinion-makers. Several studies of elite attitudes toward the environment have found substantial differences between elite sub-groups over which issues are important and over their support for various pollution abatement measures.¹⁶ To determine whether these differences are evident in relation to environmental priorities, the respondents in the present survey were divided into four affiliation groups: the public sector, the private sector, professionals, and citizen groups. One author has suggested that public sector groups and professionals share similar attitudes toward the environment because of their common background.¹⁷ A second, somewhat contradictory theory maintains that the pattern of government regulation is accommodationist rather than regulatory, and that over time industrial viewpoints control the agencies' decisions. This hypothesis suggests that the private sector and public sector respondents should show the greatest amount of agreement on environmental priorities.¹⁸ Yet, this pattern may not be presently evident since environmental regulation is a relatively new political development.

In addition to testing the various hypotheses set out above, this article will examine the policy-making relationship between environmentalists and industry. Is the formation of environmental pol-

¹⁵ For a discussion of this view, see L. CALDWELL, *MAN AND HIS ENVIRONMENT: POLICY AND ADMINISTRATION* 49-75 (1975).

¹⁶ Althoff & Grieg, *supra* note 3, at 259-88; Constantini & Hanf, *supra* note 5; MILLER, *supra* note 5, at 236-40.

¹⁷ McElrath, *Public Response to Environmental Problems*, in *POLLUTION AND PUBLIC POLICY* 56 (D. Paulsen & R. Denhardt eds. 1973).

¹⁸ For a discussion of this view see Althoff & Grieg, *supra* note 3, at 282-85; G. SMITH, H. STECK & G. SURETTE, *OUR ECOLOGICAL CRISIS: ITS BIOLOGICAL, ECONOMIC AND POLITICAL DIMENSIONS* 178 (1974) [hereinafter cited as SMITH, STECK & SURETTE].

icy a result of conflict between groups who agree infrequently and who have failed to work out mutual patterns of accommodation? Or, is there substantial agreement on priorities between these groups, leaving only the task of finding solutions or means to these ends?¹⁹

IV. ISSUE PRIORITY

To establish the importance of environmental issues to opinion-makers in this survey [see Table 2], two measures of issue priority were combined. For each issue, the percentage who rank it as a high or very high priority is averaged with the percentage who list it among the top ten issues. The use of two measures instead of one increases the validity of the indicator, that is, it ensures that we are measuring the phenomenon accurately. For the two sets of rankings, Spearman's rank-order correlation (ρ) is .81.²⁰ A correlation of this magnitude indicates that the ranks of the variables are almost identical on both of the scales. It can therefore be assumed that they are very likely measuring the same dimension, environmental priority, and the ranks can be combined to produce a single, broader measure of the phenomenon.

In Table 2, the twenty highest ranking issues are listed. Most of the issues that rank high on the combined measure also rank high on each of the separate measures. Of the first ten issues, six are among the first ten on both of the individual measures. The high ranking of these issues on both measures indicates that opinion-makers are consistent in the environmental priorities they accord the greatest importance.

Waste disposal, and more specifically, water pollution problems caused by waste discharge, are clearly given high priority. Solid waste and water pollution problems tied for first place in the priority ranking. Domestic and municipal pollution of water, in fifth place, is a related issue. Two other issues in the top twenty, water shortages and drinking water hazards posed by pollution problems,

¹⁹ Caldwell, *supra* note 10, at 104.

²⁰ Spearman's rank-order correlation (ρ) measures the amount of agreement between two sets of ranks. It answers the question of whether variables that are ranked high or low on one scale are ranked high, low, or randomly on another. The values of ρ range from + 1.00 to - 1.00. A correlation of + 1.00 indicates a perfect positive correlation—variables have high ranks on both scales. A -1.00 correlation is a perfect negative relationship—variables that have high values on one scale have low values on the other. A correlation of 0 means there is no definite pattern of rankings between the two scales. See H. BLALOCK, JR., *SOCIAL STATICS* 317-19 (1960).

Table 2
ISSUE PRIORITY

Issue	Percent of Sample Ranking Issue as High or Very High Priority	Percent of Sample Ranking Issue Among Top Ten Priorities	Combined Index ¹ for Two Priority Measures (Rank)
Problem of disposing of solid wastes	62%	34%	48% (1.5) **
Impacts on water quality by industrial wastes	74%	22%	48% (1.5) **
Designation and protection of important natural areas	66%	28%	47% (3.0) **
Public participation and understanding in environmental decisions	62%	29%	46% (4.0) **
Impacts on water quality by domestic and municipal wastes	70%	20%	45% (5.0) *
Government accountability and openness to citizen concerns over environmental policies	59%	25%	42% (7.0) **
Economic costs to consumers and the private sector—as opposed to benefits—of pollution control	55%	28%	42% (7.0) *

Issue	Percent of Sample Ranking Issue as High or Very High Priority	Percent of Sample Ranking Issue Among Top Ten Priorities	Combined Index ¹ for Two Priority Measures (Rank)	1977]
Coordination problems and preemption conflicts among government agencies in environmental affairs	60%	24%	42% (7.0)**	ENVIRONMENTAL PRIORITIES
Alternative economic incentives to achieve environmental quality goals	57%	20%	39% (10.5)*	
Shortages of water supplies for domestic and industrial use	56%	21%	39% (10.5)	
Acceptability of nuclear power plants within the human environment	54%	23%	39% (10.5)	
Environmental effects of energy generation	57%	21%	39% (10.5)*	
Conflicts between the goals of environmental quality and employment opportunities	52%	23%	38% (14.0)*	
Drinking water quality hazards	55%	20%	38% (14.0)	
Environmental costs of urban and suburban sprawl and leapfrog development	56%	19%	38% (14.0)*	

Issue	Percent of Sample Ranking Issue as High or Very High Priority	Percent of Sample Ranking Issue Among Top Ten Priorities	Combined Index ¹ for Two Priority Measures (Rank)
Extent of environmental regulation by government agencies	52%	21%	37% (17.0)
Conflict between the goals of environmental quality and individual liberties	51%	23%	37% (17.0) *
Building in areas susceptible to natural hazards	53%	21%	37% (17.0)
Erosion of lands and roads and sedimentation of waterways	56%	15%	36% (19.5)
Inadequate funds for attainment of environmental standards	58%	13%	36% (19.5) *

*Ranked among highest ten issues on one measure.

**Ranked among highest ten on both measures.

¹The combined index was constructed by adding the percentage of respondents who listed an issue as a high or very high priority with the percentage who listed it among the top ten issues. This total was then divided by two to get an average percent. The rank for each percentage is based on its column position.

deal with this same general theme. The importance attributed to water pollution problems by opinion-makers is shared by the general public. Nationwide public opinion polls show that water pollution and air pollution are viewed by the public as the most important environmental problems.²¹

In contrast with public opinion, the high concern given water pollution by environmental elites in North Carolina does not extend to problems related to air pollution. Two questions were included in the survey that deal directly with air quality in both urban and rural areas. Air pollution problems were ranked at 20.5 for urban areas, and at 57.5 for rural areas. The relatively low ranking given to urban air quality is likely a reflection of North Carolina's low level of urban development and the small number of cars within the state.

The role of government in environmental management also ranked high in the survey. Governmental coordination problems and preemption conflicts among government agencies was ranked seventh, while inadequacy of funds for the attainment of environmental standards was ranked at 19.5.²² Environmental issues related to citizen participation in public policy decision-making, a much-discussed topic in general, were ranked fourth and seventh. Earlier research on the differing opinions of the public and professional sectors regarding water pollution control revealed disagreements over the proper role citizens should play in decision-making.²³ Surprisingly, professionals were more receptive to citizen involvement than were citizens themselves.²⁴ This unexpected conclusion is contradicted by the results of the North Carolina survey. In North Carolina, over 60% of the members of citizen groups consider citizen participation to be a high priority (ranked as a high or very high priority and listed among the top ten issues). In contrast, no more

²¹ The survey findings are reported in McEvoy, *supra* note 2, at 226-27.

²² Although the issue as stated in the survey did not specify whether the "funds" referred to were private or public, it is fair to assume that the respondents read the issue as referring to an inadequacy of public funds.

²³ Mitchell, *Behavioral Aspects of Water Management: A Paradigm and Case Study*, 3 ENV'T & BEHAVIOR 135 (1971) [hereinafter cited as Mitchell].

²⁴ Mitchell's study concluded that the public is more likely than the professionals to agree that citizens do not have the knowledge to participate effectively in decision-making (81% to 49%) and that technical decisions should be left within the sole discretion of the expert (89% to 73%). The public also agreed less than the professionals with the statement that public values should be considered in technical decision-making (92% to 99%). Mitchell, *supra* note 23, at 146-47.

than 45% of public officials, professionals, industrialists, and businessmen consider it a top priority.

Predictably, issues related to the economic and political costs of governmental regulation of the environment are ranked high. Four of the top twenty issues deal with some aspect of this topic: the economic costs of pollution control is ranked seventh; economic incentives to achieve environmental quality goals is ranked tenth; the extent of governmental regulation by agencies, and conflicts between the goals of environmental quality and individual rights are both ranked seventeenth.

This concern over the economic component of environmental regulation is shared by elite and mass groups. Gallup polls indicate that the public supports pollution abatement, but is unwilling to make more than minimal economic sacrifices to achieve these goals.²⁵ Although the data from the present survey does not directly reveal why elites rank economic costs as a high priority, it is reasonable to assume that elites, too, feel a reluctance to pay. Other studies bear out this assumption.²⁶

Other issues included among the first twenty are: land use problems connected with urban sprawl, environmentally unsound building practices, soil and road erosion, and designation and protection of important natural areas. Public opinion polls demonstrate that the first three issues may be of much less importance to the general public than the last. Only 6% of those questioned in a 1969 poll listed preservation of green spaces as a major environmental problem, and just 4% thought soil erosion was a serious issue.²⁷ A problem related to urban sprawl, improved housing and slum clearance, was listed by only 27% of the public in a 1970 Gallup survey as a policy area requiring more government attention.²⁸ On the other hand, a more traditional land use concern, designation and protection of natural areas, was ranked third in the North Carolina study. The high ranking accorded this issue may reflect environmental concerns specific to North Carolina rather than a nationwide attitude. Much of the natural land in North Carolina is under industrial and federal management, and high public values are placed on the

²⁵ These findings are presented in Erskine, *The Polls: Pollution and Its Costs*, 36 PUB. OPINION Q. 120, 133-35 (1972).

²⁶ See Althoff & Grieg, *supra* note 3, at 274-82; MILLER, *supra* note 5, at 236-40.

²⁷ This poll is summarized in McEvoy, *supra* note 2, at 226-27.

²⁸ Gallup Poll Index, June, 1970 at 8.

aesthetic and recreation qualities of the State's varied natural lands.

Finally, nuclear power, and more generally, the environmental effects of energy generation, are both ranked tenth. For the last few years this area of environmental management has received increasing publicity, and the resulting debate raises a spate of economic and political issues. A 1973 study of Lake Tahoe opinion-makers found that some elites are more concerned with qualitative environmental problems, thought to be at the base of many different substantive environmental problems, than with "service-related, facility-related or practical problems."²⁹ Visual pollution, for example, was rated higher than the more concrete and practical problems of traffic congestion and sewage disposal.³⁰

Taken as a whole the data from the North Carolina survey indicate a wide range of environmental concerns among the state's opinion-makers. Specific environmental problems, many of which require technical innovations for their solution, received high rankings. Within this category were such problems as water quality, waste disposal, land use, and energy generation. A more generalized conservation issue, natural area management, was rated as a high priority, but its significance is that it is the only issue of its kind listed among the top twenty issues.³¹ Apparently, North Carolina opinion-makers are more concerned with solving the environmental problems that pose potential health hazards or that have an impact on the urban environment than with preserving the natural environment.

The concern of North Carolina opinion-makers with the environment is not, however, restricted to specific, problem-solving types of issues. They are also concerned with broader questions of environmental policy and administration. Issues including the role of the citizen, economic aspects of pollution abatement, and environmental regulation and management problems were all rated as high

²⁹ Constantini & Hanf, *supra* note 5, at 219.

³⁰ *Id.* at 217-19.

³¹ In Table 3, *infra*, there are two clusters that relate to natural areas: management of natural areas and preservation of natural and historic areas. Although there are a total of six issues in these two clusters, only one, designation and protection of natural areas, ranks among the top twenty issues in Table 2. A similar pattern exists for land use issues. In Table 3, eight issues are included in the land use cluster but only one, environmental costs of urban/suburban sprawl and leapfrog development, is listed among the top twenty in Table 2. By way of contrast, five of the seven issues included in the environmental policy cluster in Table 3 rank among the top twenty issues in Table 2.

priorities. Thus, this study suggests that the environmental priorities of these opinion-makers can be conceptualized along a continuum from specific and technical problems to more general, political, and economic problems. The policy agenda for the environment, according to the preferences of this sample of environmental elites, involves not only a consideration of the visible problems of the environment—water and land pollution are prominent examples—but a more philosophical reconciliation of the competing values of economic development and environmental quality, and a reevaluation of the proper role of government in mediating this conflict.

V. ISSUE CLUSTERS

Studies of elite and mass attitudes toward the environment have shown that issues are not perceived in isolation from one another, but rather as parts of broader problems [see Table 3].³² These broad problem areas include various substantive issues and should reflect the respondents' environmental ideologies. Thus, a number of questions can be asked about the responses of this survey. Do North Carolina opinion-makers see individual environmental issues as interrelated? Is there a tendency for different substantive issues to cluster by being ranked equally by the same respondent? For example, we might find that opinion-makers concerned with land use problems rank several issues relating to this area as top priorities. If so, then that cluster could be perceived as a policy area rather than as single, unrelated issues.

Further, are the issues in a group ranked similarly because they all deal with the same underlying problem, such as land use, or are they characterized by a mix of issues dealing with different types of problems? The latter pattern would suggest that opinion-makers view environmental priorities from a broad, ecological perspective. The link between the issues would not be the substantive characteristics they all have in common, but, possibly, the political and economic issues they reflect.

To establish whether the issues can be grouped into broader policy areas and to determine the structure of these groups, a statistical technique known as factor analysis can be employed. Factor analysis is a mathematically complex technique, but interpretation of the

³² Constantini & Hanf, *supra* note 5, at 213-15; Tognacci, Weigel, Wideen & Vernon, *Environmental Quality: How Universal is Public Concern*, 4 ENV'T & BEHAVIOR 78 (1972).

Table 3
ISSUE CLUSTERS

Issues in Each Factor (The factor loading for each variable, i.e. correlation of the variable with the factor, is in the parenthesis)

I. Land Use

- 1) Environmental conflicts of incompatible mixed land uses in rural areas and urban fringes (.67)
- 2) Environmental costs of urban/suburban sprawl and leapfrog development (.65)
- 3) Effects of tax policies on environmentally damaging development and land use decisions (.59)
- 4) Utilization of growth management methods to assure a quality environment (.52)
- 5) Land use conflicts between private and publically-owned lands (.45)
- 6) Declining qualities of the urban and rural visual/aesthetic scene (.45)
- 7) Conversion of open-space lands (farmlands, timberland, natural areas) to other intensive development uses (.44)
- 8) Environmental impacts of human population changes in North Carolina (.41)

II. Environmental Policy

- 1) Disincentives to industrial/commercial development caused by environmental controls (.74)
- 2) Economic costs to consumers and the private sector—as opposed to benefits—of pollution control (.69)
- 3) Conflicts between the goals of environmental quality and individual liberties (.62)
- 4) Loss of local tax bases because of governmental land purchases and environmental regulations (.59)
- 5) Conflicts between the goals of environmental quality and employment opportunities (.57)
- 6) Extent of environmental regulation by governmental agencies (.52)
- 7) Coordination problems and preemption conflicts among government agencies in environmental affairs (.42)

III. Management of Natural Areas

- 1) Loss of wildlife habitats and fishery breeding waters (.72)
- 2) Threats to and changes in native wildlife populations (.67)

- 3) Decline of fishing quality and quantity (.59)
 - 4) Agricultural, timber, fish and wildlife losses from population (.46)
 - IV. Pollution and Hazards
 - 1) General public health hazards from pollution (.71)
 - 2) Occupational health hazards from pollution (.60)
 - 3) Air quality in rural areas (.59)
 - 4) Air quality in urban areas (.57)
 - V. Parks and Recreation
 - 1) Need for upgrading qualities of existing parks and recreation areas (.76)
 - 2) Need for more recreational facilities (.70)
 - VI. Waste Recycling
 - 1) Need for recycling programs for residual industrial materials (.86)
 - 2) Need for recycling programs for residual domestic materials (.80)
 - VII. Effects of Energy Use
 - 1) Environmental effects of energy consumption (.66)
 - 2) Environmental effects of energy generation (.63)
 - 3) Acceptability of nuclear power plants within the human environment (.49)
 - VIII. Erosion Effects
 - 1) Erosion of lands and roads and sedimentation of waterways (.62)
 - 2) Pollution problems resulting from fertilizers, pesticides, herbicides and animal wastes (.47)
 - 3) Storm-water runoff from land development (.43)
 - 4) Floodway and watershed management problems (.40)
 - IX. Preservation of Natural and Historical Areas
 - 1) Designation and protection of important natural areas (.64)
 - 2) Loss of historic properties and cultural resources (.45)
 - X. Effectiveness of Environmental Protection Measures
 - 1) Effectiveness of environmental protection efforts by state and local governments (.47)
 - XI. Water Quality
 - 1) Impacts on water quality by domestic and municipal wastes (.76)
 - 2) Impacts on water quality by industrial wastes (.72)
 - XII. Water Shortage
 - 1) Shortages of water supplies for domestic and industrial uses (.41)
-

findings is relatively straightforward.³³ In Table 3, twelve factors are identified which show the grouping pattern of the issues. If Factor I is examined, it is clear that all the issues within the group deal with land use. Opinion-makers convinced that land use was a major problem evidently ranked all the issues they saw as related to this problem as high priorities. The task of the researcher, after such a pattern has been established, is to classify the cluster group on the basis of the underlying common characteristics of the issues. It is obvious in the case of Factor I that the clustered issues relate to some dimension of land use.

The factors or groups of issues listed in Table 3 are derived from the pattern of correlations between all of the sixty issues included in the questionnaire.³⁴ If certain issues correlate highly with one another, that is, they are all ranked similarly by a group of respondents, and they do not have consistently high correlations with any other issues, then it can be assumed that the interrelationships between these issues are a function of some characteristic common to all.³⁵ The coefficient listed with each issue in Factor I is known as the factor loading.³⁶ It represents how much of the variance (if the loading is squared) in each issue is due to the common factor of land use. The higher the loading, the more an issue is representative of that factor.³⁷

³³ For a basic discussion of factor analysis, see C. ADCOCK, *FACTORIAL ANALYSIS FOR NON-MATHEMATICIANS* (1954); Rummel, *Understanding Factor Analysis*, 11 *J. CONFLICT RESOLUTION* 444 (1967).

³⁴ The coefficient that is used is analogous to Spearman's rho discussed in note 20, *supra*.

³⁵ Interestingly, some individual issues which are ranked very high do not appear in a factor. Thus, while the overall tendency is for issues that are ranked in the top twenty in Table 2 to appear as parts of broader policy areas in Table 3, 35% (7) of the top twenty issues do not appear in Table 3. The high priority issues which are absent can be interpreted as individual problems which are seen by the opinion-makers as unrelated to other environmental problems, but, nonetheless important. The issues are: (1) problems of disposing of solid wastes; (2) public participation and understanding in environmental problems; (3) government accountability and openness to citizen concern over environmental policies; (4) alternative economic incentives to achieve environmental quality; (5) drinking water quality hazards; (6) building in areas susceptible to natural hazards; and (7) inadequate funds for attainment of environmental standards.

³⁶ The factor loading has a scale range of -1.00 to +1.00.

³⁷ All sixty issues have a loading on each factor, but only the issues with high loadings are used in identifying a factor. A factor loading of .40 or greater was chosen as the cut-off point for inclusion of an issue in a factor. The usual cut-off point is .50, but the clear relationship of issues in the .40 range to issues with higher loadings prompted us to lower the inclusive level.

In two of the factors, effectiveness of environmental protection measures (X) and water shortage (XII), only one issue has a .40 loading. These factors are not as clearly defined as

An examination of Table 3 suggests that the opinion-makers in this sample perceive environmental priorities in terms of policy areas and not as single, unrelated issues. Twelve factors or clusters are identified. For some of the respondents, land use issues are high priorities; thus, they consistently give high rankings to issues related to this problem. Other respondents are more concerned about erosion problems or issues related to problems of environmental policy. The data, therefore, support the first hypothesis; opinion-makers do perceive issues in the context of policy areas. The next area of concern is the structure of these issue clusters. Do the clusters contain issues relating to the same or different substantive problems? That is, is there a cluster with a mix of issues; for example, a factor with one land use issue, a water quality issue, and an environmental policy issue? A cluster of this type would suggest that problems of land use and water quality share similar causes and that the same political issues are related to both.

The factors indicate, however, that the policy groups are not comprised of issues relating to different substantive problems. As the names of the factors demonstrate, the priorities cluster according to common substantive themes, such as pollution and hazards, waste recycling, or management of natural areas. No factor is characterized by a mix of these themes. Opinion-makers link their environmental priorities by the substantive characteristics that the issues have in common. Finding the common thread that links entirely different kinds of environmental problems is a more subtle process and one not an aspect of the opinion-maker's environmental perceptions. In this survey, land use priorities, for example, were seen as separate from those of erosion, parks and recreation, management

the others, however, they do represent unique clusters of issues. Issues with loadings below .40 within these factors suggest that these clusters measure the dimensions as identified, but the low magnitude of these loadings do not warrant their inclusion in the factors. Since this analysis was exploratory, the goal was to identify the largest number of factors. In a descriptive study, a preferable procedure would be to extract a smaller number of factors from the correlation matrix.

An orthogonal rotation, varimax, was used to extract the factors from the correlation matrix. This procedure is used in factor analysis because it simplifies interpretation of the factors. The assumption underlying an orthogonal rotation is that it produces factors which are unrelated to each other. This aids in interpretation since variables tend to be strongly related to only one factor.

For a factor to be included in Table 2, it had to have an eigenvalue of 1 (this statistic measures the amount of variance explained by a single factor). The total variance explained by all 12 factors is 56%. The statistical program that was used was NORMAN NIE, STATISTICAL PACKAGE FOR THE SOCIAL SCIENCES (1975).

of natural areas, preservation of natural and historical areas, water shortage, and water quality. But, are these policy areas actually separate and distinct from one another? Can decisions in one area be made in isolation from the others?

It has been suggested that two characteristics of American society work against the achievement of environmental quality: a fragmented political process that produces only incremental and disjointed responses to environmental problems, and an industrialized culture which is not conducive to the development of holistic or ecological perceptions of environmental relationships.³⁸ One reason for the former characteristic may be that elites lack a perceptual framework within which they can organize their priorities in a manner reflecting the interrelated nature of environmental problems. If land use priorities are set without regard for the consequences, either positive or negative, or for other areas of environmental concern, the inadequate pattern of governmental response to environmental problems may persist. Of course, this survey focuses only on elite attitudes, yet the findings provide one explanation for the present pattern of governmental response to environmental problems. There is nothing to suggest that elites view environmental problems as a function of a few basic and common causes.

VI. ISSUE PRIORITY DIFFERENCES BY AFFILIATION AND LOCATION

In addition to information on issue priorities, data was collected on the affiliations and locations of the respondents. The decision to include this information was based on previous studies indicating that these factors might underlie major differences in elite attitudes toward the environment. Opinion studies on pollution abatement show substantial differences amongst elites regarding alternative abatement strategies. In response to a survey on water pollution, business and industry favored a combination of financing schemes which would include fees paid by waste dischargers and public subsidies to industry to purchase abatement equipment.³⁹ Environmental interest groups, however, strongly supported a strategy where all the costs of water pollution control would be borne by the producers of pollution. Business and industry also opposed discharge standards so long as their activities do not lower water quality. Environmentalists and public officials took a more stringent stand on this

³⁸ L. CALDWELL, *MAN AND HIS ENVIRONMENT: POLICY AND ADMINISTRATION* 49-75 (1975).

³⁹ MILLER, *supra* note 5, at 236-40.

issue and favored some type of standard that could be applied to the individual polluter. Summarizing these findings, the author concluded that sharp differences of opinion over alternative methods of water pollution abatement exist, and that these differences are a cause of interest group conflict.⁴⁰

The importance of the pollution abatement financing issue is evident in the findings of other surveys. A study which focused on hypothetical pollution control systems found a division of opinion over the amount of financial assistance that should be made available to industry for pollution abatement.⁴¹ In fact, this was the most important issue to industrialists and politicians and was ranked ahead of such controversial issues as the amount of federal and state control and the stringency of enforcement. On a more general level, another survey found differences between business and other groups in their respective levels of concern for the environment. The scores of business respondents on a scale measuring this attitude were consistently lower than those of individuals with professional or governmental affiliations.⁴²

To see whether these patterns of cleavages are evident in the North Carolina survey, the respondents were grouped into four affiliation categories: private sector, public sector, professionals, and citizen and public interest groups.⁴³ In Table 4, the rankings for the twelve issue clusters from Table 3 are set out by group affiliation, location group, and for the entire sample. As noted earlier, 53% of the sample listed at least two affiliations, and 27% listed three or more.⁴⁴ Given the multiple roles occupied by the opinion-makers, the four affiliation groups obviously share considerable overlap in membership. Despite this problem, the decision was made to place a respondent in only one category to simplify the analysis.⁴⁵ A location measure is used to provide a rough index of urban and rural residence. Respondents were categorized by their residence in either

⁴⁰ *Id.*

⁴¹ Althoff & Grieg, *supra* note 3, at 275-82.

⁴² Constantini & Hanf, *supra* note 5, at 225.

⁴³ See Table 1, *supra*.

⁴⁴ See Table 1, *supra*, and accompanying text.

⁴⁵ Group affiliation was determined according to the following procedure. If a respondent listed himself in any categories considered as public sector, he was given this affiliation. If a respondent did not have a public sector listing, but did list a private sector affiliation, he was placed in the latter category. If neither of these affiliations were listed, but a respondent did have a professional affiliation, he was placed in the professional category. Citizen group members listed this as their only affiliation.

a metropolitan county (defined as included in a Standard Metropolitan Statistical Area) or a non-metropolitan county.

All of the groups rank water quality as the number one priority. It is also ranked as the highest priority by the sample as a whole. The importance given this policy area may be a result of a number of factors. First, the federal government is now providing funds for the construction of municipal sewage facilities.⁴⁶ This project is reportedly the largest public works program ever undertaken by the federal government⁴⁷ and has sparked considerable debate over acceptable water quality standards. Second, public pressure for sanitary disposal systems has increased tremendously as a result of legislation aimed at reducing the discharge of hazardous wastes, especially from point sources, into standing and moving bodies of water.⁴⁸

A related policy area, water shortage, is a high priority for public officials, private industry, and business, and a slightly less high priority for professionals. This high rank is probably due to the important role played by water in municipal and industrial development. On the other hand, water shortage is the third lowest priority for citizen environmental groups, perhaps because problems of water shortage often precipitate such unpopular practices as stream diversion, natural habitat flooding, and dam building.

Waste recycling is also ranked low by professionals and citizen groups. This finding is unexpected inasmuch as both groups have spoken out strongly in favor of measures to promote recycling. One explanation may be that waste recycling is a "second level" environmental problem. Recycling wastes is a relatively new idea and may be viewed by professionals and citizen groups as an extension of more basic problems like water pollution, solid waste management, and natural resource use. Any decisions about waste recycling would depend upon decisions made in these broader policy areas.

The two policy areas evidencing the most disagreement are environmental policy and effectiveness of environmental protection measures. The effectiveness of environmental protection issue is ranked no lower than third in priority by public officials, profession-

⁴⁶ Russell E. Train, Administrator, Environmental Protection Agency, estimates that \$18 billion of federal assistance has been made available under the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 *et seq.* (Supp. II 1972); COUNCIL ON ENV'T'L QUALITY, ENVIRONMENTAL QUALITY - 1975 at 59-75 (1975).

⁴⁷ SIERRA CLUB, NAT'L NEWS BULL., May 7, 1976, at 8.

⁴⁸ *E.g.*, The Safe Drinking Water Act of 1974, 42 U.S.C. §§ 300(f) *et seq.* (Supp. IV 1974).

Table 4
ISSUE PRIORITIES BASED ON GROUP AFFILIATION AND RESIDENCE
 (Figures in columns represent combined index for two priority measures and rank)

Issue Clusters	Group Affiliation				Metropolitan (SMSA) Location		Total Sample
	Public Sector	Private Sector	Professional	Citizen Interest Group	Metro.	Non-Metro.	
	N = (214)	(157)	(144)	(41)	(343)	(278)	(621)
Water Quality	49% (1.0)	44% (1.0)	45% (1.0)	55% (1.0)	46% (1.0)	49% (1.0)	47% (1.0)
Water Shortage	44% (2.0)	37% (3.0)	32% (5.5)	29% (10.0)	38% (3.0)	39% (2.0)	39% (2.0)
Effects of Energy Use	39% (4.0)	32% (5.0)	39% (2.0)	38% (6.5)	40% (2.0)	34% (7.0)	38% (3.0)
Preserv. of Nat. & Hist. Areas	35% (6.5)	30% (6.0)	35% (4.0)	40% (4.5)	37% (4.0)	38% (3.5)	37% (4.0)
Effect. Env. Pro. Measures	40% (3.0)	19% (11.5)	37% (3.0)	46% (2.0)	36% (5.0)	33% (8.0)	35% (5.0)
Environ. Policy	32% (9.0)	43% (2.0)	30% (7.5)	21% (12.0)	33% (7.0)	36% (5.0)	34% (6.0)
Erosion Effects	35% (6.5)	24% (7.5)	30% (7.5)	42% (3.0)	33% (7.0)	38% (3.5)	33% (7.0)
Waste Recycling	37% (5.0)	33% (4.0)	27% (11.0)	36% (8.5)	29% (10.0)	35% (6.0)	32% (8.0)
Land use	33% (8.0)	22% (9.0)	32% (5.5)	40% (4.5)	32% (9.0)	30% (10.0)	31% (9.0)
Manag. of Nat. Areas	25% (11.0)	24% (7.5)	28% (9.5)	38% (6.5)	28% (11.0)	32% (9.0)	28% (10.0)
Pol. & Hazards	24% (12.0)	21% (10.0)	24% (12.0)	36% (8.5)	33% (7.0)	26% (11.5)	26% (11.5)
Parks & Rec.	30% (10.0)	19% (11.5)	28% (9.5)	25% (11.0)	27% (12.0)	26% (11.5)	26% (11.5)

als, and citizen organizations. In contrast, private industry and business rank it as their second lowest priority. Their resistance to governmental regulation of the environment may explain why they accord environmental protection such a low priority. The same differences between the groups are evident for the issue of environmental policy, although the priorities for these areas are reversed. It is the number two priority for the private sector; for the other groups it is ranked no higher than 7.5. Many of the issues in this cluster refer to problems of major concern to business, such as the economic cost of pollution control. This finding supports the data from previous surveys on the importance of the economic issue to the private sector.⁴⁹ The low priority accorded issues related to government and public policy by the non-private sector may mean that it views some governmental regulation of the environment as inevitable and recognizes the possibility that economic growth might have to be curtailed at some time in the future if environmental quality is to be maintained. This group may feel that the question is not whether government will become involved or whether economic growth will be restricted, but to what degree. This attitude may not mean that they support such alternatives, but rather that they view them as likely occurrences. To the private sector, in contrast, there is no inevitability about these outcomes and it is far from a settled matter.

The discussion to this point has indicated substantial differences between certain affiliations and their environmental priorities. There is considerable agreement, however, among the groups on the priorities of the remaining policy areas. Most of the agreement is on middle level priorities, except parks and recreation and pollution and hazards which are both assigned low priority by several of the groups. While these latter problems are often very important in large urban areas, in North Carolina, with its low level of urban development, they may be less important.

The lack of any large, densely populated urban areas in North Carolina results in a similarity in the environmental priorities of urban and rural opinion-makers. In Table 4, the priorities of the two location groups are presented. The Spearman's rank order correlation (ρ) between the two sets of ranks is .67, indicating a substantial agreement on priorities between the two groups.⁵⁰

⁴⁹ See notes 39 & 41, *supra*.

⁵⁰ Note that metropolitan residents do evince more concern for problems that typically affect cities: environmental effects of energy use and pollution and hazards.

The ranking of water quality as the top priority for both metropolitan and non-metropolitan residents is consistent with the top ranking given this issue by the entire sample and the respective affiliation groups. Non-metropolitan opinion-makers ranked water quality slightly higher than did metropolitan opinion-makers (49% to 46%). Two explanations of this difference have been suggested. One is that in rural areas the absence of the environmental problems that are unique to cities results in more emphasis placed upon the problems which must be faced.⁵¹ This explanation implies that rural residents do not have a lower level of environmental consciousness than urban dwellers, but rather that the nature of the environmental problems they face is different; thus their pattern of reaction to these problems is different. A second explanation is that people in rural areas are more likely than city residents to be exposed to various water sources, like streams and lakes, so that they come in contact more often with the problem.⁵²

The overall level of agreement between the affiliation groups and their rankings of the policy areas can be measured by computing Spearman correlation coefficients between the ranks for each of the groups. In Table 5, the rank-order correlations for the groups are presented. Previous studies of the environmental attitudes of elites have stressed the difference of opinion that exists between elite subgroups.⁵³ Table 5, in contrast, shows that there is substantial agreement between some of the groups in the order of their priorities. The strongest correlation in rankings is between public officials and professionals. This finding lends some support to the argument that professionals (university professors being a prime example) may be oriented toward the needs of government, more so than those of the public, because government is the primary client for their research.⁵⁴

Another hypothesis about the relationship between the affiliations is that the environmental attitudes of public officials will eventually come to resemble those of private industry.⁵⁵ This argument is based on a pattern that has emerged in other policy areas where government regulation is involved. The regulator becomes

⁵¹ McEvoy, *supra* note 2, at 226-27.

⁵² *Id.* This would also explain the higher priority non-metropolitan residents gave erosion effects.

⁵³ Althoff & Grieg, *supra* note 3; Constantini & Hanf, *supra* note 5; MILLER, *supra* note 5.

⁵⁴ See McElrath, *Public Response to Environmental Problems*, in *POLLUTION AND PUBLIC POLICY* 56 (D. Paulsen & R. Denhardt eds. 1973).

⁵⁵ See Althoff & Grieg, *supra* note 3, at 285; SMITH, *supra* note 18, at 178.

Table 5
 SPEARMAN'S RANK-ORDER CORRELATION (RHO) *
 BETWEEN RANKS OF ISSUE CLUSTERS FOR
 AFFILIATION CATEGORIES

	<u>Public Sector</u>	<u>Private Sector</u>	<u>Professional</u>	<u>Citizen Interest Group</u>
Public Sector		.49	.75	.46
Private Sector			.31	-.09
Professional				.60
Citizen Interest Group				

*A test of statistical significance is not used because no population estimates can be made from a non-probability sample.

controlled by the regulated as the government recruits staff from the regulated industries to fill agency positions. Consequently, industry's viewpoints come to predominate in the agency. If the development of the environment as a political issue has reached this stage, then the results of this survey challenge the applicability of the hypothesis to environmental policy; the rankings of the priorities of government and the private sector are only moderately correlated.

On the other hand, it has been suggested that the environment is such a new political issue that there should be high levels of interest group conflict and little agreement on policy questions.⁵⁶ Issue positions are not solidified; thus, coalitions are fluid and change often. Mutual patterns of accommodation between the private sector and government have not had time to develop into the traditional pattern of government servicing, as opposed to regulating, business interests. If this interpretation is correct, however, the correlation between the rankings of the public and private sectors is higher than would be expected.

The data on the rankings of the affiliation groups indicate elements of both consensus and conflict over environmental priorities. Public officials show various levels of agreement with each of the other groups, which perhaps supports the theory that there is a tendency in American politics to seek compromise.⁵⁷ There is a marked disparity in rankings between citizen groups and business groups. Since they have traditionally been the two opposing interest groups, this should come as no surprise.

VII. CONCLUSION

Political conflict is considered one of the main characteristics of the environmental policy process at its current stage of development. The data from this survey, which shows both consensus and conflict over environmental priorities, may mean that the policy process is at a transitional stage; there may be movement toward agreement on what the basic priorities are. Some issues, like water pollution, generate a high degree of consensus over their importance. Other issues, particularly those relating to government and economics, still cause sufficient disagreement to ensure a continued pattern of conflict between elite sub-groups.

⁵⁶ ROSENBAUM, *supra* note 5, at 19-21.

⁵⁷ *Id.* at 113.

There is also the possibility that agreement over environmental goals may increase conflict rather than lessen it. A consensus on goals, no matter how important these goals are, implies nothing about the best method of solving the problem. Once the decision is made to take governmental action on a problem, interest group activity will likely increase, since the stakes involved will be clearer.

Finally, the analysis demonstrates the changing nature of environmental perceptions. At the beginning of the 20th Century, wild-life and natural area conservation was the only environmental issue. Opinion-makers still view this issue as important, but aesthetic concerns with the environment are now overshadowed by utilitarian ones. The environmental problems that now pose health hazards and plague urban areas receive the highest priority. It is in these policy areas that elite activity will be the greatest.